



Oyu Tolgoi LLC

Health, Safety and Environment Management System Procedures

Land Disturbance Permit Procedure

Land Disturbance Permit Procedure

Effective Date: 2016.04.01	Document Number: OT-10-E14-PRC-0003-E	Version: 1.2
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1. PURPOSE

To ensure sustainable stewardship of all lands managed and leased by the business or for which Oyu Tolgoi LLC (OT) may have liability by defining the standards and procedures relevant to land disturbing activities, and ensuring these are adhered to by effectively utilising the Land Disturbance Permit system.

1.1 Aims

Implementation of this procedure is to support OT in the following achievements:

- Compliance with all relevant legal and standard requirements;
- Minimal disturbance to land;
- Preservation of topsoil for progressive rehabilitation and mine closure;
- Mitigation, or where practicable, prevention of land disturbance impacts on water resources, biodiversity, wildlife habitats, cultural heritage, and on the wellbeing of local communities;
- Adherence to the HSE Policy adopted by OT in regard to the implementation of leading practice environmental management; and
- Adherence to requirements outlined in the Environmental and Social Impact Assessment (ESIA).

2. SCOPE

The Land Disturbance Permit Procedure defines the minimum requirements for land disturbance and incorporates these requirements into an internal permitting system. This procedure is applicable to undisturbed and rehabilitated land impacted by OT during the construction, operations and closure phases. Activities planned in previously disturbed land which is not registered in the disturbed area category in OT geodatabase will also comply with this procedure.

The procedure also applies to non-mine related projects managed by or on behalf of OT, including facilities constructed by OT for subsequent use or management by third parties (including government regulatory functions, training institutions, contractor facilities and community organizations).

The procedure will be utilized in conjunction with other internal OT procedures, including the following:

- Priority Plants Protection Procedure (OT-10-E14-PRC-0007);
- Vegetation Monitoring Procedure (OT-0244-00-SWPO-0008)
- Topsoil handling procedure (OT-10-E14-PRC-0001);
- Technical Rehabilitation procedure (OT-10-E14-PRC-0002);
- Spill response procedure (OT-10-E15-PRC-0002)
- Chance find procedure (no reference number available);
- Land Disturbance Control and Rehabilitation Plan (OT-E14-PLN-0005) and
- Mine Closure Plan (OT-10-E14-PLN-0002)
- Biodiversity Management Plan (OT-10-E14-PLN-0003)
- Water Resources Management Plan (OT-10-E11-PLN-0001)
- Atmospheric Emissions Management Plan (OT-10-E12-PLN-0001);

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3. ROLES AND RESPONSIBILITIES

Role	Accountabilities
OT Departments coordinating projects impacting land	<ul style="list-style-type: none"> • Seeks avoidance of disturbance to priority plant species, and therefore, consults with OT Flora Research and Rehabilitation team at a planning stage of every project. • Consults with OT Flora Research and Rehabilitation team on project commencement timing at a planning stage of every project in case priority plants cannot be avoided. • Liaises between the Environmental Department and Earthwork implementation team or Contractors in all stages of LDP processing. • Submits a completed and signed LDP request form along with necessary materials, • Provides earthworks personnel with the relevant information (approved LDPs, reports, maps, guidelines, training, etc.) on proposed works. • Ensures appropriate Job Hazard Analysis (JHA) and other work-related environmental assessments are carried out prior to the proposed work commencement. • Conducts LDP-compliance inspections to ensure earthwork operators or contractors' compliance with requirements stipulated in approved LDPs, and reports to the Environmental Officer - Land after each inspection.
General Manager HSEC	<ul style="list-style-type: none"> • Ensures this procedure is implemented in OT HSEC management
Manager Environment & Biodiversity	<ul style="list-style-type: none"> • Provides supports in effective implementation of this procedure at OT business. • Reviews and approves LDPs in absence of the Specialist Environment role.
Specialist Environment	<ul style="list-style-type: none"> • Updates this procedure in consultation with the HSEC management as required. • Reviews and approves LDPs. • Reviews final reports on technical rehabilitation and signs off on LDP closure for the successful technical rehabilitation sites.
Environmental Officer - Land	<ul style="list-style-type: none"> • Receives, registers, and processes LDP requests. • Conducts a pre-disturbance environmental inspection of the proposed work site. • Outlines permit requirements for an LDP approval. • Conducts technical rehabilitation or LDP-completions inspections, and reports on the conditions to relevant parties. • For the offsite projects, submits reports on successful completion of technical rehabilitation to the HSE Compliance team for an arrangement of State inspection.

