

Appendix E: Impact Assessment Tables

August 2019

CONTENTS

E1	PROJECT ASPECTS	1-1
E2	GENERIC IMPACTS REGISTER	2-1
E3	LOCATION-SPECIFIC IMPACTS REGISTER.....	3-1
E4	ENVIRONMENTAL AND SOCIAL MANAGEMENT PLANS.....	4-1
E4.1	Introduction	4-1
E4.2	Construction Phase.....	4-2
E4.2.1	Biodiversity Management Plan	4-2
E4.2.2	Pollution Prevention Plan.....	4-6
E4.2.3	Waste Management Plan	4-10
E4.2.4	Natural Resource Management Plan	4-11
E4.2.5	Soil Management Plan.....	4-12
E4.2.6	Cultural Heritage Management Plan	4-14
E4.2.7	Reinstatement Plan	4-15
E4.2.8	Stakeholder Engagement Plan	4-18
E4.2.9	Resettlement Action Plan	4-24
E4.2.10	Labour Management Plan	4-26
E4.2.11	Project Induced In-Migration Management Plan	4-29
E4.2.12	Procurement and Supply Chain Management Plan	4-30
E4.2.13	Infrastructure and Utilities Management Plan.....	4-31
E4.2.14	Community Health, Safety and Security Plan.....	4-33
E4.2.15	Occupational Health, Safety and Security Plan.....	4-35
E4.2.16	Transport and Road Safety Management Plan	4-38
E4.2.17	Emergency Preparedness and Response Plan.....	4-39
E4.2.18	Monitoring and Reporting Plan	4-39
E4.3	Operational Phase	4-40
E4.3.1	Biodiversity Management Plan	4-40
E4.3.2	Pollution Prevention Plan.....	4-41
E4.3.3	Waste Management Plan	4-42
E4.3.4	Natural Resource Management Plan	4-43
E4.3.5	Soil Management Plan.....	4-44
E4.3.6	Cultural Heritage Management Plan	4-44
E4.3.7	Reinstatement Plan	4-45
E4.3.8	Stakeholder Engagement Plan	4-45
E4.3.9	Resettlement Action Plan	4-47
E4.3.10	Labour Management Plan	4-47
E4.3.11	Project Induced In-Migration Management Plan	4-49
E4.3.12	Procurement and Supply Chain Management Plan	4-49
E4.3.13	Infrastructure and Utilities Management Plan.....	4-50
E4.3.14	Community Health, Safety and Security Plan.....	4-50
E4.3.15	Occupational Health, Safety and Security Plan.....	4-51
E4.3.16	Transport and Road Safety Management Plan	4-52
E4.3.17	Emergency Preparedness and Response Plan.....	4-52
E4.3.18	Monitoring and Reporting Plan	4-53
E4.4	Mitigation Commitments Register	4-54

E5 CONTENT TABLES OF MANAGEMENT PLANS..... 5-1

TABLES

Table E1-1	Project Aspects.....	1-1
Table E2-1	Generic Impacts Register.....	2-1
Table E3-1	Location Specific Impacts Register.....	3-1
Table E4.1-1	Mitigation Measure Codes and Associated Primary Section	4-1
Table E4.2-1	Biodiversity Management Plan – Construction Phase	4-2
Table E4.2-2	Pollution Prevention Plan – Construction Phase.....	4-6
Table E4.2-3	Waste Management Plan – Construction Phase	4-10
Table E4.2-4	Natural Resource Management Plan – Construction Phase	4-11
Table E4.2-5	Soil Management Plan – Construction Phase.....	4-13
Table E4.2-6	Cultural Heritage Management Plan – Construction Phase	4-14
Table E4.2-7	Reinstatement Plan – Construction Phase	4-15
Table E4.2-8	Stakeholder Engagement Plan – Construction Phase.....	4-18
Table E4.2-9	Resettlement Action Plan – Construction Phase	4-24
Table E4.2-10	Labour Management Plan – Construction Phase	4-26
Table E4.2-11	Project Induced In-Migration Management Plan – Construction Phase	4-29
Table E4.2-12	Procurement and Supply Chain Management Plan – Construction Phase	4-30
Table E4.2-13	Infrastructure and Utilities Management Plan – Construction Phase.....	4-31
Table E4.2-14	Community Health, Safety and Security Plan – Construction Phase.....	4-33
Table E4.2-15	Occupational Health, Safety and Security Plan – Construction Phase.....	4-35
Table E4.2-16	Transport and Road Safety Management Plan – Construction Phase	4-38
Table E4.2-17	Emergency Preparedness and Response Plan – Construction Phase	4-39
Table E4.2-18	Monitoring and Reporting Plan – Construction Phase	4-40
Table E4.3-1	Biodiversity Management Plan – Operational Phase.....	4-40
Table E4.3-2	Pollution Prevention Plan – Operational Phase	4-41
Table E4.3-3	Waste Management Plan – Operational Phase	4-43
Table E4.3-4	Natural Resource Management Plan – Operational Phase	4-43
Table E4.3-5	Soil Management Plan – Operational Phase	4-44
Table E4.3-6	Cultural Heritage Management Plan – Operational Phase	4-44
Table E4.3-7	Reinstatement Plan – Operational Phase	4-45
Table E4.3-8	Stakeholder Engagement Plan – Operational Phase	4-46
Table E4.3-9	Resettlement Action Plan – Operational Phase	4-47
Table E4.3-10	Labour Management Plan – Operational Phase	4-47
Table E4.3-11	Project Induced In-Migration Management Plan – Operational Phase	4-49
Table E4.3-12	Procurement and Supply Chain Management Plan – Operational Phase	4-49
Table E4.3-13	Infrastructure and Utilities Management Plan – Operational Phase	4-50
Table E4.3-14	Community Health, Safety and Security Plan – Operational Phase	4-50
Table E4.3-15	Occupational Health, Safety and Security Plan – Operational Phase	4-51
Table E4.3-16	Transport and Road Safety Management Plan – Operational Phase.....	4-52
Table E4.3-17	Emergency Preparedness and Response Plan – Operational Phase	4-53
Table E4.3-18	Monitoring and Reporting Plan – Operational Phase.....	4-53
Table E4.4-1	Project Mitigation Commitments Register and Relevant Management Plans	4-54

E1 PROJECT ASPECTS

Table E1-1 Project Aspects

Abstraction of groundwater
Abstraction of water from river or channel
Accidental release of oil / chemicals
Altered drainage pattern
Community dynamics
Community health
Community safety
Contribution to economy
Damage to third party infrastructure
Disposal of surplus subsoil and aggregate
Disruption to surface water catchments
Disturbance or harm to wildlife
Disturbance or loss of cultural heritage
Disturbance, treatment and disposal of contamination
Dust
Employment
Impeded flow of river or channel
Impeded movement of animals and people
Introduction of competitive species or plant/animal diseases
Loss of habitat
Loss of soil structure, fertility and seed bank
Loss/severance of land and disruption to land-based livelihoods
Management of black and grey water
Management of solid and liquid waste
Management of surplus water from working areas
Noise
Open excavations
Project induced in migration
Provision of goods and services
Release of gases, exhausts and vapours to atmosphere
Resettlement
Restriction of access to fisheries

Table E1-1 Project Aspects

Soil compaction
Soil erosion
Temporary road closure
Use of rail network
Use of raw materials and natural resources
Use of road network
Vibration
Visual intrusion of project components into landscape

E2 GENERIC IMPACTS REGISTER

Table E2-1 Generic Impacts Register

Aspect	VEC	Potential Impact	Phase		High Stakeholder Concern	ESIA Section	Pre-mitigation Impact					Management Plan(s)	Residual Impact				
			C	O			M	D	E	S	SS		M	D	E	S	SS
Soil compaction	Habitats of conservation importance	Impaired re-establishment of vegetation after construction	C		–	8.2	4	2	1	3	10	Reinstatement plan. Community health, safety and security plan.	2	2	1	3	8
Soil erosion	Habitats of conservation importance	Loss of topsoil through erosion by wind or water causing impaired reinstatement	C		–	8.2	6	3	1	4	14	Soil management plan. Reinstatement plan.	4	3	1	4	12
Soil erosion	Habitats of conservation importance	Reduced primary productivity in watercourses, smothering of invertebrates, lethal or sublethal effects on fish, degradation of spawning habitat	C		–	8.2	6	2	2	3	13	Soil management plan. Reinstatement plan.	4	2	2	3	11
Loss of soil structure, fertility and seed bank	Habitats of conservation importance	Poor recolonisation due to anaerobic conditions in stored soil, reduced fertility and loss of entrained seeds	C		–	8.2	6	2	1	3	12	Soil management plan.	4	2	1	3	10
Impeded flow of river or channel	Habitats of conservation importance	Loss of aquatic and water-margin habitats	C		–	8.2	6	2	4	3	15	Soil management plan. Reinstatement plan. Natural resource management plan.	4	2	4	3	13
Abstraction of water from river or channel	Habitats of conservation importance	Loss of aquatic or water-margin habitats	C		–	8.2	6	2	2	3	13	Soil management plan. Reinstatement plan. Natural resource management plan.	4	2	2	3	11
Loss of habitat	Habitats of conservation importance	Permanent loss of habitat from AGIs and operational RoW	C		–	8.2	6	5	2	3	16	Soil management plan. Reinstatement plan. Biodiversity management plan.	4	5	2	3	14
Loss of habitat	Habitats of conservation importance	Temporary loss of habitat from construction activities (RoW, other temporary worksites main camps and pipe yards MCPYs)	C		–	8.2	8	3	2	4	17	Biodiversity management plan.	6	3	2	4	15
Loss of habitat	Habitats of conservation importance	Modified habitat structure following habitat reinstatement after construction	C		–	8.2	6	3	2	4	15	Biodiversity management plan.	4	3	2	4	13
Loss of habitat	Habitats of conservation importance	Loss of wetland and riparian habitat through open cut crossing during construction of the RoW	C		–	8.2	8	2	2	5	17	Biodiversity management plan.	6	2	2	5	15
Introduction of competitive species or plants/animal diseases	Habitats of conservation importance	Poor re-colonisation by local flora through competition by non-natives following reinstatement	C	O	–	8.2	6	5	2	5	18	Biodiversity management plan.	4	5	2	5	16

