

RISK ASSESSMENT AND RISK MANAGEMENT PLAN

Risk Description	Risk Assessment	Mitigation Measures or Risk Management Plan
1. Executing Agency: MRTCUD		
Public Financial Management Risk		
(i) Public financial management issues i.e., delays in, and problems with, funds flow arrangements	Medium	MRTCUD is experienced in managing ADB projects. MRTCUD coordinates effectively with MOF on all local and foreign transactions supported by external assistance. A financial and accounting specialist will be engaged for the PMU, and consultants engaged under component 3 will provide support and training.
(ii) Delays or problems with external audit	Medium	MRTCUD and the PMU will be audited annually by independent external auditors, the Government Audit Commission under MOF, and the State Audit Office. The audit is carried out in accordance with ISA and complies with the requirements of ADB and MOF.
(iii) Problems with project accounting policies and procedures	Medium	MRTCUD's accounting policy is based on the Accounting Standards of Mongolia. A manual for the accounting procedures that satisfies MOF and ADB requirements will be available to the staff of MRTCUD and the PMU. The PMU financial management manual will be updated annually.
Procurement and Corruption Risk		
(iv) Procurement inefficiencies and corruption	Medium	Procurement of the WWTP and the consulting services contracts will be carried out by MRTCUD. Contract documents for the WWTP will be prepared by MRTCUD, the PMU, and the procurement specialist engaged for the PMU, with support and assistance from the consultants. Procurement will be carried out by MRTCUD with expert representation from the government and the private sector. MRTCUD is experienced in works and equipment procurement. The plant—design, supply, and install procurement modality will be new to MRTCUD. Procurement capacity will be improved through training by consultants before the commencement of procurement activities, and address gaps that may impede project effectiveness. Relevant provisions of ADB's Anticorruption Policy (1998, as amended to date) are included in the project loan documents and bidding documents. MRTCUD will disclose to the public and annually update the project's status and how loan proceeds are used.
Other Risks		
(v) Delays in project implementation	Medium	MRTCUD has been responsible for the execution of previous ADB-supported urban development projects. MRTCUD will place its senior staff to guide and oversee the project closely, and will ensure that the PMU and the project implementation unit are staffed with experienced professionals selected in accordance with ADB's Guidelines on the Use of Consultants (2013, as amended from time to time) and trained accordingly. A procurement specialist will be recruited in advance to assist with the tendering process, and technical specialists will be recruited through advance action to assist in overall project detailed design and project management and implementation support.

Risk Description	Risk Assessment	Mitigation Measures or Risk Management Plan
2. Implementing Agency: DAG		
Public Financial Management Risk		
(i) Public financial management issues i.e., delays and problems with funds flow arrangements	Medium	DAG has knowledge of and experience with ADB-funded loans and technical assistance projects, and has closely coordinated with MOF in project transactions. No major problems were reported related to counterpart fund transfers through budget processes. DAG does not have the capacity to manage foreign exchange risk. Existing reporting systems need upgrading to enable DAG to track project proceeds from sources and payments to final beneficiaries. Consultant support during implementation will be provided to assist with public financial management of funds flow support.
(ii) Problems with project accounting policies and procedures	Medium	DAG follows the Accounting Standards of Mongolia based on ISA. Accounting follows the accrual basis and uses the accounting policy and procedures of budget organizations. Accounting and budget manuals are updated regularly. Controls exist for collections, timely deposits, and the recording of these. Training will be provided by the consultants during project implementation to assist in setting up funding, and controls and procedures for fund use, and project reporting and monitoring.
(iii) Delays or problems with external audit	Low	DAG is audited annually by independent external auditors—the general auditor of DAG and the State Audit Office. The audit is in accordance with ISA and complies with MOF requirements. Auditor recommendations are implemented.
(iv) Inadequate information systems	Medium	Accounting and financial management systems are computerized and use internationally recognized automated software, which will be adapted to include project operations and reporting requirements with the assistance of the consultants.
(v) Problems with financial reporting and monitoring	Low	DAG follows international accounting standards and prepares the necessary financial statements and other financial reports on a quarterly basis. Reporting complies with MOF requirements.
Procurement and Corruption Risk		
(vi) Procurement inefficiencies and corruption	Medium	DAG will carry out procurement for national competitive bidding contracts. Contract documents for the pumping stations and sewer pipe components will be prepared by DAG with the assistance of the Project Implementation Unit procurement specialist and the consultants. Procurement will be carried out by DAG, with expert representation from the government and the private sector. DAG is experienced in works and equipment procurement. Procurement capacity will be improved through training by the consultants before the commencement of procurement. Relevant provisions of ADB's Anticorruption Policy are included in the project's loan documents and bidding documents. ADB will prior review all procurement documents.
Other Risks		
(vii) Delays in project implementation	Medium	DAG has experience as implementing agency of a prior ADB loan project for renovation of engineering networks of the Second Micro District. However, this project is on a larger scale and enhanced capacity is required. Consultants and Project Implementation Unit specialists will support with technical, supervisory, and managerial

Risk Description	Risk Assessment	Mitigation Measures or Risk Management Plan aspects.
3. Operating Agency: DUS		
Other Risks		
(i) Sustainability of operation of new facilities	Medium	The plant—design, supply, and install modality as a form of contract will minimize the risk of not delivering a sustainable project. DUS, the operating agency of the WWTP, will receive operation training support from the contractor and the loan implementation consultants. The attached technical assistance project to the loan, the Darkhan Urban Utility Institutional Improvement Action Plan, will further build capacity and ensure the sustainability of the investment by strengthening the overall institutional capacity, management, and operations of the utility operator.
(ii) Poor technology design or poor quality construction and equipment installation will compromise treatment system performance	Medium	Optimization of design, equipment specification, and treatment operation under Darkhan conditions is ensured through engagement of consultants under the loan, including a wastewater management specialist to ensure quality design of the WWTP and provide management supervision and third-party quality assurance throughout the design, construction, commissioning, and early stages of operation. The plant—design, supply, and install modality is anticipated to include operation assistance and thus minimize risks of accountability issues by the contractor.
(iii) Unforeseen changes in flow rates and composition of wastewater compromise treatment efficiency	Medium	The plant is designed to be flexible and able to balance shock pollution loads, and the biological reactor is divided into three streams, each with a design load of about 8,000 cubic meters per day. Under higher loading conditions, all three streams and under lower conditions, two streams, can be operated. The DUS capacity and authority will be strengthened to enforce national discharge standards for industries. The loan implementation consultants will provide capacity development to enable effective management of toxic flows from industries resulting from possible process or pre-treatment failure, which could potentially endanger the wastewater treatment process.
(iv) DUS has inadequately skilled staffed to operate new facilities	Medium	DUS is staffed with experienced technical personnel of appropriate educational background to undertake the assigned tasks. Institutional and organizational development carried out under part B of the project will improve career paths for technical staff. Additional training will be carried out by the WWTP contractor and through the project management and implementation support consultants.
Overall	Medium	

ADB = Asian Development Bank, DAG = Darkhan-Uul *aimag* (province) government, DUS = Darkhan Us Suvag (water and wastewater utility company), ISA = International Standards on Auditing, MRTCUD = Ministry of Roads, Transportation, Construction and Urban Development, MOF = Ministry of Finance, PMU = project management unit, WWTP = wastewater treatment plant.

Sources: Asian Development Bank.