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	<ul style="list-style-type: none"> • Prepares LDPs for closure sign-off and circulates the closed copies to relevant teams. • Maintains LDP documentations both electronically and in hard copies.
GIS Officer	<ul style="list-style-type: none"> • Verifies the accuracy of the location and areal information provided in LDP request forms. • Prepares necessary maps for all stages of LDP processing including pre-disturbance, during proposed work implementation, and technical rehabilitation, etc. • Maintains geodatabase on land disturbance and rehabilitation.
Flora research team	<ul style="list-style-type: none"> • Maintains regular communications (quarterly reviewing) with OT Construction Engineering Group and other Departments for early planning of biodiversity surveys in areas of future land disturbance projects. • Advises the Project coordinating teams on selection of project sites with respects to avoidance of disturbance to priority plant species and project commencement timing, if avoidance is impracticable. • Provides expertise comments on LDP requested land considering aspects of soil type, topsoil depth and area, vegetation community, and rare plant species protection, in a signed LDP approval environmental checklist form. • Maintains the Topsoil log sheet on topsoil movement aligning with conditions indicated in the LDPs. • Responsible for transplantation of individuals rare plants species identified in the proposed work area. • Participates in LDP-completion, i.e. technical rehabilitation inspections and confirms whether pre-requisite condition for biological rehabilitation is achieved by providing clear commentaries in written.
Fauna research team	<ul style="list-style-type: none"> • Provides professional conclusive comments on LDP requested lands considering aspects of wildlife and habitat protection, in a signed LDP approval environmental checklist form.
Water resource team	<ul style="list-style-type: none"> • Reviews LDP request materials for protection of water resources as well as of installed monitoring points, and provides clear conclusions and/or conclusive comments, in a signed LDP approval environmental checklist form.
Waste and chemical team	<ul style="list-style-type: none"> • Describes waste and chemical management requirements necessary to be considered in implementation of proposed work, in a signed LDP approval environmental checklist form.
HSE Compliance team	<ul style="list-style-type: none"> • Carries out thorough reviews of LDP request materials by using the HSE Compliance checklist to identify relevant compliance requirements for proposed work commencement, and accordingly provides conclusive comments to the Land team, in a signed HSE Compliance checklist form.

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	<ul style="list-style-type: none"> • Where required, provides LDP requesters with necessary explanations for their comments and/or identified compliance requirements. • Coordinates State inspections at the technical rehabilitation sites accepted in internal inspections by Land and Flora teams. • Circulates Rehabilitation Acts issued by the Local administration to the relevant parties including the Land team for closures of LDPs.
Social Performance department	<ul style="list-style-type: none"> • Informs relevant community members and local stakeholders of any land disturbance activities outside of the OT Lease area prior to commencement, and conduct community consultations, if required. • Provides conclusions and comments on the proposed work in writing in all required subjects specified in the LDP approval community checklist. The subjects include community consultations on the proposed work, noise activities, winter/summer shelters, herders' well, cultural heritage clearance and other. • Shall be involved in meetings with local governmental authorities regarding land disturbing activities outside of the OT Lease area, if such events are required to be held. • Provides Community and cultural heritage inductions to Earthworks team or Contractors. • Monitors Earthworks team or Contractors compliance with the cultural heritage protection requirements if any cultural heritage spots identified nearby the proposed work areas. • Participates in LDP-completion, i.e. rehabilitation inspections, and provides written comments on the rehabilitation conditions from the community relations perspectives to the Environmental Officer - Land.

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Supervisors of Operators performing land disturbance activities	<ul style="list-style-type: none"> • Ensure earthwork operators follow this procedure. • Prior to start of daily work, make sure that earthwork operators are familiar with the scope and requirements of the approved LDP. • Identify and communicate acceptable and unacceptable work methods that are consistent with the LDP. • Ensure the earthwork is performed using the appropriate techniques and equipment. • Instruct the earthwork operators on topsoil removal, transportation and stockpiling procedures, where required. • Ensure the sediment and erosion control measures are implemented and maintained in conformance with the Sediment and Erosion Control Plan for the proposed work site throughout the duration of the LDP. • Ensure earthwork operators are provided with the appropriate protective measures including personal protective equipment (PPE) and general protective equipment. • Ensure requirements indicated in LDP-compliance and Technical rehabilitation inspection reports are followed up and notify the Project coordinating team on completion of the required actions.
Operators performing land disturbance activities	<ul style="list-style-type: none"> • Comply with requirements stipulated in LDPs. • Implement all relevant procedures when performing land disturbing activities. • Follow instructions provided by Supervisors when performing land disturbing activities.
Training Department	<ul style="list-style-type: none"> • Provide induction training for contractors and employees on environmental management associated with earthworks.