Table E2-1 Generic Impacts Register

Aspect	VEC	Potential Impact	Phase		High Stakeholder Concern	ESIA Section	Pre-mitigation Impact					Management Plan(s)	Residual Impact				
			C	O			M	D	E	S	SS		M	D	E	S	SS
Disturbance or harm to wildlife	Habitats of conservation importance	Interaction between construction workers and habitats of conservation importance, especially relating to food and fuel	C		–	8.2	6	2	2	3	13	Biodiversity management plan. Project-induced in-migration plan. Community health, safety and security plan. Occupational health, safety and security plan.	4	2	2	3	11
Disturbance or harm to wildlife	Habitats of conservation importance	PIIM to areas around camps causing increased pressure on natural resources (farming, deforestation for fuel)	C	O	–	8.2	6	5	2	3	16	Project-induced in-migration plan.	4	5	2	3	14
Disturbance, treatment and disposal of known/unknown contamination	Flora and fauna species of conservation importance (terrestrial and aquatic)	Injury or mortality of flora and fauna due to mobilisation of soil contaminants	C		–	8.3	6	3	2	5	16	Pollution prevention plan. Waste management plan.	4	3	2	5	14
Disposal of solid and liquid waste	Flora and fauna species of conservation importance (terrestrial and aquatic)	Mortality of flora and fauna through contamination of food and water supply	C		–	8.3	6	2	1	5	14	Pollution prevention plan. Waste management plan.	2	2	1	5	10
Disposal of solid and liquid waste	Flora and fauna species of conservation importance (terrestrial and aquatic)	Increase in vermin around waste dumps and consequent increase in prey availability for carnivorous birds and mammals	C		–	8.3	4	2	1	5	12	Occupational health, safety and security plan. Pollution prevention plan. Waste management plan.	2	2	1	5	10
Disposal of solid and liquid waste	Flora and fauna species of conservation importance (terrestrial and aquatic)	Stress or mortality of flora and fauna due to disposal of solid and liquid waste	C		–	8.3	4	2	1	5	12	Pollution prevention plan. Waste management plan.	2	2	1	5	10
Disposal of surplus water from working areas and hydrotest water	Flora and fauna species of conservation importance (terrestrial and aquatic)	Reduced primary productivity in watercourses, smothering of invertebrates, lethal or sublethal effects on fish, degradation of spawning habitat	C		–	8.3	6	2	3	5	16	Pollution prevention plan. Waste management plan.	4	2	3	5	14
Abstraction of water from river or channel	Flora and fauna species of conservation importance (terrestrial and aquatic)	Decreased water level due to water abstraction for project use leading to loss of aquatic and water-margin habitats causing reduced spawning activity	C		–	8.3	6	2	4	3	15	Biodiversity management plan. Natural resource management plan.	4	2	4	3	13
Abstraction of water from river or channel	Flora and fauna species of conservation importance (terrestrial and aquatic)	Mortality to aquatic organisms from the river through direct abstraction	C		–	8.3	4	2	2	4	12	Biodiversity management plan. Natural resource management plan.	2	2	2	4	10

Table E2-1 Generic Impacts Register

Aspect	VEC	Potential Impact	Phase		High Stakeholder Concern	ESIA Section	Pre-mitigation Impact					Management Plan(s)	Residual Impact				
			C	O			M	D	E	S	SS		M	D	E	S	SS
Disposal of black and grey water	Flora and fauna species of conservation importance (terrestrial and aquatic)	Injury or mortality of flora and fauna due to surface water contamination	C	O	–	8.3	6	4	3	4	17	Waste management plan. Natural resource management plan.	2	2	2	4	10
Abstraction of groundwater	Flora and fauna species of conservation importance (terrestrial and aquatic)	Decreased water level due to water abstraction for project use leading to loss of habitat for stygofauna	C		–	8.3	4	2	2	2	10	Natural resource management plan.	2	2	2	2	8
Loss of habitat for species of conservation importance	Flora and fauna species of conservation importance (terrestrial and aquatic)	Permanent loss of breeding and foraging habitat for fauna through site clearance before construction	C		–	8.3	8	5	2	2	17	Biodiversity management plan.	4	5	2	2	13
Loss of habitat for species of conservation importance	Flora and fauna species of conservation importance (terrestrial and aquatic)	Temporary loss of breeding and foraging habitat for fauna through site clearance before construction	C		–	8.3	8	2	2	2	14	Biodiversity management plan.	4	2	2	2	11
Loss of habitat for species of conservation importance	Flora and fauna species of conservation importance (terrestrial and aquatic)	Temporary habitat fragmentation causing disrupted species movement during construction of RoW	C		–	8.3	8	3	4	4	19	Biodiversity management plan.	6	2	4	4	16
Introduction of competitive species or plants/animal diseases	Flora and Fauna Species of Conservation Importance (Terrestrial and Aquatic)	Modified habitats due to non-native species establishment leading to increased competition and loss of habitat for breeding and foraging	C	O	–	8.3	6	5	2	5	18	Biodiversity management plan.	4	5	2	5	16
Disturbance or harm to wildlife	Flora and fauna species of conservation importance (terrestrial and aquatic)	Increased predation from predator species due to removal of habitat used to shelter and forage	C		–	8.3	6	3	2	5	16	Biodiversity management plan.	4	3	2	5	14
Disturbance or harm to wildlife	Flora and fauna species of conservation importance (terrestrial and aquatic)	Mortality of fauna species of conservation importance due to movement of vehicles and presence of construction plants and structures	C		–	8.3	6	3	2	5	16	Biodiversity management plan. Community health, safety and security plan. Transport and road safety management plan.	4	3	2	5	14

Table E2-1 Generic Impacts Register

Aspect	VEC	Potential Impact	Phase		High Stakeholder Concern	ESIA Section	Pre-mitigation Impact					Management Plan(s)	Residual Impact				
			C	O			M	D	E	S	SS		M	D	E	S	SS
Disturbance or harm to wildlife	Flora and fauna species of conservation importance (terrestrial and aquatic)	Increased gathering of flora and hunting of fauna species of conservation importance from PIIM to construction camps, from improved access along new or upgraded project access roads and access provided by RoW during construction and reinstatement.	C		–	8.3	8	5	3	5	19	Biodiversity management plan. Labour management plan. Community health, safety and security plan. Stakeholder engagement plan.	4	5	3	5	17
Open excavations	Flora and fauna species of conservation importance (terrestrial and aquatic)	Injury or fatality of fauna from falling into excavations if they cannot escape or where they are at increased risk of predation	C		–	8.3	6	2	2	5	15	Biodiversity management plan.	4	2	2	5	13
Noise, vibration and visual disturbance	Flora and fauna species of conservation importance (terrestrial and aquatic)	Disturbance from activities causing noise, vibration, human and vehicle activity affecting breeding and behaviour of animals	C		–	8.3	6	2	2	5	15	Pollution prevention plan.	4	2	2	5	13
Accidental release of oil / chemicals	Flora and fauna species of conservation importance (terrestrial and aquatic)	Stress or mortality to flora and fauna due to spills of hazardous materials into watercourses	C	O	–	8.3	6	4	3	5	18	Pollution prevention plan. Waste management plan.	4	4	3	5	16
Disturbance or harm to wildlife	Flora and fauna species of conservation importance (terrestrial and aquatic)	Maintenance activities causing in minor habitat loss and alteration		O	–	8.3	4	1	1	5	11	Biodiversity management plan.	2	1	1	5	9
Use of raw materials and natural resources	Soil	Depletion of natural resources, for example, aggregate	C		–	8.5	4	4	1	1–3	10–12	Waste management plan. Natural resource management plan.	2	2	1	1–3	6–8
Soil compaction	Soil	Anaerobic conditions developing that restrict plant nutrient uptake efficiency and root development. Loss of drainage capacity and poor plant establishment causing increased surface water ponding, runoff, soil erosion and decreased productivity.	C		–	8.5	8	2	1	1	12–14	Soil management plan. Community health, safety and security plan.	6	1	1	1–3	9–11
Soil erosion	Soil	Loss of topsoil causing reduced fertility and impaired reinstatement	C		–	8.5	8	2	1	1–3	12–14	Soil management plan. Community health, safety and security plan.	6	4	1	1–3	12–14
Soil erosion	Soil	Loss of topsoil causing reduced fertility and impaired reinstatement		O	–	8.5	8	2	1	1–3	12–14	Reinstatement plan. Biodiversity management plan.	6	4	1	1–3	12–14

Table E2-1 Generic Impacts Register

Aspect	VEC	Potential Impact	Phase		High Stakeholder Concern	ESIA Section	Pre-mitigation Impact					Management Plan(s)	Residual Impact				
			C	O			M	D	E	S	SS		M	D	E	S	SS
Loss of soil structure, fertility and seed bank	Soil	Development of anaerobic conditions in stored soil. Mixing of different soil or soil with foreign materials leading to loss of drainage and fertility.	C		Y	8.5	4	2	1	1–4	8–11	Soil management plan.	2	2	1	1–4	6–9
Disturbance, treatment and disposal of known/unknown contamination	Soil	Mobilisation of soil contaminants	C		–	8.5	4	2	1	3	10	Pollution prevention plan. Reinstatement plan.	2	1	1	3	7
Management of waste and accidental release of oil or chemicals	Soil	Soil contamination	C		–	8.5	4	2	1	3	10	Pollution prevention plan. Waste management plan.	2	1	1	3	7
Management of waste and accidental release of oil or chemicals	Soil	Soil contamination		O	–	8.5	2	4	1	3	10	Pollution prevention plan. Waste management plan.	2	2	1	3	8
Management of surplus subsoil and aggregate	Soil	Loss of soil structure, drainage, fertility and seed bank	C		–	8.5	4	1	1	1–3	7–9	Waste management plan.	2	1	1	1–3	5–7
Erosion	Surface water	Erosion of river or channel banks, scour, sediment contamination of surface waters	C	O	–	8.6	4	2	2	3–4	11–13	Soil management plan. Reinstatement plan.	2	2	2	3–4	9–10
Management of waste and accidental release of oil or chemicals	Surface water	Contamination of surface water	C		Y	8.6	4	2	2	3–4	11–13	Soil management plan. Reinstatement plan. Waste management plan.	2	1–2	2	3–4	8–10
Management of waste and accidental release of oil or chemicals	Surface water	Contamination of surface water		O	Y	8.6	4	2	2	3–4	11–13	Pollution prevention plan. Waste management plan. Emergency preparedness and response plan.	2	2–4	1–2	3–4	9–10
Impeded flow of river or channel	Surface water	Deterioration of water quality	C		Y	8.6	4	1	1	3–4	9–10	Biodiversity management plan. Soil management plan. Pollution prevention plan.	2	1	1	3–4	7–8
Altered drainage pattern	Surface water	Trench can act as conduit for groundwater, draining higher areas and flooding lower areas	C	O	Y	8.6	4	4	1	2	11	Reinstatement plan.	2	2	1	2	7
Management of waste and accidental release of oil or chemicals	Groundwater	Potential for groundwater contamination	C	O	–	8.7	2	1–2	1–2	5	9–11	Waste management plan. Pollution prevention plan. Natural resource management plan. Emergency preparedness and response plan.	2	1	1–2	5	9–10
Visual intrusion of project components into landscape	Landscape	Change of landscape character and views caused by project components	C	O	–	8.8	6	2	2	2–4	12–14	Biodiversity management plan. Reinstatement plan. Soil management plan.	4	2	2	2–4	10–12

