



RAPID ENVIRONMENTAL AND SOCIAL ASSESSMENT  
ALUMINIUM CAN PRODUCTION PLANT, UZBEKISTAN  
MARCH 2025

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## LIST OF ABBREVIATIONS

AOI	Area of Influence
ECS	East Can Solutions (Project Company)
E&S	Environmental and Social
EHS	Environment, Health and Safety
ESIA	Environmental and Social Impact Assessment
EPRP	Emergency Preparedness and Response Plan
ESS	Environmental & Social Standards
FS	Feasibility Study
GoU	Government of Uzbekistan
GRM	Grievance Redress Mechanisms
HH	Household
IFC	International Finance Corporation
ILO	International Labour Organization
KMK	national acronym for Construction Norms and Regulations
MAD	Maximum Allowed Discharges
MEEPCC	Ministry of Ecology, Environmental Protection and Climate Change of the RUz
OHS	Occupational Health and Safety
PAP	Project Affected Person
PS	Performance Standard
PPE	Personal protective equipment
RESA	Rapid Environmental and Social Assessment
RoW	Right of Way
SIZ	Special Industrial Zone
WBG	World Bank Group
ZEP national acronym	Statement on Environmental Consequences (SEC)

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## EXECUTIVE SUMMARY

**Introduction:** The objective of the Rapid Environmental and Social Assessment (RESA) is to identify and assess at high level potentially significant adverse environmental and social impacts associated with the Project, and determine measures needed to prevent or minimise and mitigate the adverse impacts. It should also include a brief review of possible historical environmental and social issues, such as potential contamination of soil and/or groundwater or land acquisition disputes.

**Project Description:** East-West Invest Limited (EWI) is the leading snack food producer and distributor in Uzbekistan and has exclusive distribution rights for chips made by PepsiCo in the country. EWI plans to develop an aluminium can production plant with the projected annual production capacity of around 550 million cans per year. The Project will be developed by a Special Purpose Vehicle company called “East Can Solutions” LLC (ECS or Company).

The proposed Aluminium Can Production Plant (Project) has a projected annual production capacity of 550 million cans increasing to one billion after three years of operation.

It is planned to build a greenfield aluminum cans manufacturing plant with production workshop, warehouse, administrative building, kitchen, utility room and sanitary facilities on the 21 ha land plot. The territory of the facility is provided with all necessary infrastructure facilities (gas and electricity supply). There is no need to implement additional measures to develop the infrastructure. There are main networks of electricity supply, and communications in close proximity to the proposed construction site. There is no need to build new ones. ECS will establish own stormwater system, wastewater treatment facilities and water supply for operational needs from groundwater sources.

The selected Project site is located within a newly established Jangi Avlod Special Industrial Zone (SIZ), which will be owned and operated by “Tashkent Invest”.

**Legal, Policy and Regulatory Framework:** The project is committed to comply with national laws and IFC Performance Standards on Environmental and Social Sustainability. The main law of the Republic of Uzbekistan regulating environmental issues is the Law “On Nature Protection” No. 754-XII dated December 9, 1992 (as amended on November 15 2019). The Law regulates many aspects of environmental protection and management, including environmental impact assessment procedure.

The Project will be implemented in alignment with the requirements of the IFC as set out in the IFC E&S Performance Standards (PSs) 2012 and WBG General EHS Guidelines.

**ESIA Process:** According to Law “On Nature Protection”, environmental impact assessment is obligatory for all types of businesses and activities, which are likely to have direct or indirect environmental and social impacts. Proposed project is subject to national Environmental Impact Assessment report. In line with the national legal environmental requirements, East Can Solutions commissioned a local consultant PRIME TOWER GROUP to prepare Statement of the Environmental Impact. The EIA and the 100 m Sanitary Protection Zone (SPZ) around the development<sup>1</sup> has been approved by the Ministry of Ecology, Environmental Protection

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<sup>1</sup> The distance to the nearest constructions shall be regulated in accordance with the requirements of SanPiN No 0350-17 "Sanitary norms and rules for protection of atmospheric air in populated places in the Republic of Uzbekistan". Article 2.9 of the SanPiN No.0350-7 requires the establishment of a sanitary protection zone (SPZ, buffer zone) around any new plants: class I - 1000 m, II - 500 m, III - class - 300 m, IV class - 100 m, V - 50 m. For the proposed Project, this zone will have a radius of 100 m. As per provisions of the SanPiN No.0350-17: Article 2.17 it is prohibited to locate within the boundaries of the sanitary protection zone and on the territory of

and Climate Change of the RUz (MEEPCC<sup>2</sup>). Hence, the first stage of the Environmental Impact Assessment report was developed for this facility and a positive Conclusion of the State Environmental Expertise of the Republic of Uzbekistan No. 01-02/14-677 dated 06 May, 2024 was obtained. Maximum Allowed Emissions (MAE), have not been determined. The limits will be calculated and should be approved during the project construction phase before the project commission. In the case of the proposed project, Stage-II Statement of the Environmental Impact (SEI) was not needed as the Center for State Environmental Expertise did not require any additional investigations or analyses and recommended to proceed to the third stage. The final Stage-III Statement on Environmental Consequences (SEC) of the SEE process is to be performed before the project is commissioned. The Statement on Environmental Consequences (SEC) should be developed taking into account the nomenclature of the amount of identified discharges and wastes and their disposal. The SEC must pass the SEE in accordance with the procedure established by national legislation.

Al Mar Consulting and Management (Al Mar) has been appointed by ECS in May 2024 to undertake a Rapid Environmental and Social Assessment (RESA) in compliance with the International Finance Corporation (IFC) Standards for the Project. The RESA is based on findings of the site visit undertaken in May 2024 and review of public data sources as well as documentation provided by the Company. Company environmental and social performance has been reviewed in respect of IFC Performance Standards (2012).

**Categorization:** The Project falls under Category 3<sup>3</sup> (low risk, paragraph 47. Enterprises, including workshops for assembly, repair of electrical equipment and metalworking), according to the national Law "On Environmental Expertise" and based on the Appendix to the Decree of the Cabinet of Ministers of 07.09.2020 No.541 "On further improvement of the mechanism of environmental impact assessment".

According to the IFC PSs on E&S Sustainability (2012), the proposed project is Category B, where business activities with potential limited adverse environmental or social risks and/or impacts that are few in number, generally site-specific, largely reversible, and readily addressed through mitigation measures.

**Social and Environmental Baseline:** The Consultant has undertaken screening of potential sensitive environmental and social receptors from direct or indirect Project impacts through use of available secondary data (including data sheets with socio-economic data in interviews with three (3) mahalla community leaders. Sensitive project environmental and social receptors include but not limited: irrigation canals, agricultural land users, local ambient air quality, settlements and residents around the project site. The baseline environmental and social data were collected through EIA and literature review, field visits and public consultations. The baseline conditions allow assessment of the project impacts and their significance by comparing the existing situation with the predicted situation (affected by the project impacts). The baseline data include: climate, surface and groundwater resources, soil, noise and vibration, air quality, biodiversity, socio-economic characteristics, cultural heritage.

The area of the facility under consideration is characterised by sharply continental climate and refers to the IV climatic sub-area with long hot summer (maximum temperature reaches +35.77

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the industrial site: residential buildings, kindergartens, other educational institutions. However, according to the SanPin No. 0164-04, the location enterprises of class III, IV, V which do not require railway access roads and heavy truck traffic is allowed within the residential area. However, the advantage should be given to areas further away from the residential areas.

<sup>2</sup> From February 2023 was transformed to the Ministry of ecology, environmental protection and climate change of the Republic of Uzbekistan (MEEPCC).

<sup>3</sup> The Regulation stipulates 4 categories for development: Category I (High Risk); Category II (Middle Risk); Category III (Low Risk); Category IV (Local Impact).

°C) and short snowy winter (minimum temperature -2.18). Seismicity of the area is 8 points. The depth of seasonal frost penetration is up to 0.7 m. The project area is characterised by small values of wind speeds from 1.2 to 5 m/sec. Observations conducted as part of the geotechnical survey did not reveal any major signs of erosion within the project site. The topography of the site is relatively flat, and no rills and gullies were noted.

There are no permanent surface water resources within the project area, and the nearest River Chirchik is located approximately 3 km away. Two artificial irrigation and drainage canal/collectors form the eastern boundary of the proposed land plot. Groundwater users are not prominent in the Project area, as most people are connected to piped water systems which provide potable and domestic water.

From a hydrogeological point of view, the district groundwater is located at a depth of 10-26 metres from ground level. Hydrogeological conditions of the project area are characterized by the development of groundwater aquifer at average depth of 10 to 26 m. They are widely used for water supply and irrigation. The most promising aquifer for technical water supply purposes is the aquifer of undifferentiated modern-Upper Quaternary deposits confined to boulder-pebble with sand and gravel filler. The depth of the groundwater horizon varies from 11.0 to 26.0 m, the specific flow rates of boreholes are up to 1.6 - 2.8 l/s with a decrease of 9 - 13 m. It was recommended to drill an exploratory-production borehole up to 40 m deep for technical water supply.

The air quality in the project area is considered to be good. There are no significant sources of air pollution other than traffic emissions. The hourly noise levels do not exceed 55 dB.

The entire project area shows anthropogenic impact in forms of animal husbandry, agriculture, settlements or infrastructure and transport corridors. The land plot do not cover any appreciable variety of species of fauna. In general, the habitats across the Project Aol comprise a network of agricultural fields, with scattered scrub (including hedgerows) and some remnant steppe areas. There are no trees subject to cutting on the territory of the facility. There is no wildlife habitat in this zone. The local population living in vicinity to the project site involved in the livestock (cow, sheep, and goats) raising, for personal needs and partially for the sale. Within the project area, species listed as critical, endangered or vulnerable on the IUCN Red List, as well as plants included in the Red Data Book of Uzbekistan were not identified though secondary data analysis.

The project area has no known cultural heritage either physical cultural resources and traditions and customs passed down through the generations.

The proposed land plot was developed for agricultural use, mainly double annual crop rotation (winter wheat and legumes) by two farmers; rice was previously cultivated, but due to problems with irrigation water, was discontinued more than 8 years ago. The project site is surrounded by irrigated lands where wheat, watermelons, strawberries, and orchards are grown. Three settlements are located in the immediate vicinity of the project site (90 meters nearest and 300m average distances).

**Environmental and Social Impacts and their Mitigation:** Al Mar has assessed and ranked potential project impacts according to their expected magnitude, likelihood and recipient's sensitivity. Below is a brief summarized description of the impacts along with the mitigations proposed.

**Soil Quality:** The Project's construction phase will involve land clearance, topsoil stripping, as well as earthworks such as site grading, excavation and filling. The impact may occur in case the topsoil is mixed with subsoil and/or other material during and after removal.

The key contamination regarding the soil, and bedrock is associated with the potential leakage and spills during the plant operations and the storage of hazardous materials in the plant.

Both construction and operational activities may lead to the contamination of soils and subsoil, particularly where there is the uncontrolled (accidental) spillage of technical liquids, wastewater, and contaminated storm water in areas where they are not contained and/or managed. Although there will be little or no interaction with hazardous materials or chemicals, storage and usage of any hazardous wastes during the operational phase, there remains a small potential risk associated with spills and leaks to ground. Site contamination will be prevented with appropriately designed storage options and the adoption of strict spill control procedures, as well as appropriate spill response measures.

The pre-mitigation significance of the impact can be assessed as moderate, with proposed measures including:

- ❖ The quantities of hazardous substances will be limited at site to reduce the risk of spillage.
- ❖ Any leaks/damage to the soil and groundwater will be prevented through appropriately designed storage options for hazardous materials and wastes (double bunding, contained environment).
- ❖ Providing stormwater management in a way that implies transporting of contaminated runoff to the special area equipped with catchment and treatment facilities.

Both action plans and procedures should be updated as necessary to ensure that they contain appropriate management and remediation strategies to limit the potential impacts associated with accidents and incidents involving spills of material which could impact on soil quality.

The adoption of good on-site working and storage practices and the implementation of suitable control measures, on-site training, and emergency preparedness will ensure that the potential contamination is avoided.

Implementation of the measures will reduce the impact's magnitude to minor, with its overall significance having been assessed as low thanks to the likely absence of highly sensitive or cultivated soils that could be directly affected by spills or effluents.

**Water Resources:** There are no permanent waterbodies within project area. The source of water in the irrigation canals is Chirchik river, which is located at a distance of more than 2930 meters west of the project site. Considering the distance to any surface water from the Project area, it is unlikely that any negative impact on the river will be caused. On the other hand, considering that the discharge of treated wastewater is planned into the artificial canal, it is likely that some negative impact can be potentially caused to the irrigation water and human health in the event of deficient treatment and exceedance of established discharge thresholds.

The Project is not considered to have a high demand for water during construction stage. Water consumption in the construction sites is limited to the drinking, sanitary purposes and cleaning. The water needs during construction phase will be supplied from the nearby districts via trucks. The drinking water will be supplied by bottled water from the market.

During Project operation water supply is required for service and drinking purposes, production purposes and emergency firefighting. Source of water supply for the plant will be 3 boreholes. 180,000 m<sup>3</sup> of water per year (for two production lines) will be required for the plant production needs, which will be guaranteed to be provided by a borehole and a pump with a capacity of 63 m<sup>3</sup>/h, recommended for use in accordance with the obtained hydrogeological conclusion for the possibility of industrial and technical water supply from groundwater on the project area. Water

abstraction permits will be obtained from relevant authorities before the project is commissioned (i.e., for water abstraction from boreholes).

The Project will not cause any negative impact for the population as a result of the use of water resources, firstly, according to local legislation, namely the order of the President of the Republic No. 439 dated 12/7/2022, for the personal needs of individuals, the depth of wells should not exceed 25 m, but our wells are deep and will be located at a depth of 50-70 m - which means they are a completely different aquifer. The Project will not use water from surface sources passing for the needs of the population, since this type of water source is not suitable for production.

Following the detailed design together with performing a hydraulic and topographic survey, the exact discharge locations will be determined and necessary relevant permits will be obtained from the national authorities.

The following measures are proposed as mitigation framework for this aspect:

- ❖ To reduce the risk of potentially polluting materials such as oils, fuels and chemicals leaking, use dedicated storage areas with secondary containment and spillage protection and working procedures, which ensure that these materials are handled correctly.
- ❖ The hazardous waste storage area should be constructed away from the drainage system.
- ❖ Washing of equipment, machinery and vehicles will only be permitted in designated areas, with impermeable surfaces and dedicated closed drainage systems.
- ❖ Discharge of any untreated water into the surface water body must be strictly prohibited. Treated water discharge must comply with the project water quality standards.

After the proposed management and engineering measures against pollution of surface and ground water, residual impact of wastewater discharge during the Project operation on surface water quality can be assessed as minor.

**Air Quality:** Emissions to atmosphere will occur at all stages of the proposed Project lifecycle, including construction and operation stages. Emissions will comply with national legislation requirements and the thresholds established in the IFC EHS Guidelines for Metal manufacturing industry (IFC, 2007).

During construction phase, local ambient air quality may potentially be affected by increased dust, particularly during the site preparation stage (site clearance and earthworks etc.) and by the exhaust gas of construction vehicles, equipment and temporary power generators.

During operation, emissions of air pollutants may be generated as a result of a number of processes and activities carried out as a result of the aluminium can manufacturing processes. These include: (i) emissions from stamping lines operating on-site; (ii) emissions from painting and printing process; and (iii) emissions from compressor and double-circuit boiler on-site.

According to the national EIA calculations, it is shown that the highest concentrations of all pollutants emitted into the air are expected to be at a level below the thresholds established for them outside the industrial zone.

In the process of painting the product paint dust is emitted into the atmospheric air, the paint dust collector is equipped with a cyclone with a cartridge filter with a capture efficiency of 98.0%.

The following measures are proposed as mitigation framework for this aspect:

- ❖ Fires and material burning will not be allowed on the Project site.
- ❖ Hazardous materials stored and used on site with potential gas emissions (e.g. Volatile Organic Compounds) will be located in well-ventilated, but secure low-risk areas, away

from major transport routes and away from the site boundary and receptors locations (where possible).

- ❖ Dusty material stockpiles (i.e. any fine powders and sand) and dust generating activities will be to be located away from the site boundaries and be contained to avoid dust dispersion during storage or use.

Overall, the potential impact of emissions to air during the operation is considered to be of negligible significance considering design controls and distances to receptors.

**Noise:** According to KMK 2.01.08-96 'Protection from Noise', the plant will not have a significant impact on the formation of noise background in the area of its location.

The main noise sources during construction phase are the heavy machineries to be used in construction activities. Construction will generally be undertaken during normal working hours although some works may be required outside of this time. Mitigation measures will also include the use of a sufficient buffer between the Project and local properties to reduce noise to an acceptable level at those locations.

Given the distances to the surrounding residential areas and the fact that construction noise impacts would cease as soon as the works have been complete, any potential noise impacts would be temporary and therefore considered to be of minor significance at receptors in Jaloir village and negligible significance at all other residential receptors, prior to mitigation.

The noise levels during operation phase of the project are proposed under the limit values specified for the day and night time in both national and international limits, including IFC EHS General Guidelines (IFC, 2007).

Therefore, no additional noise level reduction mitigations (such as establishment of noise barriers, etc.) are foreseen for the operation phase.

**Waste Management:** A substantial amount of waste will be generated in the Project's construction phase. Typical construction wastes include concrete, asphalt, scrap steel, glass, plastic, wood, packaging materials and domestic waste from construction workers (i.e. relating to food consumption). This waste is classified as environmental hazard class 5 (non-hazardous) and can be fully utilised or recycled. Inappropriate handling, storage, transport and/or disposal of solid waste streams during construction poses the potential for pollution of the surrounding environment (i.e. soil and groundwater resources), odour and visual nuisances, pest infestation and related occupational health and safety risks.

Due to the nature of the project and the construction works being undertaken, there will be a few hazardous materials used, which can generate oily residues, paints, paint cans, wastes from chemical cleaning products and containers used for the storage of these materials.

The Contractor should subcontract a licensed and reputable waste management company for the collection, transport, and disposal of waste produced at site. Wastes at the sites and the project facilities shall be segregated and collected at the temporary waste storage areas. There should be waste collection and segregation area in the project area depending on the number of project personnel and the anticipated volume of waste.

The operation of the proposed Project will generate small amounts of non-hazardous domestic waste from the operation of the administration facilities and from activities of the employees.

Household waste will be collected on site, stored in temporary containers and removed by specialized companies for disposal into the municipal solid waste landfill

Hazardous waste such as waste oil, ink-contaminated materials and old oil filters will be collected by authorized contractors to be disposed of in government-approved hazardous waste landfill. Aluminum scrap generated during project operations (up to 5% of aluminum consumption) will be sold to third-party licensed and specialized companies' who purchase and recycle the scrap. However, only very small quantities of hazardous materials (and waste) are expected during the operational phase of the Project.

Project Company will develop, obtain approval of and comply with the Waste Generation Norms and Waste Disposal Limits in accordance with national legislation (RD Oz RH 84.3.17.2005 on Production and consumption waste. Procedure for developing the Waste Disposal Limit Document) and IFC Environmental, Health & Safety (EHS) General Guidelines (IFC, 2007).

**Wastewater disposal:** Domestic and industrial wastewater at the construction stage will be collected in specially equipped septic tanks that comply with the sanitary standards of the Republic of Uzbekistan, and then these septic tanks transferred by a specialized contractor to the regional treatment facilities.

Process wastewater and sanitary wastewater during operational phase will be treated at the onsite wastewater treatment plant through multi-staged physical, chemical, and biological units during the operation phase. The Project will construct and operate its own wastewater treatment facilities. The treated wastewater will be discharged into the neighboring water canal.

The following measures are proposed as mitigation framework for this aspect:

- ❖ Discharge of any untreated water into the surface water body, including canals, must be strictly prohibited. Treated water discharge must comply with the project water quality standards.
- ❖ Maximum Allowed Discharge (MAD) will be calculated based on national legislation requirement and IFC EHS Guidelines for Metal Manufacturing industry (IFC, 2007). MAD should be approved by the Ministry of Ecology, Environmental Protection and Climate Change of the RUz (MEEPCC) during the project construction phase before the project commission.

**Biodiversity:** The Project Site is remote from protected habitats and not favorable for vegetation and wildlife development or preservation.

The presence of populated areas, cultivated lands, and irrigation network has left their mark on the composition of the vegetation. Wild species of the flora marginally were ousted by cultivated species of garden plants, cotton and grain crops. There is no sensitive wild flora within or the vicinity of the Project site. The proposed project construction works will not have any significant impact on flora as they take place within areas agricultural land, e.g., and along existing road routes.

Within the project area, species listed as critical, endangered or vulnerable on the IUCN Red List, as well as plants included in the Red Data Book of Uzbekistan were not identified though secondary data analysis. Most of species recorded for the project area are typical for Central Asia and more or less common and widely spread.

**Socio-economy:** The plant construction activities are environmentally and socially feasible for implementation provided the recommended mitigation measures are implemented. During the process of RESA, the following social impacts were identified as positive:

- ❖ The Project will generate additional tax revenues thus assisting local governmental bodies in regional socio-economic and infrastructure development activities.
- ❖ Employment opportunities will be created by the Company.

- ❖ Local goods (cement, reinforcement, bricks, wires, etc.) and services will be contracted for the Project development.
- ❖ During Project operations, it is expected that Project Company will implement corporate social responsibility programmes for local communities.

The Project also identified potential negative impacts, assessed their magnitude and significant to determine if community way of life will be affected, and if so, what and to what degree of those impacts. The following impacts were identified:

- ❖ Land acquisition and economic displacement;
- ❖ Influx of workers;
- ❖ Construction nuisances;
- ❖ Plant operational nuisances
- ❖ Road transportation and possible use of village road

The primary positive economic impact during construction is likely to result from employment creation during this phase. The Project is expected to create at least 100 direct short term employment opportunities during the construction phase. The majority of workers will be engaged by the Contractor and will consist of an unskilled, semi-skilled to skilled workforce. The Construction workforce is based on site in a workers camp. The likelihood is low and impact minor. It is expected that the majority of workers' contracts (especially for temporary/contract staff) will expire with the completion of the construction phase of the project.

The Project's construction phase will involve a varied range of construction operations, including transportation of workers and haulage of heavy machinery and materials.

The risks associated with the operational phase of the project are anticipated to be significantly lower than during the construction phase due to reduced site activity and requirements for heavy plant and machinery. The project's operational phase will only entail the daily transportation of O&M workers, and occasional transfer of equipment and materials for maintenance purposes and production process. None of these is expected to create significant negative impacts on the local roads. Hence, additional road movement during the operation stage will not have adverse impacts on local people.

The plant operation present a number of health and safety risks to communities based around the project site. There will be occupational health and safety risks attributable to the operational phase associated with production and maintenance. An Occupational Health Safety Management Plan and Standard Operation Procedures will be prepared and be implemented for the Project operational phase. All risks to public safety will be appropriately addressed and prepared for the operational phase Emergency Preparedness and Response Plan (EPRP) and training.

During the operation phase of the proposed project, it is anticipated that the number of the workforce will be around 267 staff (4 production shifts). All workers will have written official work contract. The Project Company will document and communicate to all workers their terms and conditions of employment, including their entitlement to wages, hours of work, overtime rules and overtime pay, and any benefits (such as sick leave, maternity/paternity leave or holiday). A structured Grievance Redress Mechanism (GRM) will be implemented in multiple languages anonymously (online and hardcopy) so that workers and community have access to express their concerns. Local communities based around the project sites will be familiarized with the Project's community GRM. The human resources department shall be responsible for implementing the GRM for the facility.

**Economic Displacement:** The assessment of available information indicates low significance impact of economic displacement, losses of income / livelihoods, losses of employment without any mitigation measures provided to the affected persons.

During the site survey conducted in June 2024, no legal and/or informal landusers were observed within the project area. The land acquisition process for SIZ, where the project site is located, was completed by the government at the time of RESA preparation. The project site is located on a former agricultural land leased by the state to two farms.

At the time of RESA preparation, the Consultant actually observes voluntary termination to possess the agricultural land parcels by land-users. The total area of land acquired from leaseholders for SIZ needs was equal to 21 ha that was used for agricultural purposes by two farmers with two farms. Site visit findings indicated that the land in question was leased by two farmers for the purpose of cultivating annual crops. The project land (21 ha) used to be leased to farm Jahongir Agro Biznes farm (18.24 ha) and Salomov Mamatqul farm (2.76ha).**Error! Reference source not found.** The farmers were asked to voluntarily terminate the land lease agreement following the notification of SIZ establishment. In September 2023, the farmers completed the harvest thus not losing any crops and no further agricultural work was done on this land. Both farmers signed a notarized agreement on the voluntary return of land to the Government's state reserves.

No state compensation was provided to the leaseholders as there were no any residential houses, constructions and installations, including incomplete constructions, and also located outside of allocated plot. There was no any incomplete agricultural production or crop lost. Farms did not lose any profit since the official balance of farms has been unprofitable over the past three years and the farm owners' voluntarily terminated to possess the land parcel and passed it to the khokimiyat reserve fund in 2024 thus losing his right to be compensated.**Error! Reference source not found.** There were no complaints or grievances to be recorded from the farmer's side up to the reporting time.

Although it is not a requirement under national legislation, Project Company is committed to successful and fair implementation of the livelihood restoration measures regarding any economic displacement associated with the project.

It is not a requirement to compensate anyone without any legal claim to land according to national legislation, however, Project Company recognises it is best practice to compensate any individuals or groups affected by the project based on the Lenders Standards.

RESA estimated compensation in the form of three national annual salaries to support economically displaced farmers in transition to other earning activities. A consultation was held on 01 April 2025 with the PAPs to disclose the evaluation methodology, compensation value, and payment timelines, etc. The PAPs expressed full agreement and gratitude. The receipt of compensation will be formally recorded.

**Environmental and Social Management System:** To manage and minimize the project's environmental and social impacts, East Can Solutions will develop and implement an Environmental & Social Management System (ESMS), commensurate with the scale & complexity of the project E&S risks and impacts. During the creation of the ESMS, the following subject / documents will be taken into consideration.

- ❖ National EIA, RESA
- ❖ IFC PSs
- ❖ IFC EHS General Guidelines
- ❖ WBG General EHS Guidelines (2007)

- ❖ WBG EHS Guidelines for Metal, Plastic, and Rubber Products Manufacturing (2007).
- ❖ Environmental and Social Action Plan (ESAP)

The ESMS will be developed in two phases. During the first phase, the following ESMS elements will be developed: (i) Environmental, Social, Health, and Safety policies and Human Resources Policy; (ii) risks and impacts identification registers; (iii) standard operating procedures; (iv) organizational capacity and competency; (v) contractor management procedure; (vi) supplier code of conduct; and (vii) stakeholder engagement plan and grievance mechanism for external and internal stakeholders. During the second phase, and before operations, the following ESMS elements are to be developed: (viii) operational E&S management plans (ESMPs), and (ix) monitoring and review, including regulatory permitting and compliance tracking.

**Stakeholder Engagement and Public Consultation:** According to the Law of the Republic of Uzbekistan No. ZRU-604 dated 17.02.2020 "On Special Economic Zones", the SIZ establishment process does not require the preparation of SEA and public consultation. The stakeholder consultation did not carry out during national Preliminary Statement of the Environmental Impact (PZVOS) preparation.

IFC Performance Standards on Environmental and Social Sustainability require public engagement to be undertaken as part of ESIA. According to the Resolution of the Cabinet of Ministers of the Republic of Uzbekistan No. 541 dated 07.09.2020 "On further improvement of the mechanism for assessing environmental impact", only objects of I and II categories of environmental impact are subject to the procedure for passing public hearings about environmental impact. As the Project falls under Category III (low risk), Al Mar engaged with a limited number of relevant stakeholders to obtain critical secondary baseline data. Local Authority Disclosure were conducted among 3 mahalla reis (community leaders) on 17 May 2024. The stakeholders expressed concerns regarding the potential of damage to existing roads and safety concerns due to increase in traffic during the construction and operational stage. The questions raised mostly related to local employment, potential E&S-related impacts, the baseline studies conducted, the Project schedule and capacity development activities to be conducted for the technical personnel to be employed. All the questions were answered by Al Mar.

**Grievance Mechanism:** Grievance Redress Mechanism (GRM) will be developed to enable stakeholders to raise grievances to the project and seek redress when stakeholders perceive an adverse impact arising from the project activities. The mechanism sets out clear systematic steps for affected individuals and communities to submit complaints and feedback and simultaneously for the Project in responding to queries, feedbacks and complaints received. This mechanism will be applied to guarantee the project is responsive to any concerns and grievances particularly from affected stakeholders and communities.

GRM will be available to personnel, workers, project staff and people living or working in the areas impacted by the project activities. Any impacted or concerned person or group of people about the project activities have the right to participate in the GRM and be encouraged to use it.

**Findings, Recommendations and Conclusions:** The Rapid Environmental and Social Assessment (RESA) of the Aluminium Can Production Plant revealed that the project will have economic benefits for the local, state and national economy. An RESA has been conducted for Project in accordance with relevant environmental and social guidelines of the International Finance Corporation with an overall objective to ensure acceptable environmental and social performance of the Project. The RESA identified potential impacts through a systematic scoping process whereby the activities (both planned and unplanned) associated with the Project have been considered with respect to their potential to interact with environmental and social resources or receptors, which may generate potentially significant environmental and social impacts have

been further assessed in the RESA, with appropriate mitigation and enhancement measures recommended for alleviating potential negative impacts or enhancing potential positive impacts from the Project.

The RESA Report presents mitigation measures and mitigation plan in order to avoid, minimize and offset above listed potential impacts that can arise during the project life. It is concluded in the RESA that with proper implementation of the recommended mitigation measures, the residual environmental and social impacts causing by the construction and operation of the Project would be of no larger than moderate significance.

The Company will manage and monitor the Project's environmental, social, health & safety (ESHS) issues throughout its life cycle – from design development to operation. Specific mechanisms will be provided at each phase to ensure prevention, minimization, mitigation of potential negative impacts, as well as measures to enhance the positive effects including:

- ❖ Environmental and social impact assessment in compliance with international requirements, including concerns expressed by stakeholders during public discussions;
- ❖ Development of design documentation in line with the best industry practices and best available techniques, internal review of design solutions;
- ❖ Procurement of modern equipment and materials which meet up-to-date environmental and safety standards;
- ❖ Ongoing supervision and monitoring of construction activities on the site, and use of modern construction technologies;
- ❖ ESHS training of the Company and contractor's personnel; and
- ❖ Day-to-day and long-term management of environmental, occupational health and safety, community safety impacts and risks through implementation of specific ESHS management plans.

The Project ESHS management plans and procedures shall be developed and implemented in order to provide adequate management of environmental, social, health and safety impacts and risks associated with the Project implementation, including respective site-specific construction and operational practices. The Project management and monitoring procedures shall be developed taking into account the findings of the current RESA.

Overall, it is expected that the Project will be constructed and operated with acceptable environmental and social performance under proper implementation of the ESMP.

# 1. PROJECT INFORMATION

## 1.1. PROJECT BACKGROUND

In order to fully and effectively utilise new opportunities and existing reserves to increase the production of industrial products, establish production of new types of competitive products, as well as to increase the export potential of Tashkent city and provide the population with high-income jobs, the proposals about Special Industrial Zone (SIZ) creation of the Tashkent City Khokimiyat, the Ministry of Economy and Finance, the Ministry of Investment, Industry and Trade, the Ministry of Agriculture, the Ministry of Water Resources and the Chamber of Commerce and Trade were approved.

Industrial Technopark "Yangikhayot" was organized in accordance with the decree of the President of Uzbekistan No. PP-4979 dated February 4, 2021. The priority areas of the technology park are the organization of high-tech, innovative, science-intensive, export-oriented and environmentally friendly production enterprises. In particular, it is planned to establish the following types of enterprises on the territory of the technopark:

- production of construction materials;
- food industry;
- electrical industry;
- light industry;
- heavy industry;
- organization of distribution centers.

Currently, a number of companies producing building materials, household goods, food products, and metal products have already become residents of the technology park.

According to the Decree of the President of the Republic of Uzbekistan № PP-138 of 20 March 2024 'On the creation of a special industrial zone "Yangi Avlod" in Tashkent city', 100 hectares of state land from the territory of the industrial technopark 'Yangikhayot' were withdrawn for the creation of the special industrial zone 'Yangi Avlod'. According to the Law of the Republic of Uzbekistan No. ZRU-604 dated 17.02.2020 "On Special Economic Zones", the SIZ establishment process does not require the preparation of EIA and public consultation.



**Figure 1: Map of Special Industrial Zone Yangi Avlod**

The selected Project site is located in the Jahongir Agro Biznes farm area of Tashkent, on a land plot dedicated to the establishment of the new Special Industrial Zone (SIZ), which will be owned and operated by “Tashkent Invest”.

## 1.2. PROJECT DESCRIPTION

**Project Proponent:** East-West Invest Limited (EWI) is the leading snack food producer and distributor in Uzbekistan and has exclusive distribution rights for chips made by PepsiCo in the country. EWI plans to develop an aluminium can production plant with the projected annual production capacity of around 550 million cans per year (The Project). The plant will produce beverage cans from aluminium coils exported from China or other regions. The Project will be developed by a Special Purpose Vehicle company called “East Can Solutions” LLC.

The Project will be developed in the Jahongir Agro Bizn area of Tashkent, on land designated for establishing a new Special Industrial Zone (SIZ). The total area of the plant is 21 ha.

**Project Shedule:** The key Project milestones to date are:

Stage	Time Shedule
Concept designing	January 2023 – May 2023
Plant designing	November 2023 – February 2025
Equipment manufacturing	June 2023 – February 2025
Design of premises and on-site auxiliaries	March 2024 – February 2025
Constructions manufacturing (Off-site)	January 2024 – February 2025

Stage	Time Schedule
Accreditation ECS as a member of SIZ Yangi avlod	April 2024 – February 2025
Lease agreement preparation and signing	February 2025 – March 2025
On-site constructions works	March 2025 – April 2025
Shipping of equipments	January 2024 – April 2025
Installation of equipment	March 2025 – June 2025
Commisioning	May 2025 – July 2025
Testings and working under Crown's supervision	June 2025 – July 2025
Starting operation	August 2025

**Plant infrastructure:** The production facility of the plant is a modern industrial complex consisting of a production building, finished product warehouse, as well as adjacent auxiliary, technical and administrative areas. The plant was designed taking into account the requirements for rational placement of technological equipment, optimization of production flows, compliance with all industrial sanitation standards, ensuring high-quality working conditions and environmental protection.

**Table 1: Project Area Allocation**

Name of sites	Unit	Size
Plant for the production of aluminium cans Warehouse of raw materials and supplies Finished products storage warehouse	m <sup>2</sup>	26180
Administration building, workers' rest rooms, auxiliary premises and and kitchen with canteen	m <sup>2</sup>	1000
Paved	m <sup>2</sup>	2820
Temporarily unused ground surfaces	m <sup>2</sup>	180000
<b>TOTAL</b>	m <sup>2</sup>	210000

**Plant Functional Areas:**

1. Main Production Area
  - ❖ Two main production LINE 1 and LINE 2 with metal storage and supply areas equipped with the following equipment: Coil handling area (Downender, Coil Car, Uncoilers), Cuppng Presses, Bodymakers (BM), Washers with Dryers, Decorators with Rim Coating Units, Curing Pin-ovens, Laquer Spray-machines (Inside Spray), Internal Baking Ovens (IBO), Neckers, Palletizers, Lines Conveying System.
  - ❖ Process control areas: Operator Stations, HMI Panels, Control Cabinets.
2. Warehouse & Dispatching:
  - ❖ Ready goods warehouse.
  - ❖ Area for loading and receiving goods with easy access to the gate (gate 3 m, 4 m, 4.9 m).
  - ❖ Storage area for pallets, packaging materials and components.
3. Product quality control:
  - ❖ Quality control laboratories: **Front End QA Lab** and **Back End QA Lab** or quality control at all stages of production.
4. Chemical control lab – chemical laboratory with fume hoods (HOOD) and special chemical storage areas.

5. All auxiliary services and supporting infrastructure are organized to ensure production:
  - ❖ Tooling (tool shop), Technical workshops including electrical workshop and mechanical workshop.
  - ❖ Spare parts warehouse, ODM (Organic direct materials) warehouse, Chemical process and oil storage warehouse, Paint (print Ink) warehouse and Prepress laboratory.
  - ❖ Changing rooms for 25, 48 and 184 people, showers, first aid station, canteen for 80 people, rest rooms.
  - ❖ Sanitary units are provided in each building block.
6. Engineering systems:
  - ❖ Switchgear rooms -10 kV, Main switchboard, Compressed air compressors, Vacuum pumps, Boilers, Cooling towers with pump stations, Water treatment and water treatment system, Ventilation and air recirculation systems (RECIRC FAN).
  - ❖ Special areas for charging loaders batteries, storage rooms, archive, supervisor room, etc.
7. Safety and environmental protection:
  - ❖ All rooms are equipped with video surveillance systems.
  - ❖ Separate waste storage areas are allocated on the territory of the plant outside the workshop, including for packaging waste, containers, used rags, ferrous and non-ferrous scrap metal to be recycled or disposal.
  - ❖ All rooms containing potentially hazardous substances are provided with waterproofing and drainage systems (trays).

**Water, Energy and Gas Requirement:** The site is located within the Tashkent city, on the territory of the Yangikhayot district, an area with developed infrastructure. The territory of the facility is provided with all necessary infrastructure facilities (gas and electricity supply). There is no need to implement additional measures to develop the new ones.