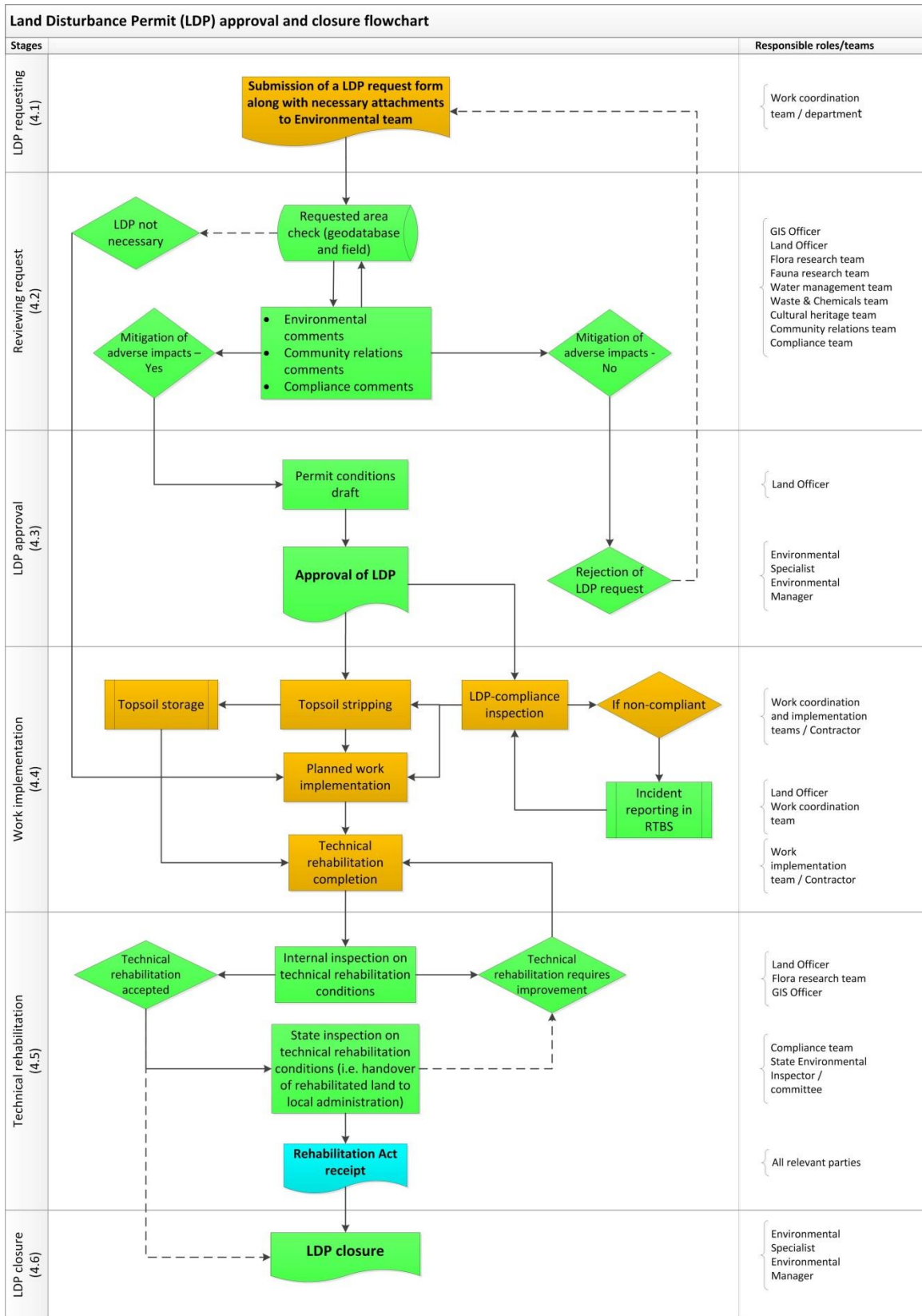
4. PROCEDURE

Land Disturbance Permits are required prior to the commencement of any land disturbing activities involving disturbance to undisturbed and/or rehabilitated land completed by or on behalf of OT. This procedure details the steps from requesting to closing of Land Disturbance Permits, and those include:

1. LDP request
2. Review of LDP request
3. Approval of LDP
4. Land disturbance
5. Technical rehabilitation
6. Closure of LDP

Flows between these steps are illustrated in a flowchart in “Land Disturbance Permit Approval and Closure Flowchart” provided below, and detailed under the respective titles in this section.

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4.1. LDP request

A team coordinating the proposed work project (hereafter Project coordinating team) submits a completed and signed LDP request form (Appendix C) along with necessary materials indicated in the request form to OT Environmental Land team.

Topsoil management and Sediment control plans are the compulsory components of LDP requests for all types of land disturbing activities. The Project coordinating team must prepare site-specific topsoil management plan by using a template (Appendix B) prepared by OT Environmental Department. The following information must be provided as for the sediment and erosion control plan in a relevant section in the LDP request form:

- Detailed plans for surface runoff and erosion control devices;
- A map of all specified sediment and erosion control measures; and
- An implementation schedule for installing and subsequently removing devices.

4.1.1. Onsite projects

LDP requests for onsite projects shall be submitted at least two weeks in advance of a scheduled commencement of proposed works in order to ensure the request is assessed and processed in accordance with this procedure.

Prior to submitting the LDP request the Project coordinating team must consider avoidance of disturbance to land if priority species are present and therefore must have provided the Flora Research team with maps on proposed work site plans to enable preliminary priority plant surveys to be undertaken. The aim of the preliminary surveys will be to establish the presence of any priority plant species and, if present, provide recommendations on avoidance and minimisation measures. Refer to Appendix A for the priority plant species locations identified within the OT mine lease area and to section 4.2.3.1 for further details of how the mitigation hierarchy is applied.

4.1.2. Offsite projects

LDP processing for offsite works requires a minimum of one month due to requirements for external permits and DEIAs which involve various governmental agencies approvals once the LDP requests submitted to the OT Environmental Department.