Table E2-1 Generic Impacts Register

Aspect	VEC	Potential Impact	Phase		High Stakeholder Concern	ESIA Section	Pre-mitigation Impact					Management Plan(s)	Residual Impact				
			C	O			M	D	E	S	SS		M	D	E	S	SS
Disposal of surplus subsoil and aggregate	Landscape	Permanent change of views as a result of disposal of surplus subsoil and aggregate	C		–	8.8	6	5	2	2–4	15–17	Soil management plan. Waste management plan. Reinstatement plan.	4	5	2	4	15
Release of gases, exhausts and vapours to atmosphere	Air quality	Reduced air quality from combustion of fuel in construction equipment, vehicles and vessels.	C		–	8.9	6	2	2	2–4	12–14	Pollution prevention plan.	4	2	2	2–4	10–12
Release of gases, exhausts and vapours to atmosphere	Air quality	Hydrocarbon vapour emissions from refuelling operations causing reduced air quality	C		–	8.9	2	2	2	1	7	Pollution prevention plan.	2	2	2	1	7
Release of gases, exhausts and vapours to atmosphere	Air quality	Exhaust emissions from vehicles causing reduced air quality during operation		O	–	8.9	4	4	2	2–4	12–14	Pollution prevention plan.	2	4	2	2–4	10–12
Dust	Air quality	Nuisance from dust emissions from construction site activities	C		–	8.9	6	2	2	1–3	11–13	Pollution prevention plan. Traffic and road safety management plan.	4	2	2	1–3	9–11
Dust	Air quality	Nuisance from mobilisation of dust by project vehicles		O	–	8.9	4	4	2	1–3	11–13	Pollution prevention plan. Traffic and road safety management plan.	2	4	2	1–3	9–11
Noise	Acoustic environment	Disturbance or nuisance from noise from construction on the RoW	C		–	8.10	10	1	2	4	17	Pollution prevention plan	10	1	2	4	17
Noise	Acoustic environment	Disturbance or nuisance from noise from traffic movement	C	O	–	8.10	10	1	2	4	17	Pollution prevention plan. Transport and road safety management plan	8	1	2	5	16
Noise	Acoustic environment	Disturbance or nuisance from noise during commissioning of the pipeline	C		–	8.10	4	1	2	4	11	Pollution prevention plan	4	1	2	4	11
Vibration	Acoustic environment	Disturbance, nuisance or cosmetic / structural damage from vibration	C		–	8.1	2-8	1	2	4	9-15	Pollution prevention plan. Stakeholder engagement plan	4	1	2	4	11
Employment	Economy	The generation of national employment opportunities leading to an increase in household income and an improvement in living standards	C	O	Y	8.11	B	–	–	–	–	None	B	–	–	–	–
Provision of goods and services	Economy	Project procurement providing opportunities for national businesses	C	O	Y	8.11	B	–	–	–	–	None	B	–	–	–	–
Contribution to economy	Economy	Contribution to national economy from investment	C	O	Y	8.11	B	–	–	–	–	None	B	–	–	–	–
Contribution to economy	Economy	Changes to the fiscal balance	C	O	–	8.11	B	–	–	–	–	None	B	–	–	–	–
Employment	Local economy (nonland-based livelihoods)	The generation of project local employment opportunities	C		Y	8.12	B	–	–	–	–	Procurement and supply chain management plan. Labour management plan. Stakeholder engagement plan.	B	–	–	–	–

Table E2-1 Generic Impacts Register

Aspect	VEC	Potential Impact	Phase		High Stakeholder Concern	ESIA Section	Pre-mitigation Impact					Management Plan(s)	Residual Impact				
			C	O			M	D	E	S	SS		M	D	E	S	SS
Employment	Local economy (nonland-based livelihoods)	The provision of training and skill development opportunities within employment	C		Y	8.12	B	–	–	–	–	Procurement and supply chain management plan. Labour management plan.	B	–	–	–	–
Employment	Local economy (nonland-based livelihoods)	Loss of employment after project construction phase	C		–	8.12	8	2	1	5	16	Procurement and supply chain management plan. Labour management plan. Stakeholder engagement plan.	4	2	1	5	12
Employment	Local economy (nonland-based livelihoods)	Dissatisfaction arising from unmet expectations, over the scale and duration of local employment opportunities	C		Y	8.12	8	2	2	5	17	Project-induced in-migration management plan. Labour management plan. Stakeholder engagement plan.	4	2	3	5	14
Employment	Local economy (nonland-based livelihoods)	Competition over employment opportunities	C		Y	8.12	8	2	2	5	17	Project-induced in-migration management plan. Labour management plan. Stakeholder engagement plan.	4	2	2	5	13
Employment	Local economy (nonland-based livelihoods)	Diversion of workers gaining employment from the project away from existing local businesses or public-sector jobs	C		–	8.12	8	2	2	4	16	Procurement and supply chain management plan. Labour management plan. Stakeholder engagement plan.	4	2	2	4	12
Employment	Local economy (nonland-based livelihoods)	School drop outs seeking employment in the project supply chain	C	O	Y	8.12	8	4	1	4	17	Procurement and supply chain management plan. Monitoring and reporting plan. Labour management plan. Stakeholder engagement plan.	4	4	1	4	13
Provision of goods and services	Local economy (nonland-based livelihoods)	Project procurement providing opportunities for local businesses	C		Y	8.12	B	–	–	–	–	Procurement and supply chain management plan. Labour management plan.	B	–	–	–	–
Provision of goods and services	Local economy (nonland-based livelihoods)	Inflation and effects on supply owing to project procurement	C		–	8.12	6	2	3	4	15	Procurement and supply chain management plan.	4	2	3	3	12
Provision of goods and services	Local economy (nonland-based livelihoods)	Improvements in road conditions for business owners and public transport	C	O	Y	8.12	B	–	–	–	–	Procurement and supply chain management plan. Monitoring and reporting plan. Stakeholder engagement plan.	B	–	–	–	–
Provision of goods and services	Local economy (nonland-based livelihoods)	Restriction of access to small businesses, street vendors and local markets during construction	C		–	8.12	6	1	2	3	12	Resettlement Action Plan. Monitoring and reporting plan. Stakeholder engagement plan.	2	1	2	3	8
Impeded movement of animals	Land-based livelihoods	Due to access restrictions, livestock cause damage to crops	C		–	8.13	10	2	1	5	18	Community health, safety and security plan. Stakeholder engagement plan. Monitoring and reporting plan.	6	2	1	5	14
Accidents due to open excavations	Land-based livelihoods	Livestock falling into excavations	C		Y	8.13	6	3	1	5	15	Community health, safety and security plan. Stakeholder engagement plan. Monitoring and reporting plan.	2	3	1	5	11
Loss/severance of land and disruption to land-based livelihoods	Land-based livelihoods	Permanent loss of land used for crop farming	C		Y	8.13	8	5	1	5	19	Pollution prevention plan. Resettlement action plan. Monitoring and reporting plan.	4	2	1	5	12

Table E2-1 Generic Impacts Register

Aspect	VEC	Potential Impact	Phase		High Stakeholder Concern	ESIA Section	Pre-mitigation Impact					Management Plan(s)	Residual Impact				
			C	O			M	D	E	S	SS		M	D	E	S	SS
Loss/severance of land and disruption to land-based livelihoods	Land-based livelihoods	Temporary loss of grazing land	C		Y	8.13	8	2	1	5	16	Pollution prevention plan. Resettlement action plan. Monitoring and reporting plan.	4	2	1	5	12
Loss/severance of land and disruption to land-based livelihoods	Land-based livelihoods	Increased traffic leading to spread of animal diseases	C		–	8.13	8	3	3	4	18	Transport and road safety management plan. Community health, safety and security plan. Biodiversity management plan.	4	3	3	4	14
Loss/severance of land and disruption to land-based livelihoods	Land-based livelihoods	Permanent loss of access to artisanal mining sites	C		Y	8.13	10	4	1	4	19	Pollution prevention plan. Resettlement action plan. Monitoring and reporting plan.	4	2	1	4	11
Loss/severance of land and disruption to land-based livelihoods	Land-based livelihoods	Permanent loss of natural resources	C		Y	8.13	4	3	2	2	11	Pollution prevention plan. Resettlement action plan. Monitoring and reporting plan.	2	2	2	2	8
Loss/severance of land and disruption to land-based livelihoods	Land-based livelihoods	Reduction in honey production due to loss of habitat	C		Y	8.13	4	3	1	3	11	Pollution prevention plan. Resettlement action plan. Monitoring and reporting plan.	2	2	1	3	8
Disruption to surface water catchments	Land-based livelihoods	Temporary disruption to surface water	C		Y	8.13	6	2	2	5	15	Infrastructure and utilities management plan. Resettlement action plan. Reinstatement plan.	4	2	2	5	13
Restriction of access to fisheries	River-, lake- and marine-based livelihoods	Temporary loss of access to fishing grounds (rivers, lakes, dams and ponds) due to temporary road closures and access restrictions across the RoW	C		–	8.14	6	2	1	4	13	Resettlement action plan. Stakeholder engagement plan.	2	2	1	4	9
Resettlement	River-, lake- and marine-based livelihoods	Permanent loss of access to ponds used for aquaculture due to project land acquisition	C		Y	8.14	6	5	1	5	17	Resettlement action plan. Stakeholder engagement plan. Monitoring and reporting plan.	4	2	1	5	12
Resettlement	Land and property	Permanent loss of private land due to project land acquisition	C		Y	8.15	8	5	1	5	19	Resettlement action plan. Stakeholder engagement plan. Occupational health, safety and security plan. Community health, safety and security plan. Labour management plan. Pollution prevention plan. Monitoring and reporting plan.	4	2	1	5	12
Resettlement	Land and property	Land speculation by third parties	C		Y	8.15	8	4	1	5	18	Resettlement action plan. Stakeholder engagement plan. Occupational health, safety and security plan. Community health, safety and security plan. Labour management plan. Pollution prevention plan. Monitoring and reporting plan.	6	2	1	5	14

Table E2-1 Generic Impacts Register

Aspect	VEC	Potential Impact	Phase		High Stakeholder Concern	ESIA Section	Pre-mitigation Impact					Management Plan(s)	Residual Impact				
			C	O			M	D	E	S	SS		M	D	E	S	SS
Resettlement	Land and property	Land and property speculation by land owners	C		Y	8.15	6	2	1	4	13	Resettlement action plan. Stakeholder engagement plan. Occupational health, safety and security plan. Community health, safety and security plan. Labour management plan. Pollution prevention plan. Monitoring and reporting plan.	4	2	1	4	11
Resettlement	Land and property	New disputes and exacerbation of pre-existing disputes and conflict around land and property	C		Y	8.15	8	4	1	5	18	Resettlement action plan. Stakeholder engagement plan. Occupational health, safety and security plan. Community health, safety and security plan. Labour management plan. Pollution prevention plan. Monitoring and reporting plan.	6	4	1	5	16
Resettlement	Land and property	Permanent loss of physical structures due to project land acquisition	C		Y	8.15	8	5	1	5	19	Resettlement action plan. Stakeholder engagement plan. Occupational health, safety and security plan. Community health, safety and security plan. Labour management plan. Pollution prevention plan. Monitoring and reporting plan.	4	2	1	5	12
Resettlement	Land and property	Permanent loss of local enterprises	C		Y	8.15	8	5	1	5	19	Resettlement action plan. Stakeholder engagement plan. Occupational health, safety and security plan. Community health, safety and security plan. Labour management plan. Pollution prevention plan. Monitoring and reporting plan.	4	2	1	5	12
Resettlement	Land and property	Loss of community infrastructure (schools, clinics, community halls) due to project land acquisition	C		Y	8.15	4	4	2	4	14	Resettlement action plan. Stakeholder engagement plan. Occupational health, safety and security plan. Community health, safety and security plan. Labour management plan. Pollution prevention plan. Monitoring and reporting plan.	2	2	2	4	10
Resettlement	Land and property	Loss of access to informal support networks and social services after physical displacement due to project land acquisition	C		Y	8.15	4	3	1	4	12	Resettlement action plan. Stakeholder engagement plan. Occupational health, safety and security plan. Community health, safety and security plan. Labour management plan. Pollution prevention plan. Monitoring and reporting plan.	2	2	2	4	10
Vibration	Land and property	The generation of vibrations during construction works	C		Y	8.15	8	3	1	5	17	Infrastructure and utilities management plan.	4	3	1	5	13
Employment	Workers' health, safety and welfare	An improvement in the health and safety of people employed from disease awareness and reduction programmes	C	O	–	8.16	B	–	–	–	–	Occupational health, safety and security plan	B	–	–	–	–
Employment	Workers' health, safety and welfare	Risk of wildlife interaction/animal bites and contracting zoonotic diseases	C		–	8.16	8	3	1	5	17	Community health, safety and security plan. Occupational health, safety and security plan. Labour management plan.	4	2	1	5	12