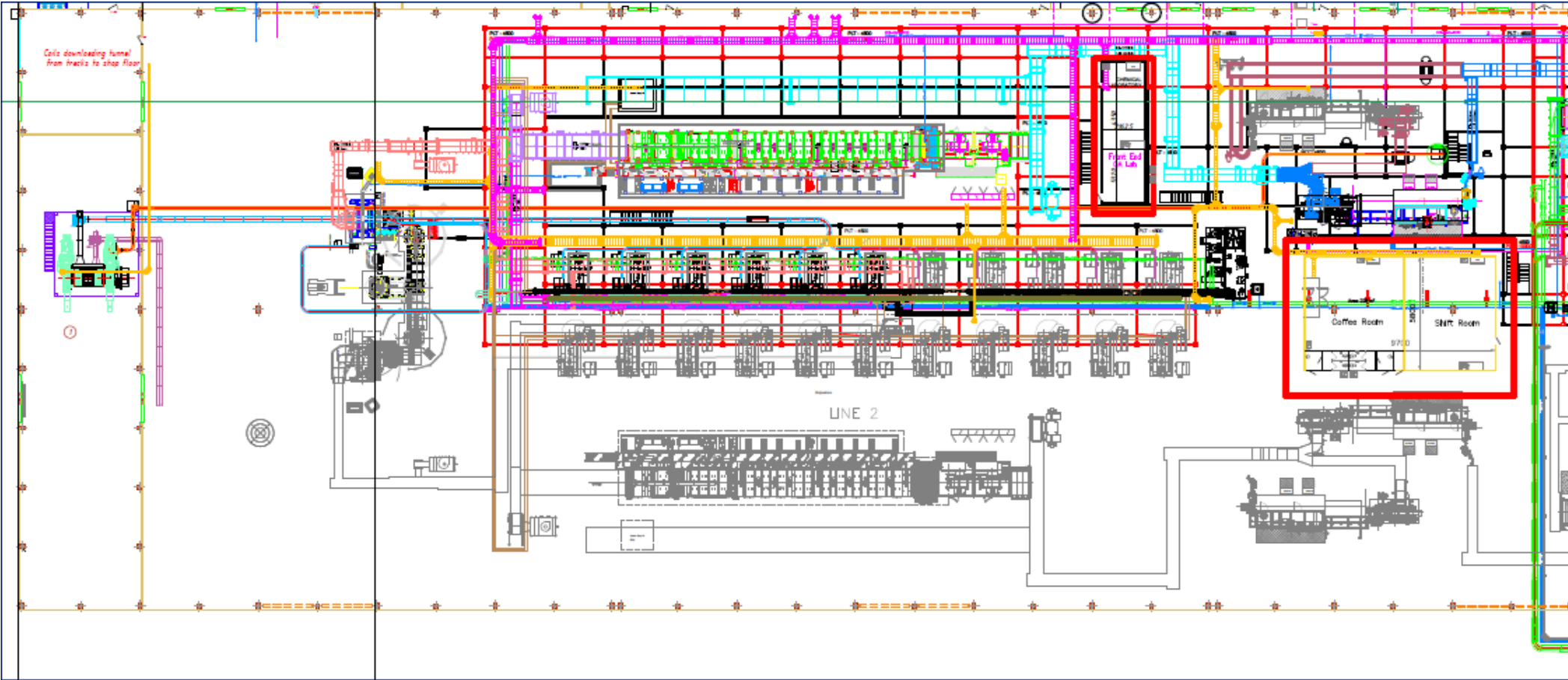
The site under consideration is provided with electricity supply. Electricity supply will be from the existing power line of Yangikhaoyot district of Tashkent city. Power demand (kW/hour per year) and installed power (kW or MW) are calculated as approximately 3,500 kW/hour, 1,680,000 kW/month, 20,160,000 kW/year.

Water consumption for production and domestic needs will be carried out from 3 drilled boreholes (up to depth 70m). Water intake for watering of the plants on the territory will be carried out from the irrigation ditch (aryk). The total water consumption of the production plant is estimated at 900 000 m<sup>3</sup>/year for one operating one production line.

Gas supply is provided from the district gas supply network. Natural gas demand (cubic meters) m per year): approximately 150 m<sup>3</sup>/h, 30,000 m<sup>3</sup> per month, 350,000 m<sup>3</sup> per year. Heating of administrative premises in autumn-winter period with the help of two-circuit gas boiler (1 pc.) is provided. The enterprise provides organisation of a kitchen for workers, where 2 gas boilers will be installed to prepare hot dishes for the working staff.

**Wastewater:** Process wastewater and sanitary wastewater will be treated at the onsite wastewater treatment unit through physical/chemical/biological treatments. The Project will construct and operate its own stormwater system, wastewater treatment facilities and water supply for operational needs from groundwater sources. The treated wastewater will be discharge into the canal. Normative discharge volume is 9.29 m<sup>3</sup>/day for domestic wastewater and 3390.85 m<sup>3</sup>/year for industrial wastewater. Drainage network for storm water drainage is designed in reinforced concrete ditches.

Figure 2: Facilities drawing



### 1.3. PROJECT LOCATION

The selected Project site is located within a newly established Jangi Avlod Special Industrial Zone (SIZ), which will be owned and operated by “Tashkent Invest”.

The territory is bordered by:

- ❖ from the northern side - internal road, irrigation canal, then settlement Djaloir;
- ❖ from the eastern side - internal road, then agricultural land;
- ❖ from the western side - agricultural land, then internal road;
- ❖ from the south side - vacant land, then the highway TRR (Tashkent ring road).

Several farms are located around the boundaries of the site. The nearest residential properties are located to the north-east of the site at a distance of approximately 90 metres and comprise one and two storey dwellings. The site is bounded on all sides by an internal road and agricultural land.

The coordinate data is defined as follows:

<b>Point</b>	<b>System of coordinates WGS84</b>	<b>System of coordinates of Tashkent city</b>
A	41°10'11.06"C / 69°16'30.81"B	X=58799.19 Y=32977.50
A1	41°9'58.36"C / 69°16'27.02"B	X=58406.86 Y=32890.54
B	41°9'51.52"C / 69°16'25.52"B	X=58196.55 Y=32856.10
C	41°9'52.31"C / 69°16'10.51"B	X=58218.92 Y=32505.64
D	41°10'11.82"C / 69°16'15.61"B	X=58821.33 Y=32622.92



Figure 3: The map of Project Site



Photo 1: General View of the Project Site



**Photo 2: The nearest residential buildings**

The area of the facility location is provided with a network of highways and means of communication.

## **1.4. STAGES OF THE PROJECT CYCLE**

### **1.4.1. Pre-construction Phase**

During the pre-construction phase, the following was done:

- a) Land survey;
- b) Site Clearing Works;
- c) Power supply design for the plant;
- d) Planning storm water drainage and containment. The final site engineering design maintained the natural drainage pattern
- e) Undertaking site preparation, manufacturing-procurement of items and transporting the required components and construction equipment to site.

Construction and installation work will be conducted according to a specially developed and duly approved work project in compliance with the requirements of regulatory documents ShNK 3.01.01-22 "Organization of construction production" and ShNK 3.01.02.23 "Safety in construction".

Main characteristics of structures and materials of the production building is the following:

- ❖ Foundations for equipment are made of class B25, W8 concrete. Foundation structures will be carried out taking into account vibration protection, in accordance with the relevant technological requirements of the equipment manufacturer
- ❖ Foundations for supporting structures of the building are provided with reinforced concrete of class B20, W8
- ❖ Foundations will be done from concrete of class B7,5 and B20.
- ❖ The columns used are prefabricated reinforced concrete according to series 1.423.1-5 and 1.427.1-3.
- ❖ The floor above the first floor of the administration building will be made of monolithic reinforced concrete.
- ❖ Roofing shall be made of 120 mm thick sandwich panels with basalt fiber based insulation on steel structures (trusses, braces, purlins).
- ❖ The external walls will be made of 100mm thick sandwich panels with basalt fiber insulation on a metal frame.
- ❖ Windows, doors and gates are used individually made of metal from aluminum profile and from MDF.

The production building provides the necessary engineering equipment and systems, such as industrial and household water supply, automatic fire extinguishing, heating, ventilation and air conditioning, electrical equipment and electric lighting, gas supply, security and fire alarm, video surveillance, structured cable system. A built-in boiler room is provided for heat supply. There is a smoke removal system and automatic shutdown of all ventilation and air conditioning systems in case of fire.

The mobilisation works for the Project were commenced on March 2024 and the construction activities were commenced on April 2024. Under the Contract, the Contractor shall comply with all applicable national, provincial and local environmental laws and regulations as well as applicable respective standards.

#### **1.4.2. Construction Phase**

East Can Solutions has hired LLC “Frigate Construction-Engineering LC” as Construction Supervision Consultant (CSC). The contract No. 1/ГП/2024 on April 04, 2024 for project management and construction supervision was signed with Frigate Construction-Engineering LC. The CSC will ensure safeguard compliance of civil works. Contractor for civil work is LLC “Kardise” and East Can Solutions has signed Construction Contract # 25 on March 18, 2024 with the company LLC “Kardise”.

It is expected that it will take approximately 20 months from the commencement of the project to the time of full production.

The construction phase will include establishment of internal roads and upgrading external access roads; establishment of construction areas; installation of temporary security fence at the camp site; mobilization of labour force, equipment and plant for construction works; actual construction works; movement of heavy equipment and machines; construction of other associated ancillary infrastructure.

The Project is expected create at least 100 direct employment opportunities during the peak of the construction period. The Contractor has already organised campsite for about 50 workers, maintenance yards and storage facilities. They are temporary in nature (for the duration of the construction phase) and located within project site. The Contractor’s camp looks organized and is in tidy condition. About 50 workers live currently in the camp. This is due to the fact that most of the local employees live fairly nearby and return home at the end of working days. All necessary sanitary facilities have been provided (water, toilets, and shower). Fire protection equipment, including water tanks, fire extinguishers and other instruments, are available at the camp.

Delivery of the construction materials to the construction sites will be conducted by the heavy trucks. Materials for construction works are expected to be delivered from the nearest national suppliers.

The territory of the project site is provided with all necessary infrastructure facilities. The facility will be connected to all communication and engineering networks of Tashkent in accordance with the project technical specifications. There are main networks of electricity supply and communications in close proximity to the proposed construction site. There is no need to build new ones and implement additional measures to develop the transport service system.

At the time of the site visit, the works of the zero construction cycle started. The works of this cycle include: installation of the protective fence, ground and underground works, foundation construction, screed pouring, hydro- and heat insulation, foundation erection and backfilling of its slots, laying of engineering communications.



**Photo 3: Project zero-cycle construction works (May 2024)**

During the site visit on 22-23 May, 2024, the Consultant visited the construction work sites where works were ongoing.

In general, the construction areas were cleaned up, waste accumulation areas allocated, household and food wastes regularly removed by the specialized municipal operator vehicles. No significant spillages of oil products were observed. No heavy dusting, smoke, odours, excessive noise were noted. The establishment of temporarily construction camp was organized. The camp has sanitation with the use of septic tanks, food and recreation facilities. All wastewater from the latrines, kitchens and bathrooms will be collected to the septic tanks.

Condition of production facilities and structures is mainly good, they appeared to be safe in many cases. However, some non-compliances have been identified during the site visit. Construction waste was scattered on the territory of construction site in a mixed form. There was no single place to collect construction waste. Dust was observed along the site. The accommodation areas at camp site of labour personnel were not in line with the requirements of IFC. The following non-compliances were identified at the site: in some cases, there is no enough space for living for workers, and the rooms poorly meet the sanitary standards.

### **1.4.3. Operational and Maintenance Phase**

It is anticipated that the plant will be operational by August 2025.

The operational phase will include plant operation and maintenance, site clearance and deposition of debris off the site, restoration of areas where construction activities temporarily disturbed the environment, repairs and replacements of failed parts.

During the operation phase of the proposed project, it is anticipated that the number of the workforce will be around 267 staff (4 production shifts). It is foreseen that operational and maintenance phase will include:

- ❖ Management and administration of the facility;
- ❖ Environmental, health and safety management;
- ❖ Full service including scheduled and unscheduled maintenance of the facility;
- ❖ Perform all necessary environmental protection activities;
- ❖ All other services necessary for the safe and efficient operation of the facility;
- ❖ Recycle all used oils, lubricants, and scrap materials at an approved facility;
- ❖ Dispose of all site generated waste at an approved facility in line with local requirements and international best practice.

It is planned to install the following equipment at the facility: tow automatic pressing and stamping lines; painting equipment; rotary printing machine.

The critical raw materials for manufacturing beverage cans are aluminum coils (7000 tonnes/year) with the potential suppliers in China and the Kingdom of Saudi Arabia (KSA).

Aluminum-manganese alloys 3004/3104 (Russian analogue D12) and alloys 5042/5182 (analogue AMГ4) used for the lid production are manufactured by two companies:

- ❖ Vsevolzhsk aluminum alloy plant, Vsevolzhsk.
- ❖ Samara Metallurgical Plant, Samara.

The main raw materials (aluminum coils) are planned to be transported by road. Finished products, depending on the volume for export, are also planned to be transported by road and by rail. It is planned to use motor transport for the domestic market.

The main harmful substances released during the processing are summarised below. Table 2 shows the preliminary calculation of annual pollutant emissions during plant operation.

**Table 2: Preliminary calculation of annual pollutant emissions**

Parameters	Maximum Permissible Concentration (MPC), mg/m <sup>3</sup>	Hazard Class	Contribution, %	Total emissions, t/year
Aluminium dust	0,3	3	0,47	0,001931
Paint dust	0,3	3	0,00	0,000011
Butyl acetate	0,1	4	4,22	0,017680
Hydrocarbons	1,0	4	1,92	0,008087
Toluene	0,6	3	1,48	0,006174
Ethylbenzene	0,02	3	4,52	0,018936
Acetic acid	0,2	3	1,90	0,008
Oil aerosol (vapor)	0,05	3	4,78	0,02
Carbon oxide	5,0	4	61,42	0,257515
Nitrogen dioxide	0,085	2	18,80	0,078838
Sulphurous anhydride	0,5	3	0,49	0,002056
<b>TOTAL</b>			<b>100</b>	<b>0,419228</b>

According to the Decree of the Cabinet of Ministers of the Republic of Uzbekistan No. 541 of July 07, 2020 "Regulations on State Environmental Examination in the Republic of Uzbekistan", aluminium cans manufacturing plant refers to the 3 category of impacts on the environment (low risk).

According to KMK 2.01.08-96 "Noise Protection," the plant will not have a significant impact on the noise in the location area.

The annual rate of generation of non-industrial and industrial waste is indicated in Table 3.

**Table 3: Annual rate of non-industrial and industrial waste generation**

Source of waste generation	Name of waste	Characteristics of waste		Waste generation rate, t/year
		chemical structure	Hazard Class <sup>4</sup>	

<sup>4</sup> According to Uzbek waste classification

Sludge	Wastewater treatment sludge	Low-hazard substances	IV	540
Paint waste	Paints	Hazard substances	II	1,5
Human life activity	Solid waste	Low-hazard substances	IV	1,5
Kitchen	Food debris	Low-hazard substances	V	0,98
Cleaning of the premises	Garbage	Low-hazard substances	IV	6
Hard surfaces	Garbage	Low-hazard substances	IV	15,51
	Rags	Low-hazard substances	IV	0,07
Production process	Rejection of cans	Low-hazard substances	IV	1,875
	Waste of lubricating oils	Hazard substances	II	0,0035
	Scrap of ferrous metal	Low-hazard substances	IV	0,05
Employees	Workwear waste	Low-hazard substances	IV	0,0855
Lighting of premises and territory	Used LED lamps	Low-hazard substances	IV	0,0219
<b>TOTAL</b>				<b>567,59</b>

Water consumption for production and domestic needs will be carried out from 3 drilled boreholes (up to depth 70m). The boreholes will be a source of fresh water for domestic needs. All water from the wells will pass through a water treatment/preparation section and then be distributed for technological needs and for household needs, respectively. Table 4 shows the preliminary calculation of annual water consumption and disposal during plant operation.

**Table 4: Preliminary calculation of annual waters consumption-disposal for 1 production line**

Type	Water consumption		Effluent discharge		Discharge Route
	(m <sup>3</sup> /day)	(m <sup>3</sup> /year)	(m <sup>3</sup> /day)	(m <sup>3</sup> /year)	
Household drinking needs	0,75	273,75	0,75	273,75	Discharging waste water on the terrain
Cooking	1,08	394,2	0,54	197,1	
Washing floors	1	365	0,5	182,5	
Shower rooms	7,5	2737,5	7,5	2737,5	
<b>Production needs</b>	<b>238</b>	<b>86870</b>	<b>0</b>	<b>0</b>	
Watering area	1,41	211,5	0	0	
<b>TOTAL</b>	<b>250</b>	<b>90 852</b>	<b>9</b>	<b>3 391</b>	

The water used to wash the cans will be treated tap water that has been passed through a water treatment plant to purify it. Effluent will be transferred to treatment facilities, where it will be treated and purified before being discharged on the terrain. The parameters of treated wastewater will comply with the Waste water discharge regulations of the Republic of Uzbekistan and the requirements of SanPiN RUz No. 0318-15 Hygienic and anti-epidemic requirements for the protection of water in reservoirs on the territory of the RUz. The maximum daily volume of industrial effluents is 500 m<sup>3</sup>/day.

Rating of discharges of pollutants will be carried out by establishing the maximum allowed discharges (MAD) of these substances in wastewater into water bodies. MAD will be calculating based on requirements indicating into SanPiN No 0088-99 «Sanitarian requirements for development and coordinating of projected MAD of pollutants, discharged into the water bodies

with waste water» and Uz RH 84.36.2004 "Regulations on discharge of pollutants into water bodies and on the terrain, taking into account technically achievable performance of wastewater treatment."

Treatment facilities are designed for complex wastewater treatment from coolant, aluminum, fluorides, suspended solids, surfactants, petroleum products, dissolved organic substances and metals (iron, zinc, copper).

The project for industrial and domestic wastewater treatment for the East Can Solutions LLC aluminum can production plant includes:

- ❖ Development of a scheme for purifying water coming to the plant with its subsequent preparation for use in the technological process;
- ❖ Development of the water deionization system;
- ❖ Development of an emulsion cleaning scheme with filtration system and drainage;
- ❖ Development of plant industrial effluent treatment scheme;
- ❖ Development of the plant domestic wastewater treatment scheme.

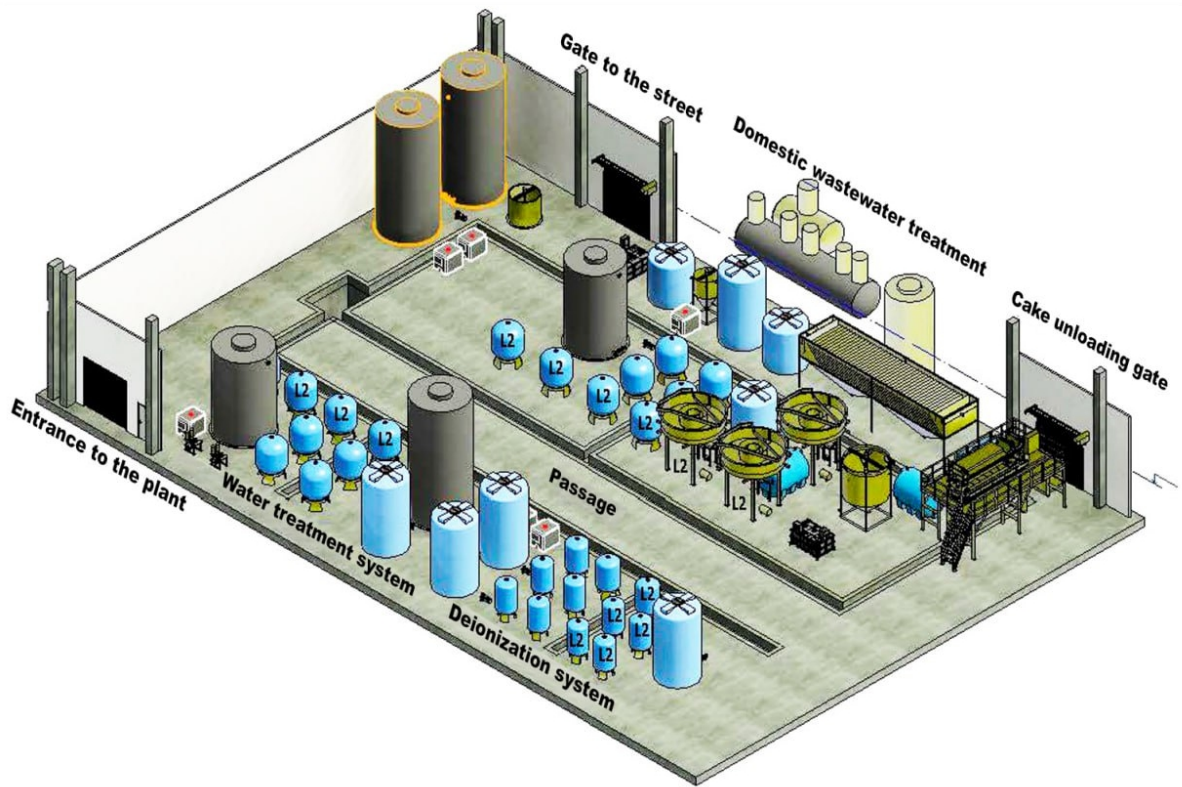
The calculated indicators for domestic wastewater treatment are given in Table 5.

**Table 5: The calculated indicators for domestic wastewater treatment**

Composition / Pollutants	Concentration of pollutants at the entrance to the plant, no more than (mg/dm <sup>3</sup> )	Concentration of pollutants at the outlet of the installation, no more than (mg/dm <sup>3</sup> )	Maximum allowed concentration based on national regulations	IFC Thresholds for metal industries
Total Suspended solids	110	10	15	20
COD	250	15	15	12.5
BOD full	180	5	15	30
Nitrogen of ammonium salts	18	0.4	1	1
Phosphorus phosphates	2	0.2	3	2
Active chlorine	0,015	0,005	0,005	0,005
Surfactant (biodegradable)	1.5	0.3	20	
Oil and Grease	40	0,1	1	1
Total Coliform Bacteria		<500 CFU/100 ml		400
Thermotolerant coliform bacteria		<100 CFU /100 ml		
Coliphages		<10 CFU /100 ml		

The scheme of water treatment of the proposed Aluminium Can Production Plant is shown in Figure 4.

Figure 4: The scheme of water treatment of the proposed Aluminium Can Production Plant



The maximum daily volume of industrial wastewater will be 500 m<sup>3</sup>/day. Domestic wastewater is calculated taking into account the average daily presence of personnel on the territory of the plant. Sanitary facilities (toilet, shower) will be used, food will be delivered to the dining room by the food supply company, so the kitchen will function only for serving food and washing dishes.

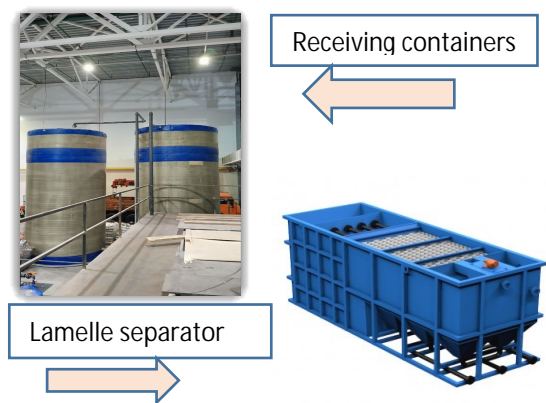
Treated household wastewater will be discharged together with treated industrial wastewater on the terrain.

The process water purification

The untreated waste from the washers flows into the washer pits where it enters the neutralization receiving tanks, where acid or alkali and lime milk (CaO) are dosed using a pH sensor.

Further, the effluent flows from the receiving tank into a lamella separator, which serves to precipitate metals in the purified effluent and separate oil.

The effluent enters the intermediate tank, from which it passes under pressure through the flocculator to the flotation unit. Flocculator - repeatedly accelerates the further coagulation reaction in the flotator. Suspended solids are removed in the flotator. The floated solid particles are removed from the surface of the flotation unit in the form of flotation sludge, which is sent to the sludge compactor and then to the filter press. Purified water is accordingly discharged from the bottom of the flotator to the buffer tank and then to the after-treatment filters.



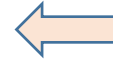
Conditionally purified effluent from the flotation unit is supplied to the buffer tank for parallel filter lines to remove fine suspended solids and dissolved organic compounds from the effluent.

Also, purified water from biological treatment facilities is supplied to the receiving tank with aeration, where additional after-treatment of organic matter takes place and enters the filter line.

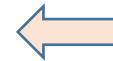
Flotation sludge is supplied from the flotator and separator (metal sedimentation compartment) to the sludge compaction tank, from where it is pumped through the central channel to the filter press. Filtrate is discharged either through corner pipelines in the inlet plate where compressed cake is formed. The filtration process is started by turning on the feed pump (pressure not more than 15 bar). Then the compressed cake is taken to the landfill.



Flocculant preparation and dosing station



Flotation unit



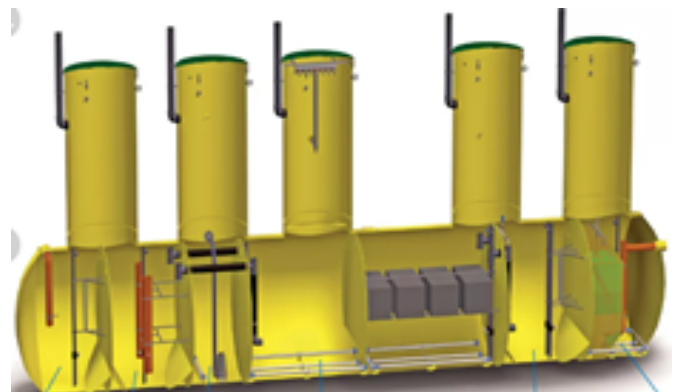
Also, an emulsion (water with petroleum products) enters the collection tank from production site. This emulsion flows by gravity into a demulsifier tank, where a special reagent (Demulsifier) is supplied, which separates the emulsion into the constituent petroleum products and water. Then the effluent enters the separation tank, where it is already divided into water and oil. From the separator, oil is supplied to the storage tank with subsequent disposal, and water is supplied to the beginning of the process (receiving tank) for purification.

The new water treatment scheme at the Aluminium Can Production Plant in Uzbekistan provides for a lamella separator, which is guaranteed to provide MPC for metals in wastewater according to all relevant SanPiN RUz.

The process wastewater treatment

Domestic wastewater treatment plant is carried out by the following methods:

- ❖ Domestic wastewater from production is supplied to the well, and then to the biological treatment unit.
- ❖ Domestic wastewater go to the settling tank-compactor, where it is treated from suspended substances and sand.
- ❖ After the settling tank-compactor, biological wastewater treatment is carried out in a biotank. This installation has adopted a technological scheme that provides for the separation of 3 zones: DO (deoxide zone), D (denitrification zone), N (nitrification zone).



Domestic wastewater treatment plant

- In the first zone (DO), anoxic conditions are provided and denitrification (bioremediation to molecular nitrogen) of nitrates coming from the return sludge flow and wastewater occurs. Bioremediation of nitrates is carried out by organic substances of wastewater,

which, at the same time, are biooxidated to CO<sub>2</sub> (gas) and H<sub>2</sub>O, that is, in parallel with the treatment of nitrates, wastewater is treated with organic substances.

- In the second denitrification zone (D), under anoxide conditions, denitrification of nitrate nitrogen occurs due to the nitrate recycling of the sludge mixture from the outlet of the third zone (N).
- In the nitrification zone (N), under strictly aerobic conditions, there is nitrification of ammonium nitrogen, additional purification from organic substances (most of the organic substances are removed in zone D), as well as purification of the wastewater from phosphates, which are consumed by phosphorus-accumulating bacteria of activated sludge. In the adopted scheme, treatment from nitrates and phosphates is carried out using organic substances in wastewater (at the same time, wastewater is treated from organic substances). Continuous operation of the blower located in WWT room is required to ensure constant aerobic conditions.

A secondary settling tank is used to separate the activated sludge from the waste water. A typical vertical sump with two longitudinal pits was used, from which the active sludge is pumped out in a constant mode.

## 2. PROPOSED RESA PROCESS AND METHODOLOGY

### 2.1. PURPOSE OF THE REPORT

This Rapid Environmental and Social Assessment (RESA) is developed to rapidly assess Project impacts and required mitigation measures in compliance with the IFC Performance Standards (2012).

Al Mar Consulting and Management (Uzbekistan) has been appointed by East Can Solutions in May 2024 to undertake the Rapid Environmental and Social Assessment (RESA) in compliance with the International Finance Corporation (IFC) Standards for the Project. The main objectives of this RESA are as follows:

- ❖ Assessment of baseline conditions (existing conditions) prior to the development of the Project;
- ❖ Assessment of the Project's environmental and social impacts during the construction and operation phases;
- ❖ Targeted engagement with stakeholders;
- ❖ Determination of applicable mitigation and management measures including monitoring requirements to be implemented in order to avoid or minimize potential impacts and maximize potential environmental and social gains;

The RESA is prepared by a group of environmental and social specialists. The team of the RESA Project is presented Table 6.

**Table 6: Project RESA Team**

EXPERT NAME	POSITION
MALINOVSKAYA Maria	Team Leader / Social Development Expert
ALEKSEEVA Yulia	Environment Specialist
TEPLYAKOVA Irina	Environment Specialist
CHERDIKUDI Veronika	Social Development and Resettlement Specialist
ERKINOVA Mamura	Stakeholder engagement and community liaison Expert

This Report has been prepared as part of the ESA process following internationally accepted standards.

### 2.2. SUMMARY METHODOLOGY

Various data collection and analyses techniques were used in the E&S assessment:

#### Desk Review

Desktop work provided a detailed description of the proposed project with respect to spatial coverage, preliminary design layout, magnitude, implementation schedules and costs as well as human resources. Relevant documents were reviewed to obtain information on the baseline information in general but specifically at the project site, land use, local micro-environmental

conditions, and land use practices, development strategies and plans (local and national) as well as the policy and legal documents among others.

### **Field Assessment**

Physical evaluation of the project area was carried out with specific focus on landform trends, land use patterns, biodiversity and social aspects. This was also an evaluation of the current environmental status with respect to physical, biological and socio-cultural conditions. It was a systematic field inspection backed with available documentation and direct interviews. Field evaluation was planned to enable determination of the exact physical environmental features to be affected within the project site and adjacent areas.

The field work adopted various techniques of baseline data collection on the existing environmental conditions, namely:

- ❖ Field observations and recordings including photography the project site and its vicinity.
- ❖ Use of checklists for determining potential environmental impacts of the proposed project.
- ❖ Consultations and public participation within the neighborhood of the project site.

### **Data Collection, Analysis**

The overarching RESA methodology is based on the requirements of the IFC PRs and the experience of the environmental and social consultants undertaking the study. Background data and information was obtained from published and unpublished sources, e.g., on climate, topography, geology and soils, natural resources, agriculture, and socio-economic data.

Towards to end of present assignment, the RESA report was prepared compiling the process and outcome of the tasks described above. The RESA report follows the standard structure that has been described later in the Chapter.

### **Public and Stakeholders Engagement**

Structured stakeholder engagement was undertaken in the neighborhood of the proposed project sites to capture the views and concerns of interested and affected parties. The engagement process entailed face to face meetings / interviews. On 17 May 2024, within the scope of social baseline survey meetings were performed with 3 mahalla reis (community leaders) that lead affected communities and can have influence on the project. Consultant has also conducted several telephone interviews with farmer and his former employee.

## **2.3. SIGNIFICANCE DETERMINATION METHODOLOGY**

Environmental and Social impacts can be characterized as interactions between some of the project's features and some of the surrounding environment's features. The assessment of significant effects or impacts is an essential concept, which limits the consideration of the effects or impacts a project may have on the environment to those, which are significant enough to merit the costs of assessment, review, and decision-making.

The assessment of significance relies on experts' judgments about what is important, desirable, or acceptable with regard to changes triggered by the project in question.

The significance of the impact will be determined in three steps as described below.

Environmental Receptors can be described as below:

- ❖ Elements of the environment that are of value to the functioning of natural or human systems (i.e. areas or elements of ecological, landscape or heritage value, soil and sediment, air and water bodies); and
- ❖ Human receptors, such as people (i.e. users of dwellings, places of recreation, places of employment, and community facilities), and human systems (e.g. employment market).

It should be noted that the sensitivity of the social receptors has been identified according to the field survey observations, which has taken into consideration the stakeholder feedback received through the RESA study. The overall magnitude of the impacts has been determined by using professional judgement in consideration of the geographical extent, reversibility, duration and frequency of the impact.

The receptors are described in terms of their spatial importance and/or the sensitivity of that receptor to change due to potential impacts. The environmental value (or sensitivity) of the receptors identified will be defined using the criteria in Step 1.

**Step 1:** The value and sensitivity of the receiving environment/receptor will be rated according to the following scales.

Value and Sensitivity	Environmental Receptor	Socio-economic Receptors	Biodiversity Receptor
<b>High</b>	Significant impacts of regional and of the larger scale; medium-term, long-term and permanent impacts resulting in irreversible changes and degradation of baseline conditions; usually having adverse effects exceeding national environmental standards or associated with transnational environmental issues; involving effects of toxic substances and associated with potential emergencies affecting critical resources and sensitive receptors.	Widely spread adverse direct and indirect impacts on both individuals and local communities which are practically cannot be mitigated or compensated. Affected receptors are not able to adapt to changes or proceed with previous livelihood.	Substantial loss of ecological functionality
<b>Moderate</b>	Site and local environmental impacts, mostly long-term; impacts which do not affect critical resources but result in irreversible loss of biodiversity and habitats; impacts with regional effects persisting from 1 to 3 years; require development of cost reasonable impact mitigation measures.	Direct and indirect impacts on livelihood and quality of life of the local communities or individuals. Receptors may undergo some difficulties to adapt to changes and they will be able to return to their former livelihood under condition of some support (for instance, compensation).	Moderate but sustainable change which stabilises under constant presence of impact source, with ecological functionality maintained.
<b>Minor</b>	Site, local and regional impacts which are not accompanied by long-term degradation of sensitive resources; effects are usually reversible and minor (do not require special mitigation	Short-term inconveniences caused by Project implementation to individuals and communities, but with no consequences to long-term change of livelihood or quality of life. Receptors either easily	Species or community unaffected or marginally affected

Value and Sensitivity	Environmental Receptor	Socio-economic Receptors	Biodiversity Receptor
	measures); usually do not exceed the applicable standards (criteria, i.e. noise, vibration, etc.) in relation to the less sensitive resources.	in part adapt to changes brought by the Project or proceed with previous livelihood.	
<b>Negligible</b>	Impacts practically do not change the environmental baseline conditions, local in extent and temporary or short-term in duration.	No significant changes in baseline conditions are expected, in-site in extent and temporary or short-term in duration impact. No significant inconveniences are caused.	No or negligible importance and rarity, site scale. The receiving biological environment is tolerant of the proposed change.

The impact is the change of state of the environment which is caused by project activity. In general, this change can be measured or estimated in some manner. The magnitude of the impacts is classified as mentioned in Step 2.

**Step 2:** The magnitude of impacts will be rated according to the following scales.

**Impact Magnitude    The Magnitude of the Impact Scale**

<b>High</b>	Loss of resources and/or quality and integrity over a significant area; severe change/damage to key characteristics, features or elements, for more than 2 years
<b>Medium</b>	Loss of resources, but not adversely affecting the integrity over a significant area; partial loss of/damage to key characteristics, features or elements, for more than 6 months but less than 2 years
<b>Low</b>	Some measurable change in attributes, quality or vulnerability; minor loss of, or alteration to, one (maybe more) key characteristics, features or elements.
<b>Negligible</b>	Little or no measurable change in attributes, quality or vulnerability

Once the value and sensitivity of the receptor and magnitude of the impacts are assessed, the significance of the impact will be derived as mentioned in Step 3.

**Step 3:** The significance of impacts will be assessed as below.

		Receptor Sensitivity			
		High	Medium	Low	Negligible
Impact Magnitude	High	Major	Major	Moderate	Minor
	Medium	Major	Moderate	Minor	Negligible
	Low	Moderate	Minor	Minor	Negligible
	Negligible	Minor	Negligible	Negligible	Negligible

## 2.4. STRUCTURE OF THE RESA REPORT

The report is organized as follows:

**Chapter 1: Project Information**– Chapter 1 describes the Project and its environmental and social setting. A summary scope of works is also provided.

**Chapter 2: Proposed RESA Process and Methodology** - This Chapter of the report provides an outline of the methodology used to complete the report including the impact assessment methodology, i.e., the method to define the significance of impacts.

**Chapter 3: Policy, Legislative and Institutional Framework-** This Chapter presents an overview of the policy/legislative framework as well as the environmental standards of Uzbekistan that apply to the proposed project. The section also identifies relevant IFC PSs and associated international guidelines.

**Chapter 4: Environmental and Social Baseline Data** – This Chapter of the report discusses the regional and local environmental and social baseline conditions (physical environment, biological environment and socioeconomic conditions).

**Chapter 5: Environmental and Social Impacts, Benefits And Opportunities, Mitigation Measures:** Chapter 5 outlines likely impacts caused on various environmental and social parameters by activities proposed during pre-construction, construction and operation stage of the project activity and were recorded for which suitable mitigation & enhancement measures were suggested to overcome the project direct or indirect impact and restore the existing environmental condition to the prevalent natural level. For the identified Environmental Impacts, suitable management/ mitigation measures are provided to minimise the impacts.

**Chapter 6: Stakeholder engagement** - Chapter 6 provides a summary of the stakeholder consultation activities undertaken.

**Chapter 7: Conclusions and Recommendations** – The final section of the report provides the report conclusions and recommendations.

## 3. POLICY, LEGISLATIVE AND INSTITUTIONAL FRAMEWORK

### 3.1. NATIONAL ENVIRONMENTAL REGULATOR

The Supreme Executive body responsible for nature protection in the Uzbekistan is the State Committee of the Republic of Uzbekistan on Ecology and Environmental Protection (SCEEP)<sup>5</sup>, subordinated and accountable to Oliy Majlis (Parliament). It defines state policy, takes legislative acts, coordinates and manages the activity of ministries and agencies regarding E&S issues. The Cabinet of Ministers is the Executive body responsible for the implementation of state nature protection policy, coordinate development and realization of state programs of socio-economic development. The Cabinet controls their execution and is responsible for registration and evaluation of nature resources. Obligations of regions regarding environmental protection are put to the Soviets of National Deputies, headed by the Leader of administration (khokims). Regional and local government are responsible for registering and evaluating the condition of nature resources, ecologically harmful facilities and are responsible for control, nature protection and usage of nature resources.

Execution of nature protective measures, control function and responsibility regarding nature protection rests on a number of ministries and agencies. Responsibilities of these bodies include provision of stable system of state service, development and realization of specialized programs, strategies and plans of actions and sustainable nature management. Regional departments and agencies are generally lower executive bodies of the MEEPCC and other responsible ministries on regional and district levels. Organizations at the regional level have the same structure as the republican level.

Public meetings (makhalla) are an independent mechanism of self-government, which carries out general initiatives and measures, including those connected with ecology, directly in villages, regions, districts and cities.

**The Cabinet of Ministers (CoM) of the Republic of Uzbekistan** governs the executive body in the Republic of Uzbekistan following the Constitution of the Republic of Uzbekistan (Article 98), and the Law of the Republic of Uzbekistan “On the Cabinet of Ministers of the Republic of Uzbekistan” (new edition of 2019). The CoM exercises the following main functions:

- ❖ Implements measures on rational use and protection of natural resources;
- ❖ Coordinates the work of state bodies on joint conducting of natural protection events;
- ❖ Implements a large-scale ecological program of national and international importance; and
- ❖ Takes measures to eliminate the consequences of accidents and disasters as well as natural disasters.

