

Environmental Code of Conduct

Project number: 57176-001

January 2025

MON: Support for Innovation and Collaboration in Science and Technology Education in Secondary Schools

Prepared by the Ministry of Education and Science for the Asian Development Bank.

Currency equivalents

(as of January 30, 2025)

Currency unit	–	togrog (MNT)
MNT1.00	=	\$ 0.00029007
\$1.00	=	MNT 3,447.43

NOTE

In this report, "\$" refers to US dollars.

Abbreviations

ADB	-	Asian Development Bank
DEPP	-	Department of Education Policy Planning
EDDR	-	Environmental Due Diligence Report
ECoC	-	Environmental Code of Conduct
EMP	-	Environmental Management Plan
EIA	-	Environmental Impact Assessment
EA	-	Executing Agency
GoM	-	Government of Mongolia
GRM	-	Grievance Redress Mechanism
IA	-	Implementing Agency
MOE	-	Ministry of Education
MNS	-	Mongolian National Standard
MON	-	Mongolia
PM	-	Particulate matters
PISA	-	Programme for International Student Assessment
PIU	-	Project Implementation Unit
PPE	-	Personal Protective Equipment
SPS	-	Safeguard Policy Statement
TA	-	Technical Assistance
TUK	-	District's waste transportation company
UBED	-	Ulaanbaatar City Environmental Department

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Project Introduction

1. The proposed project aims to transform science and IT education by equipping students and teachers with the skills, tools, and mindsets required to thrive in an increasingly digital world and to respond to environmental challenges that constrain resilient and sustainable development. Through an innovative approach that emphasizes hands-on, project-based learning and the integration of artificial intelligence (AI) and sustainable development concepts, the project aims to foster future-ready learners and educators. Implemented in selected schools across Ulaanbaatar and rural areas of Mongolia, the project will directly benefit around 35,000 students, teachers, principals, and counselors - approximately 45% of whom are female. The student beneficiaries include both female and male students in both urban and rural areas, including students with disability, students from former and current herder families, and students living in ger areas. A large share of the students come from low-income families.
2. Key interventions include strengthening teacher capacity, establishing physical and digital laboratories, introducing AI literacy training for education and AI tutoring tools for science education, promoting data-driven school management, and creating enabling environment for innovative learning. The project will help Mongolia build a resilient, future-ready generation of thought leaders and workforce by equipping students and teachers with the skills to meet the demands of a changing educational landscape, digital transformation, and broader socio-economic and environmental challenges.
3. The primary participants in project activities will be science and IT teachers, as well as school principals, from at least 100 schools, including the six pilot schools selected for the establishment of physical and digital laboratories. All participating schools will benefit from a range of activities such as professional development trainings and workshops, leadership and instructional coaching, peer learning sessions, and knowledge-sharing events to strengthen science and IT education.
4. The proposed pilot schools will be equipped with science laboratories and essential toolkits to promote interactive, hands-on science education that enhances practical learning and student engagement. To support these activities, minor physical renovations will be carried out to upgrade existing facilities. These include wall painting, selective demolition and reconstruction, electrical work, and the installation of appropriate lighting in laboratory rooms. Importantly, no major construction is planned, ensuring minimal disruption to the school environment and regular academic activities. The following six schools have been proposed as pilot sites for the implementation of project activities.

No	Name of school	Project activity	Address
1	School No.109	Science laboratories set up and delivery of equipment	3rd khoroo of Nalaikh district, Ulaanbaatar, Mongolia
2	School No.149	Science laboratories set up and delivery of equipment	20th khoroo of Chingeltei district, Ulaanbaatar, Mongolia
3	School No.157	Science laboratories set up and delivery of equipment	36h khoroo of Bayanzurkh district, Ulaanbaatar, Mongolia
4	School No.42	Science laboratories set up and delivery of equipment	2nd khoroo of Songinokhairkhan district, Ulaanbaatar, Mongolia
5	School No.26	Digital laboratories set up and delivery of equipment	13rd khoroo of Khan-Uul district, Ulaanbaatar, Mongolia
6	School No.53	Digital laboratories set up and delivery of equipment	16th khoroo of Bayanzurkh district, Ulaanbaatar, Mongolia

5. Given the nature of the proposed project activities, the project is anticipated to have minimal environmental impacts and is therefore classified as Category C. In line with this classification, no formal environmental assessment is required. However, a review of the environmental implications of the project activities is recommended to ensure compliance with ADB's 2021 energy policy.