Table E2-1 Generic Impacts Register

Aspect	VEC	Potential Impact	Phase		High Stakeholder Concern	ESIA Section	Pre-mitigation Impact					Management Plan(s)	Residual Impact				
			C	O			M	D	E	S	SS		M	D	E	S	SS
Employment	Workers' health, safety and welfare	Other occupational health and safety incidents causing diseases, injuries and mortality	C	O	–	8.16	8	5	1	5	19	Community health, safety and security plan. Occupational health, safety and security plan. Labour management plan. Transport and road safety management plan.	6	2	1	5	14
Use of Road Network	Social Infrastructure and Services	Road widening and improvement	C		Y	8.17	B	–	–	–	–	N/A	B	–	–	–	–
Use of Rail Network	social infrastructure and services	Railroad improvements between Dar es Salaam and Isaka	C		Y	8.17	B					N/A	B				
Damage to third-party infrastructure (pipelines, cables and community infrastructure)	Social infrastructure and services	Temporary disruption of power supply due to planned outage or accidental damage to cables or other pipelines during pipeline construction	C		–	8.17	4	1	2	2	9	Infrastructure and utilities management plan	2	1	2	2	7
Use of Road Network	Social Infrastructure and Services	Deterioration of road conditions	C		Y	8.17	10	2	2	5	19	Infrastructure and utilities management plan	6	2	2	5	15
Use of Road Network	Social Infrastructure and Services	Traffic congestion leading to delays	C		–	8.17	8	2	2	5	17	Stakeholder engagement plan. Transport and road safety management plan	4	2	2	3	11
Use of Road Network	Social Infrastructure and Services	Disruption of traffic flows	C		–	8.17	4	1	2	5	12	Infrastructure and utilities management plan. Transport and road safety management plan	4	1	2	2	9
Use of rail network	Social infrastructure and services	Temporary disruptions to freight and passenger movements on railroad	C		–	8.17	4	1	3	3	11	Infrastructure and utilities management plan	2	1	3	3	9
Resettlement	Community health	Resettled households' exposure to areas of higher vector densities, increasing the burden of vector-related diseases	C		Y	8.18	6	4	1	5	16	Resettlement action plan.	4	2	1	5	12
Resettlement	Community health	Resettled households' decreased food security	C		Y	8.18	8	3	1	4	16	Resettlement action plan.	4	2	1	4	11
Community health	Community health	Project activities leading to an increase in vector-related diseases	C		–	8.18	8	3	3	4	18	Community health, safety and security plan. Occupational health, safety and security plan. Stakeholder engagement plan.	6	2	3	4	15
Noise	Community health	Excessive noise exposure due to project activities	C		–	8.18	4	2	2	4	12	Community health, safety and security plan. Pollution prevention plan. Stakeholder engagement plan.	2	2	2	4	10
Disposal of Solid and Liquid Waste	Community health	Increased pressure on regional waste management facilities due to project activities	C		–	8.18	8	2	2	5	17	Waste management plan.	4	2	2	5	13

Table E2-1 Generic Impacts Register

Aspect	VEC	Potential Impact	Phase		High Stakeholder Concern	ESIA Section	Pre-mitigation Impact					Management Plan(s)	Residual Impact				
			C	O			M	D	E	S	SS		M	D	E	S	SS
Use of Road Network	Community health	An increase in the burden of disease along the project's transport corridors caused by drivers spreading communicable diseases	C	O	Y	8.18	8	4	3	5	20	Community health, safety and security plan. Occupational health, safety and security plan. Pollution prevention plan. Waste management plan. Stakeholder engagement plan.	6	4	2	5	17
Community safety	Community safety, security and welfare	Community health and safety incidents associated with construction activities causing accidents other than traffic accidents	C		Y	8.19	10	2	1	5	18	Community health, safety and security plan. Occupational health, safety and security plan. Stakeholder engagement plan.	4	2	1	5	12
Community dynamics	Community safety, security and welfare	The capturing of project benefits by men leads to a decrease in quality of life and access to resources for women and children in PACs	C		Y	8.19	8	4	1	5	18	Community health, safety and security plan. Stakeholder engagement plan. Labour management plan. Resettlement action plan.	4	2	1	5	12
Community dynamics	Community safety, security and welfare	Conflict between PACs and project security personnel	C		–	8.19	8	4	2	5	19	Community health, safety and security plan. Stakeholder engagement plan.	4	2	2	5	13
Disturbance or loss of cultural heritage	Tangible and intangible cultural heritage	Increased knowledge of tangible and intangible cultural heritage. Employment of people to survey and investigate cultural heritage affected by the project.	C		Y	8.20	B	–	–	–	–	Cultural heritage management plan	B	–	–	–	–
Disturbance or loss of cultural heritage	Tangible and intangible cultural heritage	Damage, disturbance or disruption of access of unknown Category 1 or Category 2 tangible cultural heritage, such as evidence of previous settlement and graves.	C		TBC	8.20	1–5	1–5	1–2	2–10	5–22	Cultural heritage management plan	1–3	1–5	1–2	2–8	5–18
Disturbance or loss of cultural heritage	Tangible and intangible cultural heritage	Damage, disturbance or disruption of access of unknown Category 3 intangible cultural heritage, such as meeting places, sacred natural sites, rivers or ceremonial ways, traditional dance, rituals, traditional healing and syncretism)	C		TBC	8.20	–	–	–	–	–	Cultural heritage management plan	–	–	–	–	–
Disturbance or loss of cultural heritage	Tangible and intangible cultural heritage	Damage or disturbance of Category 1 and 2 tangible cultural heritage		O	Y	8.20	1–5	1–5	1–2	2–8	5–20	Cultural heritage management plan	1–3	1–5	1–2	2–8	5–18
Disturbance or loss of cultural heritage	Tangible and intangible cultural heritage	Damage or disturbance of Category 3 intangible cultural heritage		O	Y	8.20	–	–	–	–	–	Cultural heritage management plan	–	–	–	–	–

E3 LOCATION-SPECIFIC IMPACTS REGISTER

Table E3-1 Location Specific Impacts Register

KP Start	KP End	Location	District	Aspect	VEC	Potential Impact	Impact Detail	Phase		High Stakeholder Concern	ESIA Section	Pre-mitigation Impact					Management Plan(s)	Residual Impacts				
								C	O			M	D	E	S	SS		M	D	E	S	SS
TBC	TBC	Various protected and internationally recognised areas (see Section 8.2 narrative for information)	TBC	Loss of habitat	Habitats of conservation importance	Temporary loss of habitat within protected and internationally recognised areas during pipeline construction		C			TZ 8.2	6	3	1	3	13	Biodiversity management plan.	4	2	1	3	10
438	472	Burigi–Biharamulo GR and KBA	Muleba, Biharamulo, Chato	Loss of habitat	Habitats of conservation importance	Permanent loss of old-growth forest on ridge (approx. 2% of primary forest within the AOI)		C			TZ 8.2	4	5	4	5	18	Soil management plan. Reinstatement plan. Biodiversity management plan.	4	5	4	5	18
979	996	Itigi-like thicket	Singida, Hanang	Loss of habitat	Habitats of conservation importance	Loss of Itigi-like thicket (2% of Itigi-like thicket within the AOI)		C			TZ 8.2	4	5	4	5	18	Soil management plan. Reinstatement plan. Biodiversity management plan.	4	3	4	5	16
970	1097	Dry Miombo Woodland	Singida, Hanang	Loss of habitat	Habitats of conservation importance	Loss of dry miombo woodland of high bioquality (< 1% of habitat type within AOI)		C			TZ 8.2	2	4	4	5	15	Biodiversity management plan. Reinstatement plan.	2	3	4	5	14
1424	1424	Coastal vegetation mosaic near the Sigi River	Tanga	Loss of habitat	Habitats of conservation importance	Loss of coastal thicket and coastal woodland of high bioquality from within coastal vegetation mosaic (<1% of habitat type within AOI)		C			TZ 8.2	2	4	4	5	15	Biodiversity management plan. Reinstatement plan.	2	3	4	5	14
1442	1442	Coastal vegetation mosaic	Tanga	Loss of habitat	Habitats of conservation importance	Loss of coastal thicket and coastal woodland of high bioquality from within coastal vegetation mosaic (<1% of habitat type within AOI)		C			TZ 8.2	2	4	4	5	15	Biodiversity management plan. Reinstatement plan.	2	3	4	5	14
825	825	PS5	Igunga	Disturbance or Harm to Wildlife	Habitats of conservation importance	NOx emissions and acid deposition causing impaired growth of plants affecting habitat quality			O		TZ 8.2	6	4	2	4	16	Pollution prevention plan.	4	4	2	4	14
1443	1443	MST	Tanga	Disturbance or Harm to Wildlife	Habitats of conservation importance	NOx emissions and acid deposition causing impaired growth of plants affecting habitat quality			O		TZ 8.2	6	4	2	4	16	Pollution prevention plan.	4	4	2	4	14