The selection of locations for offsite projects resulting in land disturbance must be made in consultation with OT Flora Research and Rehabilitation team in an early stage of any project planning to allow avoidance of disturbance to any priority plant species found at the site, in conformance with the OT mitigation hierarchy for potential impacts on biodiversity. The Project coordinating team must provide the Flora Research team with maps on proposed work site plans to enable preliminary priority plant surveys to be undertaken. The aim of the preliminary surveys will be to establish the presence of any priority plant species and if present provide recommendations on avoidance and minimisation measures. If priority plants are found but impacts cannot be avoided, project commencement must be scheduled at a time that allows for the transplantation of priority species at an appropriate time of the year to ensure a maximum survival rate for transplanted priority plants in accordance with the OT Priority Plants Protection Procedure (OT-10-E14-PRC-0007).

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4.2. LDP request review

Reviewing of LDP requests involves various SME teams for considerations of HSE compliance, environmental requirements, and community concerns.

4.2.1. GIS review

Upon receipt of LDP requests, the GIS Officer verifies the accuracy of requested land areal and geographical location information provided in the respective LDP request form by plotting the provided coordinates of the proposed work site in the OT Land management geodatabase and preparing appropriate maps. If the proposed work area is located in OT existing land disturbance register, an LDP approval is not necessary.

If the GIS Officer confirms that the proposed work requires an LDP, the Environmental Officer – Land circulates information on the proposed work to the SME teams and collects their expert comments to enable a decision to be made on whether to grant the permit and if it is granted comments are included into the permit conditions.

Environmental Officer - Land conducts a field verification of the proposed work site location information provided in LDP requests. Photos of the pre-disturbance landscape are taken during field visit and documented in the Pre-disturbance field inspection report (Appendix D).

4.2.2. HSE compliance considerations

All land disturbing activities coordinated by OT project must be compliant with relevant Mongolian laws, standards and requirements defined in ESIA management plans. This is supported by the HSE Compliance team reviewing of received LDP requests.

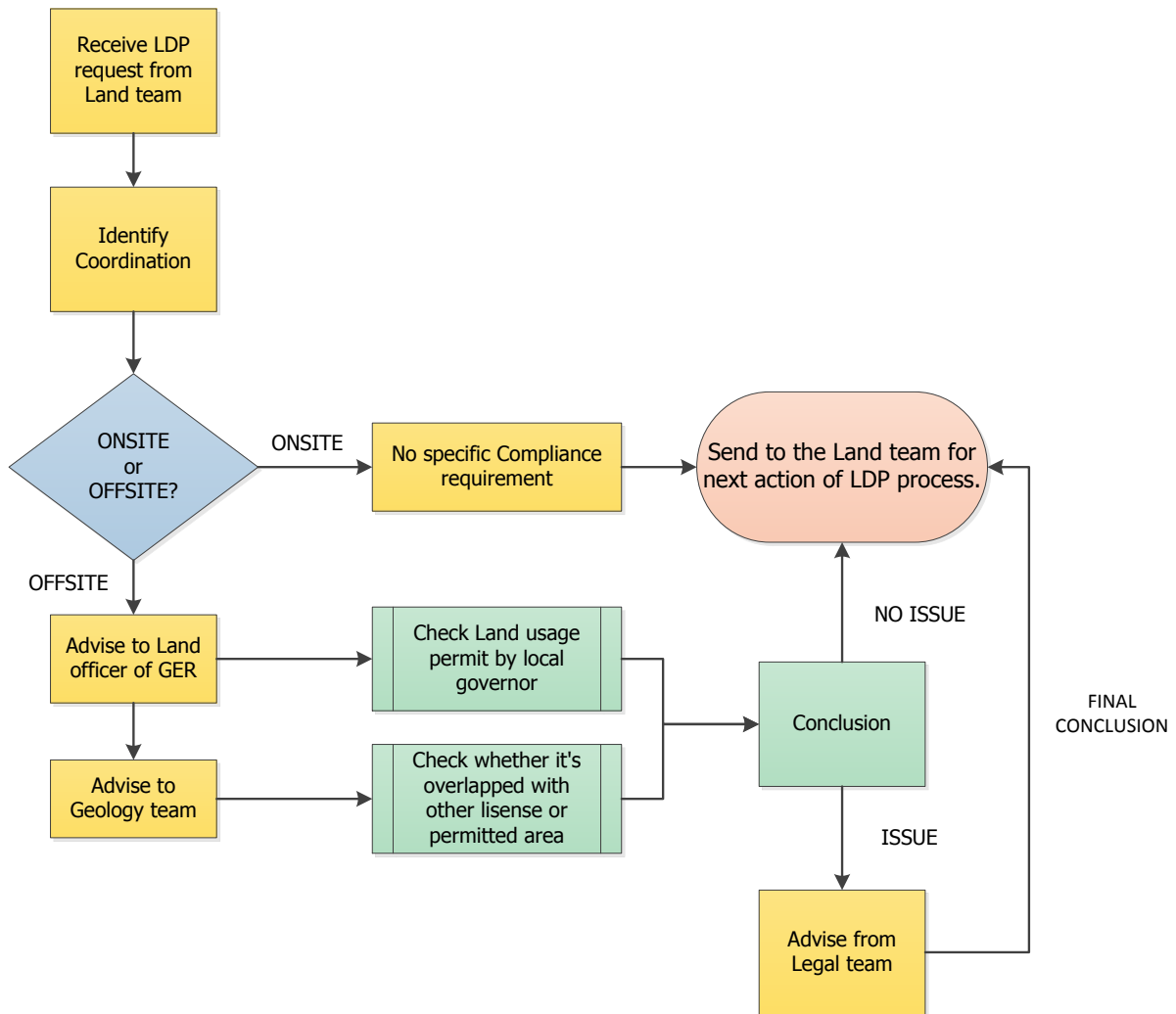
The HSE Compliance team carries out thorough reviews of LDP request materials and provides clearly stated conclusive comments in the HSE Compliance Checklist (Appendix E) with a signature.