6. As part of this review, a due diligence report has been prepared, considering the natural settings and surroundings of each project site. This report is included in Annex 1 of the Environmental Code of Conduct (ECoC).

Project Impact and Outcome

The impact of the project is to equip Mongolian students with the skills to thrive in the digital era, foster knowledge-sharing, and enable their meaningful contribution to socioeconomic development and climate resilience. This aligns with national and international education and climate strategies. The outcome of the project is that secondary school students in target schools demonstrate improved engagement, confidence, and foundational competencies in scientific reasoning and digital learning. By integrating hands-on, project-based learning approaches and AI-driven educational tools, the project will prepare future-ready learners who can navigate the challenges of a rapidly evolving technological and environmental landscape.

Outputs and Key Activities

7. The project development objective will be achieved through the following outputs:

Output 1. Teachers' capacity for planning and delivering secondary school science and technology classes improved.

Output 2. Science and technology laboratory operationalized.

8. **Output 3.** School-enabling environment for innovation and collaboration in science and technology education strengthened. Strong feature of the project is the establishment and

operation of the creative and innovative laboratory that fosters hands-on experience in science and climate change education for both students and teachers. This space will be inclusive, catering to students with disabilities and those from economically disadvantaged backgrounds. The program will promote more female student participation and invite many female leaders in science and technology who can become role models for students. The laboratory will serve as a hub for knowledge exchange among secondary students, scientists, and industry professionals, promoting skills development through internships, capstone projects, and specialized programs in leadership, project management, and entrepreneurship. It will support the implementation of programs tailored to students with disabilities and from poor families, and foster women's leadership in science and technology.

Legal requirements

9. **ADB Environment safeguards requirements.** According to the requirement of ADB's Safeguard Policy Statement (SPS, 2009), the Project is categorized as "C" for environment since it is likely to have minimal or no negative environmental impacts. With category C, it requires a review of environmental implications and recommends the implementation of ECoC by contractors.

10. **Mongolian safeguards requirements.** The Law on Environmental Impact Assessment (2012) mandates environmental impact screening (General EIA) for new buildings, large-scale restorations with extensions, or activities involving the exploitation of significant natural resources. However, the project activities are limited to minor renovation works in laboratory rooms, the transportation of materials and equipment to the project sites, the unwrapping of equipment at the subproject sites, and the installation of equipment in six selected schools in Ulaanbaatar city. Since these activities do not involve the exploitation or use of natural resources, they do not require environmental impact screening (General EIA) by the Ulaanbaatar City Environmental Department (UBED).

11. Nevertheless, certain common measures must be followed to control noise levels, dust generation, air pollution, and ensure public safety. These measures must comply with Mongolian laws, regulations, and standards, including those related to environmental, health, and safety concerns (see the list in Annex 2).

12. **Purpose of the Environmental Code of Conduct (ECoC).** The ECoC has been prepared to define the environmental due diligence procedures to be followed by the Ministry of Education (MOE) as the Executing Agency, the Department of Education Policy Planning (DEPP) of MOE as the Implementing Agency the Project Implementation Unit (PIU), the participating schools and contractors. The MOE/DEPP/PIU and selected contractors are responsible for ensuring the avoidance or mitigation of any adverse environmental effects that may arise from the proposed project activities with the support of participating schools. As recommended in the ECoC, the PIU and contractors should plan the project activities carefully, including aspects such as work

scheduling and consultation with, as well as notification to, potentially affected individuals and entities. The MOE/DEPP through the PIU, will be responsible for ensuring contractor compliance with the ECoC.

Anticipated Impacts and Mitigation Measures

13. The project activities, under Output 2, involve the delivery of renovation materials and toolkits, minor renovations such as wall painting, wall demolition and construction, electrical work, and lighting installations to create science laboratories for students. However, no major civil work is planned. The anticipated impacts and corresponding mitigation measures are outlined below:

14. **Ecological Impact:** There is no anticipated ecological impact as the project schools are located in urban areas with no sensitive ecological areas nearby. The existing infrastructure ensures no disruption to natural habitats.

15. **Noise:** The delivery of project items and wall demolition may increase noise levels. To minimize disturbance, work will be scheduled during weekends, off-peak hours, or school breaks, reducing the impact on students and staff.