Table E3-1 Location Specific Impacts Register

KP Start	KP End	Location	District	Aspect	VEC	Potential Impact	Impact Detail	Phase		High Stakeholder Concern	ESIA Section	Pre-mitigation Impact					Management Plan(s)	Residual Impacts				
								C	O			M	D	E	S	SS		M	D	E	S	SS
1443	1443	MST	Tanga	Loss of Habitat and Disturbance or Harm to Wildlife	Habitats of conservation importance	PIIM causing deforestation for fuel and cultivation			O		TZ 8.2	6	5	2	4	17	Project induced in-migration management plan. Labour management plan. Stakeholder engagement plan.	4	5	2	4	15
302	1442	Locations which support Tanzania endemic birds	Throughout pipeline route	Loss of Habitat for Species of Conservation Importance	Flora and fauna species of conservation importance	Temporary loss of nesting habitat for endemic bird through site clearance		C		–	TZ 8.2	4	2	2	4	12	Biodiversity management plan.	2	2	2	4	10
420	645	Ponds and wetlands containing the endemic bubbling puddle frog	Throughout pipeline route	Loss of Habitat for Species of Conservation Importance and Disturbance or Harm to Wildlife	Flora and fauna species of conservation importance	Direct mortality and destruction of breeding habitat for bubbling puddle frog where construction affects ponds		C		–	TZ 8.2	6	2	2	4	14	Biodiversity management plan.	4	2	2	4	12
302	312	Minziro NFR, IBA and KBA	Missenyi	Loss of Habitat for Species of Conservation Importance and Disturbance or Harm to Wildlife	Flora and fauna species of conservation importance	Loss of breeding and foraging habitat and disturbance to species using the reserve through pipeline construction		C		–	TZ 8.3	6	2	2	4	14	Biodiversity management plan. Reinstatement plan.	4	2	2	4	12
302	312	Minziro NFR and IBA	Missenyi	Loss of Habitat for Species of Conservation Importance	Flora and fauna species of conservation importance	Loss of breeding and foraging habitat for ashy red colobus monkey through pipeline construction		C		–	TZ 8.3	6	2	4	5	17	Biodiversity management plan. Reinstatement plan.	4	2	4	5	15
302	312	Minziro NFR and IBA	Missenyi	Disturbance or Harm to Wildlife	Flora and fauna species of conservation importance	Disturbance (noise and visual) to ashy red colobus monkey		C		–	TZ 8.3	4	2	4	5	15	Pollution prevention plan.	2	1	3	5	11
302	312	Minziro NFR and IBA	Missenyi	Loss of Habitat for Species of Conservation Importance and Disturbance or Harm to Wildlife	Flora and fauna species of conservation importance	Habitat loss and disturbance (noise and visual) to birds in the Important Bird Area (IBA) causing restrictions in species' distributions (blue swallow (IUCN vulnerable))		C		–	TZ 8.3	4	3	2	4	13	Biodiversity management plan. Reinstatement plan.	2	2	2	4	10
350	350	Lake Ikimba	Bukoba Rural	Disposal of solid and liquid waste, Disposal of black and grey water, Accidental release of oil / chemicals and Disturbance or Harm to Wildlife	Flora and fauna species of conservation importance	Potential pathway for contamination or sediment during construction on the lake's tributaries and disturbance (noise and visual) affecting birds of conservation importance.		C		–	TZ 8.3	6	1	4	5	16	Soil management plan. Pollution prevention plan. Waste management plan. Biodiversity management plan.	4	1	4	5	14

Table E3-1 Location Specific Impacts Register

KP Start	KP End	Location	District	Aspect	VEC	Potential Impact	Impact Detail	Phase		High Stakeholder Concern	ESIA Section	Pre-mitigation Impact					Management Plan(s)	Residual Impacts				
								C	O			M	D	E	S	SS		M	D	E	S	SS
438	472	Burigi-Biharamulo GR and KBA	Muleba, Biharamulo, Chato	Loss of Habitat for Species of Conservation Importance and Disturbance or Harm to Wildlife	Flora and fauna species of conservation importance	Loss of breeding and foraging habitat for IUCN CR species (white-backed vulture), IUCN EN species (steppe eagle) and multiple keystone species (raptors, owls, lion, leopard)		C		–	TZ 8.3	10	5	4	5	24	Biodiversity management plan. Reinstatement plan.	6	5	4	5	20
438	472	Burigi-Biharamulo GR and KBA	Muleba, Biharamulo, Chato	Disturbance or Harm to Wildlife	Flora and fauna species of conservation importance	Disturbance (noise, visual) to IUCN CR species (white-backed vulture), IUCN EN species (steppe eagle) and multiple keystone species (raptors, owls, lion, leopard) during construction		C		–	TZ 8.3	8	1	2	5	16	Pollution prevention plan. Biodiversity management plan.	4	1	2	5	12
438	472	Burigi-Biharamulo GR and KBA	Muleba, Biharamulo, Chato	Loss of Habitat for Species of Conservation Importance	Flora and fauna species of conservation importance	Loss of breeding and forage habitat for creation of two new access tracks into the reserve		C		–	TZ 8.3	4	5	2	5	16	Reinstatement plan. Biodiversity management plan.	4	2	2	5	13
456	459	Burigi-Biharamulo GR and KBA	Biharamulo	Loss of Habitat for Species of Conservation Importance	Flora and fauna species of conservation importance	Facilitated access leading to habitat loss species in Burigi-Biharamulo GR through increased deforestation, hunting and human activity		C		–	TZ 8.3	8	5	4	5	22	Community health, safety and security plan. Labour management plan. Biodiversity management plan.	6	2	2	5	15
701	701	Coating facility	Nzega	Disturbance or Harm to Wildlife	Flora and fauna species of conservation importance	Disturbance to species using the nearby Mwakalundi FR from construction activities and PIIM around the coating facility		C		–	TZ 8.3	6	2	2	3	13	Stakeholder engagement plan. Labour management plan.	4	2	2	3	11
828	868	Wembere Steppe KBA and IBA	Igunga, Iramba	Loss of Habitat for Species of Conservation Importance	Flora and fauna species of conservation importance	Loss of habitat within the IBA for a range of species it supports including the endemic species: Karamoja Apalis (IUCN VU), grey-breasted spurfowl (IUCN LC) and bubbling puddle frog (IUCN LC)		C		–	TZ 8.3	4	2	1	4	11	Biodiversity management plan. Reinstatement plan.	2	2	1	4	9
828	868	Wembere Steppe KBA and IBA	Igunga, Iramba	Disturbance or Harm to Wildlife	Flora and fauna species of conservation importance	Disturbance (noise and visual) to endemic species: Karamoja Apalis (IUCN vulnerable), grey-breasted spurfowl (IUCN least		C		–	TZ 8.3	6	2	2	4	14	Pollution prevention plan.	4	2	2	4	12

Table E3-1 Location Specific Impacts Register

KP Start	KP End	Location	District	Aspect	VEC	Potential Impact	Impact Detail	Phase		High Stakeholder Concern	ESIA Section	Pre-mitigation Impact					Management Plan(s)	Residual Impacts				
								C	O			M	D	E	S	SS		M	D	E	S	SS
936	936	Singida Lakes IBA	Singida	Disposal of solid and liquid waste, Disposal of black and grey water, Accidental release of oil / chemicals and Disturbance or Harm to Wildlife	Flora and fauna species of conservation importance	Potential pathway for contamination / sediment during construction on tributaries to lakes. Site is an IBA that supports migratory/congregatory species.		C		–	TZ 8.3	4	1	4	5	14	Soil management plan. Pollution prevention plan. Waste management plan. Biodiversity management plan.	2	1	4	5	12
936	996	Itigi-like thicket	Singida	Loss of Habitat for Species of Conservation Importance	Flora and fauna species of conservation importance	Loss of endemic and or range-restricted (Black Star) plant species		C		–	TZ 8.3	8	3	4	5	20	Biodiversity management plan.	6	3	4	5	18
1035	1037	Swaga Swaga Game Reserve	Kondoa	Loss of Habitat for Species of Conservation Importance and Disturbance or Harm to Wildlife	Flora and fauna species of conservation importance	Loss of habitat surrounding the GR and potential disturbance (noise, lighting) which supports IUCN VU species (lion, leopard, elephant) as well as endemic or restricted range species		C		–	TZ 8.3	4	5	2	4	15	Biodiversity management plan.	2	2	2	4	10
1035	1037	MCPY12	Kondoa	Loss of Habitat for Species of Conservation Importance and Disturbance or Harm to Wildlife	Flora and fauna species of conservation importance	Facilitated access leading to habitat loss to species in Swaga Swaga GR through increased deforestation, hunting and human activity.		c	O	–	TZ 8.3	8	5	4	4	21	Biodiversity management plan.	6	2	4	4	16
1028	1097	Miombo Woodland	Kondoa, Chemba	Loss of Habitat for Species of Conservation Importance and Disturbance or Harm to Wildlife	Flora and fauna species of conservation importance	Loss of endemic range-restricted and vulnerable plant species		C		–	TZ 8.3	6	3	2	4	15	Biodiversity management plan.	4	3	2	4	13
1144	1224	Talamai OA and PRS1	Kiteto	Loss of Habitat for Species of Conservation Importance and Disturbance or Harm to Wildlife	Flora and fauna species of conservation importance	Loss of breeding and forage habitat to species of conservation importance through the construction of MCPY13, MCPY14, PRS1 and the pipeline.		C		–	TZ 8.3	6	3-5	4	5	18-20	Biodiversity management plan. Reinstatement plan.	4	3	4	5	16
1224	1238	Kitwai GCA (part of the Masai Steppe IBA)	Kiteto, Kilindi	Loss of Habitat for Species of Conservation Importance and Disturbance or Harm to Wildlife	Flora and fauna species of conservation importance	Loss of breeding and forage habitat to species of conservation importance through the construction of MCPY13, MCPY14, PRS1 and the pipeline.		C		–	TZ 8.3	6	3-5	4	5	18-20	Biodiversity management plan. Reinstatement plan.	4	3	4	5	16
1144	1144	MCPY13	Kiteto	Loss of Habitat for Species of Conservation	Flora and fauna species of	Loss of breeding and forage habitat to species of conservation		C		–	TZ 8.3	6	5	4	5	20	Biodiversity management plan.	4	3	4	5	16

Table E3-1 Location Specific Impacts Register

KP Start	KP End	Location	District	Aspect	VEC	Potential Impact	Impact Detail	Phase		High Stakeholder Concern	ESIA Section	Pre-mitigation Impact					Management Plan(s)	Residual Impacts				
								C	O			M	D	E	S	SS		M	D	E	S	SS
				Importance and Disturbance or Harm to Wildlife	conservation importance	importance through the construction of MCPY13, MCPY14, PRS1 and the pipeline.											Reinstatement plan.					
1238	1238	MCPY14	Kilindi	Loss of Habitat for Species of Conservation Importance and Disturbance or Harm to Wildlife	Flora and fauna species of conservation importance	Loss of breeding and forage habitat to species of conservation importance through the construction of MCPY13, MCPY14, PRS1 and the pipeline.		C	–		TZ 8.3	6	5	4	5	20	Biodiversity management plan. Reinstatement plan.	4	3	4	5	16
1144	1224	Talamai OA	Kiteto	Loss of Habitat for Species of Conservation Importance and Disturbance or Harm to Wildlife	Flora and fauna species of conservation importance	Disturbance (noise, lighting) to IUCN EN species (African wild dog), IUCN VU species (lion, leopard, elephant, giraffe, pancake tortoise) and migrant species (African migrant butterfly)		C	–		TZ 8.3	6	1	2	5	14	Biodiversity management plan.	4	3	4	5	16
1224	1238	Kitwai GCA (part of the Masai Steppe IBA)	Kiteto, Kilindi	Disturbance or Harm to Wildlife	Flora and fauna species of conservation importance	Disturbance (noise, lighting) to IUCN EN species (African wild dog), IUCN VU species (lion, leopard, elephant, giraffe, pancake tortoise) and migrant species (African migrant butterfly)		C	–		TZ 8.3	6	1	2	5	14	Biodiversity management plan.	4	1	2	5	12
1144	1144	MCPY13	Kiteto	Disturbance or Harm to Wildlife	Flora and fauna species of conservation importance	Disturbance (noise, lighting) to IUCN EN species (African wild dog), IUCN VU species (lion, leopard, elephant, giraffe, pancake tortoise) and migrant species (African migrant butterfly)		C	–		TZ 8.3	6	1	2	5	14	Biodiversity management plan.	4	1	2	5	12
1238	1238	MCPY14	Kilindi	Disturbance or Harm to Wildlife	Flora and fauna species of conservation importance	Disturbance (noise, lighting) to IUCN EN species (African wild dog), IUCN VU species (lion, leopard, elephant, giraffe, pancake tortoise) and migrant species (African migrant butterfly)		C	–		TZ 8.3	6	1	2	5	14	Biodiversity management plan.	4	1	2	5	12
1172	1172	PRS1	Kiteto	Disturbance or Harm to Wildlife	Flora and fauna species of conservation importance	Disturbance (noise, lighting) to IUCN EN species (African wild dog), IUCN VU species (lion, leopard, elephant, giraffe, pancake tortoise) and migrant species		C	–		TZ 8.3	6	1	2	5	14	Biodiversity management plan.	4	1	2	5	12