**The Ministry of Ecology, Environmental Protection and Climate Change of the RUz (MEEPCC)** is the main regulating body of state administration on environmental protection issues. The primary responsibilities of the MEEPCC include ensuring the implementation of a unified state policy on environmental safety, environmental protection, and the use and reproduction of natural resources; and enforcing state control over the compliance of ministries, state committees, departments, enterprises, institutions, and organisations, as well as individuals, with respect to the use and protection of land, mineral resources, water, forests, flora and fauna, and atmospheric

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<sup>5</sup> From February 2023 was transformed to the Ministry of ecology, environmental protection and climate change of the Republic of Uzbekistan (MEEPCC). All responsibilities remain the same as it was for SCEEP

resources. Structurally, the MEEPCC consists of the central unit (located in Tashkent), regional units (oblast) and local (district) units.

**The Center for State Ecological Expertise:** The Center for State Ecological Expertise's activities are directly related to the evaluation of materials for EIA and the issuance of documents determining compliance with environmental requirements for planned or executed business and other activities, as well as determining the admissibility of the implementation of the object of environmental expertise.

### 3.2. NATIONAL EIA RULES AND PROCEDURES

Compliance with national requirements and a positive Environmental Approval are prerequisites to compliance with the World Bank's Environment and Social Framework 2018. For this reason, the process is described below for information.

There are specific requirements as to the content, development procedure and examination of Environment Impact Assessment (EIA) documents. These are governed by the following legislative acts of the RUZ:

- ❖ Law "On Nature Protection" No. 754-XII dated December 9, 1992 (as amended on November 15 2019).
- ❖ Law "On Ecological Expertise" No. 73-II dated May 25, 2000 (as amended on November 22, 2018).
- ❖ Regulation "On the further improvement of the environmental impact assessment mechanism", approved by the Decree of the Cabinet of Ministers of the RUZ No. 541 dated September 07, 2020. The regulation defines the legal requirements for EIA in Uzbekistan (referred to as OVOS).
- ❖ Regulation "On approval of the regulations on the order of design and approval of draft environmental standards", approved by the Decree of the Cabinet of Ministers of the RUZ No 14 dated January 21, 2014.

The main regulatory body for national EIA in Uzbekistan is the State Committee of the Republic of Uzbekistan for Ecology and Environmental Protection (SCEEP) of the Republic of Uzbekistan.

The SCEEP performs its activities on the basis of the following legal acts:

- ❖ Presidential Decree of April 21, 2017 No. UP-5024 "On improving the system of public administration in the field of ecology and environmental protection";
- ❖ Resolution of the President of the Republic of Uzbekistan of April 21, 2017 No. PP-2915 "On measures to ensure the organization of the activities of the State Committee of the Republic of Uzbekistan on Ecology and Environmental Protection";
- ❖ Resolution of the Cabinet of Ministers of the Republic of Uzbekistan dated January 15, 2019 No. 29 "On Approving the Provision on the State Committee of the Republic of Uzbekistan on Ecology and Environmental Protection";
- ❖ Resolution of the President of the Republic of Uzbekistan dated October 3, 2018 No. PP-3956 "On measures to ensure the organization of the activities of the State Committee of the Republic of Uzbekistan on Ecology and Environmental Protection";
- ❖ Decree of the President of the Republic of Uzbekistan, dated 30.12.2021, No -76 "On measures for environmental protection and organization of activities of state bodies in the field of environmental control";
- ❖ Resolution of the Cabinet of Ministries of the Republic of Uzbekistan dated September 7, 2020. No.541 "On measures for the further improvement of environmental impact assessment"; and

- ❖ other laws and by-laws related to nature protection.

The requirements of the environmental impact assessment process in Uzbekistan are specified by the Law on the SEE (2011), further amended by the Regulation about the SEE approved by the Governmental Resolution No.949 dated from 22 November 2018.

The Law on the SEE (2011) and Decree of the Cabinet of Ministers No.491 dated on 31 December 2001. The law establishes the Republic of Uzbekistan’s environmental impact assessment system requiring to reviews environmental impact reports. The review of environmental assessment is based on: i) compliance of projected economic and other activities with environmental requirements in the stages preceding decision making on its implementation; ii) level of ecological danger planned or carried out business and other activities, which may have or had a negative impact on the condition of the environment and public health; and iii) adequacy and reasonableness of the measures provided for the protection of the environment and rational use of natural resources.

The Resolution specifies the legal requirements for EIA in Uzbekistan. According to the Resolution, the State Environmental Expertise (SEE) is a type of environmental examination carried out by specialized expert divisions to set up the compliance of the planned activities with the environmental requirements and determination of the permissibility of the environmental examination object implementation.

According to the Decree of the CM No.541 dated September 07, 2020, all types of activities are classified into one of four categories ranging from Category I (High Risk) to Category IV (Local Impact):

- ❖ **Category I** is “high risks” of environmental impact (SEE is conducted by the “Centre of State Environmental Expertise” within 20 days, all stages of the EIA are required);
- ❖ **Category II** is “medium risks” of environmental impact (SEE is conducted by “Centre of State Environmental Expertise” within 15 days, all stages of the EIA are required);
- ❖ **Category III** is "low risk of impact" (SEE is conducted by the regional offices of the “Centre of State Environmental Examination” within 10 days, all stages of the EIA are required); and
- ❖ **Category IV** is "minor risk of environmental impact, local impact" SEE is conducted by regional offices of the “Centre of State Environmental Examination” within 5 days, only the first phase of the EIA process needs to be completed (Draft Statement on Environmental Impact).

The SEE Regulation describes the procedure for arranging the SEE and the procedure undertaken by the Centre of the State Environmental Expertise. The three EIA stages and their required deliverables are summarized in below Table 7 as per the regulation.

**Table 7: Stages of national EIA process**

Stage of EIA/OVOS Process	Required Deliverables
<b>Stage-I</b> <b>Preliminary Statement of the Environmental Impact (PSEI)</b> ('PZVOS' is the national acronym)	To be conducted at the planning stage of the proposed project prior to development funds being allocated. PZVOS is valid until the end of construction. PZVOS will not be valid for the commissioning time
<b>Stage-II</b> <b>Statement of the Environmental Impact (SEI)</b> ('ZVOS' is the national acronym)	To be completed where it was identified by the Center for State Environmental Expertise/Regional Center for State Environmental Expertise at Stage-I that additional investigations or analyses were necessary.

Stage of EIA/OVOS Process	Required Deliverables
	The Statement shall be submitted to the Center for State Environmental Expertise/Regional Center for State Environmental Expertise prior to the beginning of construction. <i>Usually this stage is skipped.</i>
<b>Stage-III Statement on Environmental Consequences (SEC)</b> (‘ZEP’ is the national acronym)	The final stage of the SEE process and is to be performed before the project is commissioned. The report details the modifications to the project design that have been made from the Center for State Environmental Expertise/Regional Center for State Environmental Expertise review at the first two stages of the EIA process. The comments received during the public consultation, the environmental standards applicable to the project and environmental monitoring requirements associated with the project and principal conclusions

State ecological expertise approval: The State Committee on Ecology and Environmental Protection provides their opinion at Stage I and II is a typically a mandatory document for project financing by Uzbek banks, other Lenders and for Project commissioning at Stage III. The conclusion of the State Committee is typically valid for three years from the date of its issuance. If the project is not implemented within three years from the date of issue of the conclusion, the EIA report needs to be revised and re-submitted for approval.

The Resolution specifies the legal requirements for EIA in Uzbekistan. According to the Resolution, the State Environmental Expertise (SEE) is a type of environmental examination carried out by specialized expert divisions to set up the compliance of the planned activities with the environmental requirements and determination of the permissibility of the environmental examination object implementation.

The conclusion of the SEE is valid for three years from the date of issue. If the project is not implemented within three years from the date of issue of the Conclusion, the EIA report needs to be revised and re-submitted to the Center for environmental expertise for revision and approval. In case of expansion, reconstruction, technical re-equipment or changes in the technological process of existing facilities, affecting the quantitative and qualitative characteristics of emissions, discharges and waste, changes in legislative requirements, as well as by decision of the relevant authorities exercising state control in the field of environmental protection, environmental standards are subject to revised as part of an EIA with a subsequent three-year period. After three years of facility commissioning, it is obligatory to design the ecology normative.

### **Land Code of Republic of Uzbekistan (2003).**

The RoUz Land Code was adopted on 30 April 1998 (amended few times later) is the main regulatory framework in force for land related matters in the RoU. The RoU Land Code regulates allocation, transfer and sale of land plots, defines ownership and rights on land. It describes responsibilities of different state authorities (Cabinet of Ministers, province, district, city khokimiyat) in land management; rights and obligations of land possessor, user, leaseholder and owner; land category types, land acquisition and compensation, resolution of land disputes and land protection. The RoU Land Code also defines the terms of rights termination on land plot, seizure and acquisition of land plot for state and public needs, as well as terms of seizure of land plot in violation of land legislation.

- ❖ **Article 16** of the Land Code of the Republic of Uzbekistan states that land is the property of the state, and considered to be national wealth and protected by the state. Individuals and juridical persons may petition and receive land plots for specific use through auction or

other legal means. However, lands required for water supply and sanitation cannot be awarded for private use.

- ❖ **Article 17** provides rights of legal entities and individuals for land plots on the basis of constant possession, constant and temporary use, lease and property.
- ❖ **Article 23** regulates the assignment of the land plots. Assignment (realization) of land plots into possession or use is fulfilled as if allotment is made. Land plots allotment is implemented by the CoM, provincial, Tashkent, districts and cities hokimiats in the order to be established by the legislation. Assignment (realization) of land plots, being possessed or used, is carried out only after acquisition of this plot in an established order. Lands that are not suited for agricultural purposes or of low-quality are assigned for construction of industrial enterprises, housing projects, railway, automobile, water and air transport, electric transmission lines, communications and pipelines and for other nonagricultural purposes. Assignment (realization) of land plots for the above mentioned purposes out of land resources of forestry's is carried out firstly in the districts, not covered by plantation, or in regions, covered by bushes or plants, of little value. It is forbidden to start possession or use the given (realized) land plots before appropriate land surveying authority defines the borders of this plot in field and issue documents, identifying rights for this plot. The procedures of concession (realization) into possession and use are carried out according to current legislation.
- ❖ **Article 28** Land rent. The use of lands in the Republic of Uzbekistan is paid for. Juridical and real persons having land parcels in property, possession and use make payment for the land. The land rent is taken in the form of annual land tax the size of which is defined depending on the quality, location and water supply of land and plot. The size, order of calculating and payment of the land tax is fixed by legislation.
- ❖ **Article 35** establishes that the right of entities and individuals for land plots is subject to state registration by local authority to be completed within 10 days since the appropriate documents are submitted.
- ❖ **Article 37** defines terms of redemption/ seizure of land plot for state and public needs. Land plot acquisition or part of it for state and public needs is carried out at agreement with landowners or with the concurrence of land user and lease holder at decision of district or province hokim or CoM. In case of disagreement with landowner, landuser and leaseholder with the decision on acquisition of land plot, this decision can be appealed in court.
- ❖ **Article 41** ensures the rights for land plots and establishes, that outraged rights of land owners, landusers, leaseholders and owners of land plots are subject to reinstating in legislative order. Losses, caused by the infringement on rights of landowners, landusers, leaseholders and owners of plots (including lost profits) are subject to compensation in full amount. Compensation for land acquisition for state and public needs is regulated by Article 86.
- ❖ **Article 80** defines environmental requirements to location, design, construction and operation of objects, buildings and constructions with reference to environmental protection legislation. For allocation, design, construction and launching of new and under rehabilitation objects, buildings and constructions, as well as realization of new technologies, that has negative impact to land state, land protection activities shall be provided and carried out. Negative impact of newly realized object and technology on a land

state and performance of provided activities on land use and protection assessment is done on the basis of environmental expertise. Installation of objects and application of new technologies, not provided with land protection against degradation or infringement and satisfactory conclusion of environmental expertise is forbidden. Allocation of objects, having impact on land state, shall be agreed with land surveying, environmental protection and other bodies in an established legislative order.

- ❖ **Article 86** defines common procedures of compensation to landowners, landusers, leaseholders and owners of plots. Losses, inflicted to landowners, landusers, leaseholders and owners of plots, are subject to compensation in full amount (including lost profits) in the following cases of:
  - Acquisition, redemption or temporal occupation of lands;
  - Limitation of their rights in connection with assignment of conservation, sanitary and protection zones around state reservations, wildlife preserves, national recreation areas, natural monuments, cultural-historical monuments, water reservoirs, water supply sources, resorts, along rivers, canals, water escapes, roads, transmission lines, communication and electrical lines;
  - Deterioration of lands, resulting impact, caused by construction and operation of reservoirs, canals, collectors and other objects, emitting harmful for agricultural crops and plants substances, and other activities of legal entities and individuals, causing harvest reduction and agricultural products deterioration.

Losses compensation is carried out by enterprises, organizations and agencies, which has been allocated with plots under acquisition, as well as by enterprises, agencies and organizations, whose activity causes limitation of rights of landowners, landusers, leaseholders and owners of plots or deterioration of nearby lands, in order established by legislation.

### 3.3. INTERNATIONAL REQUIREMENTS

The RESA Report has been carried out in accordance with the IFC Performance Standards (PSs) as the Company aims to seek international financing for the Project.

IFC is a member of the World Bank Group and is the largest global development institution focused exclusively on the private sector in developing countries. The IFC Performance Standards (PSs) are an international benchmark for identifying and managing environmental and social risk and has been adopted by many organizations as a key component of their environmental and social risk management.

The Project will be implemented the requirements of the IFC as set out in the following standards and guidelines:

The following IFC Performance Standards are considered to be applicable to the Project<sup>6</sup>:

- ❖ Performance Standard 1: Social and Environmental Assessment and Management System;
- ❖ Performance Standard 2: Labor and Working Conditions;
- ❖ Performance Standard 3: Pollution Prevention and Abatement;
- ❖ Performance Standard 4: Community Health and Safety

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<sup>6</sup> <https://www.ifc.org/en/insights-reports/2000/general-environmental-health-and-safety-guidelines>

- ❖ Performance Standard 5: Land Acquisition and Involuntary Resettlement. Land acquisition process for the project site was completed by the state at the moment of RESA preparation (June 2024) resulting in the economic displacement.

E&S issues associated with the remaining PSs were not encountered during the assessment of the Projects:

- ❖ Performance Standard 6: Biodiversity Conservation and Sustainable Natural Resource Management is not expected to be triggered as the project activity do not pass through any protected areas or ecologically sensitive areas. There are no known populations of threatened species in the immediate vicinity of the project sites. There are no protected areas or sensitive or rare natural habitats for flora or fauna in the project area; There are no trees subject to cutting on the territory of the project facility. No specific records of Red Book flora have been obtained as part of the original study.
- ❖ Performance Standard 7: Indigenous Peoples is not expected to be triggered as the project does not adversely affect any Indigenous Communities, as defined by PS7.
- ❖ Performance Standard 8: Cultural Heritage is not triggered as the review of available records undertaken as part of the Rapid Environmental and Social Assessment (RESA) process did not identify any known sites of archaeological or cultural heritage value within the Project site boundaries. However, a "Chance Finds" procedure has been developed for the construction phase of the project, consistent with PS8.

The following World Bank Group (WBG) Environmental, Health, and Safety (EHS) guidelines are applicable to the project:

- ❖ General EHS Guidelines<sup>7</sup>;
- ❖ Environmental and Social Management System Implementation Handbook - METAL PRODUCTS MANUFACTURING
- ❖ IFC/EBRD Guidance on Workers Accommodation: Processes and Standards (2009)<sup>8</sup>;and
- ❖ Environmental, Health, and Safety Guidelines for Metal, Plastic, and Rubber Products Manufacturing.<sup>9</sup>

### 3.4. CATEGORIZATION

The Project falls under Category 3<sup>10</sup>(medium risk, paragraph 47. Enterprises, including workshops for assembly, repair of electrical equipment and metalworking), according to the national Law "On Environmental Expertise" and based on the Appendix to the Decree of the Cabinet of Ministers of 07.09.2020 No.541 "On further improvement of the mechanism of environmental impact assessment". Hence, first stage of the Environmental Impact Assessment report (national acronym - PZVOS) was developed for this facility and a positive Conclusion of the State Environmental Expertise of the Republic of Uzbekistan № 01-02/14-677 dated 06 May, 2024 was obtained. As the Stage III of national EIA process the 'Statement on Environmental Consequences' ('ZEP' is the national acronym) represents the final stage of national EIA process and it will be conducted before the project is commissioned.

The project investor plans to apply to international finance institutions ("IFIs") for the financing of the Project. Therefore, the project owner requested this RESA to meet the IFIs' requirements in

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<sup>7</sup> <https://www.ifc.org/en/insights-reports/2000/general-environmental-health-and-safety-guidelines>

<sup>8</sup> [www.ifc.org/content/dam/ifc/doc/mgrt/workers-accomodation.pdf](http://www.ifc.org/content/dam/ifc/doc/mgrt/workers-accomodation.pdf)

<sup>9</sup> <https://www.ifc.org/content/dam/ifc/doc/2000/2007-metal-plastic-rubber-products-ehs-guidelines-en.pdf>

<sup>10</sup> The Regulation stipulates 4 categories for development: Category I (High Risk); Category II (Middle Risk); Category III (Low Risk); Category IV (Local Impact).

accordance with IFC Environmental and Social<sup>11</sup> Policy and associated Performance Requirements of IFC.

As part of the review of environmental and social risks and impacts of a proposed investment, IFC uses a process of environmental and social categorization to reflect the magnitude of risks and impacts. Currently, the project has been assigned Category B:

These categories are:

- **Category A:** Business activities with potential significant adverse environmental or social risks and/or impacts that are diverse, irreversible, or unprecedented.
- **Category B:** Business activities with potential limited adverse environmental or social risks and/or impacts that are few in number, generally site-specific, largely reversible, and readily addressed through mitigation measures.
- **Category C:** Business activities with minimal or no adverse environmental or social risks

### 3.5. PROJECT AREA OF INFLUENCE

Area of Influence (Aoi) or the spatial scope is the physical area, which is the minimum study area of the ESA studies. Aoi is always larger than the project area to assess the potential impacts and the spatial scope varies depending on the topic being studied. The total spatial scope of the ESA is the result of the sum of all the areas of influence from each assessed topic. The Aoi is the geographic area that may directly or indirectly experience impacts to the biological and, physical or socio-economic environments from resettlement, earthworks, construction, and operation of the Project components. The proposed Project Aoi includes the receptors that may be permanently and temporarily affected by the Proposed Project features.

According to IFC PS1, where the project involves specifically identified physical elements, aspects, and facilities that are likely to generate impacts, environmental and social risks and impacts will be identified in the context of the project's area of influence. This area of influence encompasses, as appropriate:

- ❖ The area likely to be affected by: (i) the project and the client's activities and facilities that are directly owned, operated or managed (including by contractors) and that are a component of the project; (ii) impacts from unplanned but predictable developments caused by the project that may occur later or at a different location; or (iii) indirect project impacts on biodiversity or on ecosystem services upon which Affected Communities' livelihoods are dependent.
- ❖ Associated facilities, which are facilities that are not funded as part of the project and that would not have been constructed or expanded if the project did not exist and without which the project would not be viable.

The area of influence in respect of this project is the investment programme proposed for the development of the new Aluminium Can Production Plant at Yangikhayot district of Tashkent city and its associated infrastructure. The total area of the enterprise is 21 ha. From the perspective of the Aluminium Can Production Plant, the Project Affected Area is the units that comprise the plant and its associated infrastructure and the immediate vicinity, including the residential areas 100m away from the main plant building. The Project Area of Influence extends to the settlements nearby.

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<sup>11</sup> In the context of this assessment, social refers to those issues which pertain to project-affected people and their communities and workers and related to socioeconomic status, vulnerability, gender, gender identity, human rights, sexual orientation, cultural heritage, labour and working conditions, health and safety and participation in decision making (2012 Version of IFC's Sustainability Policy).

## 4. ENVIRONMENTAL AND SOCIAL BASELINE DATA

This Chapter includes a description of relevant aspects of the physical, natural, and socio-economic environment in the Project's area of influence which serve as a baseline against which the anticipated impacts of the project will be determined.

The baseline conditions have been established through a combination of desk studies, field visits and consultation with key stakeholders carried out by Al Mar during the development of this RESA. No in-depth analysis of contamination and field studies have been required at this stage.

### 4.1. CLIMATE

The area of the facility under consideration is characterised by sharply continental climate and refers to the IV climatic sub-area with long hot summer (maximum temperature reaches +35.77 °C) and short snowy winter (minimum temperature -2.18). Seismicity of the area is 8 points. The depth of seasonal frost penetration is up to 0.7 m. According to SNiP 2.01.07-85 snow area -I, wind area-Sh.

The project area is characterised by small values of wind speeds from 1.2 to 5 m/sec. Wind with slightly higher speed serves as a clearing factor. The average annual frequency of wind speed of 1.2 m/sec. 80,45 %. Such winds are most frequent in April (47.8%) and March (45.2%), months of increased cyclonic activity.

### 4.2. SOILS

The geotechnical survey was conducted by O'zGASHKLITY LLC in the Project area in February, 2024.

Observations conducted as part of the geotechnical survey did not reveal any major signs of erosion within the project site. The topography of the site is relatively flat, and no rills and gullies were noted. Areas with exposed (bare) clayey top soil are potentially vulnerable to erosion from stormwater runoff.

Lithologically, the area is composed of a massive thickness of pebble deposits overlain by a thin layer of loess-like loams. Soil concentration of sulphates was found to range from 291 to 645 mg/kg, while that of chloride was recorded between 70 to 87 mg/kg. The relatively low concentration of these mineral constituents poses a low corrosive effect on planned steel, aluminium and concrete sub-structures. Soils in the studied areas are not saline.

Soils are not aggressive to concrete on Portland cement according to GOST 10178-85 and to concrete on sulfate-resistant cement according to GOST 22266-85 and non-aggressive to reinforcement of reinforced concrete structures.

Based on the results of the testing, the maximum depth of soil frost is estimated to be 70 cm with a return period of 50 years.



**Photo 4: Example of Typical Landscape**

Typically, soil pollution occurs when harmful substances fall out of the atmosphere, mainly from agricultural and motor transport emissions. According to the classification adopted by the methodology of ecological-hygienic zoning, the condition of soils in the district can be considered satisfactory.

Site specific soil quality is not known and no soil sampling was carried out prior to construction commencement. Considering it has been used as agricultural land for over decade growing rice and later wheat, legumes etc it can be assumed it might be contaminated by fertilizer chemicals and its derivatives.

### **4.3. WATER RESOURCES**

The project site is located within the middle part of the Chirchik River groundwater deposit. This basin is part of the wider Syrdarya basin, which lies within the Aral Sea mega-basin. The Chirchik River Basin is defined by the topographic descent between the foot of the Tian Shan mountain range (to the north-east), and the section of Syrdarya river valley cutting across the Aydar lake depression (to the south-west).

From a hydrogeological point of view, the district groundwater is located at a depth of 10-26 metres from ground level. Hydrogeological conditions of the project area are characterized by the development of groundwater aquifer at average depth of 10 to 26 m. They are widely used for water supply and irrigation. The maximum level of groundwater is registered in June and August. After the cessation of vegetation watering and closing of the canal in October, the ground water level gradually decreases, and in December and March reaches minimum.

In hydrogeological terms, the following aquifers are distinguished in the study area:

- ❖ **Aquifer complex of Quaternary alluvial deposits (aQIV)**, contains groundwater; The smallest depth of the aquifer is from 1-3 to 5 m, and the largest - from 10 to 25 m. Water abundance and filtration properties water-bearing deposits are high, specific borehole capacity is from 0.5 to 40 l/s; output of borehole during operation - from 5.0 to 110 l/s; odds filtration of pebbles varies from 35 to 200 m/day. Flow slope groundwater coincides with the slope of the Chirchik river valley itself and changes ranges from 0.004 to 0.007 m.

- ❖ **Aquifer complex of Upper Quaternary alluvial deposits (ap QIII-IV)** lies under the cover of modern alluvium of the Chirchik River at depths from 10-15 to 35 m. The base of the aquifer is conglomerates on sandy-calcareous cement of Middle Quaternary age (aQII), lying at depths from 25.0 to 100 m. The thickness of the horizon varies from 20 to 50 m, the deposits are represented by alluvial pebbles with the inclusion of boulders and sand-gravel filler, among which interlayers and lenses of conglomerates on sandy-clay cement are formed. Groundwater levels in boreholes are set at a depth of 3-5 to 10 m. The filtration coefficient of water-bearing rocks varies from 4-20 to 30-70 m/day; Specific flow rates in oreholes range from 2-3 to 11-17 l/s.
- ❖ **The aquifer of modern-Upper Quaternary deposits (ap QIII-IV)** is developed along the left bank in the area of merged alluvial cones of left-bank tributaries (sayov), the border of which runs along the left-bank Karasu channel. The water-bearing rocks are represented by pebbles and gravel with sandy-loamy and sandy-gravel fillers. The depth of the groundwater horizon varies from 11.0 to 26.0 m, the specific flow rates of boreholes are up to 1.6 - 2.8 l/s with a decrease of 9 - 13 m.

Groundwater mineralisation varies from 3 g/l to 6.5 g/g. Groundwater is predominantly of sulphate-calcium composition with total hardness ranging from 11.2-22.0 to 30.0-46.0 mg-eq/l. In terms of chemical composition, groundwater is predominantly fresh with dry solids from 612 to 1088 mg/l. Groundwater is not aggressive to concrete. According to the chemical composition, groundwater is not salty; pH – 7.13; the content of  $\text{HCO}_3$  - 427mg/l, Cl ions - 728 mg/l;  $\text{SO}_4$  ions - 2263 mg/l. groundwater non-aggressive to concrete on Portland cement according to GOST10178-85.

According to the Hydrogeological Investigation report<sup>12</sup>, it is recommended to drill an exploratory-production borehole up to 40 m deep for technical water supply. The most promising aquifer for technical water supply purposes is the aquifer of undifferentiated modern-Upper Quaternary deposits confined to boulder-pebble with sand and gravel filler.



**Photo 5: Irrigation canal**

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<sup>12</sup> Groundwater sampling activities were conducted by O'zGASHKLITY LLC in order to determine the baseline groundwater conditions in the Project area in February, 2024.

Two canals form the eastern boundary of the site. Based on information gathered during consultation, the canals are for irrigation purposes only (i.e. they provide water for agricultural fields located around), there are no other additions (e.g. treated or untreated industrial, domestic or other streams) and there are no downstream users of the canal. The source of water in the irrigation canals is Chirchik river, which is located at a distance of more than 2930 meters west of the project site. There are no permanent surface water resources within the project area.

#### **4.4. AIR EMISSIONS AND NOISE**

Current sources of air pollution in the vicinity of the Project site include the burning of fuels in surrounding communities and vehicular traffic along neighbouring roads. Dust conditions were low (not discernible) at the proposed site on the days of the site visits.

The main source of atmospheric pollution in Yangikhayot district of Tashkent city are emissions from nearby industrial facilities, domestic boilers, road transport and climatic conditions that cause their dispersion.

Such ingredients as welding aerosol, soot, sulphur anhydride, carbon monoxide, nitrogen dioxide, nitrogen oxide are emitted from enterprises located in Yangikhayot district.

Motor transport is a source of impact on the atmospheric air by combustion products of petrol and diesel fuel: nitrogen and sulphur dioxides, benz(a)pyrene, carbon oxide, hydrocarbons, aldehydes. Significant impact on the formation of the environment of the area under consideration, have high hot emission sources of the territory. The emissions of these enterprises contain dust, nitrogen oxides, aliphatic and aromatic hydrocarbons, sulphur dioxide.

Toxicity of exhaust gases mainly depends on the quality of fuel, engine operation mode and its technical condition and is determined mainly by the content of carbon oxides, nitrogen oxides and hydrocarbons.

Uzbekistan does not have specific standards for allowed vibration levels in the residential areas. The Sanitary Standard of Uzbekistan SanPiN No.0326-16 "Sanitary norms for the general and local vibration at the working places" provides the Uzbekistan's occupational vibration tolerance limits measured in m/s and decibels (dB).

Current anthropogenic noise in the vicinity of the Project site is related to agricultural and domestic activities, as well as vehicular traffic along the 4P21 road to the south of the site. Natural noise sources include noise from birds and insects. There were no significant sources of vibration noted during the site visits. The area is also generally not illuminated at night.

#### **4.5. BIOLOGICAL BASELINE**

##### **FLORA**

The study area has witnessed an accelerated change in natural vegetation to agricultural lands mainly induced by increased human pressure (agriculture, urbanization, etc). No protected areas were identified in the Project Aol based on published documents or during the reconnaissance field survey.

The presence of populated areas, cultivated lands, and irrigation network has left their mark on the composition of the vegetation. Wild species of the flora marginally were ousted by cultivated species of garden plants, cotton and grain crops. In the uncultivated lands of the plain various plants grow, in the foothills - sunflower, pistachios. Plane trees, juniper and fir trees and others grow well.

There is no sensitive wild flora within or the vicinity of the Project site. The proposed project construction works will not have any significant impact on flora as they take place within areas agricultural land, e.g., and along existing road routes.

Flora in the Project area typically comprises shrub, grasslands, ephemeral vegetation and human-planted orchards. Prominent species include juniper, wormwood wheatgrass and xerophyte shrubs (*Juniperus zeravschanica*, *Artemisia tenuisecta*, *A.Boldshuanica*, *Elytrigia trichophoral*, *Festula sulcala*, *Elytrigia trichophoral*). Ephemeral vegetation is common in combination with wild almond, and *Carex pachystylis*, *Poa bulbosa*, *Taeniatherum crinitum*, *Psoralea drupasea*, *Phlomis sp.sp*, *Cousinia resinosa*, *Convolvulus subhirsulus*, *Taeniatherum crinitum*, *Psoralea drupasea*, *Phlomis sp*. Common planted species include juniper, cherry, mulberry, apricot, poplar, loch and apple.

There are no trees subject to cutting on the territory of the facility. No specific records of Red Book flora have been obtained as part of the original study.

### **FAUNA**

Sections of the designed land plot do not cover any appreciable variety of species of fauna. Anthropogenic impact on the territory under consideration is significant. There is no wildlife habitat in this zone. Basically there are animals typical for the populated localities.

The local population living in vicinity to the project site involved in the livestock (cow, sheep, and goats) raising, for personal needs and partially for the sale.

The list of specimen of fauna of the considered region is limited by those animal species which could adapt to the life in anthropogenic conditions. Non-endangered species living in the vicinity of the project road are: ground squirrels, hamsters, voles, rabbits, and jerboa. Of the carnivorous species like bats (common *pipistrelle*), foxes, badgers and ferrets are commonly are sighted at various places in or adjacent. Common birds are the crow, raven, lark, Asiatic quail, sparrow, barn swallow, turtledove, grackle, oriole, spotted flycatcher, Indian myna, magpie, nightingale, wagtail, white stork. Some specified habitats are frequented by species of turtles, lizards, snakes, scorpions and arachnids.

Within the project area, species listed as critical, endangered or vulnerable on the IUCN Red List, as well as plants included in the Red Data Book of Uzbekistan were not identified though secondary data analysis. Most of species recorded for the project area are typical for Central Asia and more or less common and widely spread.

#### **Photo 6: The Photos of Observed Birds of the Project Area**



**Common Raven**



**White stork - *Ciconia ciconia***

Apart from domestic birds such as chicken and turkey, wild species like rock dove, crested lark, and house sparrow were observed. The study area has low levels of biodiversity with a few amphibians and reptiles. Arthropod species such as dermipteras are inhabitants of the study area. These species serve as a source of food for other animals especially birds, reptiles, and amphibians.

In general, the habitats across the Project Aol comprise a network of agricultural fields, with scattered scrub (including hedgerows) and some remnant steppe areas.

#### 4.6. LAND USE AND ECONOMIC DISPLACEMENT

The legal and policy framework is based on national laws and legislations related to land acquisition and compensation policy in Uzbekistan.

Legal entities, residents of the Republic of Uzbekistan, can have land plots on the basis of ownership, permanent use and lease in accordance with the Land Code of 1998. According to the 1998 Land Code of the Republic of Uzbekistan, all land is state owned national 'treasure' subject to rational use and it is protected by the state as a base of life, activities and welfare of the population (Article 16). The Land Code also regulates the allocation, transfer, and sale of land plots, defines ownership and rights on the land. It describes the responsibilities of different state authorities in land management; rights and obligations of the land possessor, user, tenant, and owner; land category types, resolution of land disputes and land protection.

Individuals, residents of the Republic of Uzbekistan, can have land plots on the basis of ownership and lease. Agricultural land is not provided for ownership. Foreign citizens and legal entities, enterprises with foreign investments can own land plots only on the basis of a lease right (LC Article 17). (Note: the rights of legal entities and individuals to permanent ownership, life-long inherited possession, permanent use and fixed-term (temporary) use of land acquired before August 1, 2021, remain in force after the amendments to the legislation on August 17, 2021).

The various types of land tenure may co-exist in several combinations – tamorka, household land plot, shirkats, dekhkan farms and farms. Farms are provided with land plots on the basis of an open tender for rent for a period of up to fifty years, but not less than thirty years. [This was the case for land within the Project Area.](#)

According to the Land Code of the Republic of Uzbekistan, Article 24, agricultural land parcel lease is temporary, paid for possession and use of the land parcel according to the terms of lease agreement.

For private farms land is usually leased for approximately 30 years but can range between a minimum of 3 years and a maximum of 49 years. Farms are subject to some state interventions (e.g. quotes for the production of cotton and wheat) but for the most part they are governed by local authorities (or hokimiyat). Hokimiyat may cancel leases for various transgressions, usually if the leaseholder fails to comply with the contract terms (e.g. the cropping plan).

In Uzbekistan, withdrawal of the land or part thereof for state and public needs is made by agreement with land user and tenant by decision respectively Khokim of district, city, and region or by decision of the Cabinet of Ministers (Land Code, Article 37, Clause 1). Pre-term cessation of the land lease agreement is carried out at the consent of the parties and when such consent has not been reached on the decision of the court.

~~Error! Reference source not found.~~ At the time of RESA preparation, the Consultant actually observes voluntary termination (according to official documents-Annex 1) to possess the

agricultural land parcels by land-users. The total area of land to be acquired from current leaseholders is equal to 21 ha that was used for agricultural purposes by two farmers with two farms.

Between the 17th to the 18th of June 2024 a site walkover was undertaken. The walkover revealed that there were two leaseholders with leases in the area. These lease holdings are shown in Figure 3 below as Jahongir Agro Biznes farm and Salomov Mamatqul farm.

**Figure 5: Leaseholds within the Project Area**



The project land (21 ha) used to be leased to farm Jahongir Agro Biznes farm (18.24 ha) and Salomov Mamatqul farm (2.76ha). Both farms are managed by Mr. Salomov Sanjar, although Mr. Salomov Sanjar is officially listed as the owner of Jahongir Agro Biznes farm and Mr. Salomov Shukhrat (his brother) is officially listed as the owner of Salomov Mamatqul farm. A summary of the affected land is provided in Table below.

**Table 8: Summary of the affected land**

PAPs	Total land leased by PAPs	Land acquired for project needs	Share of acquired land in total land leased by PAPs	Leaseholder	Actual Manager	Standing crops
Jahongir Agro Biznes farm	18.24 ha	18.24 ha	100%	Mr. Salomov Sanjar	Mr. Salomov Sanjar	No standing crops
Salomov Mamatqul farm	36.64ha	2.76 ha	7.5%	Mr. Salomov Shukhrat	Mr. Salomov Sanjar	No standing crops

The land parcel lease for both farms was 49 years. The main type of crops grown are grain/seasonal vegetables (including state orders for grain crops). The land lease agreements between the Yangikhayot district khokimiyat and both farms were re-signed on May 10, 2023, for a period of 36 years. This was due to the fact that the new Yangikhayot district was formed on the territory of the Urtachirchik district of Tashkent and when the administrative division changed, the land lease agreement was automatically extended and re-signed with new details.

For three years 2020-2023, there have been discussions about the annexation of this part of the land (collective farm Kim Peng Hwa) to Tashkent and the land acquisition to industrial land.

In the fall 2023, the leaseholders of the Jahongir Agro Biznes farm and Salomov Mamatqul farm has received an oral notice from Yangikhayot district khokimiyat to stop any agricultural activities, as the status of land changed. In September 2023, the leaseholders completed the harvest thus not losing any crops and no further agricultural work was done on this land.

In Uzbekistan, the process of land acquisition for the creation of Special Industrial Zone includes several stages and passes through several state authorities. This process is regulated by the legislation of Uzbekistan and includes the transfer of land to the khokimiyat reserve fund before its transfer to Special Industrial Zone. The land transfer to the reserve fund allows local authorities (khokimiyats) to conduct an assessment, inventory and, if necessary, reorganize the land use. After completion of all procedures for the document's preparation and approval, the territory is registered as Special Industrial Zone.

In April 2024, the Yangikhayot district hokimiat sent an official written notice to Jahongir Agro Biznes and Salomov Mamatqul farms that any field agricultural work should be stopped in connection with the planned construction of the Special Industrial Zone Yangi Avlod (according to Presidential Decree No. 138 of 20 March 2024 'On the creation of a special industrial zone "Yangi Avlod" in Tashkent city"<sup>13</sup>). Mr. Salomov did not take the official notification seriously, since similar conversations between farmers had been taking place over the past 2-3 years.

Yangikhayot district khokimiat organized public consultation on 31 May, 2024 for all affected leaseholders, leasing land parcels, which, according to Presidential Decree No. 138, became part of the special industrial zone "Yangi Avlod". The public consultation was attended by about 20 leaseholders, including Jahongir Agro Biznes and Salomov Mamatqul farms.

During the public consultation, farmers were informed about the entry into force of Presidential Decree No. 138 on 25 March 2024, in connection with which all leased land parcels were allocated to the reserve fund of the khokimiyat and will subsequently be passed to the special industrial zone Yangi Avlod. Based on this Presidential Decree No. 138, farmers were asked to sign the voluntary pre-term cessation of land to the Government's state reserves (with a no-objection declarations) and the voluntary pre-term cessation of the land lease agreement at the consent of the leaseholder.

During public consultation, Mr. Salomov tried to challenge the need to sign a voluntary termination to possess the agricultural land parcel. However, all leaseholders, including Mr. Salomov, signed a notarized agreement on the voluntary return of land to the Government's state reserves.

According to a telephone interview with the leaseholder at the time of RESA preparation (June 2024), Mr. Salomov informed about his voluntary termination to possess the land parcel and passed it to the khokimiyat reserve fund thus losing his right to be compensated as the farm balance has been unprofitable for the last three years.

The leaseholders would not have been entitled to compensation in case they had not signed voluntarily as the farm's official balance was negative.