16. **Dust:** Transportation on unpaved roads, along with demolition and renovation activities, may generate dust. To mitigate this, vehicle speeds will be controlled on unpaved roads, water sprinkling will suppress dust, and workers will wear dust masks. Additionally, the area will be wetted, and classrooms will be ventilated during demolition to maintain a safe indoor air environment.

17. **Air quality:** Transportation vehicles involved in the project will be maintained to meet emission standards (MNS5013: 2009 for petrol, MNS5014: 2009 for diesel), turned off when not in use, and managed to reduce engine fugitive gas emissions during the delivery of project equipment and materials, thereby minimizing air pollution and maintaining ambient air quality.

18. **Waste management:** Waste generated from renovation and demolition activities will be managed in accordance with Mongolia's Law on Waste (2017). If asbestos is found during wall demolition, work must stop immediately, the area should be secured, and qualified professionals must safely remove and dispose of the materials according to regulations.

19. **Safety:** As the project will take place in schools, the safety of students and school personnel must be carefully considered. Increased traffic from deliveries may pose accident risks near schools. The PIU/IA will enforce safety protocols, such as scheduling deliveries during low-traffic hours, ensuring speed limits, and assigning safety personnel to monitor the area. Schools will display project details and GRM contact information for addressing concerns.

20. Renovation activities, including wall painting, and electrical work may expose workers to chemical and electrical hazards. Contractors will ensure proper ventilation, use non-toxic paints, provide PPE, and schedule work outside school hours.

21. Wall demolition also poses risks, such as falling debris and potential hazards. Workers will be equipped with PPE, and safety barriers will be in place around the work area. Demolition will be scheduled outside school hours to ensure the safety of students and staff.

22. By implementing these mitigation measures, the project aims to minimize environmental and safety risks while enhancing the educational experience for students. Given the low-impact nature of the activities, the environmental effects are expected to be minimal, and the project has been classified as Category C for environmental impact.

23. However, potential issues such as noise, air pollution, dust, waste management, and public safety will be closely monitored during implementation. Contractors will be required to follow mitigation measures, including controlling noise and dust (especially on unpaved roads), managing vehicle emissions, ensuring safety, and minimizing traffic risks during the project implementation.

24. Additionally, the MOE/DEPP/PIU is encouraged to procure eco-labeled and energy-efficient goods and services, in line with the ADB's Sustainable Public Procurement Guidance Note and national environmental regulations, ensuring environmentally responsible project execution.

Institutional Responsibilities for implementation of Environmental Code of Conduct

25. The **Ministry of Education (MOE)/ Department of Education Policy Planning (DEPP)/ Project Implementation Unit (PIU)**. The Government of Mongolia, through the MOE, DEPP and PIU, will ensure that selected schools set up science laboratories and receive materials and equipment in compliance with national environmental, health, and safety laws, regulations, procedures, and guidelines, as well as the ECoC. The MOE/DEPP through the PIU will oversee the implementation of the ECoC, including the preparation of bidding documents, organizing an induction session on ECoC implementation by contractors, supervision of transportation, and installation of equipment at the project sites, and monitoring and reporting on contractors' compliance with the ECoC. In addition, PIU will establish a GRM to address project related concerns or grievances by the affected communities or entities in coordination with the participating schools and contractors.

26. **Participating schools** will facilitate renovation and installation by providing access, ensuring work areas are prepared, and coordinating with contractors to minimize disruptions. They will also display project information, support compliance with the Environmental Code of Conduct (ECoC), and manage grievances through the established Grievance Redress Mechanism (GRM).

27. **Contractors** will carry out renovations, installations, and related activities while adhering to safety and environmental guidelines in the ECoC. They will report progress, address any issues

promptly, and coordinate closely with schools and the PIU for smooth execution. Contractors will be responsible for the safety of all workers and users.

28. The **Asian Development Bank (ADB)** will be responsible for reviewing and endorsing the implementation report prepared by the PIU, as well as addressing environmental safeguard complaints and incidents related to the project received through the Grievance Redress Mechanism (GRM) during project implementation.