Table E3-1 Location Specific Impacts Register

KP Start	KP End	Location	District	Aspect	VEC	Potential Impact	Impact Detail	Phase		High Stakeholder Concern	ESIA Section	Pre-mitigation Impact					Management Plan(s)	Residual Impacts				
								C	O			M	D	E	S	SS		M	D	E	S	SS
						(African migrant butterfly)																
1144	1224	Talamai OA	Kiteto	Loss of Habitat for Species of Conservation Importance and Disturbance or Harm to Wildlife	Flora and fauna species of conservation importance	Direct mortality and habitat fragmentation for pancake tortoise		C		–	TZ 8.3	6	1	2	5	14	Biodiversity management plan.	4	3	1	4	12
1224	1238	Kitwai GCA (part of the Masai Steppe IBA)	Kiteto, Kilindi	Loss of Habitat for Species of Conservation Importance and Disturbance or Harm to Wildlife	Flora and fauna species of conservation importance	Direct mortality and habitat fragmentation for pancake tortoise		C		–	TZ 8.3	6	1	2	5	14	Biodiversity management plan.	4	3	1	4	12
1144	1144	MCPY13	Kiteto	Loss of Habitat for Species of Conservation Importance and Disturbance or Harm to Wildlife	Flora and fauna species of conservation importance	Direct mortality and habitat fragmentation for pancake tortoise		C		–	TZ 8.3	6	1	2	5	14	Biodiversity management plan.	4	3	1	4	12
1238	1238	MCPY14	Kilindi	Loss of Habitat for Species of Conservation Importance and Disturbance or Harm to Wildlife	Flora and fauna species of conservation importance	Direct mortality and habitat fragmentation for pancake tortoise		C		–	TZ 8.3	6	1	2	5	14	Biodiversity management plan.	4	3	1	4	12
1172	1172	PRS1	Kiteto	Loss of Habitat for Species of Conservation Importance and Disturbance or Harm to Wildlife	Flora and fauna species of conservation importance	Direct mortality and habitat fragmentation for pancake tortoise		C		–	TZ 8.3	6	1	2	5	14	Biodiversity management plan.	4	3	1	4	12
1144	1144	MCPY13	Kiteto	Disturbance or Harm to Wildlife	Flora and fauna species of conservation importance	Disturbance to species using adjacent habitat through increase noise, lighting and human activity at the camp. Exacerbated by PIIM and subsequent induced development		C	O	–	TZ 8.3	8	5	2	5	20	Project induced in-migration management plan. Pollution prevention plan.	6	2	4	5	17
1238	1238	MCPY14	Kilindi	Disturbance or Harm to Wildlife	Flora and fauna species of conservation importance	Disturbance to species using adjacent habitat through increase noise, lighting and human activity at the camp. Exacerbated by PIIM and subsequent induced development		C	O	–	TZ 8.3	8	5	2	5	20	Project induced in-migration management plan. Pollution prevention plan.	6	2	4	5	17
1144	1224	Talamai OA	Kiteto	Loss of Habitat for Species of Conservation Importance and	Flora and fauna species of conservation importance	Use of upgraded access road into reserve by nonproject persons. Facilitated access leading to habitat loss		C	O	–	TZ 8.3	8	5	4	5	22	Biodiversity management plan. Labour management plan. Community	6	5	4	5	20

Table E3-1 Location Specific Impacts Register

KP Start	KP End	Location	District	Aspect	VEC	Potential Impact	Impact Detail	Phase		High Stakeholder Concern	ESIA Section	Pre-mitigation Impact					Management Plan(s)	Residual Impacts				
								C	O			M	D	E	S	SS		M	D	E	S	SS
				Disturbance or Harm to Wildlife		and disturbance to bird and mammal species in Talamai OA through increased deforestation, noise, lighting, hunting and human activity during construction and operation											health, safety and security plan. Stakeholder engagement plan.					
1172	1172	PRS1	Kiteto	Loss of Habitat for Species of Conservation Importance and Disturbance or Harm to Wildlife	Flora and fauna species of conservation importance	Use of upgraded access road into reserve by nonproject persons. Facilitated access leading to habitat loss and disturbance to bird and mammal species in Talamai OA through increased deforestation, noise, lighting, hunting and human activity during construction and operation		C	O	–	TZ 8.3	8	5	4	5	22	Biodiversity management plan. Labour management plan. Community health, safety and security plan. Stakeholder engagement plan.	6	5	4	5	20
1424	1424	Coastal vegetation mosaic near the Sigi River	Tanga	Disturbance or Harm to Wildlife	Flora and fauna species of conservation importance	Loss of high and very high sensitivity plant species		C		–	TZ 8.3	8	4	2	5	19	Biodiversity management plan. Reinstatement plan.	4	4	2	5	15
1443	1443	Coastal vegetation mosaic near the MST	Tanga	Disturbance or Harm to Wildlife	Flora and fauna species of conservation importance	Loss of high and very high sensitivity plant species		C		–	TZ 8.3	8	4	2	5	19	Biodiversity management plan. Reinstatement plan.	4	4	2	5	15
1443	1443	MST	Tanga	Loss of Habitat for Species of Conservation Importance	Flora and fauna species of conservation importance	Habitat loss during construction of pipeline and MST for endemic and migratory species from site clearance		C		–	TZ 8.3	8	5	4	4	21	Biodiversity management plan. Reinstatement plan.	6	5	4	4	19
1443	1443	MST	Tanga	Disturbance or Harm to Wildlife	Flora and fauna species of conservation importance	Disturbance during construction for endemic and migratory species from site clearance		C		–	TZ 8.3	4	1	4	4	13	Biodiversity management plan. Community health, safety and security plan. Transport and road safety management plan.	2	1	4	4	11
1443	1443	MST	Tanga	Loss of Habitat for Species of Conservation Importance and Disturbance or Harm to Wildlife	Flora and fauna species of conservation importance	Upgrade of access road to MST. Loss of breeding and forage habitat and disturbance to endemic and migratory species through increase noise, lighting and human		C		–	TZ 8.3	6	3	2	4	15	Biodiversity management plan. Community health, safety and security plan. Transport and road safety management plan. Project	4	3	2	4	13

Table E3-1 Location Specific Impacts Register

KP Start	KP End	Location	District	Aspect	VEC	Potential Impact	Impact Detail	Phase		High Stakeholder Concern	ESIA Section	Pre-mitigation Impact					Management Plan(s)	Residual Impacts				
								C	O			M	D	E	S	SS		M	D	E	S	SS
						activity during construction of roads											induced in-migration management plan.					
1443	1443	MST	Tanga	Disturbance or Harm to Wildlife	Flora and fauna species of conservation importance	Disturbance (noise, lighting and activity) for endemic and migratory species of conservation importance in surrounding habitats from LOF and MST operation. Exacerbated by PIIM and subsequent induced development			O	–	TZ 8.3	6	5	2	4	17	Biodiversity management plan. Community health, safety and security plan. Transport and road safety management plan. Project induced in-migration management plan.	4	5	2	4	15
420	469	Protected and internationally recognised areas (Ruiga River FR)	Muleba, Biharamulo, Chato	Loss of Habitat Disturbance to Wildlife	Legally protected, internationally or nationally recognised onshore areas	Loss of ecological function and integrity of protected site through in-combination effects on species and habitats		C	O		TZ 8.4	6	2	1	3	12	Biodiversity management plan.	4	2	1	3	10
535	549	Protected and internationally recognised areas (Burigi-Biharamulo FR)	Chato	Loss of Habitat Disturbance to Wildlife	Legally protected, internationally or nationally recognised onshore areas	Loss of ecological function and integrity of protected site through in-combination effects on species and habitats		C	O		TZ 8.4	6	2	1	3	12	Biodiversity management plan.	4	2	1	3	10
551	557	Protected and internationally recognised areas (Uyovu FR)	Chato, Geita	Loss of Habitat Disturbance to Wildlife	Legally protected, internationally or nationally recognised onshore areas	Loss of ecological function and integrity of protected site through in-combination effects on species and habitats		C	O		TZ 8.4	6	2	1	3	12	Biodiversity management plan.	4	2	1	3	10
622	644.5	Protected and internationally recognised areas (Ngogwa Busangi FR)	Mbogwe, Kahama Township Authority	Loss of Habitat Disturbance to Wildlife	Legally protected, internationally or nationally recognised onshore areas	Loss of ecological function and integrity of protected site through in-combination effects on species and habitats		C	O		TZ 8.4	6	2	1	3	12	Biodiversity management plan.	4	2	1	3	10
698	701	Protected and internationally recognised areas (Mwakalundi FR)	Nzega	Loss of Habitat Disturbance to Wildlife	Legally protected, internationally or nationally recognised onshore areas	Loss of ecological function and integrity of protected site through in-combination effects on species and habitats		C	O		TZ 8.4	6	2	1	3	12	Biodiversity management plan.	4	2	1	3	10
302	312	Minziro NFR, IBA and KBA	Missenyi	Loss of Habitat Disturbance to Wildlife	Legally protected, internationally or nationally recognised onshore areas	Loss of ecological function and integrity of protected site through in-combination effects on species and habitats		C	O		TZ 8.4	6	2	1	3	12	Biodiversity management plan.	4	2	2	4	12

