Biodiversity and Eco-Toxicity Assessment Report

2025

الإتحاد للحديد والصلب
UNION IRON & STEEL

Union Iron & Steel
Biodiversity and Eco-Toxicity Commitment

Union Iron & Steel is dedicated to safeguarding the natural environment within and around ICAD Mussafah. Our Sustainability Policy guides our operations under internationally recognised management systems (ISO 14001, etc.), ensuring we reuse process water to prevent habitat disturbance.

We conduct annual environmental, biodiversity, and eco-toxicity assessments as part of our proactive stewardship. In every decision, from sourcing to production, we strive for sustainable resource use, lower emissions, and the protection of ecosystem health.

By monitoring eco-toxicity risks, UIS ensures that chemical use, wastewater discharges, and solid waste management are carefully controlled to avoid harmful impacts on soil, water, and living organisms. This integrated approach to biodiversity and eco-toxicity management reflects our belief that steel-making can coexist with thriving ecosystems, contributing to the UAE's long-term vision of ecological balance and environmental responsibility.

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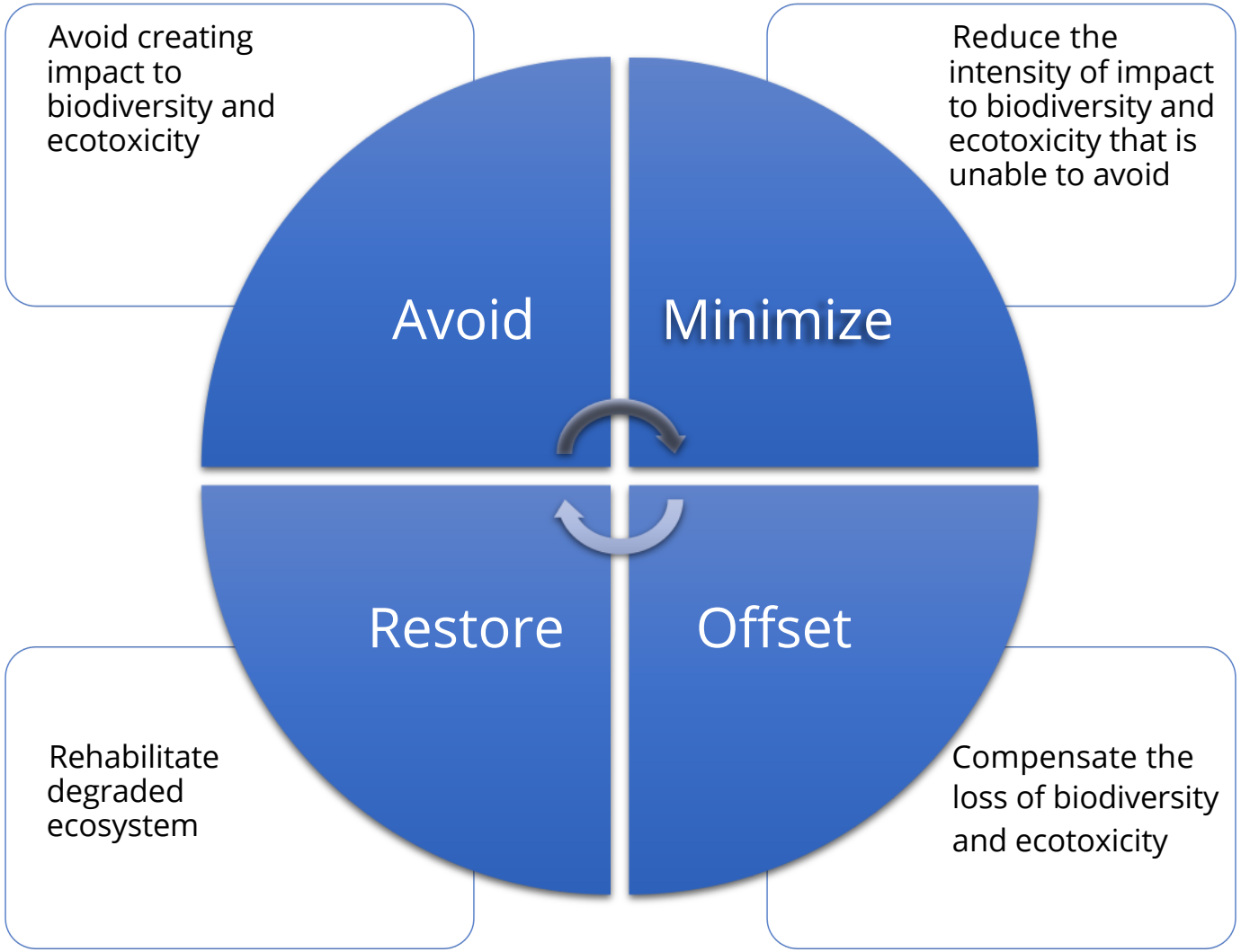
Mitigation Hierarchy Principles

Union Iron and Steel applies Mitigation Hierarchy Principles



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UIS Assessment

Union Iron & Steel's biodiversity assessment and ecotoxicity reaffirms its alignment with Abu Dhabi's sustainability and regulatory standards.

Situated in ICAD-1, Mussafah, the facility operates within a designated industrial zone with no proximity to protected habitats or reserves.

UIS maintains robust controls through wastewater treatment, emission monitoring.