Where required, the Compliance team shall provide the Project coordinating team with necessary explanations for their conclusions and/or identified compliance requirements.

HSE Compliance team applies the following flowchart in reviewing LDP requests.

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LDP Compliance Flowchart



4.2.3. Environmental considerations

Environmental requirements to be considered in processing LDP requests include topsoil protection, rare or endangered flora species protection, wildlife and its habitat protection, water resource and quality protection, and waste management requirements. Recommendations from the Environmental Department must be provided to the Environmental Officer - Land in the LDP Approval Environmental Checklist form (Appendix F).

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4.2.3.1. Flora Research and Rehabilitation team

Any OT managed project that plans to undertake land disturbance to undisturbed and/or re-vegetated lands must engage with the Flora Research team prior to submittal of a LDP request as indicated in sections 4.1.1 and 4.1.2. Preliminary surveys to check for the presence of priority plant species in proposed work areas must be conducted at this time and from the results it will be concluded if the proposed work site should be re-located in conformance with the OT mitigation hierarchy with respect to impacts on biodiversity or whether safety concerns or other considerations mean that there are no alternative options for relocating disturbance activities in which case sufficient time must be built into the project planning process to enable the Flora Research team to translocate individual priority plants at an appropriate time of year as per the Priority Plant Protection Procedure (OT-10-E14-PRC-0007).

Priority plants and habitats include:

- 8 priority plants as identified in Annex 1 in the Biodiversity Management Plan (OT-10-E14-PLN-0003);
- Granite outcrop floral communities;
- Riverine Elms and poplar;
- Tall Saxaul Forest; and
- Rangeland habitat.

When a LDP request is received, the Flora Research team conducts a pre-disturbance field inspection in the LDP requested area following the Vegetation Monitoring Procedure (OT-0244-00-SWPO-0008) and Priority Plant Protection Procedure (OT-10-E14-PRC-0007). The inspection surveys record vegetation communities and soil conditions amongst other information for the purposes of planning of future biological rehabilitation. Topsoil in areas of desert sands and semi desert sandy - loam soil which meets the requirements of MNS 5616:2008 need to be stripped and stored for future rehabilitation. However, depending on proposed work scope, it is not always necessary to remove topsoil. Topsoil removal requirement will be defined and the area where topsoil removal is necessary will be delineated by the Flora Research and Rehabilitation team in the pre-disturbance field inspection.

The Flora Research and Rehabilitation team provides clearly stated recommendations on topsoil stripping depth, storage location, delineation of area requiring topsoil preservation, in addition to a clearance notification with respects to rare plant species protection requirements in a signed LDP approval environmental checklist form. The area requiring topsoil stripping and location of topsoil stockpiling given in the recommendations shall be illustrated in appropriate type of map or drawing and enclosed to the checklist.

If any priority plant species are identified in the proposed work area during the pre-disturbance field inspection, firstly, OT will assess the feasibility of relocation of the planned work site to an area where there are no priority plant species or to where there is a lower density of priority plants. If avoidance of disturbance to the identified priority plants is impracticable, the Flora team performs transplantation of the identified priority plant individuals. This must take place at a suitable time of year to increase transplantation success, therefore the Flora Research and Rehabilitation team shall indicate a suitable timing for the project commencement in their comments.

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4.2.3.2. Fauna Research team

The Fauna Research team conducts habitat assessments in the LDP requested area, and provides professional conclusions and/or clearly stated recommendations on wildlife and habitat protection requirements for implementation by the Earthwork operators and Contractors. The fauna team will consider in their review and comments any clearing of vegetation capable of accommodating nests or other important habitats for birds and mammals. If clearing cannot be avoided in these areas, clearing must be conducted outside of breeding periods. The conclusions and recommendations of the review shall be provided in a signed LDP approval environmental checklist form.

The Project coordinating teams and Operators shall take necessary actions on wildlife conservation, as well as on habitat protection following the comments/conclusions from the Fauna team.