29. **Grievance Redress Mechanism (GRM).** The PIU, in collaboration with the schools, shall establish and maintain a GRM to address and resolve any social or environmental concerns or grievances related to the project. The GRM will ensure that issues raised by affected communities and entities are handled promptly, through a clear and transparent process that is gender-responsive, culturally appropriate, and accessible to all stakeholders at no cost and without fear of retaliation. Each project site will have bulletin boards displaying information about the project and GRM contacts. The GRM will not restrict access to the national legal system. A general outline of the GRM, detailing the three steps for grievance resolution, is provided in the figure below:

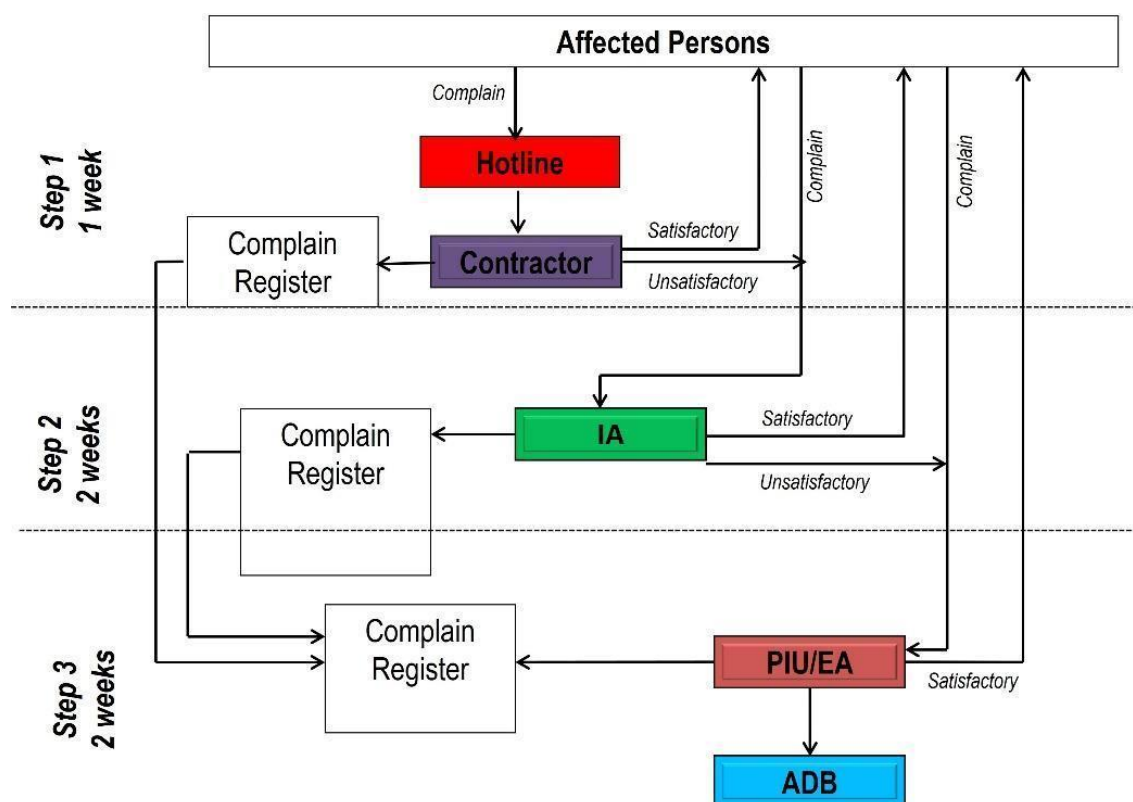


Figure 1 GRM and its steps

Monitoring and Reporting

30. The environmental and safety impacts of the project will be monitored by the MOE/DEPP through the PIU according to the ECoC, which outlines specific mitigation measures to be implemented by contractors during project activities. Contractors will submit ECoC implementation reports upon completing activities, which the PIU will consolidate into a final compliance report. The MOE/DEPP through the PIU will provide ADB with a consolidated ECoC implementation report within 1 month of project completion. In case of receiving complaints through GRM or any accidents happened, MOE/DEPP/PIU must report those to ADB immediately.

31. The following ECoC table outlines the project activities, their potential impacts, and the corresponding mitigation measures to be implemented, ensuring compliance with environmental safeguards throughout the project implementation.