Farmers' land in the project area was returned to the khokimiyat reserves by the Decision of Tashkent Khokim, which will then update its classification (e.g., industrial or infrastructure project) and transfer land to the Yangihayet District Khokimiyat. The following transfer will take place via an internal governmental process. Therefore, a Land Lease Agreement (LLA) was signed

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<sup>13</sup> Presidential Decree No. PP-138 came into force on 25 March 2024

between the Project Developer and Yangihayet District Khokimiyat on 28 February 2025. Project Developer has received cadastral registration №: R-YANG34677883 dated 04 March 2025 (Annex 2) for the project site.

In response to an official request from the Al Mar Consulting dated October 25, 2024, Yangihayet District Khokimiyat has organized public consultation with representatives of Salomov Mamatqul farm, Saidovul farm and Jahongir agro biznes farm on November 19, 2024. During consultation, Al Mar received more detailed information and clarification on the land acquisition process of the project land parcels to the district's land reserve to assess the action in accordance with national legislation.

The official head of the Jahongir Agro Biznes farm, Mr. Salomov Sanjar, is an actual manager of three farms owned by his brothers: the Saidovul farm (12.7 hectares) was officially headed by Mr. Salomov Shavkat and the Salomov Mamatqul farm (36.64 ha) was officially headed by Mr. Salomov Shukhrat. The lease on Saidovul farm (12.7 hectares) is also terminated and land parcel was also acquired according to Presidential Decree No. 138 for SIZ needs but it is outside project boundary.

Yangihayet District Khokimiyat has provided notarized application for the voluntary return of land to the Government's state reserves (with a no-objection declarations) (see Annex 1) and the voluntary pre-term cessation of the land lease agreement, signed by representatives of Salomov Mamatqul farm, Saidovul farm and Jahongir agro biznes farm.

According to information obtained during a consultation on 19 November 2024 with the leaseholder<sup>14</sup>, no compensation was provided to either the farm owner or the farm workers due to the fact that cessation of the right to land parcel was annulled by the farmer's voluntary termination from the land parcel and an assessment of compensation for damages / loss of income of this farmer was not carried out since cessation of the right to land parcels was annulled by the farmer's voluntary termination of the lease. The head of Jahongir Agro Biznes farm and Salomov Mamatqul was not familiar with the current legislation of the Republic of Uzbekistan on the withdrawal procedures of leased agricultural land for public needs. Jahongir Agro Biznes farm and Salomov Mamatqul were not informed about the grievance mechanism in connection with the disagreement with cessation process of the right to land parcels. In addition, Jahongir Agro Biznes farm received notice of non-renewal of the lease agreement in April 2024, when construction work was already underway on the site.

**Note:** According to Resolution of Cabinet of Ministers № 146 (25 May 2011), losses caused by violation of the rights of landowners, land users, tenants and owners of land plots (including lost profits) are subject to compensation in full. In case of acquisition and temporary occupation of land plot or part thereof, the following would be subject to compensation:

- ❖ Cost of assets lost, and details of the legal entities involved;
- ❖ Cost of residential houses, constructions and installations, including incomplete constructions, and also located outside of allocated plot, if its further utilisation is impossible due to seize of land plot.
- ❖ Cost of fruits and berries, protection and other perennial plants;
- ❖ Cost of incomplete agricultural production; and
- ❖ Lost profit.

The legal and policy framework described above includes mention that Jahongir Agro Biznes farm and Salomov Mamatqul farm are ineligible for any compensation. There is no any residential houses, constructions and installations, including incomplete constructions, and also located outside of allocated

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<sup>14</sup> Both farms are managed by Mr. Salomov Sanjar, although Mr. Salomov Sanjar is officially listed as the owner of Jahongir Agro Biznes farm and Mr. Salomov Shukhrat (his brother) is officially listed as the owner of Salomov Mamatqul farm.

plot. There is no any incomplete agricultural production or crop lost. Farms do not lose any profit since the official balance of farms has been unprofitable over the past three years.

After phone discussions with the Consultant (AI Mar Consulting) in June 2024, Mr. Salomov has submitted a written application (ref. No. 24 of July 08, 2024, Appendix No. 1) to the Yangikhayet district Khokimiyat about the possibility to obtain compensation for damage/lost profits for the whole land parcel 94 ha (Salomov Mamatqul farm, Saidovul farm and Jahongir Agro Biznes farm). However, at the time of the meeting with the Consultant (AI Mar Consulting) on November 19, 2024, a response was not received from Khokimiyat.

Although, according to the farmer, net income was about 40 million soums in the last year, the official financial statements, for the last three years show the farm having deficit.

### Brief Information about Jahongir Agro Biznes farm

The farmer (Mr. Salomov) is not vulnerable. He lives in Tashkent in his apartment. From 2020, the tax on water and land was removed from the farm. The farmer did not spend money on land preparation in 2024. In addition to agricultural activities, this farm is also engaged in fisheries activities in another region.

#### Gross profit

2021 - 234 816 000 soums  
 2022 - 538 998 000 soums  
 2023 - loss 4 740 000 soums<sup>15</sup>

#### Net profit

2021 - loss 274 084 000 soums  
 2022 - loss 40 731 990 soums  
 2023 - loss 77 224 000 soums

Percentage split of farmer's profit/income by year:

2020 - 80% income from fisheries and 20% from grain crops (lack of water for irrigation caused low yields)  
 2021 - 50% fisheries and 50% grain crops.  
 2022 - 30% fisheries and 70% of grain crops.

Nevertheless, Mr. Salomov and his brothers (Salomov Mamatqul farm and Saidovul farm) continue to engage in fishing<sup>16</sup>, which allows them to maintain part of their economic activity. Leaseholders typically employed seasonal farmworkers. Every year, the seasonal workers were different from all regions of Uzbekistan. The sensitivity of seasonal farmworkers is considered low due to the seasonal and changing nature of their engagement with various farms typically on a day-to-day basis.

According to PS5, in the case of projects involving economic displacement, the Client should assess the impact on farmer's livelihood resulting from the loss of leased land and to identify proportionate mitigation to be enacted by the Company to meet IFC's Performance Standard 5 (PS5) requirements. To determine the impact on livelihoods of the farmer and establish compensation value and livelihood restoration measures in alignment with PS5 principles, a proposed scheme for compensation is presented in Section 5.8.

<sup>15</sup> Statement of Financial Results - Form No. 2 (for 2021, 2022, 2023)

<sup>16</sup> In addition to agricultural activities, Jahongir Agro Biznes is also engaged in fishing in Urtachirchik region.

Except Jahongir Agro Biznes farm, no other land usages were observed within the project site, and no private property is located in the area. No other land or resettlement impacts on owners, formal or informal users are associated with the project.

Consultation activities undertaken with the leaders of local communities during RESA preparation (May-June 2024) indicated that there are no land uses undertaken by any groups within the site (to include but not limited to grazing, agriculture, etc.);

Finally, the history of the Project area has been traced through satellite maps (Google Earth) from 2015 to 2024. Past land use of project site is illustrated on below photos.



November 2021

August 2020



September 2018

2015

Photo 7: Historical Land Use of the Project site

## 4.7. CULTURAL HERITAGE AND ARCHAEOLOGY

The project area has no known cultural heritage either physical cultural resources and traditions and customs passed down through the generations. Although not identified by desktop study and in the preliminary survey, there is always a risk that earth works may encounter or damage existing structures of cultural, historical or archaeological value. The Chance Find procedures should be implemented if any artefacts are found during the construction phase. A Chance Find Procedure, as described in IFC Performance Standard 8 and law on Cultural Heritage of

Uzbekistan, is a process that prevents chance finds from being disturbed until an assessment by a competent specialist is made and actions consistent with the requirements are implemented.

In such cases the Contractor needs immediately inform the Engineer respectively representatives of the Archaeological Expertise Institute of Uzbekistan who then will advise on further and appropriate actions. Construction works are to be resumed only after written approval from this agency.

#### 4.8. SOCIO-ECONOMIC BASELINE

There are three main communities within a 3 km radius of the site. The closest identified residential areas are the makhallya Yangi Gulzor (~3521 inhabitants), makhallya Khuja Uchkun (~3100 inhabitants) and a small village-sized Djaloir (~1850 inhabitants). The nearest settlement is Jaloir village. All of these communities are considered to be directly impacted by the project activity (AOI communities).

The Consultant visited the project area and collected the data sheets with socio-economic data in interviews with three (3) mahalla reis (community leaders). The total number of population in these communities 8338 thousand people. The average share of male in project communities amounts at 50.7 %, share of women 49.3% respectively. The number of households in project communities is 1643 (2531 families).

##### Demographics

The breakdown of the population of the project affected communities in the direct Area of Influence (AOI) is provided in Table below.

**Table 9: Population of AOI communities, thousand people**

District / community	Population number (thous. people) / beneficiaries	Population number (thous. people) / beneficiaries	Number of families, units	Number of HHs, units
<b>Yangi hayot district</b>		<b>8338</b>		
Khuja Uchkun <sup>17</sup>	3.1	3100	890	641
Yangi Gulzar	3.4	3488	1121	697
Jaloir	1.7	1750	520	305

Source: Passports of project AOI communities. All data in all communities is provided according to its passports

The gender distribution is fairly consistent across the AOI districts, with slightly more men than women. Table below provides the gender distribution of the seven AOI districts.

**Table 10: Gender distribution of the AOI districts**

Community	Population	Male (%)	Female (%)
Khuja Uchkun	3.1	44,67	47,58
Yangi Gulzar	3.4	56,08	43,92
Jaloir	1.7	51,43	48,57

Source: Passports of project AOI communities. All data in all communities is provided according to its passports

<sup>17</sup> Passport of "Khuja Uchkun" community assembly as of October 1, 2023. All data in all communities is provided according to its passports

Theoretically, more males than females are the demographic norm. The household is generally headed by the male, who makes the major decisions concerning its economic undertakings. The household size ranges from 2–8 members. Family members often include the household head and his wife, grown up children with/without their husband/wife, and their grandchildren. The household head's age ranges from 38–72 years. The highest educational attainment of the household head is usually secondary level but occasionally one has a university degree. Migration of family members seems to be high as a number of adult male members of households in the village usually find work outside, normally in Tashkent, but are not reported as having migrated.

The age distribution within the project communities, delineating the percentage of the population across three main age groups: 0-17 years old, 18-30 years old, and 30 years and older. The majority of the population falls within the 30 and older category, constituting 44,6% of the total population, followed by those aged 0-17 years old at 22,4%. The smallest proportion belongs to individuals aged 18-30 years old, comprising 18,2% of the population.

**Table 11: Age structure of population in project communities, %**

Age	% of population
0-17 years old	22,4%
18-30 years old	18,2%
30 and older	44,6%
pensioners	14,8%
<b>TOTAL</b>	<b>100 %</b>

Source: Passports of project AOI communities. All data in all communities is provided according to its passports

The majority of the ethnic makeup of the population within the project communities identifies as Uzbek, constituting 55,47% of the total population. The second majority of the ethnic makeup Kazak (40.7%). Other ethnicities such as Tajik, Russian, Tatar, Uyghur and Gypsy represent smaller percentages, with Tajik being the next most prevalent at 4%.

**Table 12: National composition of population in project communities, %**

Nationality	% of population
Uzbek	55,47%
Russian	0,76%
Kazak	40,70%
Uyghur	0,05%
Karakalpak	0,23%
Kyrgyz	0,08%
Gypsy	1,92%
Tajik	0,52%
Tatar	0,28%
<b>TOTAL</b>	<b>100 %</b>

Source: Passports of project AOI communities. All data in all communities is provided according to its passports

## Employment

The main activity of the population of project communities is engagement into various forms of work and entrepreneurship, with a notable portion involved in agricultural activity. Specifically, the majority of the population are employed either in enterprises (32,09%) or engaged in business and entrepreneurship (1,93%). Additionally, a significant portion is involved in seasonal work (33,39%). This suggests that the primary economic activities of the community revolve around both traditional and modern forms of commerce, with a focus on enterprise and agriculture.

**Table 13: Status of employment**

Status of employment	% of population
Number of employees in enterprises and organizations	32,09%
Number of people engaged in business / entrepreneurs	1,93%
Number of people engaged in household chores	0,06%
Number of traders	6,94%
Number of people engaged in livestock, poultry and beekeeping	1,69%
Number of people engaged in seasonal work	33,39%
Long term employees in foreign countries	0,48%
Number of people engaged in child care	4,18%
Number of students	2,21%
Number of working pensioners	3,12%
Number of unemployed	13,91%
<b>TOTAL</b>	<b>100%</b>

Source: Passports of project AOI communities. All data in all communities is provided according to its passports

### Infrastructure

Basic social infrastructure is generally available within the village Djaloir or a nearby urban centre. Schools and polyclinics are located within walking distance. Most roads to or within villages are unpaved or in such a poor state of repair that they are effectively unpaved. Such roads are a source of dust nuisance for villagers in the dry summer months. During the wetter autumn, winter and spring months they are a source mud and related inconvenience (difficult to drive or walk over, mud carried into houses on people's shoes). Public transport system is only available in major roads and railway networks: people use them for special needs (e.g. hospital visits) or occasions (e.g. visiting relatives, weddings) for going to major urban centres or Tashkent.

There is one school in the project communities' territory.



**Photo 8: Photos of school along the Project communities' territory**

The state enterprise Makhstrans provides waste collection and transfer service within Yangikhayot District, and also commercial waste management entities are contracted for the collection and treatment, recycling and/or disposal of industrial waste. The nearest available facilities for the treatment of residential waste from the Project's construction and operational phases include:

- ❖ Landfill in Oqqo'rg'on district (about 5ha)
- ❖ Akhangaran landfill (about 59 ha)

For the management of the Project's industrial and hazardous waste streams, the following existing engineered landfills:

- ❖ Tuzel Landfill located in Kibray District
- ❖ Yegizbulok Landfill (dedicated to hazardous waste) located in Forish District of Jizzakh Region

There is no any wastewater treatment plants within the project-affected districts. Nevertheless, the existing wastewater treatment plants located further away in Tashkent Region will be used during the Project's construction and operational phases. These facilities include:

- ❖ Southern Wastewater Treatment Plant (WWTP).
- ❖ Chirchik WWTP.
- ❖ Almalyk WWTP.
- ❖ Bekabad WWTP.

In Yangikhayot district, a large number of construction works are carried out to create new housing estate, production facilities for various purposes, as well as the reconstruction of existing facilities. The Yangikhayot industrial technopark was organized in accordance with the Decree of the President of Uzbekistan No. PP-4979 of February 4, 2021 in Yangikhayot district of Tashkent city. It is planned to build a storage facility for cargo trucks and a comfortable parking lot for passenger cars, as well as organize the activities of service facilities. Currently, a number of companies producing building materials, household goods, food products, and metal products have already become residents of the technopark.

The area of the facility location is provided with a network of motor roads and means of communication. At the Tashkent level, the transport infrastructure is fairly developed. Tashkent ring road is from the south side of the project area. This road is connected with three international highways (M34; M39; A373). It is used by HGV traffic. It is deemed suitable to use for delivery purposes and can accommodate HGV traffic. These paved radial highways connect the country's regions and hinterland to a network of ring roads within the commercial capital. The road is generally wide enough to allow for two vehicles to travel in opposite directions. The minor road dissects the Project site and provides access to the site. The site under consideration is provided with electricity supply.

### ***Community Perception of the Project***

On 17 May 2024, within the scope of social baseline survey meetings were performed with 3 mahalla leaders in Khuja Uchkun Mahalla, Jaloir Mahalla and Yangi Gulzar Mahalla. The objective of the meeting was to inform stakeholder about the investment and to gain their opinions and suggestions with respect to the project.

Based on the results of this meetings, it can be concluded that the stakeholder opinion regarding Aluminium Can Production Plant and its activities are rather positive. Mainly stakeholders welcome a project and accept some inconveniences relating to the project implementation.

The outcomes of these engagement activities yielded an understanding and appreciation of local environmental and social issues. The main environmental issues identified during stakeholder consultations included increases in dust in the dry season and waste dumping associated with construction.

Social issues identified and discussed during stakeholder consultations included:

- ❖ Stakeholders have general information about the upcoming project;
- ❖ Most feedback received from communities related to employment opportunities.
- ❖ The proposed site is not used for animal grazing; the locals have other designated areas for grazing their livestock;
- ❖ Overall, the proposed project was highly welcomed by the interviewed stakeholders / mahallas;
- ❖ The local stakeholders / villagers hope to gain temporary employment during construction stage and a number of permanent employment positions at the plant.
- ❖ The stakeholders expressed concerns regarding the potential of damage to existing roads and safety concerns due to increase in traffic during the construction and operational stage. The community leader of makhallya Khuja Uchkun expressed concern about the increase in traffic. A solution to this concern could be to install traffic lights to limit speed. But access roads for transportation of equipment, materials, and construction workers do not pass through the makhallya Khuja Uchkun.

## 5. ENVIRONMENTAL AND SOCIAL IMPACTS, BENEFITS AND OPPORTUNITIES, MITIGATION MEASURES

### 5.1. INTRODUCTION

This chapter discusses the environmental impacts – positive and negative, direct and indirect, immediate and long-term – associated with construction and operation of the proposed Project.

The environmental and social impacts were identified in the context of the project area of influence and were based on the existing E&S baseline data including information obtained during site visit. A logical and systematic approach was used to capture all project - environment interactions capable of resulting in environmental and social impacts.

The activities associated with the proposed works especially the civil engineering aspects can result in varying degrees of impacts on the bio-physical and social environment. The potential impacts of the proposed project are identified and assessed to determine their significance. Subsequently, mitigation measures are defined for all potentially significant impacts. To achieve this, all the potential environmental and social resources and/or receptors in the project area that may be affected (adversely or beneficially) by the project were identified. The identification was based on the review of existing information and baseline desk review.

The proposed mitigation measures were derived from comprehensive reviews of the proposed project activities, existing relevant mitigation guidance prescribed in IFC Performance Standards (PSs), World Bank EHS Guidelines and Good International Industry Practice (GIIP). The measures to expand or enhance the benefits of the project especially as it relates to the socioeconomic well-being of the members of local communities and the project region are also described.

### 5.2. SOILS

#### Sensitive Receptors

The potential impacts on soil during the Project implementation can occur as a result of the following activities:

- ❖ Soil Erosion due to vegetation clearance and improper storage of topsoil and subsoil, loading-unloading operations,
- ❖ Soil contamination due to the leakages of oil products and chemicals, spills of friable materials, poor management of construction materials, liquid and solid wastes,
- ❖ Soil contamination from improper storage and transportation of materials and waste,
- ❖ Littering and improper waste / garbage management, etc.

**Table 14: E&S impact receptors – Soils**

RECEPTOR	SENSITIVITY	JUSTIFICATION
Soil Quality	Medium	The soil within the Project site is typical of the soil characteristics found in the area. It had agricultural designation prior SIZ establishment and therefore of medium importance and rarity on a local scale.

### **Construction Phase**

The major activity that should be considered regarding the construction activities is the excavation. The ground materials (not tested for potential contaminants) arising from excavation will be used for backfilling, land levelling and elevation adjustment to the extent possible.

In the process of organizing production, the impact on soils is due to the processes of removal, movement, compaction of soils during the construction of foundations and installation of equipment. In the process of soil compaction, their physical and mechanical properties will change. Cross contamination and pollutant mobilization is also possible if original ground is contaminated by chemical fertilisers or other substances.

**Damage and/or loss of topsoil:** The Project's construction phase will involve land clearance, topsoil stripping, as well as earthworks such as site grading, excavation and filling. The impact may occur in case the topsoil is not removed; mixed with subsoil and/or other material during and after removal. Impact on topsoil outside the boundaries of the project site may also happen. The topsoil not subject to removal may be compacted by heavy vehicles, scattered during transportation to temporary stockpiling site as well as lost by wind and water erosion when in stockpiles. The quality of topsoil may deteriorate if the stockpiles are not managed properly.

The impact on topsoil resulting from clearance during construction and reinstatement during operation and decommissioning has the potential to cause soil erosion and soil degradation. These potential impacts are considered negative and of **Moderate significance** prior to mitigation.

**Soil Contamination or cross-contamination:** Potential soil contamination is a possibility resulting from poorly managed fuels, oils and other hazardous liquids used during the project works as well as poorly managed waste (solid and liquid waste streams).

Construction of the plant will involve activities that generate solid non-hazardous and hazardous waste, as well as potential liquid wastes resulting from sanitary waste streams. Waste generated during these activities poses a threat to the soils. Of particular concern is the management of hazardous waste generated during the construction phase and its handling. Although the hazardous fraction of construction waste such as used oil, machinery lubricants and paints, etc. will represent a very small proportion of the total amount of construction waste it will however require special attention for management and disposal. If the temporary storage and handling of such waste on the construction site is inadequate prior to being removed for disposal, the risk to soil increases.

On-site refueling will not be conducted. However, there is a risk of contamination on soil where fuel or lubricant spillage occurs. Therefore, adsorbent materials with adequate amount and characteristics will be made available for oil leakage that may be caused by earthmovers and vehicles during excavation, filling, transportation operations carried out in the field so that any possible contamination of the soil. Soil contamination during construction work is possible with the spill of oil products used as fuel for mobile vehicles and construction equipment. However, the pollution impact significance is expected to be **Moderate** and localized.

The presence and use of such dangerous and hazardous chemicals increase the probability of accidental spills or releases of minor quantities of these materials into soil.

The risk of contamination through temporary storage facilities will be reduced through the storage of all materials within designated areas. Storage and handling procedures for oils and other chemicals will be required to minimize risk of pollution. The soil sensitivity is considered high, the

magnitude of the impact on soil is low and therefore, impact significance is assessed as **Moderate**.

### **Operational Phase**

The key contamination regarding the soil, and bedrock is associated with the potential leakage and spills during the plant operations and the storage of hazardous materials in the plant.

Although there will be little or no interaction with hazardous materials or chemicals, storage and usage of any hazardous wastes during the operational phase, there remains a small potential risk associated with spills and leaks to ground. Site contamination will be prevented with appropriately designed storage options and the adoption of strict spill control procedures, as well as appropriate spill response measures. Floors of hazardous material storage areas will be leak-proof and equipped with a drainage system.

The areas, where the maintenance-repairs of vehicles will be made and all the areas that have the risk to pollute soil due to any spillage and scattering from tanks of chemicals, grease, etc. will be covered with an impermeable floor. Therefore, adsorbent materials with adequate amounts and characteristics will be made available for oil leakage.

The adoption of good on-site working and storage practices and the implementation of suitable control measures, on-site training, and emergency preparedness will ensure that the potential contamination is avoided. Subject to the implementation of the Project environmental measures, the impact is assessed as **Negligible**.

### **Mitigation and Management measures**

The potential impacts on the soil during the construction and operation phases and measures to be applied are presented in Table 15. Mitigation and Management measures are also prepared taking into account the requirements of GOST 17.4.3.02-85 Nature Protection. Soils "and GOST 17.5.3.06-85" Nature Protection. Lands".

**Table 15: Impacts Significance of the Soil and Mitigation Measures**

Potential Impacts	Receptor	Sensitivity of receptor	Magnitude of impact	Potential Impact Significance <sup>18</sup>	Mitigation and Management Measures	Significance of Residual Impacts
<b>Construction Phase</b>						
Damage and / or loss of topsoil	Soil Quality	Medium	Medium	Moderate	<p>Topsoil will be stored within the project site.</p> <p>Ground clearance must be minimized.</p> <p>Topsoil must be removed from all areas required for permanent and temporary needs of the project.</p> <p>To avoid loss of the productive soil layer, all suitable topsoil and other material shall be saved and stockpiled separately for the future recultivation of the area.</p> <p>Unwanted materials from topsoil such as roots of trees, rubble and waste removed prior to stockpiling.</p> <p>Stockpiles of removed topsoil must be properly designed/shaped and managed;</p> <p>Topsoil and subsoil must be stored separately until reuse.</p> <p>To ensure stability, the soil piles shall not be higher than 2 meters.</p>	Minor

<sup>18</sup> without impact mitigation measures

Potential Impacts	Receptor	Sensitivity of receptor	Magnitude of impact	Potential Impact Significance <sup>18</sup>	Mitigation and Management Measures	Significance of Residual Impacts
Soil Contamination or cross-contamination	Soil Quality	Medium	Medium	Moderate	<p>Any leaks/damage to the soil and groundwater will be prevented through appropriately designed storage options for hazardous materials and wastes (double bunding, contained environment).</p> <p>The quantities of hazardous substances will limit at site to reduce the risk of spillage.</p> <p>Areas where spillage of soil contaminants occurs will be excavated (to the depth of contamination) and suitably rehabilitated. If any other minor spillage occurs, the spillage will be cleaned immediately and the contaminated area will be rehabilitated. All contaminated material will be suitably disposed of.</p> <p>It is necessary to concretise the allocated area for the placement of metal containers for the collection of household waste.</p> <p>The contaminated soil and treat as hazardous waste will remove, promptly.</p>	Minor
<b>Operational Phase</b>						
Soil Contamination or cross-contamination	Soil Quality	Medium	Low	Minor	<p>Operator to develop and implement an Emergency Response Plan (ERP).</p> <p>Any leaks/damage to the soil and groundwater will be prevented through appropriately designed storage options.</p> <p>Strict spill control procedures will develop as well as emergency clean-up procedures.</p> <p>The quantities of hazardous substances will limit at site to reduce the risk of spillage.</p>	Negligible

### Cumulative Impacts

The cumulative impact is considered to be potentially negative as SIZ development activity is planned in the region. The Project Area will be part of the SIZ which means various industries populating the project zone. Due to the current stage of other SIZ projects, there is currently very little information publicly available in relation to baseline information and potential impacts associated with other SIZ projects. However, should this change in the future, it could pose potential contamination risks to soil, groundwater. In order to ensure no significant cumulative impacts on soil as the Project progresses, the Project will seek to engage with other SIZ industrial projects in development as and when data becomes available.

Project related impacts on soil and groundwater quality would be those related to the potential contamination of soil and groundwater resources during construction as well as during operation. However, the effect of these impacts will be localized and limited within the Project boundaries with very limited potential for cumulative effects. Cumulative soil impacts in relation to soil erosion is only anticipated when overburden and topsoil from the excavation/extraction process at the plant facilities are being piled up in proximity to the project site at the same time as the installation of foundation, underground cables, access roads, and other ancillary infrastructure at the Aluminium Can Production Plant.

Land use will be also changed from agricultural to industrial and agricultural soils will be lost/impacted.

### **5.3. WATER RESOURCES**

This section discusses the significance of potential hydrological, hydrogeological and water quality impacts associated with the Project.

#### Sensitive Receptors

Potential impacts on water resources include:

- ❖ Water consumption, potentially affecting local water resources.
- ❖ Alteration of surface and groundwater flow.
- ❖ Water discharge and pollution.

The irrigation and drainage channels run along the eastern side of the project site boundary. Unprotected surface water sources include Chirchik River (from the west side at a distance of more than 2930 meters), and irrigation canals. The river and major watercourses in and around the project footprint drain surface water which is utilized for local agriculture.

Groundwater users are not prominent in the Project area, as most people are connected to piped water systems which provide potable and domestic water. However, groundwater wells are present in some locations and as a precautionary measure they should be classified as sensitive receptors if they are being used as potable water, or for domestic use.

**Table 16: E&S impact receptors – Ground and Surface Water**

RECEPTOR	SENSITIVITY	JUSTIFICATION
Groundwater Quantity	High	Groundwater is a vital resource and is of high importance on a national scale with limited potential for substitution. In addition, groundwater resources are scarce in Uzbekistan and the rest of the region.

RECEPTOR	SENSITIVITY	JUSTIFICATION
Surface water Quantity	Medium	<p>Unprotected surface water sources include Chirchik River (at a distance of more than 2930 metres from project area), natural streams, and irrigation canals. The river and major watercourses around the project footprint drain surface water which is utilized for local agriculture.</p> <p>Considering the distance to any surface water from the Project area, it is unlikely that any negative impact on the river will be caused. On the other hand, considering that the discharge of wastewater is planned into the artificial canal, it is likely that some negative impact will be caused to the canal.</p>

### **Construction Phase**

The Project is not considered to have a high demand for water. Water consumption in the construction sites is limited to the drinking, sanitary purposes and cleaning. The drinking water requirements will be met through bottled water.

During construction, the water will mostly be used for dust suppression during soil moving works and top soil storage; when clearing vegetation and grading; for unpaved road traffic; for making concrete for foundations; and for consumption by construction workers.

**Pollution from accidental Leaks or Spillage:** Pollution of surface water and groundwater resources during construction is usually related to improper storage of construction materials, construction waste and excavated materials, spillage of fuel, oil and other hazardous substances during construction activities. The potential impact would be of **Moderate** significance.

**Blockage of or Damage to Irrigation/ Drainage Channels:** The construction activities particularly near the irrigation canals and drainage channels can potentially cause damage to the side slopes of the canals and drainage channels and even block them. The damage to or blockage of irrigation canals can cause reduction of water availability for irrigation purposes thus causing loss of agriculture produce. Similarly, any damage or blockage of drainage channels can cause local flooding, adversely affecting the project site as well as the nearby cultivation fields.

To reduce the potential for erosion of drainage channels during construction, routes will be selected to avoid ephemeral drainage channels where possible. Stormwater run-off onto roads and uncontrolled flow from roads will be minimized. The washing of equipment and vehicles, as well as dirty water run-off from different Project components has the potential to contaminate surface- and groundwater resources if not managed appropriately.

**Water Consumption:** At the construction stage of the Plant, water is mainly needed to prepare mortars, as well as for water spray for dust control at the construction site. In addition, household and drinking water needs will consist of drinking needs, showers, and cooking. The water needs during construction phase will be supplied from the nearby districts via trucks. The drinking water will be supplied by bottled water from the market. Water for the construction activities will be extracted in relatively small quantities from one existing borehole. Therefore, the potential adverse impact on the irrigation system during construction phase is **Medium**.

**Wastewater disposal:** During construction, there will be no pre-planned direct discharges to areas potentially holding surface water, including ephemeral streams. Sanitary and domestic wastewater generated during construction is planned to be directed to a temporarily installed storage tank (a waterproof cesspool) with subsequent removal to the nearest treatment facilities in the city of Tashkent. On site sanitation and toilet facilities (including septic tanks) during construction will be provided for construction staff.

In order to protect and prevent pollution of surface and ground waters, as well as to ensure sanitary and epidemiological reliability in accordance with KMK 2.04.02.-97 and ShNk 245-71 'For water supply facilities', a number of measures are envisaged to eliminate the possibility of ingress of sewage.

Construction activities for the proposed new plant development may have a **Minor** impact on hydrology and water quality of the local area as the construction waste will not be leached into groundwater or to any surface water body.

### **Operational Phase**

**Water consumption during operations:** Water supply is required for service and drinking purposes, production purposes and emergency firefighting. Source of water supply for the plant will be 3 boreholes (up to depth 70m). The total water consumption by the enterprise for drinking and domestic, production needs is 238 m<sup>3</sup> per day and 86 870 m<sup>3</sup> per year. Watering and irrigation of green areas on the territory of the enterprise with hard and green cover irrevocably consumes water in the amount of - 1,41 m<sup>3</sup> per day and - 211,5 m<sup>3</sup> per year.

The sanitary protection zone should be organized around the boreholes in accordance with the requirements of Uzbek Legislation. In particular, the sanitary protection zone should be fenced and all activities, except the activities related with repair or maintenance of the borehole are restricted within the sanitary protection zone of boreholes. The boreholes should be registered in state register of boreholes and the plant should receive special permission for special water use or water consumption. This permission will be received through the single portal of interactive services.

**Spills and Leaks Associated with Operation:** Although there will be little or no interaction with hazardous materials or chemicals, storage and usage of any hazardous wastes during the operational phase, there remains a small potential risk associated with spills and leaks. Certain sources of contamination that can introduce risks to surface and ground water are cleaning fluids and solvents, fuels stored for use by site vehicles and back-up generators, etc. In rare circumstances there could be a spill of oil / fuel from trucks. Although these materials may be used and present in small quantities, precaution must be paid to ensure proper storage, handling, transportation and adequate spill prevention. It is expected that the storage of any of these materials, chemicals and fuels will be within designated areas, which have specific management and mitigation measures in place to prevent exposure of these pollutants to unprotected ground and surface water.

Pollution of ground waters by plant operation is excluded, as depth of ground waters is 3-7 m below the ground level, and in addition, waterproofing of underground pipelines is done with bituminous and rubber waterproofing. Any leaks/damage to the groundwater will be prevented through appropriately designed storage options. Strict spill control procedures will develop as well as emergency clean-up procedures. The quantities of hazardous substances will limit at site to reduce the risk of spillage.

**Wastewater disposal:** Process wastewater and sanitary wastewater will be treated at the onsite wastewater treatment unit through physical/chemical/biological treatments. The Project will construct and operate its own wastewater treatment. The treated wastewater will be discharge on the terrain. The maximum daily volume of industrial effluents is 500 m<sup>3</sup>/day.

Rating of discharges of pollutants is carried out by establishing the maximum allowed discharges (MAD) of these substances in wastewater into water bodies. MAD is calculating based on requirements indicating into SanPiN No 0088-99 «Sanitarian requirements for development and coordinating of projected MAD of pollutants, discharged into the water bodies with waste water»

and Uz RH 84.36.2004"Regulations on discharge of pollutants into water bodies and on the terrain, taking into account technically achievable performance of wastewater treatment."

**Table 17: Calculated parameters of water after industrial wastewater treatment**

Composition / Pollutants	Maximum monthly concentrations before treatment (mg/dm <sup>3</sup> )	Maximum monthly concentrations after treatment (mg/dm <sup>3</sup> )	Maximum allowed concentration based on national regulations	IFC Thresholds for metal industries
Total suspended solids	169,7	13	15	20
COD	695.3	2.5	3	50
Synthetic surfactants (Anionic surfactants)	14.9	2	20	
Sulfates	169,5	100	100	
Fluorides	80	1.5	1.5	5
Aluminum	242.9	0,75	0,75	0,2
Iron	85	0,03	0,03	
Copper	0,072	1	1	0,1
Oil products	57.8	1	1	10
Phenol		0,0005	0,001	0,001

Discharge of all categories of waste water is regulated by hygienic requirement and quality norms for surface water in accordance with SanPiN No 0056-96 Hygiene requirements for the protection of surface waters in RUz and Attachment to Construction Norms and Rules (CNR) 1.03.01-96 — «Guidelines on content, order, approval and endorsement of design estimate for enterprises, building construction».

Currently, for future plant, Maximum Allowed Discharge (MAD) have not been determined. The limits will be calculated and should be approved by the Ministry of Ecology, Environmental Protection and Climate Change of the RUz (MEEPCC) during the project construction phase before the project commission. MAD for the new units will be calculated based on national legislation and international standards, whichever is more stringent. This document will include general information on plant, water use situation on the plant and describes sources of using water and waste water discharge and disposal. The document also provides calculation of maximum allowed discharges into the water courses based on national regulations.

Considering the distance to any surface water from the Project area, it is unlikely that any negative impact on the river will be caused. On the other hand, considering that the discharge of wastewater is planned into the artificial canal, it is likely that some negative impact will be caused to the canal. The main canal water users are farmers who use the water to irrigate surrounding agricultural fields. Functioning and serviceability, soundness and proper use of main and inter-farm canals, pipelines and associated facilities is the responsibility of Regional Irrigation System Administrations. Water User Associations bear the cost of maintaining and operating of their internal irrigation systems. The Company will work with WUA on an ongoing basis to ensure rapid response in the accidental discharges of untreated water. Compliance with Uzbek standards and adoption of IFC EHS guidelines for effluent discharges to minimise discharges to the environment will also serve to protect community health.

The project provides for comprehensive engineering and organizational solutions aimed at preventing emergency discharges of untreated wastewater into the environment, as well as ensuring the continuity of the drainage system even in the event of malfunctions of local treatment facilities (VOCs) such as:

- ❖ Installation of an emergency sealed tank - The project provides for the installation of an external sealed tank with a capacity of 80 m<sup>3</sup>, designed for the temporary accumulation of wastewater in the event of a breakdown or repair of the treatment plant. The volume was selected taking into account the peak sanitary and domestic wastewater, amounting to up to 9.29 m<sup>3</sup> per day, which allows for an emergency reserve for several days of uninterrupted operation without discharge into the environment.
- ❖ Possibility of pumping and transportation to municipal treatment facilities - The project includes the possibility of prompt pumping of wastewater from the emergency tank using vacuum machines. For this purpose, a draft agreement has been prepared with the licensed organization SUVSOZABONENTXIZMATI, which provides services for the removal and disposal of wastewater at municipal centralized treatment facilities that meet sanitary and environmental requirements.
- ❖ Develop Emergency Response And Prevention Plan.
- ❖ Organization of continuous monitoring and control - The level of wastewater and the condition of VOC equipment are continuously monitored. In the event of malfunctions, automatic switching of the wastewater flow to an emergency tank is provided, eliminating the possibility of uncontrolled discharge.

After the proposed management and engineering measures against pollution of surface and ground water, residual impact of wastewater discharge during the Project operation on surface water quality can be assessed as **Minor**, local and short-term.

Rainfall will be directed to on-site surface water drainage systems. The sensitivity of the channels is low during the summer months and medium during spring when they are likely to be accommodating runoff / heavy rains. The magnitude of the impact is considered low. Therefore, overall, the significance of the impact is **Minor to Negligible**.

Potentially polluting substances impacting land and surface water during operation is considered to be of **Minor** significance prior to mitigation.

#### **Mitigation and Management measures**

Mitigation measures to reduce impacts on water resources for construction and operation phases are given below and summarized in Table 18.