Table E3-1 Location Specific Impacts Register

KP Start	KP End	Location	District	Aspect	VEC	Potential Impact	Impact Detail	Phase		High Stakeholder Concern	ESIA Section	Pre-mitigation Impact					Management Plan(s)	Residual Impacts				
								C	O			M	D	E	S	SS		M	D	E	S	SS
438	472	Burigi–Biharamulo GR and KBA	Muleba, Biharamulo, Chato	Loss of Habitat Disturbance to Wildlife	Legally protected, internationally or nationally recognised onshore areas	Loss of ecological function and integrity of protected site through in-combination effects on species and habitats		C	O		TZ 8.4	8	4	2	4	18	Biodiversity management plan. Pollution prevention plan.	6	2	2	4	14
1144	1224	Talamai OA	Kiteto	Loss of Habitat Disturbance to Wildlife	Legally protected, internationally or nationally recognised onshore areas	Loss of ecological function and integrity of protected site through in-combination effects on species and habitats		C	O		TZ 8.4	8	2	2	4	16	Biodiversity management plan. Pollution prevention plan.	6	2	2	4	14
1224	1238	Kitwai GCA	Kiteto, Kilindi	Loss of Habitat Disturbance to Wildlife	Legally protected, internationally or nationally recognised onshore areas	Loss of ecological function and integrity of protected site through in-combination effects on species and habitats		C	O		TZ 8.4	8	2	2	4	16	Biodiversity management plan. Pollution prevention plan.	6	2	2	4	14
1303	1303	Handeni GCA	Kilindi	Loss of Habitat Disturbance to Wildlife	Legally protected, internationally or nationally recognised onshore areas	Loss of ecological function and integrity of protected site through in-combination effects on species and habitats		C	O		TZ 8.4	8	2	2	4	16	Biodiversity management plan. Pollution prevention plan.	6	2	2	4	14
1442	1442	East African Coastal Forest EBA	Tanga	Loss of Habitat Disturbance to Wildlife	Legally protected, internationally or nationally recognised onshore areas	Disturbance to species using habitat surrounding the MST and PIIM leading to increased deforestation and bushmeat hunting leading to a loss of integrity or ecological function		C	O		TZ 8.4	6	5	2	4	17	Biodiversity management plan. Project induced in-migration plan. Stakeholder engagement plan. Pollution prevention plan.	4	5	2	4	15
TBC	TBC	All locations sensitive to soil compaction	TBC	Soil compaction	Soil	Anaerobic conditions developing that restrict plant nutrient uptake efficiency and root development. Loss of drainage capacity and poor plant establishment causing increased surface water ponding, runoff, soil erosion and decreased productivity.		C	–		TZ 8.5	8	2	1	4–5	15–16	Soil management plan. Community health, safety and security plan.	6	1	1	4–5	12–13
TBC	TBC	All locations sensitive to soil erosion	TBC	Soil erosion	Soil	Loss of topsoil causing reduced fertility and impaired reinstatement		C	–		TZ 8.5	8	2	1	5	16	Soil management plan. Community health, safety and security plan.	6	4	1	5	16
604.7	604.7	Kigosi River	Bukombe	Erosion and increased suspended sediment in watercourses	Surface water	Erosion of river or channel banks, scour, sediment contamination of surface waters		C	–		TZ 8.6	6	2	1	3	12	Reinstatement plan. Soil management plan.	4	2	1	3	10

Table E3-1 Location Specific Impacts Register

KP Start	KP End	Location	District	Aspect	VEC	Potential Impact	Impact Detail	Phase		High Stakeholder Concern	ESIA Section	Pre-mitigation Impact					Management Plan(s)	Residual Impacts				
								C	O			M	D	E	S	SS		M	D	E	S	SS
713.1	713.1	Nawa River	Nzega	Erosion and increased suspended sediment in watercourses	Surface water	Erosion of river or channel banks, scour, sediment contamination of surface waters		C		–	TZ 8.6	6	2	1	3	12	Reinstatement plan. Soil management plan.	4	2	1	3	10
729	729	Floodplain draining to the Nzega urban water-supply reservoir	Nzega	Erosion and increased suspended sediment in watercourses	Surface water	Erosion of river or channel banks, scour, sediment contamination of surface waters		C		–	TZ 8.6	6	2	1	3	12	Reinstatement plan. Soil management plan.	4	2	1	3	10
739.8	739.8	Ephemeral watercourse	Nzega	Erosion and increased suspended sediment in watercourses	Surface water	Erosion of river or channel banks, scour, sediment contamination of surface waters		C		–	TZ 8.6	6	2	1	3	12	Reinstatement plan. Soil management plan.	4	2	1	3	10
796.7	796.7	Ephemeral watercourse	Igunga	Erosion and increased suspended sediment in watercourses	Surface water	Erosion of river or channel banks, scour, sediment contamination of surface waters		C		–	TZ 8.6	6	2	1	3	12	Reinstatement plan. Soil management plan.	4	2	1	3	10
813.6	813.6	Ephemeral watercourse	Igunga	Erosion and increased suspended sediment in watercourses	Surface water	Erosion of river or channel banks, scour, sediment contamination of surface waters		C		–	TZ 8.6	6	2	1	3	12	Reinstatement plan. Soil management plan.	4	2	1	3	10
854.8	854.8	Kinkungu River	Iramba	Erosion and increased suspended sediment in watercourses	Surface water	Erosion of river or channel banks, scour, sediment contamination of surface waters		C		–	TZ 8.6	6	2	1	3	12	Reinstatement plan. Soil management plan.	4	2	1	3	10
1044	1044	Bubu River	Kondoa	Erosion and increased suspended sediment in watercourses	Surface water	Erosion of river or channel banks, scour, sediment contamination of surface waters		C		–	TZ 8.6	6	2	1	3	12	Reinstatement plan. Soil management plan.	4	2	1	3	10
1064	1064	Bubu tributary	Chemba	Erosion and increased suspended sediment in watercourses	Surface water	Erosion of river or channel banks, scour, sediment contamination of surface waters		C		–	TZ 8.6	6	2	1	3	12	Reinstatement plan. Soil management plan.	4	2	1	3	10
1337	1337	Mnyuzi River	Handeni	Erosion and increased suspended sediment in watercourses	Surface water	Erosion of river or channel banks, scour, sediment contamination of surface waters		C		–	TZ 8.6	6	2	1	3	12	Reinstatement plan. Soil management plan.	4	2	1	3	10
914.7	914.7	Watercourse at MCPY11	Singida	Erosion and increased suspended sediment in watercourses	Surface water	Erosion of river or channel banks, scour, sediment contamination of surface waters		C		–	TZ 8.6	4	2	1	4	11	Reinstatement plan. Soil management plan.	4	2	1	3	10

Table E3-1 Location Specific Impacts Register

KP Start	KP End	Location	District	Aspect	VEC	Potential Impact	Impact Detail	Phase		High Stakeholder Concern	ESIA Section	Pre-mitigation Impact					Management Plan(s)	Residual Impacts				
								C	O			M	D	E	S	SS		M	D	E	S	SS
1144	1144	Watercourse at MCPY13	Kiteto	Erosion and increased suspended sediment in watercourses	Surface water	Erosion of river or channel banks, scour, sediment contamination of surface waters		C		–	TZ 8.6	4	2	1	4	11	Reinstatement plan. Soil management plan.	4	2	1	3	10
1318	1318	Watercourse at MCPY15	Handeni Township Authority	Erosion and increased suspended sediment in watercourses	Surface water	Erosion of river or channel banks, scour, sediment contamination of surface waters		C		–	TZ 8.6	4	2	1	4	11	Reinstatement plan. Soil management plan.	4	2	1	3	10
931.1	931.1	Watercourse at PS1	Singida	Erosion and increased suspended sediment in watercourses	Surface water	Erosion of river or channel banks, scour, sediment contamination of surface waters		C		–	TZ 8.6	6	2	1	3	12	Reinstatement plan. Soil management plan.	4	2	1	3	10
419	419	ERU-MCPY6 at road KP3.5 and 5.9	Muleba	Management of waste and accidental release of oil or chemicals	Surface water	Contamination of surface water		C		Y	TZ 8.6	4	2	1	4	11	Soil management plan. Reinstatement plan. Waste management plan.	2	1	2	4	9
1035	1035	ERU-MCPY12 at road KP2.7, 4.1, 6.0 and 7.4	Kondoa	Management of waste and accidental release of oil or chemicals	Surface water	Contamination of surface water		C		Y	TZ 8.6	4	2	1	4	11	Soil management plan. Reinstatement plan. Waste management plan.	2	1	2	4	9
1144	1144	ERU-MCPY13 at road KP0.46, 2.4, 3.1, 3.5, 3.9, 4.7, 6.4, 10.2 and 11.1	Kiteto	Management of waste and accidental release of oil or chemicals	Surface water	Contamination of surface water		C		Y	TZ 8.6	4	2	1	4	11	Soil management plan. Reinstatement plan. Waste management plan.	2	1	2	4	9
1238	1238	ERU-MCPY14 at road KP7.3 and 11.4	Kilindi	Management of waste and accidental release of oil or chemicals	Surface water	Contamination of surface water		C		Y	TZ 8.6	4	2	1	4	11	Soil management plan. Reinstatement plan. Waste management plan.	2	1	2	4	9
325.5	325.5	Land at MCPY5	Missenyi	Management of waste and accidental release of oil or chemicals	Surface water	Contamination of surface water		C		Y	TZ 8.6	4	2	1	4	11	Soil management plan. Reinstatement plan. Waste management plan.	2	1	2	4	9
800	800	Land at MCPY10	Igunga	Management of waste and accidental release of oil or chemicals	Surface water	Contamination of surface water		C		Y	TZ 8.6	4	2	1	4	11	Soil management plan. Reinstatement plan. Waste management plan.	2	1	2	4	9

Table E3-1 Location Specific Impacts Register

KP Start	KP End	Location	District	Aspect	VEC	Potential Impact	Impact Detail	Phase		High Stakeholder Concern	ESIA Section	Pre-mitigation Impact					Management Plan(s)	Residual Impacts				
								C	O			M	D	E	S	SS		M	D	E	S	SS
1238	1238	Land at MCPY14	Kilindi	Management of waste and accidental release of oil or chemicals	Surface water	Contamination of surface water		C		Y	TZ 8.6	4	2	1	4	11	Soil management plan. Reinstatement plan. Waste management plan.	2	1	2	4	9
419	419	Watercourse at MCPY6	Muleba	Management of waste and accidental release of oil or chemicals	Surface water	Contamination of surface water		C		Y	TZ 8.6	4	2	1	4	11	Soil management plan. Reinstatement plan. Waste management plan.	2	1	2	4	9
914.7	914.7	Watercourse at MCPY11	Singida	Management of waste and accidental release of oil or chemicals	Surface water	Contamination of surface water		C		Y	TZ 8.6	4	2	1	4	11	Soil management plan. Reinstatement plan. Waste management plan.	2	1	2	4	9
1035	1035	Watercourse at MCPY12	Kondoa	Management of waste and accidental release of oil or chemicals	Surface water	Contamination of surface water		C		Y	TZ 8.6	4	2	1	4	11	Soil management plan. Reinstatement plan. Waste management plan.	2	1	2	4	9
1144	1144	Watercourse at MCPY13	Kiteto	Management of waste and accidental release of oil or chemicals	Surface water	Contamination of surface water		C		Y	TZ 8.6	4	2	1	4	11	Soil management plan. Reinstatement plan. Waste management plan.	2	1	2	4	9
1318	1318	Watercourse at MCPY15	Handeni Township Authority	Management of waste and accidental release of oil or chemicals	Surface water	Contamination of surface water		C		Y	TZ 8.6	4	2	1	4	11	Soil management plan. Reinstatement plan. Waste management plan.	2	1	2	4	9
1404	1404	Watercourse at MCPY16	Muheza	Management of waste and accidental release of oil or chemicals	Surface water	Contamination of surface water		C		Y	TZ 8.6	4	2	1	4	11	Soil management plan. Reinstatement plan. Waste management plan.	2	1	2	4	9
458.1	458.3	Permanent wetland	Biharamulo	Management of waste and accidental release of oil or chemicals	Surface water	Contamination of surface water		C		Y	TZ 8.6	4	2	1	4	11	Soil management plan. Reinstatement plan. Waste management plan.	2	1	2	4	9
1208.6	1209.3	Floodplain	Kiteto	Management of waste and accidental release of oil or chemicals	Surface water	Contamination of surface water		C		Y	TZ 8.6	4	2	1	4	11	Soil management plan. Reinstatement plan. Waste	2	1	2	4	9