Environmental Code of Conduct (ECoC)

Project activity	Potential impacts	Mitigation Action	Parameters to be monitored	Responsibility	
				Implementation	Supervision
For all project sites					
Project preparation: Comply with all statutory requirements set out by Government	Delay of project activity	MOE/DEPP/PIU and contractors shall comply with relevant laws and regulations in place for project activities and obtain all government approval and secure requisite permits and clearances.	Number of compiled laws and regulations	PIU	MOE/DEPP
Prepare bid documents for equipment supply works	Delay of project activity	Ensure that the Environmental Code of Conduct (ECoC) is included in the tender documents for the contractors responsible for supplying and delivering toolkits, renovation materials as well as for those handling renovation works and toolkit installation. This will ensure that all contractors comply with environmental and safety regulations throughout the execution of their work.	Number of bid documents	PIU	MOE/DEPP
Public Consultation	Misinformation may create misunderstanding among public	Public consultation during project implementation will be organized as needed and mainly rely on informal interviews with the school staff, nearby residents, organizations such as khoroo administration, kindergarten and hospital, commercial entities during site inspections by the PIU.	Number of consultations	PIU/IA	MOE/ ADB
Delivery of project	Increased traffic volumes and higher	The PIU/IA should outline clear safety requirements to ensure compliance with traffic regulations and prevent accidents. Contractors	No traffic accidents	Contractors/School	PIU/DEPP MOE/ ADB

equipment and materials	speeds may lead to road accidents	must adhere to speed limits, use designated roads, and schedule deliveries during low-traffic hours or when students are not present. Drivers should be well-trained and follow safe driving practices. The PIU/IA should assign safety personnel to monitor the area, preventing pedestrian crossings and minimizing risks as vehicles approach the site. Schools should display bulletin boards with project details and GRM contact information for handling complaints.			
	Increased noise level	The PIU/contractors must consult with school management to determine the optimal timing for transporting project items and minimize disruption due to increased noise level. Deliveries should occur outside school hours, from 8 AM to 7 PM, Monday to Friday, to avoid interfering with educational activities. Additionally, the contractor should coordinate with school management and other affected entities to schedule activities and deliveries, considering alternative timings such as evenings, weekends, or school holidays (spring or summer) to further reduce disruption. A plan should be established to ensure low noise levels throughout the project.	<60 dB (A) Reference: MNS 4585:2007 Air quality. General technical requirements	Contractors	PIU/DEPP/ MOE/ ADB
	Vehicle engine fugitive gas emission reduces ambient air quality	Contractors must ensure they have records of regular maintenance of engines to meet the emission requirements and maintain vehicles in good technical condition. Vehicles shall be turned off when not in use. For transportation vehicles, the following two standards requirements for emission should be applied to reduce the impact on air quality: MNS5013: 2009 Petrol engine vehicles – Maximum acceptable level and measuring methods of exhaust emission, and MNS5014: 2009 Diesel engine vehicles – Maximum	MNS5013: 2009 Petrol engine vehicles – Maximum acceptable level and measuring methods of exhaust emission MNS 5014: 2009 Diesel engine vehicles – Maximum	Contractors	PIU/DEPP/ MOE/ ADB

		acceptable level and measuring methods of exhaust emission.	acceptable level and measuring methods of exhaust emission		
	Excessive dust generation	Access roads to Schools No. 159, 42, 23 and 53 have unpaved access roads and transportation vehicles may lead to increased dust, which negatively impacts on the health of contractor's workers, students, school workers and nearby residents living in ger and apartment buildings. Contractors should control vehicle speeds on unpaved access roads and sprinkle water to suppress dust generated during the transportation.	PM2.5 and PM10 Reference: MNS4585:2016 Air Quality. General Technical Requirements	Contractors	PIU/DEPP/ MOE/ ADB
Unpacking of renovation materials and laboratory equipment	Solid waste generation	Within project equipment unloading and unwrapping activity, some solid waste from unwrapping equipment and devices will be generated such as plastic wrapping materials, wood boxes, cartons, ropes and bundles. PIU/Contractors should establish a prior contract with respective local governments in charge of landscaping and public utility management on solid waste management for handling project generated solid waste. In addition, contractors must follow the solid waste management regulations: sort the solid waste generated during the project into recyclables and non-recyclables and dispose into separate wastebins for transportation by local waste management company to designated dump sites. Contact local recyclable collectors or recycling entities for sorted recyclables.	No unattended solid waste generated by the project	Contractors	PIU/DEPP/MO E/ADB
Wall painting	Chemical exposure	Ensure proper ventilation in the classrooms during wall painting. Contractors must provide PPE for workers, use non-toxic paints, and schedule work	No chemical exposure or accidents	Contractors	PIU/DEPP/ MOE/ ADB