**Table 18: Impacts Significance of the Water Resources and Water Environment**

Potential Impacts	Receptor	Sensitivity of receptor	Magnitude of impact	Potential Impact Significance <sup>19</sup>	Mitigation and Management Measures	Significance of Residual Impacts
<b>Construction Phase</b>						
Pollution from accidental Leaks or Spillage	Groundwater Quality	High	Low	Moderate	<p>Any leaks/damage to the groundwater will be prevented through appropriately designed storage options.</p> <p>Strict spill control procedures will develop as well as emergency clean-up procedures.</p> <p>The quantities of hazardous substances will limit at site to reduce the risk of spillage.</p> <p>Storage of all hazardous materials on an impermeable base with liners and/or secondary containment bund</p> <p>All equipment using oils will have drip trays underneath to capture any oil leaks or drips.</p> <p>Availability of suitable containment and spill cleanup materials/equipment at specific locations within the project site.</p> <p>First aid kits will be available at all hazardous and chemical storage areas.</p>	Minor
	Surface water Quality	Medium	Low			
Disturbance of site drainage and irrigation system	Water quality in Irrigation canal / Drainage channel	Medium	Medium	Moderate	<p>Excavation and stockpiling will be sited as far as possible from unprotected drainage channels, irrigation canals, natural streams and Chirchik River.</p> <p>The hazardous waste storage area should be constructed away from the drainage system.</p> <p>Washing of equipment, machinery and vehicles will only be permitted in designated areas, with impermeable surfaces and dedicated closed drainage systems.</p> <p>Routes should be selected to avoid ephemeral drainage channels where present. Culverts or other drainage control features should be installed where crossings of any drainage routes are unavoidable.</p>	Minor
	Hydrology	Medium	Medium			

Potential Impacts	Receptor	Sensitivity of receptor	Magnitude of impact	Potential Impact Significance <sup>19</sup>	Mitigation and Management Measures	Significance of Residual Impacts
Consumption of water	Water resources	High	Negligible	Minor	<p>The Project workers will be trained on ways to minimise water consumption and to ensure they have an understanding of water resources and resource efficiency.</p> <p>Ensure there is proper and adequate sanitation facilities at the site during construction.</p> <p>Discharge of any untreated water into the surface water body must be strictly prohibited. Treated water discharge must comply with the project water quality standards.</p> <p>Domestic wastewater generated will be directed to a temporarily installed storage tank (a waterproof cesspool) with subsequent removal to the nearest treatment facilities in the city of Tashkent.</p> <p>The Project Company will have a grievance mechanism in place that will allow villagers to lodge their complaints or concerns regarding any water issues related to the Project.</p>	Negligible
Wastewater disposal	Surface and Ground water Quality	High/ Medium	Negligible	Minor	<p>Domestic wastewater generated will be directed to a temporarily installed storage tank (a waterproof cesspool) with subsequent removal to the nearest treatment facilities in the city of Tashkent.</p> <p>A licensed wastewater collection contractor will be engaged to carry out a controlled extraction of sewage for transfer to designated wastewater treatment plants within the host districts or elsewhere in Tashkent Region.</p>	Negligible

<sup>19</sup> without impact mitigation measures

Operational Phase						
Water consumption during operations	Grounwater Resources (quantity)	High	Low	Minor	<p>The Project Company will obtain water abstraction permits before drilling any wells/boreholes at the project site.</p> <p>All boreholes should be registered in state register of boreholes and the plant should receive special permission for special water use or water consumption.</p> <p>Employees will be trained on how to minimise water consumption and ensure they have an understanding of the water issues in the Project area.</p> <p>Maintain integrity and permeability of storm water drainage system to avoid blockage, overflow and direct discharge of untreated runoff into the canals/ water bodies.</p>	Negligible
Spills and Leaks Associated with Operation	Grounwater Resources (quantity)	Medium	Low	Minor	<p>The chemical storage area will have proper ventilation and cover from the elements (i.e. rain, sun) and different storage areas to allow for segregation of incompatible chemicals.</p> <p>Storage of all hazardous materials such as fuels and chemicals on an impermeable base with liners and/or secondary containment bund with enough capacity to hold 110% of the bulk storage container and 25% of the total volume of the multiple containers.</p>	Negligible
Wastewater disposal	Surface and Ground water Quality	Medium	Low	Minor	<p>Maximum Allowed Discharge (MAD) will be calculated and should be approved by the Ministry of Ecology, Environmental Protection and Climate Change of the RUz (MEEPCC) during the project construction phase before the project commission.</p> <p>Water quality monitoring (at least 1 quarter) at the water outlet point and from the channel below the water intake of the treatment facilities.</p> <p>Installation of an emergency sealed tank.</p> <p>Possibility of pumping and transportation to municipal treatment facilities. For this purpose, a draft agreement has been prepared with the licensed organization SUVSOZABONENTXIZMATI, which provides services for the removal and disposal of</p>	Negligible

					<p>wastewater at municipal centralized treatment facilities that meet sanitary and environmental requirements.</p> <p>Develop Emergency Response and Prevention Plan.</p> <p>Rainfall directly on to roadways will be directed to on-site surface water drainage systems.</p> <p>Wastewater collection systems and oil water separators shall be inspected frequently, to ensure that no blockages could result in overflowing.</p>	
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## **Cumulative Impacts**

Increase in water consumption during construction and operation phase of the Project may potentially affect the surrounding users. However, it is not expected to have adverse impact on the irrigation system. It is important therefore that the Project does not place additional pressure on water sources utilised by local communities. State Ecological Committee for Environment and Ecology Protection already gave positive consent regarding the water usage of the project during the local EIA process.

The development of other industrial activities within SIZ activity in the region will permanently change the water resources character of the Project area, which is currently dominated by predominantly agricultural areas, and may affect current water users

While SIZ development can have significant cumulative impacts on the scarce regional water resources, the Project's contribution is likely to be low. Appropriate mitigation will be applied to reduce any potential conflict with other cumulative developments in the area.

Engagement with other SIZ developers and water authorities should be established. This will be in relation to both data sharing and future data gathering exercises to ensure any identified cumulative impacts can be mitigated, and as far as possible, the joint development of mitigation / management strategies that can be aligned across SIZ projects, where relevant to do so.

## **5.4. AMBIENT AIR**

Emissions to atmosphere will occur at all stages of the proposed Project lifecycle, including construction and operation stages. Such emissions include release of air quality pollutants. Impacts on the environment from atmospheric emissions during each stage of the project lifecycle differ significantly in duration, scale and magnitude.

### **Sensitive Receptors**

During construction phase, local ambient air quality may potentially be affected by increased dust, particularly during the site preparation stage (site clearance and earthworks etc.) and by the exhaust gas of construction vehicles, equipment and temporary power generators. During the construction phase sensitive receptors will mainly be residents affected by dust, and to a lesser degree by odour. It is possible that some agricultural crops could also be affected by dust. During the operational phase the main receptors will be residents affected by dust and air emissions.

Increases in dust or fugitive emissions can have a negative impact on the local air quality (AQ) as well as the health of workers or residents. The health effects include dust getting into eyes and mouth (workers, residents), increased AQ particles in the atmosphere, nuisance through surface soiling affecting crops, and local ecology.

The following table provides an overview of E&S impact receptors in the context of potential air quality impacts within the Project's Areas of Influence (AoI). A sensitivity rating and corresponding description is further provided for each relevant receptor.

**Table 19: E&S impact receptors – Air quality**

<b>RECEPTOR</b>	<b>SENSITIVITY</b>	<b>JUSTIFICATION</b>
Construction workers health	High	Construction workers have a potentially high sensitivity to the emission and dispersion of air pollutants (i.e., exhaust gases and PM) at close range.

RECEPTOR	SENSITIVITY	JUSTIFICATION
Operation & Maintenance (O&M) workers health	High	O&M workers have a potentially high sensitivity to the emission and dispersion of air pollutants (i.e., exhaust gases and PM) at close range.
Residential establishments	High	Residents within nearby residential establishments have a potentially high sensitivity to the emission and dispersion of air pollutants (i.e., exhaust gases and PM) at close range, with generally good baseline levels of air quality.
Crops, Ecological receptors (i.e., flora, fauna)	Low	Flora and fauna species resident within habitats within the immediate vicinity of the plant site have a potentially low sensitivity to fugitive dust from construction related earthworks and movement of heavy machinery.

### **Construction Phase**

During construction phase, local ambient air quality may potentially be affected by increased dust, particularly during the site preparation stage (site clearance and earthworks etc.) and by the exhaust gas of construction vehicles, equipment and temporary power generators. Sources of air emissions during construction phase are:

- ❖ Excavations and earthworks (dust),
- ❖ Vehicle movements on unpaved, or compacted roads and surfaces (dust);
- ❖ Particulate matter dispersion from uncovered truckloads;
- ❖ Vehicle and construction equipment emissions and particulates from vehicles, generators and other mechanical equipment;
- ❖ Stored VOCs and other volatile hazardous materials (VOCs) and;
- ❖ Odour from temporary wastewater facilities, or containment

The construction activities related with the plant modernization includes installation of equipment within the existing facilities and transport of construction materials. The project does not consider large scale civil or construction works to be implemented. The estimated impact on ambient air during the construction phase is limited and short term as the emissions from transportation of materials and equipment will be related with a few number of delivery trucks and frequency of deliveries. The impact is considered not significant as the number of deliveries will not be more than few containers with equipment during the three months period. Accordingly there will be increase of traffic during the delivery date and this activity will not have noticeable impact on local traffic. The air emissions related with installation of the equipment will be also minimum, so no specific mitigation measures are required to minimize the effect from installation.

The change in ambient air quality may arise during construction as a result of fugitive dust and particulate matter emissions. However, such impacts are expected to be temporary and of short-term nature as they are limited to the construction phases only.

**Emissions to air:** The greatest potential impact on air quality due to emissions from vehicles and plant associated with the construction phase will be in the areas immediately adjacent to the Site access and the Site boundary. The number of construction vehicles likely to be used is not known, however, given that existing air quality within the vicinity of the Site is likely to be good, and that there are limited residential properties in the vicinity of the Site, there are unlikely to be any significant changes in air quality at residential properties.

Final details of the exact construction plant and equipment likely to be used on the Site will be determined by the appointed contractor, it is considered likely to comprise bulldozers, road rollers,

cranes, and excavators. The number of plant and their location within the Site are likely to be variable over the construction period. There will also be emissions relating to welding, roofing and painting, however, these are unlikely to be released in significant volumes, and will be temporary in nature, and any impacts will be highly localised.

Based on the distance of sensitive receptors to the roads likely to be used by construction vehicles and the Proposed Development site boundary, the impacts from air emissions are considered to be of **Negligible** significance prior to mitigation.

**Dust:** Dust emissions can be generated directly from construction activities of the project, its ancillary facilities and associated traffic; including clearing of topsoil, transport and open storage of materials, and from unpaved roads. The principal sources of dust and particulate emissions during construction will be:

- ❖ Excavations and earthworks,
- ❖ Vehicle movements on unpaved, or compacted surfaces; and
- ❖ Particulate dispersion from uncovered truckloads.

In the case of this Project, there are residents within 100m of the Project site boundary. As such, there is the potential for impacts relating to dust emissions because of construction works upon these receptors. Dust resulting from excavations and earthworks typically comprises large diameter particles, which settle rapidly and close to the generation source. The construction will involve potentially dusty materials such as concrete, crushed stone, and gravel. However, the magnitude of dust impacts from construction works will depend on the wind speed and wind direction as well as levels of precipitation at the project site. The highest risk of dust exposure is to regular staff and workers on site. Consequently, dust generation impacts during construction on ambient air quality are considered to be of **Major significance** prior to mitigation.

**Odor** – On site sanitation and toilet facilities (including septic tanks) will be provided for construction staff. There is the potential for release of odour to the immediate surrounding areas from inappropriate containment and coverage associated with wastewater holding/septic tanks. Any such impacts are likely to be temporary and limited to the Project site or in close proximity to the construction site boundaries.

Earthworks and civil works are not among the activities considered likely to generate significant odour emissions. It is considered unlikely that activities associated with the construction phase would result in the generation of odours other than odours from vehicles and construction machinery/ equipment exhausts. The closest residential properties which may be subjected these odours are located approximately 90-125m of the proposed project site. At this distance, it is considered unlikely that any odours generated by exhaust emissions will be detectable. All other properties are located further from the Site and it is therefore considered that the odour impact during the construction phase would be of **Negligible** significance prior to mitigation.

**Emissions of Volatile Organic Compounds (VOCs)** - Small quantity of fuels, paints, solvents and other volatile substances are likely to be required during the construction phase, which will be stored in secure areas within the construction camps. If not adequately contained, such substances have the potential to result in the dispersion of volatile emissions to the immediate air shed. Given that the storage of such volatile substances will be in small quantities, any potential impacts will be temporary and limited to the immediate surrounding area, likely to be within the Project site or near the construction boundaries. **No significant impacts from VOCs emissions are anticipated.**

## **Operational Phase**

Air pollution prevention and ambient air quality monitoring will be undertaken to ensure compliance with national regulations and WBG EHS Guidelines for Metal, Plastic, and Rubber Products Manufacturing (2007). According to the Decree of the Cabinet of Ministers of the Republic of Uzbekistan No. 541 of September 07, 2020 "On further improvement of the environmental impact assessment mechanism", Company refers to the 3 category of impact on the environment (low risk).

**Emissions to air:** During operation, emissions of air pollutants may be generated as a result of a number of processes and activities carried out as a result of the Proposed Development. These include:

- ❖ Emissions from stamping lines operating on-site;
- ❖ Emissions from painting and printing process;
- ❖ Emissions from compressor and double-circuit boiler on-site.

During national EIA preparation, it was identified 6 sources of impact on air quality at the project plant: 5 organized and 1 unorganized sources of pollutant emissions.

- ❖ Gross emissions of all ingredients..... 0,419228 ton/year
- ❖ Emissions of solid ingredients ..... 0,001942 ton/year
- ❖ Liquid and gaseous ingredients ..... 0,417286 ton/year

As a result of the operation of the above mentioned production processes, the number of sustainable sources of emissions of harmful substances into the atmospheric air is: carbon monoxide - 0.257515 tonnes/year (61.42%); nitrogen dioxide - 0.078838 tonnes/year (18.80%); aerosol vapours - 0.02 tonnes/year (4.78%); ethylbenzene - 0.018936 tonnes/year (4.52%); butyl acetate - 0.017680 tonnes/year (4.22%); hydrocarbons - 0,008087 tonnes/year (1,92%); acetic acid - 0,008 tonnes/year (1,90%); small amounts of aluminium dust, dye dust, sulphur dioxide are emitted.

According to the EIA calculations, it is shown that the highest concentrations of all pollutants emitted into the air are expected to be at a level below the thresholds established for them outside the industrial zone.

In the process of painting the product paint dust is emitted into the atmospheric air, the paint dust collector is equipped with a cyclone with a cartridge filter with a capture efficiency of 98.0%.

Overall, the potential impact of emissions to air during the operation is considered to be of **Negligible** significance considering design controls and distances to receptors.

**Dust:** The ventilation regime is controlled in order to ensure optimal growth conditions are maintained within the house (and varies throughout the day and depending on season / external conditions to ensure the internal temperature is maintained appropriately). The highest risk of dust exposure is to regular staff on site. Measures put in place to protect on-Site staff will ensure that the risk of impacts off-Site are smaller. The closest off-Site receptors are located in Jaloir, approximately 100m from the proposed plant building, however, activities associated with the plant are unlikely to generate significant dust emissions. Besides these properties, all others are located over 1.5km from the Site. The area surrounding the Site is therefore considered to be of low sensitivity to dust generated by the identified operational phase activities, and therefore low risk of experiencing significant dust impacts. The potential of emissions impact to the facility can be considered as **Negligible**.

Consequently, dust impacts during operation on ambient air quality are considered to be of **Minor** significance prior to mitigation.

**Odor:** The Site will be operational throughout the year, and therefore there is a risk of odours to be generated at all times. Based on the distance between the potentially odorous activities and the sensitive receptors, there is the opportunity for significant dispersion by the wind, and it is considered unlikely that significant odours will be perceived by residents in the area surrounding the Proposed Development. This being the case, odour impacts are considered to be of **Minor** significance prior to mitigation.

#### **Mitigation and Management measures**

By using impact assessment significance criteria approach, key potential impacts and countermeasures on air quality for the construction and operation phase are presented in Table 20.

**Table 20: Impacts Significance of the Air Quality**

Potential Impacts	Receptor	Sensitivity of receptor	Magnitude of impact	Potential Impact Significance <sup>20</sup>	Mitigation and Management Measures	Significance of Residual Impacts
<b>Construction Phase</b>						
Elevated levels of dust	Residential Areas	Medium	Medium	Moderate	Dust control measures will be implemented on the main construction zones and haul routes and to 100 m from the camp and plant entrances. Vehicle speed on all site roads and along the access road into the site will be restricted to 20 km/h. Wetting down of any unpaved site roads in order to reduce dust generation. Full PPE kit will be provided to the workers including dust masks.	Minor
	Workers at the Site	High	Medium	Major	Dusty material stockpiles (i.e. any fine powders and sand) dust generating activities will be to be located away from the site boundaries and be contained to avoid dust dispersion during storage or use. If visible dust dispersion to off-site locations becomes apparent additional control measures may include a maximum speed limit in dust-prone areas, cover stockpiles, temporarily suspend activities at the source of the dust emissions until wind speed is reduced, and/or apply additional water to access roads and work areas as necessary.	Moderate
Elevated levels of exhaust emissions	Residential Areas & Workers at the Site	Medium	Medium	Moderate	Unnecessary usage of vehicles, plant and equipment will be minimized No unnecessary idling. Lorries and truck engines will be turned off while waiting on site to minimize gaseous emissions. Internal roads inside the project site will be compacted as it reduces vehicular power consumption.	Minor
Emissions of VOCs and other	Residential Areas &	Medium	Low	Minor	Hazardous materials stored and used on site with potential gas emissions (e.g. Volatile Organic Compounds) will be located in well-ventilated, but secure low-risk areas, away from major transport routes	Negligible

<sup>20</sup> without impact mitigation measures

Potential Impacts	Receptor	Sensitivity of receptor	Magnitude of impact	Potential Impact Significance <sup>20</sup>	Mitigation and Management Measures	Significance of Residual Impacts
hazardous volatiles	Workers at the Site				and away from the site boundary and receptors locations (where possible). Fires and material burning will not be allowed on the Project site.	
Odour from Onsite	Residential Areas & Workers at the Site	Medium	Low	Minor	Adequate and sufficient sanitary facilities for site workers will be provided. Effective cleaning and maintenance of toilets to be undertaken to avoid odour dispersion and cleaning records/inspection sheets displayed in the toilets. All septic tanks will be sealed and fully functioning. Septic tanks will be operated and maintained according to manufacturer recommendations. Sanitary waste will be removed from site by licensed contractors and disposed in waste treatment facilities approved by the local government.	Negligible
<b>Operational Phase</b>						
Air emissions generated from general operational activities	Residential Areas Workers at the Site	Medium	Low	Minor	Unnecessary usage of vehicles, plant and equipment will be minimized - No unnecessary idling.	Negligible

## **Cumulative Impacts**

Project related impacts on ambient air quality would be those associated with construction: temporary emissions from vehicles, dust from earthworks and dust from vehicle movements within the Project. Cumulative impact on air quality with respect to dust generation and gaseous emissions is only anticipated when construction activities at project site is undertaken simultaneously with industrial works at the other SIZ projects development.

At locations where construction of the proposed plant passes in close proximity to communities, construction dust may cause a temporary nuisance to local residents. Should the proposed Can Production Plant project be carried out close to the proposed additional SIZ with various industries at the same time as Aluminium Can Production Plant construction, there could be some additional dust in the atmosphere or the duration of increased dust concentrations could be longer.

If the construction periods coincide, cumulative impact on air quality with respect to dust generation and gaseous emissions from construction activities at the Project is anticipated. However, with the implementation of management and mitigation measures, the cumulative impacts are expected to be Minor.

## **5.5. BIOLOGICAL RESOURCES**

### **Sensitive Receptors**

Most of the areas along the project sections have been heavily disturbed by human activities. There are no known reports of threatened or endangered plant species or habitats. There are no natural forests or natural habitats across the entire project plot. The desk study indicates that mainly common species of flora and fauna are present in the project affected area. These are generally considered to be of low conservation value and of low sensitivity. Therefore, the overall sensitivity of flora and fauna is considered to be Low. However, agricultural crops cultivated on surrounding land can be of Medium sensitivity to dust.

**Table 21: E&S impact receptors – Biological Resources**

<b>RECEPTOR</b>	<b>SENSITIVITY</b>	<b>JUSTIFICATION</b>
Flora	Low	There are no trees subject to cutting on the territory of the facility. No specific records of Red Book flora have been obtained as part of the original study. There is no protected plant species or natural habitats in the project area.
Fauna /Reptiles	Low	The designed land plot does not cover any appreciable variety of species of fauna. Anthropogenic impact on the territory under consideration is significant. There is no natural habitat in this zone. Basically there are animals typical for the populated localities. Within the project area, species listed as critical, endangered or vulnerable on the IUCN Red List, as well as plants included in the Red Data Book of Uzbekistan were not identified though secondary data analysis. Most of species recorded for the project area are typical for Central Asia and more or less common and widely spread.
Fauna / Ornithofauna	Low	
Fauna / Mammals	Low	
Crops	Medium	The land surrounding the project is intensively farmed and land use is considered typical for the region. The site territory is located in the middle of agricultural lands. The area is used primarily for rice, wheat, watermelons, legume crops, strawberries cultivation. There could be loss of crop production

RECEPTOR	SENSITIVITY	JUSTIFICATION
		due to accidental damages such as dust, movement of construction machinery, etc during construction period.

**Construction Phase**

**Loss of Habitat / Habitat Fragmentation:** The impact is generally direct as habitat will be lost through construction activities and this could include direct destruction of flora or damage to fauna habitat. There is no natural habitat in the project area as all habitats within the project area are exposed of anthropogenic disturbance, especially agriculture.

Clearing, grading, excavation and other earthworks during early construction stages results in habitat loss over the full construction footprint of the project, including temporary structures, lay-down areas, and internal roads used for incoming and outbound traffic.

Based on the site survey observation, there are limited flora diversity in the Project area. In addition, there exist similar habitats around the Project area. Hence, it is not considered as a sensitive area. In general, the species composition of fauna in the project area corresponds to the species composition of fauna in the the populated localities. Construction in this area will not bring negative consequences on global population of these species. Therefore, clearance in the project area, which is currently under anthropogenic influence, will not cause significant habitat loss. The project area will not cause habitat fragmentation and hinder the movement of animals.

Modified habitats adjacent to construction works may be temporarily or permanently impacted by: reduced air quality, including dust from earthworks and material transfer; loss of soil structure including erosion of the upper territorial horizon; leaching of construction sites and soil pollution from waste. The impacts will be relatively small in extent, short-term and partially reversible. Habitat loss and degradation is therefore considered to be a minor impact. No adverse impacts on the conservation status of habitats are expected.

Inadequate storage and handling of hazardous materials, and inappropriate design and storage of wastes could result with contamination of soils and groundwater which may also attract pest species and potential for disease. Pests may also be attracted to site by the accumulation of wastes (particularly domestic food wastes) if these are not stored and disposed of appropriately.

Deposition of harmful substances on soil and plants is **Minor** and there will be no impact on these facilities. The area around the site, as well as in the adjacent streets, will be planted with green areas of decorative and fruit trees.

**Introduction of Alien Species:** Accidental introduction and dispersal of invasive species from construction activities may occur. Excavated soil are stockpiled and preserved within dedicated sites to enable its reuse in backfilling excavations and landscaping as part of site rehabilitation post the completion of construction works. Potential invasive flora species shall be identified, and action must be taken to clear these species if they occur in or around areas designated for bush clearance to prevent establishment after clearing. No planting of alien species shall occur in the camps or any areas within the Aol, including landscaping of re-vegetated areas.

**Biodiversity Loss:** Clearing of existing vegetation will results in direct loss and mortality of specimens. Further, wildlife such as burrowing rodents and herptiles may be directly crushed during earthworks or may suffer stress-induced mortality.

The desk study indicates that mainly common species of flora are present in the project effected area. There is no sensitive wild flora within or the vicinity of the Project site. The proposed project construction works will not have any significant impact on flora as they take place within areas

agricultural land, e.g., and along existing road routes. Given the nature of the project site where agricultural crops have been cultivated, the impacts on biodiversity are assessed as of **Minor significance**.

**Disturbance of Fauna:** The disturbance factors for animals are noise, light exposure due to the work of construction equipment and vehicles within the construction site, access roads, and the presence of people on construction sites.

Movement of vehicles and heavy machinery within the Project site as well as the site clearance and excavation could potentially cause direct mortality of fauna species such as reptiles. Also, access to the construction area and displacements from various field activities increase the risk of accidents for small species.

During the construction stage the death of individuals of small mammals, birds, and reptiles may be possible. Some birds may abandon their nests and even nestlings.

Construction work duration is approximately 6 months and to be carried out in a limited area minimizing disturbances to fauna outside the site boundaries.

**Damage to agricultural crops:** At the construction stage, the main factor for the deterioration of plant growth conditions will be dust emissions during loading and unloading, emissions of construction equipment. The most affected areas will be vegetation near construction site. It is expected that the maximum concentrations of dust emissions will be observed at a distance of up to 30 m. Given the limited duration of construction, and distances of typically over 30 meters to surrounding agricultural fields the impact is likely to be of **Negligible**.

### Operational Phase

**Disturbance of Flora/Fauna:** At the operation stage there may be cases of death of individuals as a result of their falling on the road (mainly birds, small mammals and amphibians), but these cases are episodic. The plant fence significantly reduces the risk of the death of animals. Subject to the implementation of the Project environmental measures, the impact is assessed as **Negligible**.

**Introduction of Invasive and Alien Species (IAS):** Visual inspections will be carried out for imported stocks of tree seeds, manure and compost during site rehabilitation, to identify any invasive plant specimens with potential for on-site regeneration and propagation. Suitable weed control measures will be implemented for any related finds. The clearance of invasive and alien floral species within the project sites will follow a weed control hierarchy. Control measures such as the use of herbicides and fire will be prohibited.

### Mitigation and Management measures

Mitigation measures to reduce impacts on biological resources for construction and operation phases are given below and summarized in Table 22. **Error! Reference source not found.**

**Table 22: Impacts Significance of the Ecology**

Potential Impacts	Receptor	Sensitivity of receptor	Magnitude of impact	Potential Impact Significance <sup>21</sup>	Mitigation and Management Measures	Significance of Residual Impacts
<b>Construction Phase</b>						
Loss of Habitat / Habitat Fragmentation and Damage of Habitats	Flora	Low	Medium	Minor	<p>The loss of habitat directly in the Project area can be mitigated post-construction through planting of species comparable to those being lost and management and restoration of habitat within the area.</p> <p>Storage of construction materials, products and structures on specially equipped sites.</p> <p>All vehicles and equipment to be restricted to within the project boundaries and only along the approved access road route.</p> <p>Fires will not be allowed under any circumstances.</p>	Negligible
	Fauna	Low	Medium	Minor	<p>After the completion of construction work, temporarily disturbed areas are subject to reclamation with sowing of perennial grasses /locally found grasses and shrubs increase soil stability.</p> <p>Rehabilitation of temporary habitat loss as soon as possible after construction activity is finished.</p>	Negligible
Introduction of Alien Species	Local Flora species	Low	Medium	Minor	<p>Potential invasive flora species shall be identified, and action must be taken to clear these species if they occur in or around areas designated for bush clearance to prevent establishment after clearing.</p> <p>Cleared areas no longer required for construction activities shall be rehabilitated by re-seeding with locally found grasses and shrubs increase soil stability.</p>	Negligible

<sup>21</sup> without impact mitigation measures

Potential Impacts	Receptor	Sensitivity of receptor	Magnitude of impact	Potential Impact Significance <sup>21</sup>	Mitigation and Management Measures	Significance of Residual Impacts
					No planting of alien species shall occur in the camps or any areas within the Aol, including landscaping of re-vegetated areas.	
Biodiversity Loss	Flora species	Low	Low	Minor	Minimise permanent and temporary land take for civil works. The project area boundaries shall be fenced to avoid fauna from entering the active construction site where they may be injured.	Negligible
	Fauna species	Low	Medium	Minor	Drivers operating in the area must be well briefed and must be aware of the dangers that vehicles pose to the local fauna. Pollution control measures should be put into place to avoid any impacts in accordance with requirements of IFC PS3.	Negligible
Disturbance of Fauna	Small mammals, reptiles and birds	Low	Medium	Minor	There will be no encroachment to land outside of the Project footprint, or defined laydown areas, site access road. The project area boundaries shall be fenced to avoid fauna from entering the active construction site where they may be injured.	Negligible
	Big and medium mammals	Low	Low	Minor	Route directions and speeds limit will be placed along the access road into the project site.	Negligible
Damage to agricultural crops	Vegetation near construction site	Medium	Medium	Moderate	There will be no encroachment to land outside of the Project footprint, or defined laydown areas, site access road. If necessary, work site and access roads should be irrigated to minimize dust impact.	Minor

Potential Impacts	Receptor	Sensitivity of receptor	Magnitude of impact	Potential Impact Significance <sup>21</sup>	Mitigation and Management Measures	Significance of Residual Impacts
<b>Operational Phase</b>						
Disturbance of Fauna	Birds, Reptiles and Mammals	Low	Low	Minor	<p>Natural revegetation of the cleared areas will take place. The success will be monitored and if necessary additional measures will be undertaken such as watering of those areas.</p> <p>Hazardous materials and chemicals shall be stored in designated areas in accordance with the national requirements and standards and good practices guidelines so as to prevent any spillage on the site.</p> <p>Periodic water and air quality, and noise level monitoring shall be performed.</p>	Negligible
Introduction of Invasive and Alien Species (IAS)	Local Flora species	Low	Low	Minor	<p>During routine maintenance any invasive flora species shall be removed.</p> <p>Landscaping on site shall be incorporate indigenous plant species to minimise irrigation requirements and the need for fertilisers/pesticides.</p>	Negligible

## **Cumulative Impacts**

Cumulative impacts from SIZ and the Project on biodiversity of the modified habitats within the area are not considered to be significant.

There are no distinct natural habitats in the project area exposed to medium or high levels of anthropogenic disturbance, especially agriculture. The Project site is limited in flora diversity and there are no known protected species.

## **5.6. NOISE & VIBRATION**

The main source of noise and vibration at the facility is technological equipment. In the process of placement of technological equipment, necessary measures are taken to protect against noise in accordance with GOST 12.1.003 - 83 'Noise'. General safety requirements include installation of elastic rubber gaskets under the foundations of apparatuses, motors.

### **Sensitive Receptors**

Residents and educational facilities (school № 336) within the Project corridor are those most sensitive to noise in both the construction and operational phases of the Project. Commercial properties are also sensitive to noise, although the guideline noise limits for commercial properties are much higher than residential areas indicating that their sensitivity is much lower.

Three settlements are located around the proposed project site and as such noise levels from construction activities may be elevated above national noise standards during construction. The table below show these receptors in representative clusters and have been identified based on the nearest receptors to the Project site in each cluster group.

**Table 23: Potential Noise Receptors of the Project**

<b>Receptor</b>	<b>Receptor Type</b>	<b>Distance from the Project Border (m)</b>	<b>Sensitivity</b>	<b>Justification</b>
Small village-sized Djaloir	Residential establishments	90m	Medium	Residents living in these residential areas will be particularly vulnerable to increase in ambient noise levels.
Makhallya Yangi Gulzor	Residential establishments	580 m	Low	Residents living in these residential areas can be particularly vulnerable to increase in ambient noise levels. It is far away from Project site.
Makhallya Khuja Uchkun	Residential establishments	670m	Low	Residents living in these residential areas can be particularly vulnerable to increase in ambient noise levels. It is far away from Project site.
Construction workers	Project Area		Medium	Construction workers have a potentially high sensitivity to noise emissions and vibration from sources at close range.
Operation and Maintenance (O&M) workers	Project Area		Medium	O&M workers have a potentially medium sensitivity to noise emissions and vibration from sources at close range.

## **Construction Phase**

**Construction Site Noise – Noise generated from general construction activities:** The primary source of noise during construction will be heavy equipment (e.g. bulldozers, graders, excavators, dump trucks, etc.) and vehicular traffic. The magnitude of construction noise impacts depend upon the specific plant used, its duration of use during a typical day and the distance between construction works and sensitive receptors.

The closest residential receptor from any part of the Proposed Development is Jaloir village, which is approximately 90-125m of the proposed project site. All other surrounding villages are at least 450m from any part of the development.

In the absence of a specific construction program, it is not practicable to determine accurate noise level predictions at the residential receptors, however, construction noise levels are only likely to cause isolated changes to the existing environment within a distance of 100m from the works and when all construction plant is operating at the same location simultaneously.

Construction activities in relation to noise and vibration are likely to include:

- ❖ Site Preparation
- ❖ Civil Works
- ❖ Construction and mechanical Installation;
- ❖ Internal Road Paving/Compacting; and
- ❖ Works at associated facilities; and
- ❖ Movement of vehicles (on and off-site)

The construction phase of the Project is planned to be conducted only during the day-time. However, if it is required to work during evening and night times, the necessary permits should be received from the authority. The permit will identify the type of construction activities that are allowed to be performed during night-time. In addition, Project construction traffic routing through community areas will be minimised wherever possible.

Construction will generally be undertaken during normal working hours although some works may be required outside of this time. Mitigation measures will also include the use of a sufficient buffer between the Project and local properties to reduce noise to an acceptable level at those locations.

Given the distances to the surrounding residential areas and the fact that construction noise impacts would cease as soon as the works have been complete, any potential noise impacts would be temporary and therefore considered to be of **Minor** significance at receptors in Jaloir village and **Negligible significance** at all other residential receptors, prior to mitigation.

**Construction vibration impacts (including vehicle vibration):** There will be no blasting during construction activities; therefore, vibration effect will not be of concern on the environment and human health. Nevertheless, there will be vibration due to heavy machinery. Vibrations resulted from the machines or buildings including machinery emerge from the dynamic force from the moving parts of the machines. Different parts of the machines generally make different frequency and vibration. Vibrations cause mechanical weathering in time. Generally, most important factor of a machine malfunction is vibration. Therefore, necessary maintenance shall be performed for the construction machines and equipment. Any potential vibration impacts would be temporary and therefore considered to be of **Minor** significance at receptors in Jaloir village and **Negligible significance** at all other residential receptors, prior to mitigation.

**Impacts to Construction Workers & Accommodation Areas Located at the Project site:** Site workers will be exposed to varying levels of noise depending on their specific roles and activities being conducted. This may relate to exposure to noise in areas that are considered 'high' (e.g.

above occupational health and safety guidelines), without mitigation, noise impacts to the workforce could result in health impacts, for example hearing damage. Workers should wear suitable ear protection (if applicable). Noise monitoring at the construction camp accommodation will be required, and if the noise levels at these locations are beyond the acceptable limits, appropriate mitigation measures such as noise barriers will need to be employed. All equipment is equipped with a special noise protection box and installed on sound-absorbing substrates. Workers will be instructed in the proper use of equipment and all construction activities will be properly designed and managed. In the absence of mitigation, the impact significance is potentially **Moderate**.

### **Operational Phase**

**Operation Site Noise – Noise generated from general operation activities:** According to KMK 2.01.08-96 'Protection from Noise', the plant will not have a significant impact on the formation of noise background in the area of its location.

The initial noise assessment has concentrated on the village on the northern boundary but it is deemed to be of sufficient distance from the site to ensure operational impacts are not likely to be significant. The noise levels during operation phase of the project are proposed under the limit values specified for the day and night time in both national and international limits.

Therefore, no additional noise level reduction mitigations (such as establishment of noise barriers, etc.) are foreseen for the operation phase.

The primary noise sources during operation are assumed to be mechanical services equipment and vehicular traffic on the internal paved and 'dirt' road networks.

It is understood that under Uzbek law, noise calculations are not required during the design development stages and that exact locations and specification of mechanical services equipment are therefore not provided until after the commissioning stage.

Allowing for a worst case scenario, the likely noise levels all fall below the day-time criteria stipulated by the WHO for impacts at residential receptors but could exceed the night-time limit of 45 dB(A) and night time construction work is not planned.

The movement of vehicles for transportation of O&M workers and transfer of materials, finished products and equipment for maintenance purposes may influence ambient noise levels. The plant site access gate and entry road are adjacent to the highway TRR (Tashkent ring road), and project-associated traffic will therefore not generate perceptible increases in traffic related noise along the highway corridor. The magnitude of likely noise impacts during operation and prior to mitigation, are therefore considered to be of Moderate significance at residential receptors in Jaloir that are closest to the road network and of **Minor** significance at all other residential receptors.

### **Mitigation and Management measures**

By using impact assessment significance criteria approach, key potential impacts and countermeasures on noise and vibration for the construction and operation phase (acc. WBG ESHG<sup>22</sup>) are presented in Table 24.

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<sup>22</sup> <https://www.ifc.org/content/dam/ifc/doc/2000/2007-general-ehs-guidelines-noise-en.pdf>

**Table 24: Impacts Significance of the Noise and Vibration**

Potential Impacts	Receptor	Sensitivity of receptor	Magnitude of impact	Potential Impact Significance <sup>23</sup>	Mitigation and Management Measures	Significance of Residual Impacts
<b>Construction Phase</b>						
Construction Site Noise – Noise generated from general construction activities	Residential Areas	Low	Medium	Minor	Restrict all construction activities to daytime during normal working hours (07:00 am – 18:00 pm). Conduct construction activities within the maximum permitted noise levels.	Negligible
	Workers at the Site	Medium	Medium	Moderate	Strictly ensure the use of protective personal equipment at all times while on site and noise reduction techniques such as silencers and ear muffers to employees.	Minor
Construction vibration impacts (including vehicle vibration)	Residential Areas	Low	Medium	Minor	The Contractor will, at all times, carry out all works in such a manner to keep any disturbance from vibration to a minimum.	Negligible
	Workers at the Site	Medium	Medium	Moderate	Wherever practical, all vibratory generating equipment and activities shall be sited away from the Project boundary. Vibrating equipment/machinery will be switched off when not in use.	Minor
Impacts to Construction Workers & Accommodation Areas Located at the Project site	Site Workers	Medium	Medium	Moderate	Where noise levels exceed 80dB(A) noise protection devices will be provided to personnel on-site and the area marked as a high-noise zone where ear protection is mandatory. <i>Note: 80dB(A) is aligned with Uzbekistan noise standards.</i> Workers potentially exposed to high noise and vibration shall be provided with appropriate PPE with respect to the occupational H&S risk assessment conducted for that activity.	Minor
<b>Operational Phase</b>						
Operation Site Noise – Noise generated from	Residential Areas	Low	Low	Minor	Noise levels during the operational phase are not anticipated to increase by more than 3dBA above the ambient noise	Negligible

<sup>23</sup> without impact mitigation measures

Potential Impacts	Receptor	Sensitivity of receptor	Magnitude of impact	Potential Impact Significance <sup>23</sup>	Mitigation and Management Measures	Significance of Residual Impacts
general operation activities					levels. No specific mitigation measures are therefore required for the operational phase.	

### **Cumulative Impacts**

Project related impacts with regards to nuisance to sensitive receptors from noise and vibration would be those associated with construction: use of vehicles, heavy plant and machinery, in particular earthworks and operation of the plant etc. Cumulative noise and vibration impact at receptor locations particularly any activities that will be undertaken at the boundary is only anticipated when any possible construction/operation processes of industries are being undertaken at future SIZ facilities at the same time as the plant construction activities.

No cumulative impact is expected if construction periods do not coincide with any other industrial construction. If construction period coincide, cumulative impact will occur at receptors within the area of influence. Receptors within the area of influence may be temporarily impacted by the cumulative impact from the increase in ambient noise due to operation of construction machinery and equipment.

## **5.7. WASTE MANAGEMENT**

### **Sensitive Receptors**

Project construction waste from will be managed and disposed of according to national regulations by state licensed companies. There should not be any nearby receptors that would be impacted directly by waste disposal as long as national waste management regulations are followed. Management of waste at work sites within the Project area can be more challenging and local communities and the environment can be affected by improper management and disposal of liquid and solid wastes which could result in localized pollution of soils, surface water and groundwater. In this instance the groundwater protection zones are particularly vulnerable.