Priority wildlife features include:

- Asiatic Wild Ass (*Equus hemionus*);
- Argali (*Ovis ammon*);
- Goitered Gazelle (*Gazella subgutturosa*);
- Houbara Bustard (*Chlamydotis undulate*);
- Short-toed Snake-eagle (*Circaetus gallicus*);

4.2.3.3. Water Resource team

Water resource team reviews LDP request materials with respects to protection of water bodies and also as avoidance of damage to installed facilities at the monitoring points. Conclusions and/or clearly stated conclusive comments based on reviews shall be put in the LDP approval environmental checklist form signature on it. If any concerns or risks from the water protection and legislation perspectives identified in the proposed work site, OT Water resource team shall advise necessary mitigation measures or suitable relocation site for Project coordinating teams for implementation to ensure conformance with OT Water Resource Management Plan (OT-10-E11-PLN-0001) and other relevant legislative requirements. The comments on concerns and/or risks shall be supported with suitable maps and/or other tools for Project coordinating teams' review and comprehension.

Water team shall also complete a Water-Hydrogeological Assessment when reviewing LDP requests for establishing new water supply points including both deep and shallow wells for local communities use.

4.2.3.4. Waste and Chemicals team

Officer Waste and Chemicals reviews LDP request materials to identify waste and chemicals management requirements necessary to be considered in implementation of the planned project in the LDP request area.

Waste and chemicals management related comments mainly cover waste collection method specific to project scope and waste disposal locations, and appropriate handling of chemicals if any used in the permitted work areas. However, because waste and chemicals management requirements vary depending on scope of works, comments shall be based on thorough review of

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the proposed work plan to ensure Earthwork Operators implement the project in compliance with OT waste and chemicals practices and other legislative requirements.

Officer Waste and Chemicals describes necessary waste and chemical management requirements in the LDP approval environmental checklist form and signs on it.

4.2.2. Community relations considerations

The SP Department provides conclusions and comments on the proposed work in all required subjects specified in the signed LDP approval community checklist (Appendix G). The subjects include community consultations on the proposed work, noise activities, winter/summer shelters, herders' well, cultural heritage clearance and other.

4.2.2.1. Community complaints

All construction related activities must be conducted in designated permitted areas only and construction sites clearly demarcated and secured, with appropriate warning signage.

Relevant community members or stakeholders shall be informed of proposed work plans by the SP Department during the LDP request processing stage. A potential noise disturbance to the relevant community members must be communicated at this stage.

All possible efforts must be made by OT to avoid disturbance to herders' wells, winter shelters and sacred places in the local vicinity. If such disturbances cannot be avoided, the project representatives must discuss or negotiate with the local communities, and the SP Department shall be accountable for organizing the meetings and discussions with local communities.

4.2.2.2. Cultural heritage protection

It must be ascertained by an authorized organization that there are no areas of cultural significance, including archaeological and paleontological findings, in the proposed work area. The OT SP Department must provide such clearance to the Environmental Department in a LDP approval SP checklist.

In case of discovery of cultural heritage items or sites during the LDP request processing stage, necessary rescue measures must be taken in accordance with Mongolian Law on Cultural Heritage and a notification or conclusion shall be provided to the Environmental Department to allow further processing particular LDP requests. The OT SP Department is responsible for organizing the rescue works.

If sites or findings of archaeological or paleontological significance are encountered in the proposed work area during the work, the following actions are required to be taken in accordance with the OT Chance Find Procedure:

- All types of earthworks must be ceased in immediate vicinity as soon as an employee or worker becomes aware of the findings.
- The employee shall report the findings to his/her immediate supervisor without delay.
- The informed supervisor shall notify the OT SP Department or Control room immediately.
- The Cultural heritage program team of the RDSP Department must ensure that necessary actions are proceeded in compliance with the Mongolian Law on Cultural Heritage Protection.

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The SP department organizes an induction on OT Chance Find Procedure to earthwork operators or Contractors prior to the proposed works commencement.

4.3. LDP approval

Based on a careful review of all comments collected from SME teams, Environmental Officer Land drafts permit conditions outlining necessary requirements for compliance of all parties involved in the proposed work in section 2 in the LDP form (Appendix H).

Specialist Environment approves the LDP after reviewing the permit conditions.

Rejected requests with identified potential non-conformances or community concerns will be returned to Project coordinating teams for a revision of the project plan with considerations of avoiding those identified concerns. Re-submitted LDP requests will go through the reviewing processes again and will be approved if all potential concerns are resolved or effective mitigation measures are approved by the management role(s), who has/have an approval authorization.

4.4. Work implementation

The proposed work can commence only after the Project coordinating team received an approved LDP and communicated all conditions stipulated in the permit to the earthwork implementation team or Contractor.

The proposed work in the permitted area commences by stripping and storing topsoil.

4.4.1. Topsoil removal and storage

Earthwork operators shall adhere to the OT Topsoil Handling Procedure (OT-10-E14-PRC-0001) at all stages when handling topsoil, which details the stripping and storage requirements for topsoil. Key requirements for topsoil stripping and storage are outlined below

4.4.1.1. Topsoil removal

- The area requiring topsoil stripping shall be free from spills and garbage. Spill contaminated soils shall be cleaned up from the area and transported to the OT Landfarm in accordance with OT Spill Response Procedure (OT-10-E15-PRC-0002) prior to topsoil stripping.
- Topsoil in areas delineated by the Flora Research and Rehabilitation team need to be stripped to a depth indicated in the approved LDP.
- Dust mitigation measures shall be undertaken, for example emptying the loader slowly and keeping the bucket close to the truck while dumping, suspending topsoil stripping in high speed winds;
- If available, topsoil shall be transplanted directly from the area of disturbance to land being rehabilitated;
- Stripped topsoil shall be transported to a designated area for stockpiling, if direct placement of topsoil is not practicable, or alternative arrangement agreed; and
- Topsoil shall not be removed during heavy rain, high winds or when soil is excessively moist.