		outside school hours in consultation with school management.			
	Solid waste generation	Wall painting and surface preparation generate solid waste, including empty paint cans, used brushes, rollers, rags, masking tape, and discarded cleaning materials, which must be properly disposed of to avoid environmental contamination.	No unattended solid waste generated by the project	PIU/ Contractors	DEPP/MOE/ ADB
Electrical work	Electrical hazards such as electric shocks, fires, and explosions	Contractors must strictly adhere to safety standards, provide proper training for their workers, and ensure the use of appropriate protective equipment during electrical work and light installations in the laboratory rooms. Proper safety measures, such as qualified personnel and good inspections are essential to reduce these risks	No electrical hazards	Contractors	PIU/DEPP/ MOE/ ADB
Site specific requirements. Project site name: School No. 109, 3rd khoroo of Nalaikh district					
Delivery of renovation materials and toolkits	Traffic accident during long distance travel	School No. 109 is located along one of the busiest roads in Nalaikh District, with a commercial shop to the west. The school operates from 8 AM to 7 PM, and the shop is open from 9 AM to 9 PM, attracting both vehicles and pedestrians. To prevent collisions between delivery vehicles and students or shop visitors, the contractor must consult with school management and inform shop management about delivery schedules. Contractors must adhere to speed limits, use designated roads, and schedule transportation during low-traffic hours or when students are not present. The PIU/IA should assign safety personnel to monitor the area, ensuring pedestrians do not cross paths with vehicles and minimizing the risk of accidents as deliveries approach and enter the project site.	No accidents or injuries	Contractors/School	PIU/DEPP/ MOE/ ADB

Wall construction	Increased risk to public safety specifically students and staff	Wall construction and painting pose safety risks, including falling debris, dust, asbestos, harmful fumes, slips, and unauthorized entrance by students and staff. To reduce these risks, workers should wear PPE, secure the work area with barriers, ensure proper ventilation, and schedule work outside school hours to protect everyone.	No accidents or injuries	Contractors/School	PIU/DEPP/ MOE/ ADB
Site specific requirements. Project site name: School No. 149 Address: 20th khoroo of Chingeltei district Project site name: School No. 159 Address: 13rd khoroo of Sukhbaatar district, Ulaanbaatar, Mongolia					
Demolition of wall	Increased risk to workers and school safety	To ensure safety during the wall demolition, contractor workers must be trained in safe practices and proper equipment use. Protective barriers and signs should be placed around the work area to prevent unauthorized access by students and staff. Workers must wear appropriate PPE, including helmets, gloves, and respirators. Demolition work should be scheduled outside school hours to safeguard students and staff. If asbestos is found, work must stop immediately, and the chance find procedure must be implemented.	No accidents or injuries	Contractors/School	PIU/DEPP/ MOE/ADB
	Dust generation	Wall demolition at the school to build the entrance to the storage room will cause excessive dust generation in the school corridor and can spread to surrounding areas and pose health risks. To prevent health risks from spreading to surrounding areas, the area should be wetted, and classrooms should be well-ventilated during the demolition. These measures will help protect the health of workers, students, and school staff.	PM2.5 and PM10 Reference: MNS4585:2016 Air Quality. General Technical Requirements	Contractors	PIU/DEPP/ MOE/ ADB
	Solid waste generation	The wall demolition at the school may generate solid waste (e.g., concrete, bricks, wood) and pose	No unattended solid waste	PIU/Contractors	DEPP/MOE/A DB

		risks of asbestos-containing materials (ACMs) such as plaster or fireproofing sprays. To mitigate these impacts, waste must be sorted into recyclables and non-recyclables, with disposal arranged through local waste management. If ACMs are encountered, the area must be sealed, workers must use appropriate PPE, and qualified professionals should safely remove and dispose of the materials following local regulations. Work should stop immediately until proper procedures are followed.	generated by the project		
Construction of wall	Dust generation	Dust generation may arise from material handling and unpacking. Use covered storage for materials to reduce dust. Regularly clean work areas and remove debris. Wet down dusty surfaces to prevent dust spread if needed. Ensure proper cleanup after activities.	PM2.5 and PM10 Reference: MNS4585:2016 Air Quality. General Technical Requirements	Contractors	PIU/DEPP/MOE/ADB
	Solid waste generation	The construction of a wall generates solid waste, including materials such as excess concrete, broken bricks, wood, and packaging, which must be properly managed to prevent environmental impact. PIU/Contractors should establish a prior contract with respective local governments in charge of landscaping and public utility management on solid waste management for handling project generated solid waste. In addition, contractors must follow the solid waste management regulations: sort the solid waste generated during the project into recyclables and non-recyclables and dispose into separate waste bins for transportation by local waste management company to designated dump sites. Contact local recyclable collectors or recycling entities for sorted recyclables.	No unattended solid waste generated by the project	PIU/Contractors	DEPP/MOE/ADB