### **Construction Phase**

Waste generation from the construction phase will increase the demand for local waste treatment and disposal facilities. The generation of construction waste could also give rise to impacts associate with dust generation. During construction, waste will be generated during earthworks, construction of the fences, paths and buildings. Hazardous waste streams are also generated, which have the potential for pollution incidents to ground and surface water.

Typical construction wastes include concrete, asphalt, scrap steel, glass, plastic, wood, packaging materials and domestic waste from construction workers (i.e. relating to food consumption). This waste is classified as environmental hazard class 5 (non-hazardous) and can be fully utilised or recycled. Concrete may be found in two forms on the construction site; structural elements containing reinforced concrete, while foundations (such as surface level concrete slabs) have mass non-reinforced concrete.

Solid waste generated from construction activities on the project sites will include the following:

Non-hazardous waste such as;

- ❖ Waste related to construction processes, including earthworks (such as rubble, soils and potentially rock), installation (such as bolts, rebars, etc);
- ❖ Paper/cardboard, plastics, packaging, plastic bottles, glass, scrap metal, excess fill materials, sand, gravel, excess construction materials, concrete, subsoil and rock (not contaminated).
- ❖ Domestic waste generated by the construction workforce (e.g. food/organic waste, paper trash, cardboard, aluminium, plastic)

Hazardous waste such as;

- ❖ Batteries (unused), chemical drums, aerosol cans, contaminated metals, empty containers, expired and unused chemicals, adhesives, machinery lubricants, cleanup materials such as rags, containers and tins with remains of hazardous substances, used spill kits and clean-up materials.
- ❖ Replacement parts from vehicles, plant and equipment such as tyres.

A substantial amount of waste will be generated in the Project's construction phase. Inappropriate handling, storage, transport and/or disposal of solid waste streams during construction poses the potential for pollution of the surrounding environment (i.e. soil and groundwater resources), odour and visual nuisances, pest infestation and related occupational health and safety risks.

**Non-hazardous construction waste** is typically inert and does not pose a threat to human health or the environment. However, proper management is required in order to reduce associated secondary impacts such as unnecessary resource use, dust emissions, etc. Non-hazardous waste generated by the Project will be collected by a licensed waste contractor and transported to a licensed waste management facility.

**Hazardous Solid Waste.** Due to the nature of the project and the construction works being undertaken, there will be a few hazardous materials used, which can generate oily residues, paints, paint cans, wastes from chemical cleaning products and containers used for the storage of these materials.

Although the hazardous fraction of construction waste is expected to represent a relatively small portion of the total amount of construction waste likely to be generated, its management requires careful consideration as the impacts associated with hazardous waste can potentially result in contamination to soils and potentially groundwater.

Hazardous wastes will be disposed of in accordance with the relevant Uzbek environmental guidelines as well as GIIP. The project will comply with the provisions approved by the MEEPCC; the Ministry of Health No. 2438 dated March 20, 2013, for hazardous waste specifically for placement of hazardous chemicals and hazardous waste in special landfills, their protection, transport, and disposal.

There are no licensed hazardous waste disposal facilities currently available in Tashkent Region. Therefore, waste generated by the Project will most likely be transported by road vehicles to a licensed hazardous waste facility outside the region. Therefore, it will be particularly important to properly store project hazardous wastes in designated and secured storage areas at the site until collection to final disposal. These areas should have impermeable surface and bunds to contain spillages, secure fencing to control access, proper safety signage, a roof structure to prevent rainwater entering etc.

**Liquid Waste/Wastewater.** Wastewater generated from the Project's construction activities will include the following:

- ❖ Sanitary and domestic wastewater generation;
- ❖ Wastewater from any vehicles or equipment washing/cleaning; and
- ❖ Liquid hazardous waste such as fuels, chemicals, paints, lubricants, solvents, waste oil, hydraulic fluid, resins, waste solvents and thinners.

Improper handling, storage and transportation of sanitary and domestic wastewater could potentially cause contamination to soil or groundwater resources. The municipal waste management contractor was engaged for the collection, transportation and disposal of wastes generated at the site.

Where possible, waste should be sent to treatment facilities for segregation for recycling in order to reduce the need to send waste to landfill. A review should be undertaken to determine the availability of such sites, it is likely that the key waste streams generated during the construction phase have the potential to be reused / recycled e.g. soils, concrete, bricks, glass etc. Adherence to the Waste Hierarchy by reusing and/or recycling waste materials will reduce the volume of waste transfer off-site or to local waste treatment and disposal facilities. The sensitivity of the waste management infrastructure in Uzbekistan is anticipated to be high and it is unknown whether adequate facilities are readily available to process the expected volumes of waste. The magnitude of effect, prior to mitigation is considered to be medium as the site is unlikely to produce a significant volume of waste. Therefore, there is likely to be a direct, temporary medium-term effect on waste management infrastructure of **Moderate** significance prior to the implementation of mitigation measures.

### **Operational Phase**

Waste generation from the operational phase will increase the demand for local waste treatment and disposal facilities. The generation of operational waste could also give rise to impacts associated with dust generation. Government-authorized contractors will dispose of all solid waste generated during operations. Any paper, wood, cardboard, plastic, and metal from packaging will also be sold for recycling to licensed specialized companies.

The Contractor should subcontract a licensed and reputable waste management company for the collection, transport, and disposal of waste produced at site. Wastes at the sites and the project facilities shall be segregated and collected at the temporary waste storage areas. There should be waste collection and segregation area in the project area depending on the number of project personnel and the anticipated volume of waste.

The waste storage area shall have separate storage segments for prime recyclables (scrap metals, tires, plastic, wooden material), and separate segment for other hazardous waste including waste oils, paint etc. Special care should be taken to ensure that liquid wastes are kept in a segment with secondary containment. Proper waste segregation will be maintained at all times. Environmental labelling including visual communication elements shall be applied to the area/on the containers where appropriate.

Project Company will develop, obtain approval of and comply with the Waste Generation Norms and Waste Disposal Limits. The waste inventory should be undertaken during operation stage. This document also serves as a basis for Waste Data Sheets (WDS) and the Waste Disposal Limit Document to be developed by the Project at the design phase. The Waste Inventory Document should be approved by MEEPCC. A WDS is a document to confirm the point of origin, amounts, properties and potential hazards of waste, as well as placement limits and storage periods on the plant's premises.

The WDS aims at assessing risks associated with waste management and obtaining information on waste as a recoverable resource. The WDS should be developed for each type of generated waste and include the following information:

- ❖ waste description, location, company information
- ❖ general data of generated waste including generation rate (t/year), total amount accumulated, type, aggregative state, code (local + international)
- ❖ waste specific characteristics like density, mass, humidity, composition, hazard class, etc.

The plant's management should ensure development and implementation of waste management plan. Particular should be made on proper collection and safe storage of various wastes prior to handling over approved waste management companies for further management. Record keeping

on waste generation should be made a requirement as well. It is recommended to investigate possibilities for waste prevention and reduction to improve the plant's environmental performance and cost effectiveness.

The waste streams identified in the RESA are of a low risk. Therefore, there is likely to be a direct, temporary medium term effect of **Minor** significance prior to the implementation of mitigation measures on ground and water quality.

**Non-Hazardous Solid Waste:** The operation of the proposed Project will generate small amounts of non-hazardous domestic waste from the operation of the administration facilities and from activities of the employees. The Project FS provides an estimate of waste types and volumes to be generated by the Project as follows:

- ❖ Sludge from wastewater treatment - 540 tonnes/year (hazard class IV), regularly collected by the related municipalities and disposed of at landfills (for industrial waste).
- ❖ broken LED lamps - 0.0219 tonnes/year (hazard class IV), to be delivered for recycling to specialised enterprises;
- ❖ waste fabric that has become unusable - 0.07 tonnes/year (hazard class IV),
- ❖ unusable overalls - 0.0855 tonnes/year (hazard class IV),
- ❖ ferrous metal waste - 0.05 tonnes/year (class V), this waste is delivered to JSC Uzikkilamchikorametall for recycling;
- ❖ waste oil - 0.0035 tonnes/year (hazard class II), stored in metal drums and delivered to oil refineries;
- ❖ waste aluminium cans - 1.875 tonnes/year (hazard class IV), delivered for recycling to specialised enterprises;
- ❖ food waste - 0.98 tonnes/year (hazard class V), employees of the enterprise take it for livestock feed;
- ❖ swept weeds - 21.51 tonnes/year (hazard class IV), regularly disposed of at the landfill under an agreement with a body of the district specialised organisation for sanitary cleaning and control;
- ❖ solid domestic waste - 1.5 tonnes/year (hazard class IV), regularly disposed of at the landfill by the enterprise 'Spetstrans' on a contractual basis.

Household waste will be collected on site, stored in temporary containers and removed by specialized companies for disposal into the municipal solid waste landfill. Domestic and industrial wastewater during the construction phases will be treated in accordance with the standards specified in the Uzbekistan legislation.

Sludge from all treatment systems will be disposed in accordance with national regulations. The removal of any sludge residues will be undertaken by a licensed waste contractor.

Industrial waste will mainly consist of packaging materials and non-conditioned products. Polymer materials will be given to the specialized companies for recycling. Metal cans and scrap metal will be also collected and recycled through specialized scrap metal collection companies.

**Hazardous Solid Waste:** Hazardous waste such as waste oil, ink-contaminated materials and old oil filters will be collected by authorized contractors to be disposed of in government-approved hazardous waste landfill. Aluminum scrap generated during project operations (up to 5% of aluminum consumption) will be sold to third-party licensed and specialized companies' who purchase and recycle the scrap. However, only very small quantities of hazardous materials (and waste) are expected during the operational phase of the Project.

Hazardous wastes of the plant will include mostly used and damaged lamps which are collected in metal barrels and shipped to the company for disposal and utilization. After the project produces hazardous waste, authorized transporters may transport the waste to a facility that can recycle,

treat, store or dispose of the waste. Since such transporters are moving regulated wastes on public roads, highways, rails, and waterways according to Uzbekistan regulations.

### **Mitigation and Management measures**

Waste can exhibit certain characteristics according to the process stream from which it is generated and any pre-treatment processes that are undertaken. Different types of waste require different management and disposal techniques according to the potential risk that the material poses to human health or the environment.

Table 25 outlines WBG ESHG<sup>24</sup> and feasible and cost-effective measures to prevent or minimize waste management impacts during the construction and operational phases.

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<sup>24</sup> <https://www.ifc.org/content/dam/ifc/doc/2000/2007-general-ehs-guidelines-waste-management-en.pdf>

**Table 25: Impacts Significance of the Waste Management**

Potential Impacts	Receptor	Sensitivity of receptor	Magnitude of impact	Potential Impact Significance <sup>25</sup>	Mitigation and Management Measures	Significance of Residual Impacts
<b>Construction Phase</b>						
Inappropriate handling, storage, transport and disposal of solid non-hazardous waste	Local community and environment Workers at the Site Waste Management Facilities	Medium	Medium	Moderate	<p>Dispose all construction wastes that cannot be recycled or reused to a licensed solid waste disposal site using a licensed refuse handler.</p> <p>Provide suitably sized facilities for proper handling, segregation and storage of wastes at designated points within the construction compound.</p> <p>Provide adequate number of properly contained litter bins and containers properly marked with type of wastes.</p> <p>Strictly prohibit burning or dumping of any wastes at the site.</p> <p>Contractor will identify recycling companies in Tashkent Region and nearby regions (as relevant) in order to promote the recycling of waste especially packaging materials, wood and metal waste etc.</p> <p>Engineered landfills will be used for all hazardous waste generated during construction and used for the disposal of non-recyclable general waste on a priority basis.</p>	Minor
Inappropriate / uncontrolled handling, storage, transport and/or disposal of solid hazardous waste	Local community and environment Workers at the Site Waste Management Facilities	High	Medium	Major	<p>Provide suitably sized facilities for proper handling, segregation and storage of wastes at designated points within the construction compound.</p> <p>Hazardous waste storage area will be constructed away from drainage system and a rain shelter will be provided to avoid any potential instance of runoff, or leakage of runoff.</p> <p>Ensure the hazardous waste collection containers are emptied at appropriate intervals to prevent overflow.</p> <p>Regular maintenance of all equipment and machines used onsite so as to minimise leakage of hazardous materials.</p>	Moderate

<sup>25</sup> without impact mitigation measures

Potential Impacts	Receptor	Sensitivity of receptor	Magnitude of impact	Potential Impact Significance <sup>25</sup>	Mitigation and Management Measures	Significance of Residual Impacts
					<p>Containers for storing hazardous waste, including used oil, should be stored securely, labelled and disposed in line with the governing regulations.</p> <p>Strictly prohibit illegal disposal of hazardous wastes onsite.</p> <p>At worksites and camps where hazardous waste is generated the Company will ensure compliance with the following safety measures:</p> <ul style="list-style-type: none"> <li>▪ Use containers suitable for each type of waste;</li> <li>▪ Prohibit use of damaged containers. Check integrity of containers – regularly;</li> <li>▪ Mark containers adequately specifying the waste types;</li> <li>▪ Provide secondary containment for hazardous waste liquids;</li> <li>▪ Do not mix various waste streams.</li> </ul> <p>Hire state authorized contractor for hazardous waste removal and keep agreements with hazardous waste management Company's active.</p>	
Inappropriate/uncontrolled handling, storage, transport and/or disposal of sanitary wastewater	Workers at the Site Waste Management Facilities	Medium	Medium	Moderate	<p>Segregate and identify hazardous waste from the other waste streams into separate signed and labeled waste containers/skips.</p> <p>Sanitary wastewater tanks to be properly maintained and inspected to ensure tanks do not overflow.</p> <p>Wastewater tanks should be free of leakage and overflow at all times. Regular checks should be done to ensure there is no overflow or leakage.</p> <p>Engage a licensed waste contractor for the periodic removal of septic tanks.</p> <p>In common with the IFC EHS Guidelines, an effort will be made in training construction personnel to minimise water consumption for ablutions and to ensure an understanding of water resource and wastewater issues.</p>	Minor
<b>Operational Phase</b>						

Potential Impacts	Receptor	Sensitivity of receptor	Magnitude of impact	Potential Impact Significance <sup>25</sup>	Mitigation and Management Measures	Significance of Residual Impacts
Inappropriate/un controlled handling, storage, transport and / or disposal of solid hazardous waste	Local community and environment Workers at the Site	High	Medium	Major	<p>Develop and maintain a hazardous waste inventory to document and track hazardous wastes generated, segregated, reused and consignments.</p> <p>Segregate and identify hazardous waste from the other waste streams into separate waste containers/skips clearly signed and labelled.</p> <p>Store hazardous waste in allocated impervious hard standing areas in sealed containers stored with impermeable bases, sufficient containment and separation capacity, sun/rain shelter, separate drainage system, good ventilation and equipped with spill kits &amp; spill response procedures. This area must be placed away from any sources of ignition.</p>	Moderate
Inappropriate handling, storage, transport and disposal of solid non-hazardous waste	Local community and environment Workers at the Site	Medium	Medium	Moderate	<p>The waste inventory should be undertaken during operation stage. This document also serves as a basis for Waste Data Sheets (WDS) and the Waste Disposal Limit Document to be developed by the Project and approve by MEEPCC.</p> <p>Sludge from all treatment systems will be disposed in accordance with national regulations. The removal of any sludge residues will be undertaken by a licensed waste contractor.</p> <p>Develop and implement a Waste Management Plan.</p> <p>Train employees on Hazardous waste management</p> <p>Segregate waste by separating hazardous waste from non-hazardous waste.</p> <p>Establish a designated storage area for fuels / chemicals with an impervious base and impermeable bund walls and protected from precipitation. Capacity must be 100% of the full volume to be stored within a bund and secured area.</p> <p>Containers for storing hazardous materials / waste (including used oil) should be stored in the designated, secured with a fence. All containers are to be labelled correctly.</p>	Minor

## Cumulative Impacts

Project related impacts in relation to waste and wastewater management would mainly be those related to the potential deterioration and/or contamination of soil and groundwater resources during construction and operation due to improper or uncontrolled handling, storage, transport and disposal of waste.

The operation of the proposed Project will generate small amounts of non-hazardous domestic waste from the operation of the administration facilities and from activities of the employees. Existing waste management facilities with Yangikhayot District and the wider Tashkent region have a potentially high sensitivity to an overwhelming cumulative demand for services, due to the limited availability and capacity of these facilities. However, given the amounts of waste generated it is not envisaged that cumulative impacts with other projects will be significant.

## 5.8. LAND USE AND ECONOMIC DISPLACEMENT

### Sensitive Receptors

The stakeholders associated with the Project were identified and classified based on the review of the Project's legal framework and the preliminary identification of E&S impact receptors by means of desktop research and field reconnaissance.

As noted, only two farms are directly affected by the development of the plant. There has been no physical displacement to farmers. Jahongir Agro Biznes farm (18,24ha) and Salomov Mamatqul farm (2.76ha) have not applied for alternative land and indicated that access to land does not form a significant part of their livelihood.

A sensitivity rating and corresponding description is further provided for each relevant receptor in Table below.

**Table 26: E&S impact receptors – Land Use and Economic Displacement**

RECEPTOR	SENSITIVITY	JUSTIFICATION
Lease holders, mainly Jahongir Agro Biznes farm (18,24ha) and Salomov Mamatqul farm (2.76ha)	Medium	Access to land for farmers is permanent. A total of 21ha of land was acquired for SIZ, where the project is located. No compensation was provided to the farm owners as there were no any residential houses, constructions and installations, including incomplete constructions, and also located outside of allocated plot. There is no any incomplete agricultural production or crop lost. Farms do not lose any profit since the official balance of farms has been unprofitable over the past three years and the farm owners' voluntarily terminated to possess the land parcel and passed it to the khokimiyat reserve fund in 2024 thus losing his right to be compensated. The farm income was not the only source of income for the farmer (he has fisheries activities in another region).
Workers of Jahongir Agro Biznes farm and Salomov Mamatqul farm	Low	The detailed socio-economic survey and inventory survey was not conducted as part of RESA preparation. No compensation was provided to Jahongir Agro Biznes farm and Salomov Mamatqul farm as the voluntary pre-term cessation of the land lease agreement was carried out at the consent of the farm owner and district khokimiyat. Leaseholders typically employ seasonal farmworkers to assist him with pruning, planting, embossing/weeding. The sensitivity of seasonal farmworkers is considered low due to the seasonal and changing nature of

RECEPTOR	SENSITIVITY	JUSTIFICATION
		their engagement with various farms typically on a day-to-day basis.
Loss of Trees used by community for subsistence	Low	There are no trees subject to cutting on the territory of the project facility. The project will affect no privately-owned perennial crops and fruit and other trees. Therefore, no compensation measures will be required.
Loss on Other Structures and Business Premises	Low	No physical structures were noted onsite. Residential houses and other related homestead structures of households will not be affected by the Project development. The Project will have no impact on other privately owned structures like kitchen, pit latrine, water harvesting structure, grain stores, livestock barn, livestock watering points, etc. and business premises.
Crop Production	Low	There is no crop production within the project area as the last crop cycle was collected by the farmer. The land surrounding the project is intensively farmed and land use is considered typical for the region. The site territory is located in the middle of agricultural lands used primarily for rice, wheat, watermelons, legume crops, and strawberries cultivation. There could be loss of crop production due to accidental damage such as dust, movement of construction machinery, etc. during construction period.
State property assets	Low	The Project will have no impacts on state property assets i.e., lighting towers, signs, traffic lights, road signs, banners (both for advertisement and district border indication). No relocation of state property or other movable assets is provided by the project activity.
Infrastructure and Utilities	Low	Although unlikely, the construction phase of the plant may potentially damage of existing infrastructure which may potentially result in disruption of services. Additionally, such disruption of services will be highly unlikely because the plant design will meet all relevant legal requirements and movement of machinery, equipment and workers will be within the allocated footprint.
Access Road	Low	The construction phase of the plant does not require the development of access roads. The access route to the construction area will be along an existing public road (mainly Tashkent ring road) and will not involve cause any displacement or land take for any new roads.

**Assessment:**

Implementation of the Aluminium Can Production Plant project affected 21 ha land that was used for agricultural purposes by two leaseholders. The leaseholder's voluntary terminated to possess the land parcel and passed it to the khokimiyat reserve fund in 2024 thus losing his right to be compensated. The transfer of ownership rights for the project site was undertaken in line with regulatory protocols. In May 2024, the land was reallocated back to state ownership, with no objection from the lessee. No compensation was provided to either two leaseholders or the farm workers due to the fact that cessation of the right to land parcel was annulled by the farmer's voluntary termination from the land parcel. There were no complaints or grievances to be recorded from the farmer's side up to the reporting time.

The farmland was not the only source of income for the farmer (he has fisheries activities) and he plans to obtain alternative land to use on an auction basis in future. Thus, the loss of leased farmland is not severe for farm owners.

Yangihayet District Khokimiyat has provided notarized application for the voluntary return of land to the Government's state reserves (see Annex 1).

The assessment of available information indicates low significance impact of economic displacement, losses of income / livelihoods, losses of employment without any mitigation measures provided to the affected persons.

Based on the site visit undertaken in May 2024, when Project construction was already underway, no physical or economical land use activities were recorded onsite nor any evidence which could indicate any such activities or informal activities. In particular, the following was noted:

- ❖ The land is no longer used for cultivation. There was evidence of past cultivation;
- ❖ The land surrounding the project is intensively farmed and land use is considered typical for the region. The site territory is located in the middle of agricultural lands. The area is used primarily for rice, wheat, watermelons, legume crops, strawberries cultivation;
- ❖ The land surrounding the project area is largely used as arable land. Nearby villages / settlements graze livestock (cow, sheep, and goats) elsewhere in order to avoid livestock consuming crops.
- ❖ No physical structures were identified on site;
- ❖ No key evidence of any economic activities to include in particular agriculture activities or recent grazing activities which are common practices undertaken by local communities. In particular, no ploughing marks were noted within the Project area (which would be indicative of agricultural activities) nor any animal feces (which would be indicative of grazing activities);

Displaced persons have been identified and compensation measure defined. The assessment of available information indicates low significance impact of economic displacement, losses of income / livelihoods, losses of employment without any mitigation measures provided to the affected persons. No further activities are expected to be carried out in this respect..

As discussed earlier, the current Project is under governmental ownership and the land ownership was eventually transferred to the Project Company from the district land reserve fund on February 28, 2025. Therefore, there is no land expropriation or acquisition process to be undertaken for the Project and also no impacts anticipated in terms of land ownership.

### **Livelihood restoration Mitigation and Management measures**

Although it is not a requirement under national legislation, Project Company is committed to successful and just implementation of the livelihood restoration measures regarding any economic displacement as a consequence of the project. Two leaseholders will be eligible for compensation.

It is not a requirement to compensate anyone without any legal claim to land according to national legislation, however, Project Company recognises it is best practice to compensate any individuals or groups affected by the project based on the Lenders Standards in terms of classification of a displaced person. Project Company will ensure any displaced person is compensated accordingly or provided with livelihood restoration based on their eligibility.

*Principles and guidelines for livelihood restoration initiatives:* The following main guidelines and regulations were taken into consideration, in devising transitional support for potentially affected persons (PAPs):

- ❖ IFC PS 5, which set out the requirement for compensation for lost livelihood assets at full replacement value, and transitional support to defray economic losses prior to the re-establishment of lost livelihood assets and income streams.

Transitional support refers to monetary and non-monetary means of support to defray transitional income losses and expenses leading up to the restoration of pre-project livelihood productivity and income levels.

### *Compensation allowance*

Economic displacement of two farms within the project site will be managed through provision of livelihood transition support compensation measure. A compensation allowance will be provided to PAPs, as a means of relief over the initial term of the transitional period. Due to the fact that the farm is unprofitable according to the official financial data provided, it is impossible to accurately calculate compensation allowance based on current financial statements. The allowance is pegged at the average wage<sup>26</sup> of Uzbekistan and paid for a variable number of months, which would be considered as household-specific and need-based transitional periods. The compensation allowances for the PAPs identified are calculated as follows:

PAPs	Total land leased by PAPs	Land leased within the project area	Share of acquired land in total land owned by PAPs	Number of months to be compensated	Total amount to be paid (in UZB sum)	Total amount to be paid (in USD)*
Jahongir Agro Biznes farm	18.24 ha	18.24 ha	100%	36	99 440 748	7 710
Salomov Mamatqul farm	36.64ha	2.76 ha	7.5%	3	8 286 729	642.5

\*US dollar exchange rate 12897.20 sum per 01 March 2025 according to the Central Bank of Uzbekistan

The proposed method provides the farmers with the necessary financial support during the transition period, taking into account the average economic indicators of the country. This allowance will be delivered to PAPs as one-time lump sum payment.

Summary sheets presenting transitional support will be provided to the PAPs for their review and feedback. Any grievances arising from the disclosure of the livelihood restoration measures benefits will be managed using the project GRM. The payment of monetary livelihood restoration benefits/ assistance (i.e., subsistence allowances) to relevant PAPs will be made to the PAP's designated bank accounts. The PAPs will be notified upon the completion of each livelihood restoration payment, and related payment records will be filed by the Project Company's finance team for the purposes of M&E.

<sup>26</sup> 1 average wage is equal to 2 762 243,0 sum (<https://stat.uz/ru/ofitsialnaya-statistika/labor-market>)

After the completion of the compensation packages additional consultation on 01 April 2025 was held with the PAPs to disclose the methodologies, compensation, payment timelines, etc. Disclosure of the final entitlements and compensation packages to the PAPs was done. It was notified the PAPs on the information required to prove eligibility of the compensation entitlements including transitional support. PAPs were also notified about implementations timelines and how this relates to the project schedule, relocation requirements etc. The amount of compensation, as well as the method of its calculation, was announced. The PAPs expressed full agreement and gratitude.

Thereafter, agreements (provided in Uzbek) will be signed between Project Company and the PAP. The agreements will clearly state the total compensation and the specific payment timelines.

The table below outlines feasible and cost-effective measures to minimize impact from land acquisition and enhance farmer's livelihood. The mitigation measures follow the objective and requirements stated in PS5 including livelihood restoration and sustainable management of living resources (if applicable).

**Table 27: Mitigation and management for land acquisition and livelihood restoration**

Potential Impacts	Receptor	Sensitivity of receptor	Magnitude of impact	Potential Impact Significance <sup>27</sup>	Mitigation and Management Measures	Significance of Residual Impacts
Economic displacement - Loss of access to agricultural lands, products	Farmer and potentially other users of the project plot	Medium	Low	Minor	<ul style="list-style-type: none"> <li>❖ Economic displacement of two farms within the project site will be managed through provision of livelihood transition support compensation measure.</li> <li>❖ Farms will be provided with additional support to ensure that their livelihoods are not negatively impacted by the project.</li> <li>❖ Project Company will notify local communities on job announcement and the application process.</li> <li>❖ As far as possible/practical undertake Project design to avoid any possible impact privately owned structures like kitchen, pit latrine, water harvesting structure, grain stores, livestock barn, livestock watering points.</li> <li>❖ The Project Company will establish a grievance mechanism as this will provide the means for people to express their grievances related to project construction land use;</li> <li>❖ Project Company should disclose GRM with local communities as soon as possible and during the project construction phase.</li> </ul>	Minor
Loss of agricultural lands, products	Residential and commercial areas	Low	Negligible	Negligible	<p>Not expected</p> <ul style="list-style-type: none"> <li>❖ The Project Company will implement a grievance mechanism;</li> </ul>	Negligible

<sup>27</sup> without impact mitigation measures

## 5.9. LANDSCAPE AND VISUAL

### Sensitive Receptors

The sensitivity of the ones who are exposed to visual impact is based on their location and viewing opportunity. The potential sizes of the impacts on visual amenity and on the elements composing landscape depend on the nature and intensity of changes derived from development. The nearest settlement is Djaloir with a population of 1,850 which is located 90 m in the north of the project area.

The following table provides an overview of E&S impact receptors in the context of potential visual impacts within the Project's Areas of Influence (AoI). A sensitivity rating and corresponding description is further provided for each relevant receptor.

**Table 28: E&S impact receptors – Landscape and visual amenity**

RECEPTOR	SENSITIVITY	JUSTIFICATION
Residences and other establishments in makhallya Djaloir (~1850 inhabitants)	Medium	These residents will have direct visibility of the proposed plant construction and as such will be particularly vulnerable to changes in landscape character as the plant will be visible to residents.
Residences and other establishments in makhallya Yangi Gulzor (~3521 inhabitants)	Low	While further away from the proposed plant than makhallya Djaloir, residents will still have direct line of sight visibility of the proposed plant. As such, residents will be vulnerable to changes in the landscape character and visual amenity of the area.
Residences and other establishments in makhallya Khuja Uchkun (~3100 inhabitants)	Low	While further away from the proposed plant than makhallya Djaloir, residents will still have direct line of sight visibility of the proposed plant. As such, residents will be vulnerable to changes in the landscape character and visual amenity of the area.

Visual impact can be defined as any alteration in landforms, water bodies, or vegetation, or any introduction of structures or other man-made visual elements, that negatively or positively affect the visual characteristics or quality of a landscape and the visual experience of people viewing the landscape through the introduction of visual contrasts (opposition of different forms, lines, colors, textures in a landscape) in the basic elements of form, line, color, and texture. They cover the impacts on specific views and on the general visual amenity experienced by people and the potential visual impact is primarily originated from changes in visual characteristics in the view field.

The Project area is located in Yangikhayet district of Tashkent. The proposed plant site covers an area of approximately 201 ha. Within the area, the total construction footprint of the proposed facility is approximately 27 ha. Based on the field study and satellite views, the areas of natural landscapes are used by the local population for agriculture, including the project area.

Arboreal plantations (from decorative – thuja, pine, mulberry, from fruit-flavored, and stone fruits - apple, apricot, walnut, almond), as well as grapes are found on the territory of the nearest settlement Djaloir.

The territory is bordered by:

- ❖ from the northern side - internal road, irrigation canal, then settlement Djaloir;
- ❖ from the eastern side - internal road, then agricultural land;

- ❖ from the western side - agricultural land, then internal road;
- ❖ from the south side - vacant land, then the highway TRR (Tashkent ring road).

### **Construction Phase**

The assessment of landscape sensitivity was conducted by examination of the locations for permanent facilities. Therefore, visual impacts and landscape impacts are closely connected with predicted changes in terrain, soil, and vegetative cover.

In that regard, the project sites are assessed in terms of their landscape and visual aspects to determine the areas with high landscape value that can be impacted by the project activities at the project site and its close vicinity.

The Project's construction phase will entail vegetation clearance earthworks, civil works, and temporary establishments that will degrade the visual amenity of the existing landscape elements, unobstructed viewpoints located within the vicinity of the project sites. Specifically, excavations, stockpiles, laydown areas, on-site labour facilities, as well as heavy construction machinery may present an eyesore to nearby residents, particularly where construction zones are not fenced.

Visual impacts during the construction period will result from on-site machinery, hoardings, scaffolding, ground formation works, construction works for foundations and buildings, traffic and lighting on site. Installation of 2 m high fence with checkpoint is planned for the construction and operation phase in order to protect the site and to screen the development from nearby sensitive receptors.

There is no natural vegetation that can be considered as visual landscape element at the Project site. There are only bushes suitable for irrigated land in the area.

Construction activity is highly visible activity. The elements of construction may cause a significant change in the landscape in which they are conducted. On the other hand, all of these are temporary activities. The activities will become significant for a couple of months at any location.

The Proposed Development is likely to have short term direct effects on the views from makhallya Djaloir, makhallya Yangi Gulzor and makhallya Khuja Uchkun. Specifically, works during construction phase could have a **Minor to Moderate** adverse impact on the views from from makhallya Djaloir due to its close proximity to the site boundary. Therefore, mitigation measures, such as visual screening, are recommended during construction phase.

The potential impacts on landscape and visual amenity during the construction phase and mitigation measures are presented in Table 29. Mitigation measures will further reduce the impacts and therefore residual impacts will be moderate on the environment.

### **Operational Phase**

The development of the plant will result in a permanent alteration of the landscape features constituting viewshed within neighbouring settlements. Land conversion will be particularly noticeable at sensitive viewpoints within the vicinity of the project area. The establishment of built-up structures such as new fencing, plant and its facilities will result in visual intrusion and nuisances, and a resultant decline in the visual appeal of existing landscape elements.

Visual impacts during the operation phase will mainly result from on-site buildings and plant facilities, traffic and lighting on site. The height of the structures on site will vary from 2.5 m to 12.9 m.

The objective of the landscape studies during the operation phase is to provide the visual screening of the landscape damaged during the project activities and to create an environment that has scenic value and is consistent with the natural structure. The wider project is not expected to have adverse impacts on sensitive visual receptors.

The maintenance process is a significant phase, during when the application area should be controlled periodically; the plants that are damaged and cannot grow should be replaced. When required, maintenance works such as irrigation, fertilization, pruning, disinfection, protection against external impacts, should be carried out.

The re-establishment of vegetation cover across disturbed areas were not conflicting with longer-term operational infrastructure will help to increase the visual absorption capability of the landscape within the Project area and reduce the overall visibility of the Project infrastructure.

The potential nighttime lighting may issue of direct light spill from floodlights or other lighting elements toward surrounding rural residential dwellings and roads. It will be minimized to avoid unnecessary light spill into dark areas.

While some planting will tempt to integrate the development into the wider landscape, overall the scale of the development and the relatively flat terrain means that the farm would result in a **moderate** adverse impact on the local landscape character.

#### **Mitigation and Management measures**

Mitigation measures will further reduce the impacts and therefore residual impacts will be moderate on the environment. Mitigation measures will further reduce the impacts and therefore residual impacts will be moderate on the environment.

**Table 29: Landscape and Visual Mitigation and Management**

Potential Impacts	Receptor	Sensitivity of receptor	Magnitude of impact	Potential Impact Significance <sup>28</sup>	Mitigation and Management Measures	Significance of Residual Impacts
<b>Construction Phase</b>						
Disturbance on visual view on receptors	Residential and commercial Areas in makhallya Djaloir, Yangi Gulzor and makhallya Khuja Uchkun	Medium	Medium	Moderate	<p>Minimize the extent to which Project activities will be visible from various view locations;</p> <p>Minimize the visual contrast between the main infrastructure elements associated with the Project and the surrounding landscape in which they will be seen.</p> <p>The number of lights during nighttime works will be kept to a minimum, insofar as is consistent with maintaining operations and health and safety requirements.</p> <p>Light spill will be contained to the greatest extent possible e.g. by using directional lighting wherever possible. If required based on feedback of affected people an additional shielding might need to be installed.</p> <p>Regular monitoring of the affected people’s feedback with regards to visual impacts will be provided.</p>	Minor
<b>Operational Phase</b>						
Disturbance on visual view on receptors	Residential and commercial Areas in makhallya Djaloir, Yangi Gulzor and makhallya Khuja Uchkun	Medium	Medium	Moderate	<p>Minimize the extent to which Project activities will be visible from various view locations.</p> <p>Shiny building materials will be avoided</p> <p>Minimize the visual contrast between the main infrastructure elements associated with the Project and the surrounding landscape in which they will be seen.</p> <p>The number of lights during nighttime works will be kept to a minimum with the except flight corridors, insofar as is</p>	Minor

<sup>28</sup> without impact mitigation measures

Potential Impacts	Receptor	Sensitivity of receptor	Magnitude of impact	Potential Impact Significance <sup>28</sup>	Mitigation and Management Measures	Significance of Residual Impacts
					<p>consistent with maintaining operations and health and safety requirements.</p> <p>Light spill will be contained to the greatest extent possible e.g. by using directional lighting wherever possible. If required based on the feedback of affected people an additional shielding might need to be installed.</p> <p>Regular monitoring of the affected people's feedback with regards to visual impacts will be provided.</p>	

## **Cumulative Impacts**

Project related impacts in relation to landscape would mainly be those related to the clearance of the Project site, loss of typical desert landscape and visual impact due to the anthropogenic intrusion of vertical plant building. There are potential cumulative impacts relating to other SIZ projects given that this Project is one of the first industrial plant to be developed in project area.

The development of a similar industrial activity in the region will permanently change the landscape character of the Project area, which is currently dominated by predominantly agricultural areas.

## **5.10. CULTURAL HERITAGE**

As mentioned in the baseline, there are no known internationally, nationally or locally designated historical and cultural monuments in the project area.

Consequently, the project is not expected to have any impact on the cultural resources, since these are located considerable distance away from the project area. However, direct impacts to unknown cultural resources could occur from construction activities and indirect impacts could be caused by increased accessibility to the area. Mitigation measures are therefore recommended to avoid any potential impact.

The project areas has no particular areas that protected due to any cultural heritage refers to both physical cultural resources and traditions and customs passed down through the generations. Although not identified in the preliminary survey, there is always a risk that earth works may encounter or damage existing structures of cultural, historical or archaeological value. The Chance Find Procedure will be implemented if any artefacts are found during the construction phase. If such occur Contractor will be recorded on the Sensitive Location Register. Any archaeological finds will be reported to the Archaeological Expertise Institute of Uzbekistan immediately.

## **5.11. LABOUR CONDITIONS AND OCCUPATIONAL HEALTH AND SAFETY**

This section discusses the impacts of the Project on workers' rights and occupational health and safety during construction and operation of the Project.

The main Project-related activities that may result in OHS issues are:

- ❖ Accidents involving the use of heavy equipment.
- ❖ Accidents involving construction vehicles.
- ❖ Accidents due to lack of, or poor application of, personal protective equipment (PPE).
- ❖ Poor sanitary conditions at work sites.
- ❖ Lack of first aid and medical facilities.
- ❖ Falls from heights;
- ❖ Electrocutions;
- ❖ Construction camp and temporary accommodation;
- ❖ Excavation.

Workers' rights including occupational health and safety need to be considered to avoid accidents and injuries, loss of man-hours, labor abuses and to ensure fair treatment, remuneration and working and living conditions. These issues need to be considered not only for workers who are directly employed by the Project but also sub-contractors.

## Receptors

The following table provides an overview of E&S impact receptors in the context of potential impacts relating to labour and working conditions within the Project's Areas of Influence (AoI). A sensitivity rating and corresponding description is further provided for each relevant receptor.

**Table 30: E&S impact receptors – Labour and working conditions**

RECEPTOR	SENSITIVITY	JUSTIFICATION
Direct and contracted workers	High	Direct and contracted workers employed by the Project Company, Contractors and subcontractors have a potentially high sensitivity to risks associated with exploitative, abusive and harmful working terms and conditions, and those relating to indecent living conditions.

## Construction Phase

**Occupational health and safety incidents:** Construction activities will involve the operation of heavy equipment and trucks, working at height, construction traffic, use of electric devices, handling of hazardous materials and other hazardous activities. Due to the nature of the activities being undertaken during construction, worker H&S is a key risk with the potential for accidents that may result in injuries and fatalities as well as lost man-hours.