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4.4.1.2. Topsoil storage

- Boundaries of the designated topsoil stockpile area will be demarcated by the Earthwork team or Contractors prior to commencement of topsoil stockpiling, and must be free from spills and garbage. Spill contaminated soils shall be cleaned up from the area and transported to the OT Landfarm in accordance with OT Spill Response Procedure (OT-10-E15-PRC-0002).
- The surface of the stockpile area shall be loosened by tools/equipment approved by appropriate manager or contractor Supervisor, to a minimum of 50-150 mm depth to facilitate bonding of the topsoil in the stockpile area to the bottom of the stockpiles prior to commencement of topsoil stockpiling.
- Topsoil shall be stockpiled to avoid wind and surface water flow erosion;
- Topsoil stockpiles should have a height of less than 3 meters in order to limit the potential for anaerobic conditions to develop within the soil pile;
- Topsoil stockpiles need to be kept away from hostile waste rock materials and other sources of contamination;
- Sediment movement from stockpiles needs to be prevented using catch drains; and
- Traffic movements over topsoil stockpiles are restricted.

Further requirements for topsoil stripping and stockpiling are provided in the OT Topsoil Handling Procedure (OT-10-E-14-PRC-0001).

4.4.2. LDP-compliance inspection

Conformance with LDP's shall be controlled by the OT Environmental Department for all work performed by the earthwork operators throughout the project.

Compliance inspections are performed by the respective Project coordinating teams to ensure Earthworks operators or Contractors' compliance with conditions stipulated in LDPs. Following each inspection, a report shall be prepared in an LDP-Compliance Inspection form (Appendix I) and submitted to the Environmental Officer - Land in a timely fashion for a review following each inspection.

Any non-compliance with the conditions indicated in LDPs is considered as an environmental incident and thus reported in the RTBS for corrective actions.

4.4.3. Earthwork completion or reclamation

Demobilisation of the earthwork equipment and team is permitted when the work site has been cleared from foreign debris and the area rehabilitated (including topsoil placement, surface scarification and re-contouring). All these activities shall be performed in accordance with OT Technical Rehabilitation Procedure (OT-10-E14-PRC-0002) which guides these activities. LDP conditions may require that rehabilitation includes direct seeding with seedstock native to the area in certain impact areas, which shall occur under the guidance of the Flora Research and Rehabilitation team.

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4.5. Technical rehabilitation inspection

Upon rehabilitation work completion, the Environmental Officer - Land will complete the LDP-completion inspections jointly with the Flora Research and Rehabilitation and also Social Performance teams. The joint inspection group will evaluate the rehabilitation conditions at the work site and prepare a report using LDP-completion inspection form (Appendix J). Should the rehabilitation condition be considered satisfactory the Specialist Environment signs off the final report on rehabilitation conditions and communicates to the relevant parties. LDP-completion inspection reports applying outside of the Mining Licence shall be passed to the HSE Compliance team to confirm the rehabilitated land is safe for public, livestock and wildlife access and therefore ready to be returned to the local administration. The HSE Compliance team coordinates arrangements of State inspections at the internally accepted rehabilitation sites.

Details on technical rehabilitation requirements and inspection process are provided in OT Technical Rehabilitation Procedure (OT-10-E14-PRC-0002).

4.6. LDP closure

Should the rehabilitation condition be considered satisfactory, the Specialist Environment signs off the Completion section of the approved Land Disturbance Permit. A copy of the closed LDP along with the report of the LDP-completion inspection, i.e. rehabilitation inspection is sent to Project coordinating team(s) as for an environmental sign-off to allow demobilization of Contractors or OT earthwork teams from the work site.

LDPs for offsite works will be formally closed out by the OT Environmental Land Team when Rehabilitation Act issued by the local administration is received from the HSE Compliance team.

Complete Land Disturbance Permit documentation including:

- LDP request form completed
- The Pre-disturbance Inspection Report;
- The Land Disturbance Permit;
- LDP approval environmental checklist;
- HSE Compliance checklist for LDP approval
- LDP approval community checklist;
- LDP-compliance inspection reports and evidence of corrective actions being closed out;
- LDP-completion i.e. rehabilitation inspection reports; and
- Rehabilitation Acts for offsite projects

shall be stored electronically and in hard copy at the OT Environmental Department.

5. TRAINING

Knowledge on the Land disturbance permit procedure and implementation of its requirements, topsoil handling and rehabilitation is provided to all OT employees and Contractors in Environmental awareness induction as well as OT Land management training.