Site specific requirements. Project site name: School No. 42 Address: 2nd khoroo of Songinokhairkhan district, Ulaanbaatar, Mongolia					
Delivery of science laboratory items and equipment	Road accident to the pedestrian nearby bus station	Sensitive groups, such as students, school staff, and pedestrians, are at risk of road accidents due to increased traffic near the project site during the transportation of equipment. Pedestrians at bus stops and those using the school entrance, which is close to the vehicle entrance, are particularly vulnerable. To ensure safety, the project contractor must consult with school management and carefully plan delivery schedules. The PIU/IA should ensure contractors follow traffic regulations, use designated roads, and schedule deliveries during low-traffic hours. Schools should also post bulletin boards with project details and GMR contact information to address complaints.	No accident	Contractors/School	PIU/DEPP/ MOE/ ADB
Site specific requirements. Project site name: School No. 26 Address: 13rd khoroo of Khan-Uul district, Ulaanbaatar, Mongolia					
Delivery of digital laboratory items and equipment	Traffic accident during long distance travel	The school's location 35 km from Ulaanbaatar and proximity to a busy main road increase the risk of traffic accidents during project items' deliveries. To mitigate this, the project contractor must coordinate delivery schedules with school management, ensure compliance with traffic regulations, and conduct deliveries during low-traffic hours, while displaying project details and GRM contact information at the school for handling complaints.	No accident	Contractors/School	PIU/DEPP/ MOE/ ADB
Site specific requirements. Project site name: School No. 53 Address: 16th khoroo of Bayanzurkh district, Ulaanbaatar, Mongolia					
Delivery of digital laboratory items and equipment	Excessive dust generation	The access road to this school is unpaved and transportation vehicles may lead to increased dust, which negatively impacts on the health of contractor workers, students, school workers and nearby residents living in apartment buildings. Contractors should control vehicle speeds on unpaved roads and sprinkle water to suppress dust generated during transportation.	PM2.5 and PM10 Reference: MNS4585:2016 Air Quality. General	Contractors	PIU/DEPP/ MOE/ ADB

			Technical Requirements		
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Annex 1. Environmental Due Diligence Report

The Environmental Due Diligence Report (EDDR) for the Project: Support for Innovation and Collaboration in Science and Technology Education in Secondary Schools in Mongolia is in a separate file to avoid formatting problems.

Annex 2. Environmental Laws, Environmental Quality and Health and Safety Standards Relevant to the Project

Relevant laws

Law	Enacted and Amended	Responsible Agency	Brief Description
Law on Environmental Protection	Enacted in 1995 and amended 2017	• Environmental departments of district, province and Soum authorities¹ • Department of Environment and Tourism of MUB	To ensure a safe environment, have ecologically balanced social and economic development, and for the protection of the environment for present and future generations, the proper use of natural resources and the restoration of available resources". Its Article 7 requires the conduct of natural resource assessment and environmental impact assessment to preserve the natural state of the environment, and Article 10, the conduct of environmental monitoring on the state and changes of the environment.
Law on Environmental Impact Assessment	Enacted in January 1998 and last amended in 2012.	• Ministry of Environment and Tourism (MET) • Environmental departments of district authority • Legal entity/Project implementing entity • Mongolian Academy of Sciences	Regulates "relations concerning protection of the environment, prevention of ecological imbalance, the use of natural resources, assessment of the environmental impact and decision-making on the start of a project". It sets out the general requirements and procedures for project screening and conduct of environmental assessment and review.
Law on Land (revised)	Enacted in 2003 and amended 2018	• Ministry of Construction and Urban Development (MCUD); • Administration of Land Affairs, Geodesy and Cartography (ALAGac); • Administration of State Registry of Titles (ASRT)	Regulates the possession & use of land by a citizen, entity & organization, & other related issues. Articles 42/43 provide guidance on removing possessed land & granting of compensation relative to removing.

¹ With recent restructuring of the government system, the State Specialised Inspection Agency (GASI) was dismantled and all responsibilities of this agency were shifted to related ministries.