The Project is expected create at least 100 direct employment opportunities during the peak of the construction period. The majority of workers will be engaged by the Contractor and will consist of an unskilled, semi-skilled to skilled workforce.

Common activities undertaken during construction such as the movement of heavy machinery, excavation, handling of chemicals, works undertaken at height etc. can all introduce significant risk to the health and safety for the associated work force. In particular, risks are more likely to be apparent for those who are not familiar with the type of works undertaken and/or the associated hazards.

The expected impacts on worker rights and H&S because of construction, activities and Project operation are as follows:

- ❖ Risk to workers H&S due to hazardous construction activities; and
- ❖ Violation of workers' rights.

During construction, health and safety of workers is at risk. Contractor's occupational safety procedures will mitigate against impact to the safety of workers during construction.

**Poor working and living conditions:** Upon recruitment, construction workers and contracted labourers in particular may be subjected to working and living conditions that do not meet minimum welfare requirements prescribed in relevant national legislation (i.e., national constitution, Labour Code), binding ILO conventions and lender requirements. Workers may be afflicted with onerous routines with protracted working durations, absence of rest breaks, and lacking access to dining and potable water facilities/ supplies, and insufficient sanitary facilities, amongst other inadequacies. The Contractor will provide accommodation facilities to workers at the Project site and it is noted that there will be requirements for workers to be accommodated in alignment with the benchmarks outlined in the IFC & EBRD Workers Accommodation: Processes

& Standards (2009)<sup>29</sup>. These potential impacts are considered negative and of **Moderate significance** prior to mitigation.

**Lack of Access to a Grievance Mechanism:** Workers contracted by the Contractor and sub-contractors may not be able to freely express their opinions or seek remedy. This may be because they do not know that a grievance mechanism is available to them, how it works or they are afraid of retribution. As such, the Contractor will provide information about the grievance mechanism to all the workers during their site induction sessions, in employee handbooks and on posters across the site and in accommodation areas. The magnitude of the impact is considered medium. Therefore, overall, the significance of the impact is **Moderate to Minor**.

**Use of Forced and Child Labour:** Uzbekistan has a record of forced and child labour (particularly in the cotton industry, with a small incidence of forced labour in construction work under the traditional hashar system). However, it has ratified the ILO conventions on forced labour, minimum age and worst forms of child labour. The incidence of forced and child labour has reduced significantly in recent years, and it is not a high risk in this type of project which employ workers through national or international companies (rather than community level organizations which may employ the hashar system). The potential impact would be of **Moderate** significance.

**Site security:** The project area will require site-based security at the gates and on patrol around the site and access road during construction in order to prevent the public from trespassing to the construction areas. This is so as to minimize the potential for construction site incidents or damage of construction machinery. It is anticipated that the security personnel will be unarmed. During construction, structural and administrative measures will be implemented to ensure site security. Various provisions will be made to safeguard on-site personnel, equipment, materials and assets from potential security incidents, such as theft, vandalism, arson and personal violence against construction workers. The current security system is site-wide and will serve the project infrastructure for the duration of the project's construction phase. The magnitude of the impact is considered low. Therefore, overall, the significance of the impact is **Minor to Negligible**.

**Unequal access to employment opportunities and benefits due to discriminatory and/or exploitative recruitment practices:** Recruitment mechanisms for construction-phase labour may involve discriminatory and/or exploitative practices which may inhibit fair and equitable access to job opportunities and employment terms/ benefits. Discriminatory recruitment practices may deny suitably qualified job candidates equitable access to employment on the basis of bribery, nepotism, sexual harassment, and/or biased consideration on the basis of personal attributes of no bearing on inherent job requirements (e.g., gender, religion, ethnicity etc.).

Likewise, exploitative recruitment practices may deny job candidates and recruits equitable employment benefits or legal entitlements (e.g., remuneration, overtime compensation, health insurance professional development, leave entitlements, freedom of association and right to engage in traetc.). In addition, workers may be recruited without the establishment of transparent, comprehensive, and mutually accessible employment contracts to document mutual obligations (i.e., job requirements, length of employment, related legal entitlements) and ensure satisfactory performance and sound employee-management relationships.

These potential impacts are considered negative and of **Major significance** prior to mitigation. The unequal access to employment opportunities is considered high, the magnitude of the impact is medium and therefore, impact significance is assessed as **Major**.

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<sup>29</sup> <https://www.ifc.org/content/dam/ifc/doc/mgrt/workers-accomodation.pdf>

## Operational Phase

**Occupational health and safety incidents:** The risks associated with the operational phase of the project are anticipated to be significantly less than during the construction phase due to reduced site activity and requirements for heavy plant and machinery.

Occupational health and safety impacts could result in disease, injury, or death to workers and so the magnitude is high. There will be occupational health and safety risks attributable to the operational phase associated with production and maintenance. Site vehicles and activities also pose risks to human health and safety. An Occupational Health Safety Management Plan and Standard Operation Procedures shall be prepared and be implemented for the Project operational phase.

The lack of H&S risk assessment to eliminate critical hazards, comprehensive H&S training oriented to general and specific areas of work, provision of Personal Protective Equipment (PPE), H&S monitoring for direct and contracted workers, emergency response plans and other crucial safeguards may result in H&S accidents, which may culminate in severe injury, sickness, and fatalities.

The severity and likelihood of risks during the operational phase will be dependent on the frequency and requirements for planned and unplanned maintenance. The operation and maintenance team will need to ensure that a robust plan is in place to appropriately manage these risks.

The safety of workers may be impacted during operation due to exposure to occupational hazards on-site. However, the likelihood of occurrence of such incidents is low taking into consideration the mitigation measures and occupational safety procedures to be implemented. The OHS sensitivity during operational stage is considered high, the magnitude of the impact on OHS is low and therefore, impact significance is assessed as **Moderate**.

**Lack of Access to a Grievance Mechanism:** The Contractor will develop and implement a Grievance Redressal Mechanism (GRM) in line with the requirements of IFC PS2. A structured GRM will be implemented at the plant level in multiple languages anonymously (online and hardcopy) so that workers have access to express their concerns. The human resources department will be responsible for implementing the GRM for the facility. The magnitude of the impact is considered low. Therefore, overall, the significance of the impact is **Minor to Negligible**.

**Working Conditions:** No long-term accommodation requirements are anticipated for the project. However, as with construction, operational activities will need to plan for and enforce just and fair treatment of operation and maintenance staff (including any engaged contractors) in accordance with lender requirements and relevant Uzbekistan national requirements. Allowance will also need to be made for site staff welfare facilities including sanitation, rest, recreational and medical facilities. These potential impacts are considered negative and of **Minor significance**.

## Mitigation and Management measures

By using impact assessment significance criteria approach, key potential impacts and mitigation measures for the construction and operation phase are presented in Table 31.

**Table 31: Labour & Working Condition Mitigation & Management Measures**

Potential Impacts	Receptor	Sensitivity of receptor	Magnitude of impact	Potential Impact Significance <sup>30</sup>	Mitigation and Management Measures	Significance of Residual Impacts
<b>Construction Phase</b>						
Occupational health and safety incidents	Project Employees (direct and contractors)	Medium	Medium	Moderate	<p>Recruitment of qualified EHS manager;</p> <p>Establish a permit to work system for all high-risk activities (i.e. hot works, confined space, working at high etc.)</p> <p>Train employees on the importance of occupational health and safety requirements and develop work instruction.</p> <p>Workers will be provided (before they commence works) with appropriate PPE suitable for their work such as safety boots, helmets, gloves, protective clothes, goggles, and ear protection at no cost to the workers.</p> <p>The ventilation regime should be controlled in order to ensure optimal regime for OHS. The ventilation management should ensure that temperature, relative air humidity, air velocity indoors do not reach levels which are harmful to human health and must comply with permissible norms according to SanPiN No. 0203-06 "Sanitary and hygienic norms for microclimate of production premises".</p> <p>Strictly enforce the use of the Personal Protective Equipment to minimise the accidents.</p> <p>Provide fully equipped First Aid Kit and sanitary facilities on site, including water for drinking and bathing, at all times.</p> <p>Provision and placement of appropriate fire extinguishers and training personnel on their use.</p> <p>The Contractor will regularly inspect, test and maintain all safety equipment (including firefighting equipment), scaffolds, guardrails, working platforms, hoists, ladders and other means of access,</p>	Minor

<sup>30</sup> without impact mitigation measures

Potential Impacts	Receptor	Sensitivity of receptor	Magnitude of impact	Potential Impact Significance <sup>30</sup>	Mitigation and Management Measures	Significance of Residual Impacts
					<p>lifting, lighting, signing and guarding equipment. Lights and signs will be kept clear of obstructions and legible to read. Equipment, which is damaged, dirty, incorrectly positioned or not in working order, will be repaired or replaced immediately by the Contractor.</p> <p>Put clear signage to restricted areas in Uzbek and Russian languages.</p> <p>Prohibit unauthorised persons from entering the site through installation of a perimeter fence.</p> <p>Report and investigate all incidences of accidents or near misses and keep proper records of the actions taken.</p>	
Poor working and living conditions	Project Employees	Medium	Medium	Moderate	<p>Worker accommodation areas will be managed in accordance with the EBRD and IFC Workers' Accommodation: Processes and Standards.</p> <p>Implementation of the Worker Accommodation Plan.</p> <p>Prioritize employment of community members where possible.</p> <p>Prioritize procurement of goods from local communities where possible.</p> <p>Induction on health and safety and environmental mitigation will be held with each worker before starting work and with updates regularly.</p>	Minor
Lack of Access to a Grievance Mechanism	Project Employees	Medium	Medium	Moderate	<p>A structured Grievance Redress Mechanism (GRM) will be implemented in multiple languages anonymously (online and hardcopy) so that workers and community have access to express their concerns. The human resources department shall be responsible for implementing the GRM for the facility. The Contractor will inform the workers about the grievance mechanism at the time of recruitment and make it easily accessible to them. The mechanism should involve an appropriate level of management and address the concerns promptly. It should use an understandable and transparent process that provides feedback to those affected</p>	Minor

Potential Impacts	Receptor	Sensitivity of receptor	Magnitude of impact	Potential Impact Significance <sup>30</sup>	Mitigation and Management Measures	Significance of Residual Impacts
					without retaliation. The mechanism should not impede access to other judicial or administrative remedies available under the law or through existing arbitration procedures, nor should it replace grievance mechanisms provided for in collective agreements.	
Use of Forced and Child Labour	Minors, Project Employees	High	Low	Moderate	<p>The Contractor will not use forced labour, which is any work or service that is not voluntarily performed and is required of a person under threat of force or punishment. This includes any type of involuntary or forced labour, such as indentured labour, debt bondage, or similar labour contracts.</p> <p>The policies and procedures of HR will be adapted to the size of the workforce required for the project. Policies and procedures shall be developed to comply with the requirements of national legislation and IFC PS 2.</p> <p>The contractor will comply with all relevant national legislation, the requirements of the lender and ILO regulations relating to the employment of minors.</p> <p>In all cases, the contractor will not employ children in a manner that is economically exploitative or that risks interfering with the child's education or harming the child's health or physical, mental, spiritual, moral or social development.</p> <p>Young people under the age of 18 will not be employed in hazardous work and all work undertaken by persons under the age of 18 will be subject to an appropriate risk assessment.</p>	Minor
Site security	Project Employees (direct and contractors)	Medium	Low	Minor	<p>Firearms are prohibited on site.</p> <p>Fence the entire plant to restrict entrance to the site.</p> <p>Inspect the fence around the facility regularly and seal all loopholes.</p> <p>Ensure adequate lighting within and around the plant.</p> <p>Regularly check and maintain security lights at the site.</p>	Negligible

Potential Impacts	Receptor	Sensitivity of receptor	Magnitude of impact	Potential Impact Significance <sup>30</sup>	Mitigation and Management Measures	Significance of Residual Impacts
					<p>Train the onsite guards to adequately handle trespass incidents</p> <p>Ensure that the security staff act in compliance with relevant Uzbek laws;</p> <p>Ensure that robust background checks are carried out staff to make sure they have not been implicated in past abuses;</p> <p>Introduce head of security personnel to neighbouring communities and outline the necessary safety precautions that will need to be put in place to ensure both the safety of the Project and safety of local communities;</p>	
Unequal access to employment opportunities and benefits due to discriminatory and/or exploitative recruitment practices	Project Employees (direct and contractors)	High	Medium	Major	<p>The Contractor will not make recruitment decisions on the basis of personal characteristics such as gender, race, nationality, ethnic origin, religion or belief, disability, age or sexual orientation which are unrelated to the inherent job requirements.</p> <p>The Contractor will document and communicate to all workers their terms and conditions of employment, including their entitlement to wages, hours of work, overtime rules and overtime pay, and any benefits (such as sick leave, maternity/paternity leave or holiday).</p> <p>The Contractor will base the employment relationship on the principle of equal opportunity and fair treatment and will not discriminate in relation to any aspect of the employment relationship, including recruitment and hiring, remuneration (including wages and benefits), terms and conditions of employment, accommodation, access to training, promotion, termination of employment or retirement and disciplinary action.</p> <p>Special measures of protection or assistance to promote local employment opportunities or selection for a particular job based on the inherent requirements of the job which are in accordance with national law, will not be deemed discrimination.</p>	Minor

**Operational Phase**

Potential Impacts	Receptor	Sensitivity of receptor	Magnitude of impact	Potential Impact Significance <sup>30</sup>	Mitigation and Management Measures	Significance of Residual Impacts
Occupational health and safety incidents	Project Employees	High	Medium	Major	<p>Develop and implement an O&amp;M ESHS for operations.</p> <p>Train new employees on the importance of occupational health and safety.</p> <p>Ensure compliance with the governing regulations.</p> <p>Maintain the fence around the entire plant to prohibit unauthorized persons from accessing the site;</p> <p>Provide workers with appropriate personal protective clothing such as helmets, safety boots, gloves, dust masks (if required) and overalls.</p> <p>Strictly enforce the use of the Personal Protective Equipment to minimise the accidents;</p> <p>Provide fully equipped First Aid Kit and sanitary facilities on site;</p> <p>Put clear signage to restricted areas in Uzbek to reduce risk of accidents;</p> <p>Undertake regular inspection of the plant.</p>	Moderate
Worker's Grievance Mechanism	Project Employees	Medium	Low	Minor	<p>The Project Company will establish a grievance mechanism for workers to raise reasonable workplace concerns, including GBV. The Project Company will inform the workers about the grievance mechanism at the time of recruitment and make it easily accessible to them. The mechanism should involve an appropriate level of management and address concerns promptly. It should use an understandable and transparent process that provides feedback to those affected without retaliation. The mechanism should not impede access to other judicial or administrative remedies available under the law or through existing arbitration processes, nor should it replace grievance mechanisms provided for in collective agreements.</p>	Negligible
Working Conditions	Project Employees	Medium	Low	Minor	<p>Measures for ensuring sufficient ventilation in areas with evaporative, fugitive, aerosol and exhaust emissions will be implemented.</p>	Negligible

Potential Impacts	Receptor	Sensitivity of receptor	Magnitude of impact	Potential Impact Significance <sup>30</sup>	Mitigation and Management Measures	Significance of Residual Impacts
					<p>Preventative and mitigating measures for the handling, storage and transportation of hazardous (i.e., toxic, flammable or explosive) materials will be implemented.</p> <p>Fire detection and suppression systems as well as the establishment of emergency exits, assembly points and emergency medical response, will be implemented.</p> <p>Sufficient and specialized Personal Protection Equipment (PPE) including (but not limited to) safety boots, helmets, ear plugs/ mufflers, eye protection, overalls and gloves will be provided for O&amp;M workers engaged in various risk-presenting activities, in conjunction with regular training on the proper use of the PPE.</p> <p>All workplace H&amp;S incidents (i.e., accidents and near-misses) will be reported and documented for expert investigation and root-cause analysis, and subsequent remedial action to prevent re-occurrence.</p> <p>Adequate and conveniently located sanitation and welfare facilities, including toilets, ablution, drenching, handwashing, and sanitizing facilities will be provided within the project sites.</p>	

## 5.12. COMMUNITY HEALTH, SAFETY AND SECURITY

### Construction Phase

Permanent staff including contractors, sub-contractors, specialists, supply chain personnel will be hired during construction phase of the project. This is expected to lead a temporary workforce presence and potential interference with local population.

The Project construction will require around 100 during the peak period. Approximately 70% of the workforce will be unskilled and the remaining will be either skilled or semi-qualified staff. The capacity of campsite accommodation for construction workforce is about 50 workers. The provision of accommodation for self-sufficient worker accommodation will be responsibility of the Contractor.

**Impacts of Project-related worker influx:** Due to potential mixing of workers with the local community, there is a risk of increase in number of communicable diseases and illnesses. Such diseases include Sexually Transmitted Illnesses (STIs), skin infections, and waterborne diseases.

The influx of construction workers may put additional load on the healthcare services, if the projects do not have adequate infirmary facilities on-site. The Project will have on-site infirmary services at the construction camp sites for direct and contracted employees in order to reduce the load on public health facilities.

The influx of workers may also impact on local security as armed robbers and hoodlums may be attracted to the area. The likelihood is low and impact minor. Influx of construction workers may also lead to an increase in prevalence sexually transmitted diseases among the local population.

The influx of construction workers to the area may also increase the incidence of HIV/AIDs. However, due to the low population density of the area, and the relatively small size of the labour force, the potential risk to family structures and social networks is regarded as low.

These potential impacts are considered negative and of **Major significance** prior to mitigation. The worker influx sensitivity is considered high, the magnitude of the impact on communities' health is medium and therefore, impact significance is assessed as **Moderate**.

**Community health and safety incidents:** Areas designated for construction activities pose a broad range of physical and chemical hazards associated with construction activities, materials, equipment and machinery. The majority of these hazards pose health and safety risks to construction workers. Nevertheless, a number of construction-phase activities and contingencies present H&S risks to third parties, such as residents within local communities based around the project sites and access tracks, as well as the general public. In the context of H&S risks, third party receptors such as local community members are predisposed to H&S accidents, due to the lack of Personal Protection Equipment and limited construction H&S awareness for this at-risk category of receptors.

The project area will require site-based security at the gates and on patrol around the site and access road during construction in order to prevent the public from trespassing to the construction areas. This is so as to minimize the potential for construction site incidents or damage of construction machinery. It is anticipated that the security personnel will be unarmed.

The increase in community health and safety risks is a negative impact. From the above the impact of Community health and safety during the operation of the plant and associated infrastructure is considered to be of **Negative Major significance** prior to mitigation.

**Emergency Preparedness and Response:** The Emergency Preparedness and Response Plan (EPRP) will be developed as stand-alone documents separately for the construction and operation phases. The EPRPs will provide preventive measures and response strategies to manage potential incidents/accidents and to protect the community health, safety and environment against potential natural hazards, fires, or sabotage.

Measures/systems for collaboration with the local communities and other external parties including local governmental agencies, media, etc. will be developed, where necessary. Emergency preparedness and response information will be disseminated to the potentially affected communities (e.g. emergency notification systems and evacuation procedures).

Local communities will be notified by using appropriate tools (e.g. telephone call lists, vehicle mounted speakers) in case of emergencies arising from the Project work/construction sites may pose risk on them. Where necessary, the details of the nature of the emergency, protection options, etc. will be communicated through trained HR officer.

The related authorities will be cooperated both for prevention of and responding to emergencies and during emergency situations, where necessary. For fire emergencies, the procedures to be applied, including the trainings to be given to Project personnel and the measures to be taken, will be planned in coordination with the fire response units of the provinces.

In the event of a fire, wall-mounted, hand-held, suitable type fire extinguishers and special extinguishing systems in places where the fire response units cannot enter or reach quickly will be provided, and kept ready for use. The potential impact would be of **Moderate** significance.

**Community security incidents:** Areas designated for construction activities pose a broad range of physical, chemical, and biological hazards associated with construction activities, materials, equipment and machinery. The majority of these hazards pose health and safety risks to construction workers. Nevertheless, a number of construction-phase activities and contingencies present H&S risks to third parties, such as residents within local communities based around the project sites and access tracks. In the context of H&S risks, third party receptors such as local community members are predisposed to H&S accidents, due to the lack of Personal Protection Equipment and limited construction H&S awareness for this at-risk category of receptors. Trespassing, and unauthorized access to project sites and facilities during construction can further lead to H&S accidents from impact with moving (onsite) construction machinery, falls into excavations, and electrocution from contact with live conductors, amongst other potential impacts. These potential impacts are considered negative and of **Moderate significance** prior to mitigation.

**Traffic and Pedestrian Safety (Road traffic accidents):** Material transport vehicles and vehicles transporting the waste generated at construction sites may result an increased traffic on off-site roads during the construction period. Increased volumes of construction traffic along public and project-dedicated access roads carries the risk of road traffic accidents including vehicular collisions and accidents involving vehicular impact on pedestrians, which can result in property damage, injury, and fatalities. Potential risk factors for this category of accidents include (but are not limited to) limited visibility due to road dust, equipment failure for inadequately serviced vehicles, lack of traffic safety signage along access roads and negligence of project vehicle drivers or road users. Increases traffic congestion and increased travel times resulting from project traffic can disrupt local transportation patterns, impede timely access to workplaces and other key destinations, cause economic losses and present an inconvenience to road users. These potential impacts are considered negative and of **Moderate significance** prior to mitigation.

### **Lack of awareness or access to Grievance Mechanism:**

A Grievance Mechanism should be developed, whereby affected people can raise issues and concerns associated with social vices, the behavior of workers and drivers and etc. The project will implement an appropriate system to allow external parties to raise grievances in regard to the Project. The Grievance Mechanism will be clearly defined, transparent and accessible to identified stakeholders. The project will implement an appropriate system to allow external parties to raise grievances in. The grievance mechanism will be confidential and provide referral and support system for any workers reporting cases of GBV.

Besides the risks discussed above, trespassing, and unauthorized access to project sites and facilities during construction can further lead to H&S accidents from impact with moving (onsite) construction machinery, falls into excavations, and electrocution from contact with live conductors, amongst other potential impacts. Presence of outside labour force can cause negative impact on environment and local communities and should be managed to prevent conflict situations, including GBV. It is expected that most serious risks and impacts for community health and safety can be exposed during construction time. All other risks and impacts will be substantial and **Moderate** and mostly will be observed during time of construction.

### **Operational Phase**

**Community health and safety incidents:** The Project's operational phase will involve commissioning and commercial operation of the plant. These operations present a number of health and safety risks to communities based around the project site. All risks to public safety will be appropriately addressed and prepared for in the operational phase Emergency Preparedness and Response Plan (EPRP) and training. The plan will include the appropriate procedure to respond to any such incidents, as well as site specific contact details and details of external agencies who may be required. The Health and Safety team on site will provide advice during training/inductions on exposure to disease including preventative measures.

**Lack of awareness or access to Grievance Mechanism:** Local communities based around the project sites will be familiarized with the Project's community GRM, to enable the collection of grievances pertaining to H&S incidents within host communities on platforms that are accessible to all local constituencies and free of manipulation, interference, intimidation, service charges and restrictions on arbitration, judicial recourse and choice of confidentiality.

**Traffic accidents:** During the operation stage, it is not expected a large number of HGVs will be used. The Project's operational phase will entail the daily transportation of O&M workers, and occasional transfer of equipment and materials for maintenance purposes and production process. None of these is expected to create significant negative impacts on the local roads. Hence, additional road movement during the operation stage will not have adverse impacts on local people. The movement of project vehicles along roads and the access routes associated with the plant site in particular presents the inherent risk of road traffic accidents which may result in injury, fatalities, property damage and road kill (involving herded livestock).

The operational activities of the project are not expected to increase the existing number of movements on the local road network. Besides, it is not anticipated that abnormal loads on the roads will be required during the operation stage. The impact is assessed as **Negligible**.

### **Mitigation and Management measures**

Table below outlines feasible and cost-effective measures to prevent or minimise impact to socio-economic state of sensitive receptors during the construction phase.

**Table 32: Social Mitigation and Management**

Project phase	Receptor	Sensitivity of receptor	Magnitude of impact	Potential Impact Significance <sup>31</sup>	Mitigation and Management Measures	Significance of Residual Impacts
<b>Construction Phase</b>						
Impacts of Project-related worker influx	Communities health	Medium	Medium	Moderate	<p>The Project Company will develop and implement an internal audit system to check and monitor compliance of the Contractor and subcontractor implementations with the requirements of the following Project-specific documents;</p> <ul style="list-style-type: none"> <li>❖ Social Policy</li> <li>❖ Code of Conduct</li> <li>❖ HR Policy</li> </ul> <p>Awareness training of employees to ensure community health protection.</p>	Minor
Community health and safety incidents	Nearby communities	Medium	Medium	Moderate	<p>Ensure that Project security is aware of the Project's goals to establish good relationships with local stakeholders; the grievance mechanism for communities to voice concerns; and receives human rights and cultural sensitivity training to ensure the respect and protection of the local community.</p> <p>Risks to public safety will be appropriately addressed and prepared for in the construction phase 'Emergency Response Plan' and training.</p> <p>Smoking will be prohibited at chemical and fuel storage areas.</p> <p>Provide safety information to local community.</p>	Minor

<sup>31</sup> without impact mitigation measures

Project phase	Receptor	Sensitivity of receptor	Magnitude of impact	Potential Impact Significance <sup>31</sup>	Mitigation and Management Measures	Significance of Residual Impacts
					<p>Appropriate mechanisms for emergency control (e.g. well-equipped firefighting equipment) will be placed at suitable positions around the site.</p> <p>Community safety meetings should be organised with all potentially affected groups and be conducted in advance of construction activities.</p>	
Emergency Preparedness and Response	Project Employees and contractors	Medium	Medium	Moderate	<p><b>Emergency Preparedness and Response (EPRP)</b> - Developed to identify potential, foreseen emergency risks and provide details on how the risks will be reduced and actions in cases of an Emergency event, be they natural disaster or anthropogenic events.</p> <p>Work with local emergency responders to: (i) communicate EPRP; (ii) depending on level of risk from emergency events build local capacity to ensure appropriate local response in case of emergency.</p> <p>Communicate potential risks and EPRP to those potentially affected by emergency events.</p>	Minor
Community security incidents	Nearby communities	Medium	Medium	Moderate	<p>The project will employ its own security staff who will provide 24/7 security control across the Project site and dedicated security staff at gatehouses.</p> <p>Appropriate lighting will be provided at gatehouses for security personnel to prevent unauthorized access.</p>	Minor
Traffic and Pedestrian Safety (Road traffic accidents)	Households and establishments utilizing the project access roads and associated feeder roads	Medium	Medium	Moderate	<p>Project traffic will be organized to avoid peak traffic hours and traffic congestion hotspots to the extent feasible, in consultation with relevant local authorities.</p> <p>Project logistics will be implemented to ensure convoys of construction vehicles (and Heavy Goods Vehicles in particular) are dispatched with maximal</p>	Minor

Project phase	Receptor	Sensitivity of receptor	Magnitude of impact	Potential Impact Significance <sup>31</sup>	Mitigation and Management Measures	Significance of Residual Impacts
					load to minimize the number of consignments/delivery trips to the project sites. The parking of project vehicles will be restricted to designated parking bays within the project sites.	
Lack of awareness or access to Grievance Mechanism	Nearby communities	Medium	Medium	Moderate	The project will implement an appropriate system to allow external parties to raise grievances in regard to the Project. The Grievance Mechanism will be clearly defined, transparent and accessible to identified stakeholders. The grievance mechanism will be confidential and provide referral and support system for any workers reporting cases of GBVH.	Minor
<b>Operational Phase</b>						
Community health and safety incidents	Project Affected Community	Medium	Medium	Moderate	Risks to public safety will be appropriately addressed and prepared for in the operational phase 'Emergency Preparedness and Response Plan' and training. The plan will include the appropriate procedure to respond to any such incidents, as well as site specific contact details and details of external agencies who may be required. Appropriate mechanisms for emergency control (e.g. firefighting equipment) will be placed at suitable positions around the site. The Health and Safety teams on site will provide advice during training/inductions on exposure to disease including preventative measures.	Minor

Project phase	Receptor	Sensitivity of receptor	Magnitude of impact	Potential Impact Significance <sup>31</sup>	Mitigation and Management Measures	Significance of Residual Impacts
Lack of awareness or access to Grievance Mechanism	Nearby communities	Medium	Medium	Moderate	<p>The project will implement an appropriate system to allow external parties to raise grievances in regard to the Project.</p> <p>The Grievance Mechanism will be clearly defined, transparent and accessible to identified stakeholders.</p> <p>The Project Company will appoint a HR officer who will maintain communication with the local leaders and community members.</p> <p>The grievance mechanism will be confidential and provide referral and support system for any workers reporting cases of GBVH.</p>	Minor
Traffic accidents	Nearby communities	Low	Low	Minor	<p>Drivers will receive induction trainings in defensive driving and precautions against protracted shifts and fatigue that can result in impaired performance and traffic accidents.</p>	Negligible

## 5.13. SOCIO-ECONOMIC IMPACTS

### Sensitive Receptors

The following table provides an overview of E&S impact receptors in the context of potential impacts on livelihoods and social infrastructure within the Project's Areas of Influence (AoI). A sensitivity rating and corresponding description is further provided for each relevant receptor.

**Table 33: E&S impact receptors – and social infrastructure (socioeconomics)**

RECEPTOR	SENSITIVITY	JUSTIFICATION
Residents within project-affected communities, districts and regions	Medium	Residents within the project-affected communities located around the project sites, access roads and off-site labour accommodation facilities, as well residents of the broader host districts and affected regions. The makhallas of Djaloir, Yangi Gulzor and Khuja Uchkun amongst others, have a potentially high sensitivity to socioeconomic risks associated with construction activities and the influx of construction labour.
Utilities and social service providers	High	Utilities and social service providers operating within Yangikhayot Districts and the wider Tashkent Region.
Welfare of local population	High	Any change to infrastructure, population or regional inputs is likely to have effects on the welfare of the local population in the makhallas close to the Project site.
Local / Regional Economy	High	The plant development is likely to influence regional businesses. Not only local contractors and those directly involved in the construction but also local commercial operations such as food suppliers.
Employment Market	Medium	The plant development will result in the creation of employment opportunities and will offer an opportunity for greater dissemination of skills especially during the construction phase.

The primary economic impact during construction is likely to result from employment creation during this phase. This Project is expected to create employment opportunities during the construction phase for unskilled and applicably skilled workers.

In addition to the direct monetary increase to the families of the employed, the money paid to the workers will also stimulate the local economy with a multiplier effect, so that the money earned from the locally spent Project will recirculate within the local economy.

Additional secondary impact on the local economy is likely to arise from spending on domestic and foreign goods and services during the construction process. The nature of the development and the specialized nature of the materials required, their construction materials will be sourced locally. There is also the potential to buy food products locally to stimulate the local economy, where local people can sell vegetables and daily products to workers.

### Construction Phase

**Employment Generation:** The primary economic impact during construction is likely to result from employment creation during this phase. This Project is expected to create employment opportunities during the construction phase for unskilled and applicably skilled workers.

Therefore, in order to have an idea about the employment opportunities in the local area, it is necessary to keep in touch with the local authorities, local employers and employment-related

institutions. Long-term consultations with the aforementioned stakeholders may be required, especially for a qualified and unskilled workforce.

The Project has the potential to encourage the spread of construction and construction support skills to the local workforce. This will open up job opportunities for the unemployed in the Region and increase their chances of securing similar jobs after the completion of the Project construction phase.

It is expected that the majority of workers' contracts (especially for temporary/contract staff) will expire with the completion of the construction phase of the project.

**Accidental damage to public property and utility service interruptions:** The Project's construction phase will involve a varied range of construction operations, including transportation of workers and haulage of heavy machinery and materials, land clearance, and earthworks. A number of specific construction activities present a high risk of inadvertent physical damage to private and public property, outside of the areas demarcated for construction works, which potentially include

- ❖ Ground excavation works can also result in accidental damage to private and public/ utility property. Such damages can occur in instances where marginal deviations from excavation perimeters encounter underground utility assets (e.g., water pipes, underground gas pipelines, telecommunication cabling) and private assets (i.e., crop farms and resident trees etc.). Any impact with high-pressure gas pipeline during trenching works the risk of casualties, catastrophic damage, utility service interruptions, and associated economic losses;
- ❖ Civil works involving the alteration and/or construction of drainage systems potentiate inadvertent overflows that can extend towards nearby (off-site) establishments such as communal dirt roads, crop farms and residential facilities.
- ❖ Stockpiling and unloading of aggregates and debris within laydown areas and dumping sites can cause inadvertent damage to nearby property (e.g., crop farms, water sources etc.), especially in instances where the property boundaries are inconspicuous and immediately adjacent to working areas.

**Local Economic Development:** In addition to the direct monetary increase to the families of the employed, the money paid to the workers will also stimulate the local economy with a multiplier effect, so that the money earned from the locally spent Project will recirculate within the local economy.

Additional secondary impact on the local economy is likely to arise from spending on domestic and foreign goods and services during the construction process. The nature of the development and the specialized nature of the materials required, their construction materials will be sourced locally. There is also the potential to buy food products locally to stimulate the local economy, where local people can sell vegetables and daily products to workers. The potential impact would be of **Moderate** significance.

**Increased pressure on public infrastructure and resources:** The Project's construction phase poses the risk of heightened pressure on public infrastructure and communal resources, as a result of the following:

- ❖ Direct demand for construction resources and facilities for the management of construction waste, to provide for construction works
- ❖ Indirect demand basic social services, as a result of construction-phase labour influx.

Construction activities will demand a substantial amount of fuel and power. The provisioning of these resources for construction purposes may put a strain on locally available sources of fuel stations and power grid, particularly in the winter season.

Work sites and access routes to be used by the contractors and subcontractors will be clearly identified to avoid potential off-site impacts on local infrastructure. Project-specific GRM, including the external grievance mechanism, will be implemented to inform the communities about potential interruptions on local infrastructure services and collect relevant concerns and grievances for further management/resolution.

### **Operational Phase**

The following potential impacts for the operation phase were considered as the most relevant for the Aol and the socio-economic receptors:

- ❖ Impacts from local employment during operation.
- ❖ Impacts on the national and regional economy during operation.

In the project operation phase, job opportunities are created for limited individuals. Occupational opportunities are also created outside the project area.

### **Mitigation and Management measures**

Table 34 outlines measures to prevent or minimize socio-economic management impacts during the construction and operational phases.

**Table 34: Socio-Economic Management Mitigation and Management**

Project phase	Receptor	Sensitivity of receptor	Magnitude of impact	Potential Impact Significance <sup>32</sup>	Mitigation and Management Measures	Significance of Residual Impacts
<b>Construction Phase</b>						
Employment generated by the Project	Local Communities and Businesses in Project Affected Settlements (potential for the working age group in all settlements)	Medium	Low	Minor	<p>Contractor and Project Company will seek to employ local workers where possible including women. This will be done in consultation with the local administration and Makhalla leaders in the communities near the Project site.</p> <p>General job application forms will be collected from the settlements (The local employment potential of the settlements is presented in this report).</p> <p>The Contractor will give priority to the local people while employing unskilled and semiskilled labor forces from the Project area.</p>	Minor
Accidental damage to public property and utility service interruptions	<p>Local Communities and Businesses in Project Affected Settlements</p> <p>Residents within projectaffected communities, districts, and broader Tashkent Region</p> <p>Utilities and social service providers</p>	Medium	Medium	Moderate	<p>Water abstraction permits will be obtained from relevant authorities during the Project's construction and operational phase (i.e., for water abstraction from boreholes).</p> <p>Municipal and commercial waste recycling contractors within the affected districts and Tashkent Region at large will be identified and engaged for the recovery of materials from recyclable construction waste.</p> <p>Local communities based around the project sites will be familiarized with the Project's community GRM, to enable the collection of grievances pertaining to overburdened utility or communal infrastructure and common resources on platforms that are accessible to all local constituencies and free of manipulation, interference, intimidation, service charges and</p>	Minor

<sup>32</sup> without impact mitigation measures

Project phase	Receptor	Sensitivity of receptor	Magnitude of impact	Potential Impact Significance <sup>32</sup>	Mitigation and Management Measures	Significance of Residual Impacts
					<p>restrictions on arbitration, judicial recourse and choice of confidentiality.</p> <p>Regular coordination will be made with relevant authorities on permitting requirements and H&amp;S measures for any instances of on-site storage and project-related transportation of hazardous materials and waste in quantities that exceed regulatory thresholds.</p>	
Increased pressure on public infrastructure and resources	<p>Residents within projectaffected communities, districts, and broader Tashkent Region</p> <p>Utilities and social service providers</p>	Medium	Medium	Moderate	<p>Water abstraction permits will be obtained from relevant authorities during the Project's construction and operational phase.</p> <p>Local communities based around the project sites will be familiarized with the Project's community GRM, to enable the collection of grievances pertaining to overburdened utility or communal infrastructure and common resources on platforms that are accessible to all local constituencies and free of manipulation, interference, intimidation, service charges and restrictions on arbitration, judicial recourse and choice of confidentiality.</p> <p>Affected communities will be notified about any interruptions to social services resulting from the project, and informed about when any such interruptions are resolved.</p>	Minor
<b>Operational Phase</b>						
Employment generated by the Project	Management and technical operator positions	Negligible	Negligible	Negligible	The operational phase will require significantly less staff than the construction phase. Management and technical operator positions, the majority of staff will be security teams and other office-based support personnel	Negligible

Project phase	Receptor	Sensitivity of receptor	Magnitude of impact	Potential Impact Significance <sup>32</sup>	Mitigation and Management Measures	Significance of Residual Impacts
					HR Policy including company positive approach for the promotion of local employment should be developed by the Project Company and will be implemented during the Project operation activities.	

## 6. STAKEHOLDER ENGAGEMENT

IFC Performance Standards require adequate stakeholder consultation/engagement and therefore the Project will require a minimum level of engagement.

The stakeholders are the organisations and individuals, who are responsible for, interested in or affected by the proposed Project. The employees of the Company are the internal stakeholders of the Project. Other parties are the external stakeholders.

Based on changes in the national legislation regarding the process of National Environmental Impact Assessment conducting public consultation is now mandatory part of Stage I of the National EIA process. However, AI Mar could not reviewed any findings of stakeholder consultation / engagement process in Preliminary Statement of the Environmental Impact (PZVOS) report which was prepared by local consultant Prime Tower Group.

The TOR for AI Mar does not constitute Environmental and Social Impact Assessment (ESIA), but preliminary evaluation of site conditions and priority issues presented to the receptors as potentially significant impacts. It is important to note that the nature of AI Mar assignment is framed as the Rapid Environmental and Social Assessment. Therefore, AI Mar engaged with a limited number of relevant stakeholders mostly with community leaders of the nearest settlements.