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6. DEFINITIONS

Erosion: The wearing away of land surface by wind or water, intensified by land-clearing practices related to farming, residential or industrial development, road building.

Land Disturbance: Any activity on the project area that results in a change or alteration in the existing ground cover (both vegetative and non-vegetative) and/or the existing soil topography. Land disturbing activities include but not limited to development, construction, demolition, clearing, grading, excavation and borrow pits activities.

Land Disturbance Permit: A permit authorizing the commencement of the planned earthwork in accordance to the Land Disturbance Permitting Procedure.

Oyu Tolgoi Project area: All area, including the 6709A OT Mine Lease area as well as offsite areas, predicted to be directly impacted by activities performed by Oyu Tolgoi LLC.

Project coordinating team: A team or role from OT coordinating the proposed work in the LDP request area.

Technical Rehabilitation: First stage of the process by which the unavoidable environmental impacts of land disturbing activities are repaired or remedied.

Sediment: Topsoil, sand, and minerals leaching.

Work Site Plan: A surveyed and engineered graphic representation of a proposed development of a parcel of land describing with reasonable certainty the type and intensity of use thereon.

Stockpiling: Temporary storage of erodible materials in a common location.

Stripping: Removal of soil layer to a specified depth.

Topsoil: A top layer, which is fertile and contains essential organic matters, microorganisms, root stocks and seeds, of surface deposit overlying bedrock.

Land Disturbance Permit Procedure		
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7. REFERENCES AND RELATED DOCUMENTS

	Name	Location
Legal and Other Requirements	<ul style="list-style-type: none"> MNS 5916:2008 Environment. Fertile or topsoil removal and storage during the earth works. MNS 5917:2008 Environment. Reclamation of land destroyed due to mining activities. General technical requirements. Mongolian Law on Environmental Protection, 1995 Mongolian Law on Land, 2002 Mongolian Law on Subsoil, 1998 Mongolian Law on Cultural Heritage Protection, 2014 	Legal register
Oyu Tolgoi HSESC Management System	<ul style="list-style-type: none"> Rio Tinto E-14 Land disturbance control and rehabilitation standard Priority plants protection procedure (OT-10-E14-PRC-0007) Vegetation monitoring procedure (OT-0244-00-SWPO-0008) Topsoil handling procedure (OT-10-E14-PRC-0001) Technical rehabilitation procedure (OT-10-E14-PRC-0002) Chance find procedure (no reference number available) Spill response procedure (OT-10-E15-PRC-0002) Land disturbance control and rehabilitation plan (OT-10-E14-PLN-0005) Mine closure plan (OT-10-E14-PLN-0002) Biodiversity management plan (OT-10-E14-PLN-0003) Water resource management plan (OT-10-E11-PLN-0001) Atmospheric emissions management plan (OT-10-E12-PLN-0001) 	OT Portal
Forms, Checklists, Templates	<ul style="list-style-type: none"> LDP request form (Appendix C) LDP form (Appendix H) Pre-disturbance field inspection form (Appendix D) HSE Compliance checklist for LDP approval (Appendix E) LDP approval environmental checklist (Appendix F) LDP approval community checklist (Appendix G) LDP-compliance inspection form (Appendix I) LDP-completion inspection form (Appendix J) Topsoil management plan template (Appendix B) 	OT Portal
Diagrams, Maps	<ul style="list-style-type: none"> Land disturbance permit approval and closure flowchart Flowchart of HSE Compliance reviewing of LDP requests OT MLA priority plants avoidance areas map (Appendix A) 	Attachment to this procedure

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8. DOCUMENT CONTROL

File Name	OT-10-E14-PRC-0003-E-Land Disturbance Permit Procedure
Description	The Land Disturbance Permit Procedure sets rules for land disturbance and establishes the environmental requirements of formal permitting process. This procedure is applicable to undisturbed and also to rehabilitated lands..
Original Author(s)	Tsetsegsuren Luvsan
Creation Date	2010.02.25
Approved By	Glen Ainsworth, Environmental Manager
Approval Date	2010.04.29
Change Record Number	##

Risk Ranking	Assessment Date	Risk Assessor	Review Schedule	Next Review Date
Moderate	2013.05.06	Dolgor Baasansuren	2 Yearly	2018.02.28

Version	Revision Date	Author(s)	Approved By	Revision Notes
1.1	2012.09.01	Tsetsegsuren. L	Mark Newby	Follow-up on IESC audit comments such as an inclusion of noise nuisance considerations and elaboration of habitat assessment in the LDP request review processes.
1.1	2013.05.06	Tsetsegsuren.L	Mark Newby	Approved version in a new template for Standard Operating Procedures.
1.2	2016.02.29	Tsetsegsuren.L	Dennis Hosack	Word change in Purpose section to align with Scope and Intent of E14 standard; updates in roles and responsibilities; revised flowchart; organized the content to align with the procedure steps; RT and OT Internal audit recommendations reflected; External incident investigation (water bores) recommendation reflected; Cultural heritage law date updated; Incident reporting requirement added; List of references and related documents organized in a table format; 16 comments from Lenders addressed in the procedure.

Appendix A. OT MLA priority plants avoidance areas