No adverse biodiversity, ecotoxicity impacts or stakeholder concerns have been reported, underscoring our commitment to responsible and sustainable growth.

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Biodiversity and Eco-Toxicity Assessment

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Biodiversity and Eco-Toxicity Assessment Summary

All Union Iron & Steel operations undergo environmental assessments in line with UAE regulatory requirements to identify potential impacts on the environment, including biodiversity. Accordingly, UIS defines and implements management measures to safeguard biodiversity.

UIS’s facility in ICAD-1, Mussafah, operates within a designated industrial zone, ensuring no overlap with biodiversity conservation areas or sensitive habitats. Biodiversity and ecotoxicity assessments confirm negligible impacts on local flora, fauna, and aquatic species. Our operations ensure zero chemical leaching to soil in line with REACH regulations.

The company maintains wastewater treatment systems, emission monitoring. Environmental monitoring plan, supporting continuous improvement and regulatory compliance.

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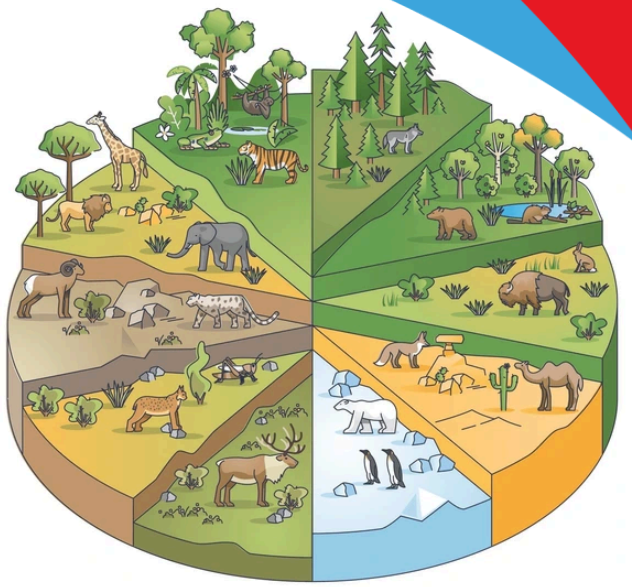
BIODIVERSITY & ECOTOXICITY ASSESSMENT REPORT

Category	Assessment Criteria	Description / Findings	Impact Level	Mitigation / Recommendations	Implementation Status
Biodiversity Terrestrial	Habitat Quality	Site located in an industrial zone with limited natural vegetation; surrounding desert ecosystem.	Low	Maintain landscaping with native drought-tolerant plants to support micro-habitats.	Already Implemented
	Flora & Fauna Species	Very low occurrence of endangered species due to industrial setting; desert-adapted flora/fauna present in surrounding areas.	Low	Maintain landscaping with native drought-tolerant plants to support micro-habitats.	In Practice
	Connectivity	No major ecological corridors near site; industrial area already fragmented.	Low	Maintain landscaping with native drought-tolerant plants to support micro-habitats.	Maintained
Biodiversity Aquatic	Surface/Groundwater Ecosystems	No permanent rivers/wetlands nearby; risk of groundwater contamination from effluents.	Medium	Maintain landscaping with native drought-tolerant plants to support micro-habitats.	Operational

Biodiversity Aquatic	Aquatic Fauna	Limited due to arid desert setting; risk only if discharges reach marine/groundwater.	Low to Medium	Strict discharge controls as per EAD (Environment Agency Abu Dhabi) guidelines.	Implemented
Ecotoxicity – Soil	Contamination Risk	Potential from slag, heavy metals, lubricants, chemical additives.	Medium	Hazardous waste segregation; safe storage & disposal in approved landfills.	Ongoing
Ecotoxicity – Water	Effluent Quality	Cooling water, process wastewater may contain suspended solids, oils, metals.	High	On-site treatment, monitoring, and reuse; comply with Tadweer & EAD discharge standards.	In Place
Ecotoxicity – Air	Emissions	Dust (PM10/PM2.5), NOx, SOx, CO, heavy metal fumes during steel melting/rolling.	High	Bag filters/ESPs installed, continuous emission monitoring, switch to cleaner fuels.	Implemented
Ecotoxicity – Noise/Light	Disturbance	Noise from machinery/rolling mills; light from night operations.	Medium	Noise enclosures, green buffers, downward lighting to reduce sky glow.	In Practice
Overall Impact	Biodiversity & Ecotoxicity Risk	Minimal direct biodiversity loss due to industrial location.	Medium to High	ISO 14001 EMS in place, periodic biodiversity monitoring, environmental audits.	Ongoing

Environmental Stewardship at Union Iron & Steel



Union Iron & Steel Company LLC upholds the highest standards of environmental stewardship, ensuring that its operations fully comply with all applicable UAE environmental regulations.

Although our facility is located within the designated industrial zone of ICAD-1, where impacts on natural habitats are minimal by design, UIS recognizes its corporate duty to safeguard biodiversity and ecological balance. Comprehensive biodiversity and ecotoxicity assessments have been conducted, supported by ongoing environmental management plan (EMP), which consistently demonstrate no significant adverse impact on local flora, fauna, or aquatic species.

As a responsible industrial leader, UIS remains committed to embedding sustainability, compliance, and ecological responsibility into every facet of its operations. Through continuous monitoring, preventive measures, and forward-looking rehabilitation initiatives, the company ensures that steelmaking progress is pursued in harmony with nature and in alignment with the UAE's long-term sustainability vision.

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