### 6.1. PUBLIC MEETINGS

The Consultant engaged with a limited number of relevant stakeholders to obtain critical secondary baseline data where necessary. The Consultant visited the project area and collected the data sheets with socio-economic data in interviews with three (3) mahalla reis (community leaders).

On 17 May 2024, within the scope of social baseline survey meetings were performed with 3 mahalla reis that can have influence on the project. The meetings with project AOI communities leaders related to the project and particularly its impact on local physical, ecological and social environment was held in project affected communities. The meeting aims to inform stakeholder about the proposed project, and disclose the environmental and social issues especially on potential impacts and proposed mitigation. The meeting was held to obtain a feedback if any from the three Mahalla Committees. List of mahallas are as follow:

- ❖ Khuja Uchkun Mahalla;
- ❖ Jaloir Mahalla;
- ❖ Yangi Gulzar Mahalla.

**Photo 9: Project stakeholders**



Makhallya Committee in Jaloir Makhallya



Makhallya Committee in Khuja Uchkun Makhallya



Makhallya Committee in Yangi Gulzar Makhallya



Strawberry pickers

Most feedback received from communities related to employment opportunities. Due to the high level of unemployment, the respondents were very interested to get information about the required specialist and the number of employees. The residents showed an interest to the social and environmental aspects. Mainly people welcome a project and accept some inconveniences relating to the project implementation. However, community leader of makhallya Khuja Uchkun expressed concern about the increase in traffic. A solution to this concern could be to install traffic lights to limit speed. But access roads for transportation of equipment, materials, and construction workers do not pass through the makhallya Khuja Uchkun.

Consultant has conducted interview with farmer and his former employee on 20 May, 2024. The farmer reconfirmed his position on voluntary land transfer and no losses incurred. More detailed information is provided in Section 4.6

## 7. CONCLUSIONS

The proposed project is considered to be suitable for development and will comply with national regulatory framework and the standards and guidelines as set out in the IFC PSs and Environmental Health and Safety Guidelines. This is a category B project according to IFC's Policy on Environment and Social Sustainability (2012). Based on information reviewed by IFC, the proposed project will have limited site-specific potential adverse environmental and social impacts that are few, largely reversible, and that can be readily addressed through mitigation measures.

IFC PS 1 establishes the importance of assessment to identify the environmental and social impacts associated with development, effective community engagement and project information disclosure and consultation with local Project affected communities and environmental and social management measures. This RESA Study has therefore been carried out as a preliminary evaluation to meet the requirements of IFC PS1 as applicable to this stage of assessment. To manage and minimize the project's environmental and social impacts, East Can Solutions will develop and implement an Environmental & Social Management System (ESMS), commensurate with the scale & complexity of the project E&S risks and impacts and in line with the EIA, ESA, IFC PSs, WBG General EHS Guidelines (2007), WBG EHS Guidelines for Metal, Plastic, and Rubber Products Manufacturing (2007).

The remaining IFC PSs set out objectives and requirements to avoid and minimize potential environmental and social adverse effects on the environment and to offset/compensate any residual effects. PS 2 to 8 have therefore been considered as part of the assessment process and discussed where relevant within the topic specific sections below. PS7 has been scoped out of the assessment due to the absence of indigenous peoples in this area.

The overall environmental and social baseline is characterized by the following:

- ❖ The project area is dominated by agricultural land and degraded scrubland with little to no ecological significance;
- ❖ There are no protected areas or sensitive or rare natural habitats for flora or fauna in the project area;
- ❖ There are no known internationally, nationally or locally designated historical and cultural monuments in the project area;
- ❖ Agricultural land converted to Special Industrial zone. Two farmers are economically displaced within the project site boundary;
- ❖ There are very few sensitive receptors to noise and air pollution along the routes of the proposed bypasses;
- ❖ There are no known objects of cultural, recreational or historical interest in the immediate project area;
- ❖ There are no trees subject to cutting on the territory of the project facility. No specific records of Red Book flora have been obtained as part of the original study.

Based on the review of available Project information, observations from the site visit engagement with Project Company representatives, the main conclusion is that despite the size of the Project investment, likely adverse environmental and social impacts can be mitigated through conventional, proven measures.

During the construction period, potential impacts could include: potential air pollution especially due to dust and noise; surface water pollution (irrigation and drainage canals); temporary deterioration of traffic safety due to traffic diversions and materials transport, material assets and safety, and landscape. The project will not affect protected areas, forest areas or areas with

ecological sensitive. There will be some shrubs affected by land clearing but vegetation clearance is only partial across the Project site. These potential impacts are temporary and localised, and most are easily managed by following good construction practices. The ESMP in Chapter V provides mitigation measures for the potential negative impacts associated with the construction and operation of the project to ensure their significance is reduced to acceptable levels.

The potential impacts associated with the operation and maintenance (O&M) include minor noise and air quality deterioration caused by the plant operation, safety risks for the local population as well as for the O&M workers.

The RESA findings indicate that Project will have socio-economic benefits and, provided that the mitigation actions defined in the Chapter 5 are fully implemented during the construction and operation periods, the Project is not expected to have significant adverse environmental effects.

## ANNEX 1: MINUTES OF MEETINGS

Date: May 17, 2024

Location: Makhallya Yangi Gulzor, makhallya Khuja Uchkun, makhallya Djaloir

Meeting participants:

1. Community leader of Yangi Gulzor makhalla, Mr. Isakov;
2. Specialist of youth issues, Yangi Gulzor makhalla, Ms. Norqulova;
3. Community leader of Khuja Uchkun makhalla, Mr. Raximbayev;
4. Khokim assistant of Khuja Uchkun makhalla. Mr. Karimov;
5. Community leader of Djaloir makhalla, Ms. Abdullayeva

On 17 May 2024, within the scope of social baseline survey meetings were performed with 3 mahalla leaders in Khuja Uchkun Mahalla, Jaloir Mahalla and Yangi Gulzar Mahalla. The objective of the meeting was to inform stakeholder about the investment and to gain their opinions and suggestions with respect to the project. During the meeting with mahallas representatives, the Consultant received the following information:

- ❖ **The overall number and characteristics of the population in the mahallas:** These mahallas have a medium population and are located in the Yangi Khayet district of Tashkent city.
- ❖ **Issues of the standard of living of the population:** The standard of living of the population is estimated as average, with potential for improvement in connection with upcoming projects.
- ❖ **Employment of the population, employment of youth and women:** Currently, employment rates remain at an average level, while there is significant potential to increase the employment of youth and women in future projects.
- ❖ **Awareness of the Planned Construction of the Aluminium Can Production Plant:** Representatives of the mahalla are aware about the plans for the plant construction and positively assess the possible benefits associated with this project.

Based on the results of this meetings, it can be concluded that the stakeholder opinion regarding Aluminium Can Production Plant and its activities are rather positive. Mainly stakeholders welcome a project and accept some inconveniences relating to the project implementation.

The outcomes of these engagement activities yielded an understanding and appreciation of local environmental and social issues. The main environmental issues identified during stakeholder consultations included increases in dust in the dry season and waste dumping associated with construction.

Social issues identified and discussed during stakeholder consultations included:

- ❖ Stakeholders have general information about the upcoming project;
- ❖ Most feedback received from communities related to employment opportunities.
- ❖ The proposed site is not used for animal grazing; the locals have other designated areas for grazing their livestock;
- ❖ Overall, the proposed project was highly welcomed by the interviewed stakeholders / mahallas;
- ❖ The local stakeholders / villagers hope to gain temporary employment during construction stage and a number of permanent employment positions at the plant.

The stakeholders expressed concerns regarding the potential of damage to existing roads and safety concerns due to increase in traffic during the construction and operational stage. The community leader of makhallya Khuja Uchkun expressed concern about the increase in traffic. A solution to this concern could be to install traffic lights to limit speed. But access roads for transportation of equipment, materials, and construction workers do not pass through the makhallya Khuja Uchkun.

Question	Answer
What are the main risks in ecological and social impact during plant construction?	During the construction period, various environmental impacts will occur. These could include: potential air pollution especially dust and noise; surface water (irrigation and drainage canals); temporary impairment of traffic safety due to traffic diversions and materials transport, material assets and safety, and landscape. The project will not affect protected areas, forest areas or areas with ecological sensitive.
How will people be informed on this project? How will they be informed of their rights?	The Project Company will provide up-to-date information on the Project status and construction/operation activities and implement the Grievance Mechanism. The project will implement an appropriate system to allow external parties to raise grievances in regard to the Project. The Project Company is also responsible to establish collaboration mechanisms for emergency preparedness and response, cumulative impact management, etc. as necessary.
Will there be any job opportunities for the local population during the construction phase? What about for women?	During the construction phase of the plant, jobs will be created for laborers and foremen. Residents can contact the construction supervisor for employment opportunities. Additionally, women can also be hired to perform various tasks, including maintaining order in the construction workers' camp.
Residents have expressed concern about the safety of children who walk to school. Intensive construction work and the future plant operation may increase traffic. Is it possible to install a traffic light to ensure safety?	The Consultant will take this remark into consideration and forward the information to the Project Company for evaluating the possibility of installing a traffic light.

Question	Answer
All Community leaders of the mahallas requested that priority be given to employing people from the mahallas. Will this be possible?	The Consultant acknowledged the importance of this request and stated that the information will be forwarded to Project Company for consideration in their staffing policies.
Will there be any programs for training and upskilling local residents so that they can qualify for more skilled positions at the new enterprises?	The Consultant mentioned that the district's employment assistance centers always have programs for professional training and retraining for local residents. These programs will be aimed at enhancing qualifications and developing the skills needed for employment at the new enterprises.
How will labour conditions during the plant operation be monitored to ensure they comply with all safety and labor protection standards?	The Consultant emphasized that plant will be required to adhere to national and international safety and labor protection standards. Regular inspections will be conducted, and mechanisms will be in place for workers to submit complaints and appeals.
Community leader of the Mahalla Djaloir was concerned about the road condition, which could be damaged by construction machinery. What measures will be taken to prevent damage?	The Consultant assured that this concern will be communicated to the authorities responsible for construction to take necessary measures to ensure the preservation of the road surface.
How will be dust and noise impacts during construction be mitigated?	The Consultant explained that modern construction technologies and equipment will be used to minimize dust and noise. Measures will include limiting construction work during nighttime hours and conducting regular road watering to reduce dust.

### Minutes of phone discussion with leaseholder of Saidovul farm

Participant:

Mr. Salomov Shavkat      Leaseholder  
 Ms. Erkinova              Stakeholder engagement and community liaison Expert, AI Mar Consulting

AI Mar contacted with the leaseholder of the Saidovul farm in order to receive for more detailed information and clarification on the process of the land acquisition of the project land parcel to the district's land reserve to assess the action in accordance with national legislation.

Date	Format	Key discussion points / Summary
May 20, 2024	By phone	<p>During the first discussion, the Consultant received very brief information about Saidovul farm. The farm was a land parcel lessee according to the terms of lease agreement. The lease agreement was signed in January 07, 2000 for a period of 25 years (till January 2025). The main crop grown is grains. Over the past 5-7 years, the farmer has been growing wheat under government orders. Before this, the farmer also grew rice. The total area of the land parcel is 21 ha. The farmer says that the land acquisition of the total area will not significantly affect his livelihood.</p> <p>The farmer informed that the Saydovul farm has received a notice of non-renewal of the lease agreement in the fall 2023 in view of the fact that the Free Industrial Zone Yangi Avlod will be created in 2024. According to information from the farmer, there were repeated meetings with representatives of the khokimiyat when there was a discussion about the SIZ construction in this area.</p> <p>No compensation payments or livelihood restoration measures were made to compensate for lost profits. After discussion, the need to pass the land to the khokimiyat reserve fund, no compensation was discussed, because the land was state-owned. After notification from khokimiyat, farmer harvested mung beans (autumn 2023). Farmer confirmed his voluntary termination to possess the land parcel and passed it to the khokimiyat reserve fund.</p>
June 6, 2024	By phone	<p>There were no any buildings on the territory of the farm parcel, the land was used only for growing agricultural products. Additionally, the farmer used the land for secondary planting of crops. Part of this harvest was transferred to workers as payment in kind. The workers' wages in monetary terms were also paid by the farmer.</p> <p>The farmer does not anticipate any ecological or social impacts associated with the Project. The farmer is not interested in job offers during the construction.</p>
June 29, 2024	By phone	<p>During the discussion, the farmer refused to provide the Consultant with a copy of the voluntary termination to possess the land parcel and his application to the district khokimiyat for the return of the leased land parcel to the land reserve fund. He also refused to provide detailed information about average yield, annual profit and production costs. Seasonal workers from neighboring mahallas worked on the land plot, who work for farmers who invite them. The total number of workers during the peak season was up to 8 people.</p> <p>During the re-discussion on June 29, 2024, the farmer also confirmed that any compensation was not provided. Despite the Consultant's attempts to obtain more detailed information about the land acquisition and compensation assessment process, the farmer refused to answer this question, arguing that the issue was already closed for him personally and he did not want to deal with this issue again.</p> <p>The Consultant has also informed the farmer that if he disagrees with the procedure of land acquisition to the khokimiyat's reserve fund, he has the opportunity to submit a complaint to the khokimiyat, the presidential reception,</p>

Date	Format	Key discussion points / Summary
		or directly to the court. However, the farmer informed that he had no complaints about this process.
01 August, 2024	By phone	The farmer was more open to communication. The land parcel lease was 49 years but not 25 years as he indicated earlier. He plans to obtain new land parcel on the auction basis in future. And now he has agricultural machinery that he rents out.

### Minutes of phone discussion with Leaseholder of Saidovul farm

Participant:

Mr. Sanjar                                      Leaseholder  
 Ms. Erkinova                                 Stakeholder engagement and community liaison Expert, AI Mar Consulting

AI Mar contacted with the Farm Manager of the Saidovul farm in order to receive for more detailed information and clarification on the process of the land acquisition of the project land parcel to the district's land reserve to assess the action in accordance with national legislation.

Date	Format	Key discussion points / Summary
May 20, 2024	By phone	<p>The total land area is 21 ha. No physical structures were onsite. The main type of crop grown is crops, in particular wheat. The land parcel lease was 25 years. The workers were mainly seasonal workers who were hired for pruning, planting, embossing/weeding. These workers will however not be impacted by the project due to the seasonal and changing nature of their employment which is typically on a day-to-day basis.</p> <p>He refused to provide the Consultant with a copy of the voluntary termination to possess the land parcel and farm's application to the district khokimiyat for the return of the leased land parcel to the land reserve fund. However, he confirmed that there is no any complaints or grievances to be recorded from his side.</p> <p>The Farm Manager said that the reduction of the total area would not significantly affect his livelihood. The Farm Manager is not interested in job offers during the construction.</p>

### Minutes of phone discussion with Leaseholder of Saidovul farm

Participant:

Mr. Salomov Sanjar                            Head of Jahongir Agro Biznes Farm  
 Mrs.Malinovskaya Maria                    Social Safeguard Specialist of AI Mar Consulting

AI Mar contacted with the Leaseholder of the Saidovul farm in order to disclosure of the final entitlements and compensation packages to the PAP.

Date	Format	Key discussion points / Summary
01 April 2025	By phone	Disclosure of the final entitlements and compensation packages to the PAP was done. It was notified the PAP on the information required to prove eligibility of the compensation entitlements including transitional support. Mr. Salomov Sanjar was also notified about implementations timelines and how this relates to the project schedule, relocation requirements etc. The amount of compensation, as well as the method of its calculation, was announced. The farmer expressed full agreement and gratitude.

### Minutes of Public consultation with Farm owner of Jahongir Agro Biznes farm

Date: 19 November 2024

Location: Yangihayet District Hokimiat

Participant:

Mr. Salomov Sanjar	Head of Jahongir Agro Biznes Farm
Mr.Makhmudov Azam	Hokim of Yangihayet district
Mrs.Rizaeva Dilfuza	Lawyer of the Yangihayet District Hokimiat
Mr. Makhkomov Akmal	Head of Yangihayot District Cadastre
Mr. Khamidov Jahongir	Yangihayet District Investment Department Representative
Mrs.Malinovskaya Maria	Social Safeguard Spesialist, AI Mar Consulting
Mrs.Cherdicudi Veronika	Resettlement specialist, AI Mar Consulting
Ms. Erkinova Mamura	Stakeholder engagement and community liaison Expert, AI Mar Consulting



Public consultation with Farm owner of Jahongir Agro Biznes farm on 19 November, 2024

Date	Format	Key discussion points / Summary
November 19, 2024	Face to face	<p>The head of the Jahongir Agro Biznes farm, Mr. Salomov Sanjar, is a representative of three farms led by his brothers: the Saidovul farm (36.64 hectares) was headed by Mr. Salomov Shavkat and the Salomov Mamatqul farm (12.7 ha) was headed by Mr. Salomov Shukhrat.</p> <p>The total farm land area is 18.24 ha. The main type of crops grown are grain/seasonal vegetables (including state orders for grain crops). In the fall 2023, the owner of the Jahongir Agro Biznes farm has received an oral notice from Yangikhayot district khokimiyat to stop agricultural activities, as the status of land changes. In September 2023, the farmer completed the harvest thus not losing any crops and no further agricultural work was done on this land.</p> <p>In April 2024, the Yangikhayot district hokimiat sent an official written notice to Jahongir Agro Biznes farm that any field agricultural work should be stopped in connection with the planned construction of the Free Industrial Zone Yangi Avlod. Mr. Salomov did not take the official notification seriously, since similar conversations between farmers had been taking place over the past 2-3 years.</p> <p>In April 2024, Mr. Salomov has received clarification from Yangikhayot district khokimiat that construction permission has been issued as the land was in reserve fund on the basis of the Presidential Decree No. 138. Therefore, construction work was legal. Although, at the time of the</p>

construction start (April 2024), the lease agreement #TSHQXB-37 dated 05/10/2023 for the land parcel was valid.

Yangikhayot district khokimiyat has organized public consultation on 31 May, 2024 for all affected farmers, leasing land parcels. During the public consultation, farmers were informed about the entry into force of Presidential Decree No. 138 on 25 March 2024, in connection with which all leased land parcels were passed to the reserve fund of the khokimiyat and will subsequently be passed to the special industrial zone Yangi Avlod. Farmers were asked to sign the application for the voluntary return of land to the Government's state reserves (with a no-objection declarations) and the voluntary pre-term cessation of the land lease agreement at the consent of the farm owner.

At the public consultation, Mr. Salomov tried to challenge the need to sign a voluntary termination to possess the agricultural land parcel. However, all farmers, including Mr. Salomov, signed notarized agreement on the voluntary return of land to the Government's state reserves.

After phone discussions with the Consultant (Al Mar Consulting) in June 2024, Mr. Salomov has applied with a written application (ref. No. 24 of July 08, 2024, Appendix No. 1) to the Yangikhayot district Khokimiyat about the possibility to obtain compensation for damage/lost profits for the whole land parcel 94 ha (Salomov Mamatqul farm, Saidovul farm and Jahongir Agro Biznes farm). However, at the time of the meeting with the Consultant (Al Mar Consulting) on November 19, 2024, a response was not received from Khokimiyat.

Despite the voluntary termination to possess the land parcel and passed it to the khokimiyat reserve fund, Mr. Salomov believes that he has a right to compensation for lost benefits from farming. According to khokimiyat representatives, the entire process of land acquisition was carried out in accordance with the Uzbek law, and the farm voluntary refused to possess the land parcel and passed it to the khokimiyat reserve fund thus losing his right to be compensated. Therefore, there are no legal grounds for paying compensation, according to the khokimiyat. Representatives also said that the farmer has the opportunity to purchase another land parcel through an auction.

Due to the lack of free land for agricultural activities in the Yangihayet district, the likelihood of obtaining a new parcel in this area is extremely low.

**Notarized application for the voluntary return of land to the Government's state reserves from Jahongir Agro Biznes farm**



**TOSHKENT SHAHAR YANGIHAYOT TUMANI  
HOKIMI**

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**Тошкент шаҳар ҳокимлиги**

**ТАҚДИМНОМА**

**“Ер участкасини давлат  
захирасига олиш тўғрисида”**

Ўзбекистон Республикаси Президентининг 20.03.2024 йилдаги ПК-138-сонли қарорига ва 31.05.2024 йилдаги фермер хўжалигининг 31/05-сон қарорига асосан, “JAXONGIR AGRO BIZNES” фермер хўжалигининг раҳбари Саломов Санжар Маматкулович фермер хўжалигига ижара ҳуқуқи асосида тегишли бўлган Тошкент шаҳар, Янгиҳаёт туманидаги ер майдонининг контур белгиси “24” бўлган 18,69 га қишлоқ хўжалиги тоифасидаги ер майдони давлат захирасига ўтказилишига ўз розилигини билдирганлиги 2024 йил 31 майдаги хусусий амалиёт билан шуғулланувчи нотариус С.Мусаев томонидан тасдиқланган.

Ўзбекистон Республикаси “Маҳаллий давлат ҳокимияти тўғрисида”ги Қонунининг 10-моддасига кўра, қонунда назарда тутилган ҳолларда, Тошкент шаҳар ҳокими ер участкаларини доимий фойдаланишга беришга, ерга эгалик қилиш ва ундан фойдаланиш ҳуқуқини бекор қилишга ҳақли.

Ўзбекистон Республикаси Ер кодексининг 36-моддасига асосан, ер участкасига эгалик қилиш ҳуқуқини ёки ер участкасидан доимий ёхуд вақтинча фойдаланиш ҳуқуқини ушбу модда биринчи қисмининг 1, 2, 3 ва 5-бандларида кўрсатилган ҳолларда тугатиш ердан фойдаланиш ҳамда уни муҳофаза қилиш устидан давлат назоратини амалга оширувчи органларнинг тақдимномасига кўра, бутун ер участкасига ёки унинг бир қисмига эгалик қилиш ҳуқуқи ёхуд ундан доимий ёки муддатли фойдаланиш ҳуқуқи, шунингдек ер участкасини ижарага олиш ҳуқуқи бекор қилиниши белгиланган.

Ўзбекистон Республикаси Президентининг 24.08.2022 йилдаги “Мулк ҳуқуқининг дахлсизлигини ишончли ҳимоя қилиш, мулкий муносабатларга асоссиз аралашувга йўл қўймаслик, хусусий мулкнинг капиталлашув даражасини ошириш чора-тадбирлари тўғрисида” ПФ-198-сонли фармони асосан, 2022 йил 1 сентябрдан бошлаб ер участкасидан ихтиёрий воз кечиш тўғрисида нотариал тасдиқланган ариза

ушбу ер участкасига бўлган ҳуқуқларни бекор қилиш учун асос бўлиб ҳисобланади.

Вазирлар Маҳкамасининг 2022 йил 14 апрелдаги “Давлат ер ва кадастр назоратини амалга ошириш тартиби ҳамда давлат геодезия назоратини амалга ошириш тартиби тўғрисидаги низомларни тасдиқлаш ҳақида”га 183-сонли қарори талабларига асосан, Давлат ер ва кадастр назоратини амалга оширувчи ваколатли органлар рўйхатида маҳаллий давлат ҳокимияти органлари белгиланган.

Юқоридагиларни инобатга олиб, “Маҳаллий давлат ҳокимияти тўғрисида”ги Қонунининг 10-моддасига ҳамда Ер кодексининг 36-моддасига асосан,

**СЎРАЙМАН:**

1. Ўзбекистон Республикаси Ер кодексининг 6-моддасига асосан, “JAXONGIR AGRO BIZNES” фермер хўжалигига ижара ҳуқуқи асосида тегишли бўлган Тошкент шаҳар, Янгиҳаёт туманидаги контур белгиси “24” майдони 18,69 га бўлган қишлоқ хўжалиги тоифасидаги ер участкасини давлат захирасига олишингизни.

Илова: \_\_\_ варақда.

Туман ҳокими



Х.Иногамов

**ЎЗБЕКИСТОН РЕСПУБЛИКАСИ**  
**МУТАСАДДИ ИДОРЛАРГА**

Тошкент шаҳар, Мирзо-Улугбек тумани,  
Мустақиллик МФЙ, Ц-2-мавзе, Олой кучаси,  
13-уй, 32-хонадонда рўйхатга олинган:  
28.05.1972 й.т., **SALOMOV SANJAR**  
**MAMATKULOVICH** (ЎЗ.Р.Фуқаросининг  
биометрик паспорти АА 8944817 ТОШКЕНТ  
ШАҲАР МИРЗО-УЛУҒБЕК ТУМАНИ ИИБ  
томонидан 08.03.2015 йилда берилган,  
ЖШШИР 32805720270019), номидан

**БОШҚА ТУРДАГИ АРИЗАНИ ТАСДИҚЛАШ**

Ушбу ариза Тошкент шаҳар, Янгиҳаёт тумани, "TASHKENT INDEX" худуди D03-блок  
1013-1014-1015-1016 сонли дўкон манзилида Тошкент шаҳар Янгиҳаёт туманида  
хусусий амалиёт билан шуғулланувчи, нотариусда тасдиқланди.

Ўзбекистон Республикаси. Тошкент шаҳар.

**Икки минг йигирма тўртинчи йил. Ўттиз биринчи май.**

Мен "JAHONGIR AGRO BIZNES" ФХ бошлиғи **SALOMOV SANJAR**  
**MAMATKULOVICH**, Ўзбекистон Республикаси Президентининг 20.03.2024 йилдаги  
№ПҚ-138-сонли қарорига ва 31.05.2024 йилдаги мазкур фермер хўжалигининг №31/05-  
сон қарорига асосланиб, мазкур фермер хўжалиги тасарруфидаги (ижара асосида  
фойдаланишдаги) Тошкент шаҳар, Янгиҳаёт туманидаги ер майдонининг контур белгиси  
«24» бўлган 18.69 га қишлоқ хўжалиги тоифасидаги ер майдонини Давлат захирасига  
ўтказилишига ўз розилигимни бераман.

Ариза менинг сўзимдан тўғри олиб ёзилди. Кейинчалик ҳеч қандай даъво  
қилмайман.

Ўзбекистон Республикаси Нотариат тўғрисидаги қонуннинг 67-моддасини  
мазмунини нотариус томонидан тушунтирилади. Нотариус имзонинг ҳақиқийлигини  
шаҳодатлар экан, ҳужжатда баён этилган фактларни эмас, балки фақат имзонинг  
муайян шахс томонидан қўйилганлигини тасдиқлайди.

**ИМЗО:**

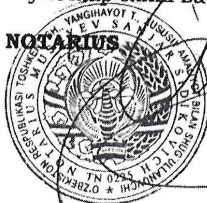
Ўзбекистон Республикаси. Тошкент шаҳар.

**Икки минг йигирма тўртинчи йил. Ўттиз биринчи май.**

Мен, Тошкент шаҳар Янгиҳаёт туманида хусусий амалиёт билан шуғулланувчи  
нотариуси **MUSAYEV SANJAR SIDIKOVICH**, фуқаро **SALOMOV SANJAR**  
**MAMATKULOVICH**нинг менинг ҳузуримда қўйган имзосининг ҳақиқийлигини  
шаҳодатлайман. Унинг шахси аниқланди, муомалага лаёқатлигини текширилади, яъни  
шахсий мулоқот давомида унинг муомалага лаёқатлиги шубҳа туғдирмади, ушбу  
нотариал ҳаракатни амалга ошириш даврида нотариал идорада унинг муомалага  
лаёқатсиз эканлиги ҳақида ҳеч қандай маълумотлар йўқ.

"Нотариус" ахборот тизимига нотариал ҳаракат №20240238100 1186 сонли  
уникал рақам билан кайд қилинди.

Давлат божи – 17 000 (ун етти минг) сўм + 34 000 (ўттиз тўрт минг) сўм техник  
тусдаги пуллик хизмат ҳақиқи ва Галбидкорлик субъектлари ягона давлат реестридан  
маълумотлар олиш ва чоп этиш: 17 000.00 (ун етти минг сўм ноль тийин) сўм ўндирилади.



MUSAYEV S.S.



Гривент шара  
Хорамнига

Шага байр зурагтаа  
Хорамниг  
"JAHONGIR ABOO BRNES"  
Бизнесийн Санхүүжилт

Ариза.

Хуучин гуд үгүйсгэн харгалзах замаар та  
"JAHONGIR ABOO BRNES" бизнесийн санхүүжилтээр  
Хорамниг зурагт байршилтай 2019 оны 29 сар  
дунд 172 өдөр зарцуулаад өөрсөнтэй байр  
хуудсаар 18,69 метр өр хөндөгчтэй шүү  
байр зурагтаа үзэгдсэн.

Хуучин байр үзвэл 18,69 метр хэмээх  
хуучин өр хөндөгчтэй байр зарцуулаад  
үү илгээх байр төлөвлөгчид.

Утас: 31.05.2024 5-24 12240238100186

Өөрсөнтэй байр хуучин байртай ариулан  
байртай.

"JAHONGIR ABOO BRNES"  
Бизнесийн Санхүүжилт



М.Сүхбаатар

**Notarized application for the voluntary return of land to the Government's state reserves from Salomov Mamatqul farm**



**TOSHKENT SHAHAR YANGIHAYOT TUMANI  
HOKIMI**

100102, Toshkent sh., Yangihayot t., Yo'ldosh 2-daha, 25a-uy. tel: 71-210-60-04, yangixayotdevon@exat.uz

01/159 -son

«10» 06 2024 yil

**Тошкент шаҳар ҳокимлиги**

**ТАҚДИМНОМА**

***“Ер участкасини давлат захирасига олиш тўғрисида”***

Ўзбекистон Республикаси Президентининг 20.03.2024 йилдаги ПҚ-138-сонли қарорига ва 03.06.2024 йилдаги фермер хўжалигининг 03/06-сон қарорига асосан, “SALOMOV MAMATQUL” фермер хўжалигининг раҳбари Саломов Шухрат Маматкулович фермер хўжалигига ижара ҳуқуқи асосида тегишли бўлган Тошкент шаҳар, Янгихаёт туманидаги ер майдонининг контур белгиси “6” бўлган 37,10 га қишлоқ хўжалиги тоифасидаги ер майдони давлат захирасига ўтказилишига ўз розилигини билдирганлиги 2024 йил 31 майдаги хусусий амалиёт билан шуғулланувчи нотариус С.Мусаев томонидан тасдиқланган.

Ўзбекистон Республикаси “Маҳаллий давлат ҳокимияти тўғрисида”ги Қонунининг 10-моддасига кўра, қонунда назарда тутилган ҳолларда, Тошкент шаҳар ҳокими ер участкаларини доимий фойдаланишга беришга, ерга эгалик қилиш ва ундан фойдаланиш ҳуқуқини бекор қилишга ҳақли.

Ўзбекистон Республикаси Ер кодексининг 36-моддасига асосан, ер участкасига эгалик қилиш ҳуқуқини ёки ер участкасидан доимий ёхуд вақтинча фойдаланиш ҳуқуқини ушбу модда биринчи қисмининг 1, 2, 3 ва 5-бандларида кўрсатилган ҳолларда тугатиш ердан фойдаланиш ҳамда уни муҳофаза қилиш устидан давлат назоратини амалга оширувчи органларнинг тақдимномасига кўра, бутун ер участкасига ёки унинг бир қисмига эгалик қилиш ҳуқуқи ёхуд ундан доимий ёки муддатли фойдаланиш ҳуқуқи, шунингдек ер участкасини ижарага олиш ҳуқуқи бекор қилиниши белгиланган.

Ўзбекистон Республикаси Президентининг 24.08.2022 йилдаги “Мулк ҳуқуқининг дахлсизлигини ишончли ҳимоя қилиш, мулкий муносабатларга асоссиз аралашувга йўл қўймаслик, хусусий мулкнинг капиталлашув даражасини ошириш чора-тадбирлари тўғрисида” ПФ-198-сонли фармониغا асосан, 2022 йил 1 сентябрдан бошлаб ер участкасидан ихтиёрий воз кечиш

тўғрисида нотариал тасдиқланган ариза ушбу ер участкасига бўлган ҳуқуқларни бекор қилиш учун асос бўлиб ҳисобланади.

Вазирлар Маҳкамасининг 2022 йил 14 апрелдаги “Давлат ер ва кадастр назоратини амалга ошириш тартиби ҳамда давлат геодезия назоратини амалга ошириш тартиби тўғрисидаги низомларни тасдиқлаш ҳақида”га 183-сонли қарори талабларига асосан, Давлат ер ва кадастр назоратини амалга оширувчи ваколатли органлар рўйхатида маҳаллий давлат ҳокимияти органлари белгиланган.

Юқоридагиларни инобатга олиб, “Маҳаллий давлат ҳокимияти тўғрисида”ги Қонунининг 10-моддасига ҳамда Ер кодексининг 36-моддасига асосан,

**СЎРАЙМАН:**

1. Ўзбекистон Республикаси Ер кодексининг 6-моддасига асосан, “SALOMOV MAMATQUL” фермер хўжалигига ижара ҳуқуқи асосида тегишли бўлган Тошкент шаҳар, Янгиҳаёт туманидаги контур белгиси “6” майдони 37,10 га бўлган қишлоқ хўжалиги тоифасидаги ер участкасини давлат захирасига олишингизни.

Илова: \_\_\_ варақда.

Туман ҳокими



Х.Иногамов

**ЎЗБЕКИСТОН RESPUBLIKACISI  
MUTASADDI IDORALARGA**

Тошкент шаҳар, Мирзо-Улугбек тумани,  
Марказ-1 мавзеси, 38-уй, 109-квартирада  
рўйхатга олинган: 28.09.1966 й.т.,  
**SALYAMOV SHUHRAT MAMATKULOVICH**  
(Ўз.Р.Фуқаросининг биометрик паспорти  
AB 1002179 ТОШКЕНТ ШАҲАР МИРЗО-  
УЛУҒБЕК ТУМАНИ ИИБ томонидан  
05.09.2015 йилда берилган, ЖШШИР  
32809660060033), номидан

**БОШҚА ТУРДАГИ АРИЗАНИ ТАСДИҚЛАШ**

Ушбу ариза Тошкент шаҳар, Янгиҳаёт тумани, "TASHKENT INDEX" худуди D03-блок  
1013-1014-1015-1016 сонли дўкон манзилида Тошкент шаҳар Янгиҳаёт туманида  
хусусий амалиёт билан шуғуланувчи, нотариусда тасдиқланди.


Ўзбекистон Республикаси, Тошкент шаҳар.

**Икки минг йигирма тўртинчи йил. Учинчи июн.**

Мен "**SALOMOV MAMATQUL**" ФХ бошлиғи **SALYAMOV SHUHRAT MAMATKULOVICH** Ўзбекистон Республикаси Президентининг 20.03.2024 йилдаги №ПҚ-138-сонли қарорига ва 03.06.2024 йилдаги мазкур фермер хўжалигининг №03/06-сон қарорига асосланиб, мазкур фермер хўжалиғи тасарруфидаги (ижара асосида фойдаланишдаги) Тошкент шаҳар, Янгиҳаёт туманидаги ер майдонининг контур белгиси «б» бўлган 37.10 га қишлоқ хўжалиғи тоифасидаги ер майдонини Давлат захирасига ўтказилишига ўз розилигимни бераман.

Ариза менинг сўзимдан тўғри олиб ёзилди. Кейинчалик ҳеч қандай даъво қилмайман.

Ўзбекистон Республикаси Нотариат тўғрисидаги қонуннинг 67-моддасини мазмуни нотариус томонидан тушунтирилади. Нотариус имзонинг ҳақиқийлигини шаҳодатлар экан, ҳужжатда баён этилган фактларни эмас, балки фақат имзонинг муайян шахс томонидан қўйилганлигини тасдиқлайди.

**ИМЗО:** 

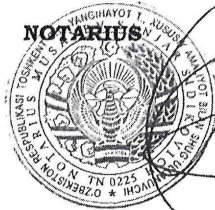
Ўзбекистон Республикаси, Тошкент шаҳар.

**Икки минг йигирма тўртинчи йил. Учинчи июн.**

Мен, Тошкент шаҳар Янгиҳаёт туманида хусусий амалиёт билан шуғуланувчи нотариуси **MUSAYEV SANJAR SIDIKOVICH**, фуқаро **SALYAMOV SHUHRAT MAMATKULOVICH**нинг менинг ҳузуримда қўйган имзосининг ҳақиқийлигини шаҳодатлайман. Унинг шахси аниқланди, муомалага лаёқатлилиги текширилади, яъни шахсий мулоқот давомида унинг муомалага лаёқатлилиги шубҳа туғдирмади, ушбу нотариал ҳаракатни амалга ошириш даврида нотариал идорада унинг муомалага лаёқатсиз эканлиги ҳақида ҳеч қандай маълумотлар йўқ.

"Нотариус" ахборот тизимида нотариал ҳаракат №**20240238100** 1206 сонли уникал рақам билан кайд қилинди.

Давлат божи – 17 000 (ўн етти минг) сўм + 34 000 (ўттиз тўрт минг) сўм техник тусдаги пуллик хизмат ҳаққиси ва Тадбиркорлик субъектлари ягона давлат реестридан маълумотлар олиш ва чоп этиш: 17 000.00 (ўн етти минг сўм ноль тийин) сўм ўндирилади.



**MUSAYEV S.S.**





## ANNEX 2 CADASTRAL REGISTRATION FOR THE PROJECT SITE



**KADASTR AGENTLIGINING DAVLAT KADASTRLARI PALATASI**  
**Toshkent shahri boshqarmasi**  
**Yangiheyot tumani filiali**  
**YER UCHASTKASINING KADASTR PASPORTI**

(kadastr yig'majildidan ko'chirma)

Kadastr yig'majildi shakllantirilgan sana	04.03.2025	
Kadastr pasporti berilgan	Sana	04.03.2025
	Raqami	P-YANG34677883

**I. Manzil haqida ma'lumotlar**

Yer uchastkasining kadastr raqami	10:12:40:03:02:0012
Joylashgan joyi	Toshkent shahri, Yangiheyot tumani, Jaloyir MFY, Jaloir ko'chasi, 51-uy

**II. Yer uchastkasi tavsifi**

Ko'chmas mulk obyekti turi:	Noturar joy	
Yer uchastkasining (obyekt) nomi:	Bo'sh yer maydoni	
Yer maydoni, (kv.m)	Huquqiy hujjatga asosan	210 000.00
	Amalda	210 000.00
	O'zboshimchalik bilan egallangan	0
Yer uchastkasining toifasi:	Sanoat, transport, aloqa, mudofaa va boshqa maqsadlarga mo'ljallangan yerlar	
Yer uchastkasining kichik toifasi	Tadbirkorlik sanoat zonalari yerlari	
Yerdan foydalanish turi	Sayyor savdo obyektlari	
Yer uchastkasi bahosi (so'm)		
Servitut haqida ma'lumot		
Kadastr qiymati (so'm)		
Kadastr baholash sanasi		
Qo'shimcha ma'lumotlar	Yo'q	

UZKAD tizimida ERI dan foydalanib shakllantirilgan.  
ERI egasi:

**KAMARITDINOV AKMAL**  
**ZIYAVITDINOVICH**