Law	Enacted and Amended	Responsible Agency	Brief Description
		• Policy, Coordination Department for State Protected Area of the MET	
Law on Plant Protection	Enacted in 1996 and amended in 2017	• Ministry of Environment and Tourism (MET) • Aimag Department of Environment and Tourism • Mongolian Academy of sciences	Regulates the inhibition, protection, inspection of pasturelands & plants
Law on Protection of Cultural Heritage	Enacted in 2014 and amended in 2016.	• MET • Cultural heritage department of the Ministry of Education Culture and Science • Archaeological and Paleontological departments of the Mongolian Academy of sciences (MAS)	Regulates the collection, registration, research, classification, evaluation, preservation, protection, promotion, restoration, possession and usage of cultural heritage including tangible and intangible heritage.
Law on Soil protection and prevention from desertification	Enacted in 2012 and amended in 2015	• MET – including national programs • MAS – mainly laboratories • Local (Municipality, district and Khoroo levels) government authority, including environmental departments	Regulates matters related to protection of soil deterioration, exclamation, and prevention from desertification
Law on Air (revised)	Enacted in 2012 and amended in 2018	• Department of Hydro Meteorology and Environmental Monitoring of MET • Meteorological institute • MOH	Regulates the protection of the atmosphere to provide environmental balance & for the sake of present & future generations. Allows the government to set standard limits to emissions from all sources. Regulates regular monitoring of air pollution, hazardous impacts & changes in small air components such as ozone and hydrogen.

Law	Enacted and Amended	Responsible Agency	Brief Description
		• Clean Air program • Clean Air fund • EIA companies • MET • Air pollution mitigation projects • MAS – laboratories • The National Committee for Reducing Air and Environmental Pollution (NCRAP)	
Law on Waste	Enacted in 2017	• Aimag Departments of Environment and Tourism • MOH - District level infrastructure landscaping service departments • Infrastructure landscaping service companies • MET	Governs the collection, transportation, storage, & depositing in landfills of household & industrial waste, re-using waste as a source of raw materials to eliminate hazardous impacts of household and industrial waste on public health & the environment. Undertakings that generate a significant amount of wastes must dispose of the wastes in designated landfills that meet prescribed standards.
Law on Health	Enacted in 2011 and amended in 2018.	• MOH	This law defines roles and responsibilities of health institutions and their staffs and state policies and general principles for health services
Law on Labour Safety and Hygiene	Enacted in 2008 and amended in 2018.	• MOH	This law defines state policy and control on work conditions, requirements on occupational health and safety conditions and aims to ensure provision of safe labor conditions for employees.

Law	Enacted and Amended	Responsible Agency	Brief Description
Law on Fire Safety	Enacted in 2015	Ulaanbaatar (Municipality of Ulaanbaatar) and aimag/soum government	This regulates affairs regarding fire safety and defines roles of organizations, entities and individuals to ensure fire safety at all places.

Applicable Mongolian National Standards

Air	
MNS 4585:2016	National air quality standards and parameters applies to urban areas
Noise	
MNS 0012-1-009:1985	Standard for noise level in residential areas and civil construction
Occupational Health/Safety	
MNS 12.1.06:1988	General requirements for safety against extreme high noise
MNS 4990:2000	Hygienic requirements in workplace environment
Fire safety	
MNS 0640: 1989	Fire safety requirement

Ambient Noise Standards MNS 4585:2016 & Compared to International Standards

Receptor	MNS 4585:2007		EHS Guidelines (Guidelines for Community Noise. World Health Organization (WHO), 1999)	
Residential, Institutional, Educational	07 00 - 23 00	60 dB(A)	07 00 - 22 00	55 dB(A)
	23 00 - 07 00	45 dB(A)	22 00 - 07 00	45 dB(A)

Soil Quality Standard MNS 5850-2019

Parameter	MNS 5850:2019			
	Soil Mechanical Composition			Maximum Acceptable Amount *
	Clay	Loamy	Sandy	
Pb	100	70	50	100
Cd	3	1.5	1	3
Hg	2	1	05	2
As	6	4	2	6
Cr	150	100	60	150
Cr6+	4	3	2	4
Sn	50	40	30	50
Sr	800	700	600	800
V	150	130	100	150
Cu	100	80	60	100
Ni	150	100	60	150
Co	50	40	30	50
Zn	300	150	100	300
Mo	5	3	2	5
Se	10	8	6	10
B	25	20	15	25

F	200	150	100	200
CN	25	15	10	25

* There are no soil quality International standards for EHS guidelines.