Table E3-1 Location Specific Impacts Register

KP Start	KP End	Location	District	Aspect	VEC	Potential Impact	Impact Detail	Phase		High Stakeholder Concern	ESIA Section	Pre-mitigation Impact					Management Plan(s)	Residual Impacts				
								C	O			M	D	E	S	SS		M	D	E	S	SS
																	management plan.					
1228	1230	Watercourse	Kiteto	Management of waste and accidental release of oil or chemicals	Surface water	Contamination of surface water		C		Y	TZ 8.6	4	2	1	4	11	Soil management plan. Reinstatement plan. Waste management plan.	2	1	2	4	9
405.4	405.4	PAR-PS3	Muleba	Management of waste and accidental release of oil or chemicals	Surface water	Contamination of surface water		C		Y	TZ 8.6	4	2	1	4	11	Soil management plan. Reinstatement plan. Waste management plan.	2	1	2	4	9
405.4	405.4	ERU-PS3 at road KP5.0 and KP5.5	Muleba	Management of waste and accidental release of oil or chemicals	Surface water	Contamination of surface water		C		Y	TZ 8.6	4	2	1	4	11	Soil management plan. Reinstatement plan. Waste management plan.	2	1	2	4	9
610	610	PAR-PS4	Mbogwe	Management of waste and accidental release of oil or chemicals	Surface water	Contamination of surface water		C		Y	TZ 8.6	4	2	1	4	11	Soil management plan. Reinstatement plan. Waste management plan.	2	1	2	4	9
1330	1330	ERU-PRS2 at road KP1.1 and KP1.5	Handeni	Management of waste and accidental release of oil or chemicals	Surface water	Contamination of surface water		C		Y	TZ 8.6	6	2	1	3	12	Soil management plan. Reinstatement plan. Waste management plan.	2	1	2	4	9
610	610	PS4	Mbogwe	Management of waste and accidental release of oil or chemicals	Surface water	Contamination of surface water		C		Y	TZ 8.6	4	2	1	4	11	Soil management plan. Reinstatement plan. Waste management plan.	2	1	2	4	9
701	702	Coating facility	Nzega	Management of waste and accidental release of oil or chemicals	Surface water	Contamination of surface water		C		Y	TZ 8.6	4	2	1	4	11	Soil management plan. Reinstatement plan. Waste management plan.	2	1	2	4	9
824.9	824.9	PS5	Igunga	Management of waste and accidental release of oil or chemicals	Surface water	Contamination of surface water		C		Y	TZ 8.6	4	2	1	4	11	Soil management plan. Reinstatement plan. Waste management plan.	2	1	2	4	9
1172	1172	PRS1	Kiteto	Management of waste and accidental	Surface water	Contamination of surface water		C		Y	TZ 8.6	4	2	1	4	11	Soil management plan. Reinstatement	2	1	2	4	9

Table E3-1 Location Specific Impacts Register

KP Start	KP End	Location	District	Aspect	VEC	Potential Impact	Impact Detail	Phase		High Stakeholder Concern	ESIA Section	Pre-mitigation Impact					Management Plan(s)	Residual Impacts				
								C	O			M	D	E	S	SS		M	D	E	S	SS
				release of oil or chemicals													plan. Waste management plan.					
1330	1330	PRS2	Handeni	Management of waste and accidental release of oil or chemicals	Surface water	Contamination of surface water		C		Y	TZ 8.6	4	2	1	4	11	Soil management plan. Reinstatement plan. Waste management plan.	2	1	2	4	9
1443	1443	MST and LOF	Tanga	Management of waste and accidental release of oil or chemicals	Surface water	Contamination of surface water		C		Y	TZ 8.6	4	2	1	4	11	Soil management plan. Reinstatement plan. Waste management plan.	2	1	2	4	9
405.4	405.4	Watercourse at PS3	Muleba	Management of waste and accidental release of oil or chemicals	Surface water	Contamination of surface water		C		Y	TZ 8.6	4	2	1	4	11	Soil management plan. Reinstatement plan. Waste management plan.	2	1	2	4	9
914.7	914.7	Watercourse at PS6	Singida	Management of waste and accidental release of oil or chemicals	Surface water	Contamination of surface water		C		Y	TZ 8.6	4	2	1	4	11	Soil management plan. Reinstatement plan. Waste management plan.	2	1	2	4	9
610	610	PAR-PS4 at road KP0.2	Mbogwe	Impeded flow in watercourses	Surface water	Deterioration in surface water quality		C		–	TZ 8.6	6	2	1	3	12	Biodiversity management plan. Soil management plan. Pollution prevention plan.	4	2	1	3	10
1330	1330	ERU-PRS2 at road KP1.5	Handeni	Impeded flow in watercourses	Surface water	Deterioration in surface water quality		C		–	TZ 8.6	6	2	1	3	12	Biodiversity management plan. Soil management plan. Pollution prevention plan.	4	2	1	3	10
TBC	TBC	TBC	TBC	Surface water use	Surface water	Decreased water level due to abstraction for project use		C				2	1	2			Biodiversity management plan. Natural resource management plan	2	2	1		
1370	1370	Pangani River	Handeni	Open-cut crossing	Surface water	Deterioration in water quality		C		–	TZ 8.6	8	1	1	3	13	Reinstatement plan. Soil management plan. Natural resource management plan. Pollution prevention plan.	6	1	1	3	11

Table E3-1 Location Specific Impacts Register

KP Start	KP End	Location	District	Aspect	VEC	Potential Impact	Impact Detail	Phase		High Stakeholder Concern	ESIA Section	Pre-mitigation Impact					Management Plan(s)	Residual Impacts				
								C	O			M	D	E	S	SS		M	D	E	S	SS
325.5	325.5	MCPY5	Missenyi	Management of black and grey water	Groundwater	Contamination of groundwater		C		Y	TZ 8.7	4	1	2	5	12	Pollution prevention plan. Waste management plan.	2	1	1	4-5	8-9
419	419	MCPY6	Muleba	Management of black and grey water	Groundwater	Contamination of groundwater		C		Y	TZ 8.7	4	1	2	5	12	Pollution prevention plan. Waste management plan.	2	1	1	4-5	8-9
513	513	MCPY7	Chato	Management of black and grey water	Groundwater	Contamination of groundwater		C		Y	TZ 8.7	4	1	2	5	12	Pollution prevention plan. Waste management plan.	2	1	1	4-5	8-9
594.5	594.5	MCPY8	Bukombe	Management of black and grey water	Groundwater	Contamination of groundwater		C		Y	TZ 8.7	4	1	2	5	12	Pollution prevention plan. Waste management plan.	2	1	1	4-5	8-9
702	702	MCPY9	Nzega	Management of black and grey water	Groundwater	Contamination of groundwater		C		Y	TZ 8.7	4	1	2	5	12	Pollution prevention plan. Waste management plan.	2	1	1	4-5	8-9
800	800	MCPY10	Igunga	Management of black and grey water	Groundwater	Contamination of groundwater		C		Y	TZ 8.7	4	1	2	5	12	Pollution prevention plan. Waste management plan.	2	1	1	4-5	8-9
914.7	914.7	MCPY11	Singida	Management of black and grey water	Groundwater	Contamination of groundwater		C		Y	TZ 8.7	4	1	2	5	12	Pollution prevention plan. Waste management plan.	2	1	1	4-5	8-9
1035	1035	MCPY12	Kondoa	Management of black and grey water	Groundwater	Contamination of groundwater		C		Y	TZ 8.7	4	1	2	5	12	Pollution prevention plan. Waste management plan.	2	1	1	4-5	8-9
1144	1144	MCPY13	Kiteto	Management of black and grey water	Groundwater	Contamination of groundwater		C		Y	TZ 8.7	4	1	2	5	12	Pollution prevention plan. Waste management plan.	2	1	1	4-5	8-9

Table E3-1 Location Specific Impacts Register

KP Start	KP End	Location	District	Aspect	VEC	Potential Impact	Impact Detail	Phase		High Stakeholder Concern	ESIA Section	Pre-mitigation Impact					Management Plan(s)	Residual Impacts				
								C	O			M	D	E	S	SS		M	D	E	S	SS
1238	1238	MCPY14	Kilindi	Management of black and grey water	Groundwater	Contamination of groundwater		C		Y	TZ 8.7	4	1	2	5	12	Pollution prevention plan. Waste management plan.	2	1	1	4-5	8-9
1318	1318	MCPY15	Handeni Township Authority	Management of black and grey water	Groundwater	Contamination of groundwater		C		Y	TZ 8.7	4	1	2	5	12	Pollution prevention plan. Waste management plan.	2	1	1	4-5	8-9
1404	1404	MCPY16	Muheza	Management of black and grey water	Groundwater	Contamination of groundwater		C		Y	TZ 8.7	4	1	2	5	12	Pollution prevention plan. Waste management plan.	2	1	1	4-5	8-9
701	702	Coating facility	Nzega	Management of black and grey water	Groundwater	Contamination of groundwater		C		Y	TZ 8.7	4	1	2	5	12	Pollution prevention plan. Waste management plan.	2	1	1	4-5	8-9
325.5	325.5	MCPY5	Missenyi	Management of waste and accidental release of oil or chemicals	Groundwater	Contamination of groundwater		C		Y	TZ 8.7	4	1	1	4	10	Waste management plan	2	1	1	4-5	8-9
419	419	MCPY6	Muleba	Management of waste and accidental release of oil or chemicals	Groundwater	Contamination of groundwater		C		Y	TZ 8.7	4	1	1	4	10	Waste management plan	2	1	1	4-5	8-9
513	513	MCPY7	Chato	Management of waste and accidental release of oil or chemicals	Groundwater	Contamination of groundwater		C		Y	TZ 8.7	4	1	1	4	10	Waste management plan	2	1	1	4-5	8-9
594.5	594.5	MCPY8	Bukombe	Management of waste and accidental release of oil or chemicals	Groundwater	Contamination of groundwater		C		Y	TZ 8.7	4	1	1	4	10	Waste management plan	2	1	1	4-5	8-9
702	702	MCPY9	Nzega	Management of waste and accidental release of oil or chemicals	Groundwater	Contamination of groundwater		C		Y	TZ 8.7	4	1	1	4	10	Waste management plan	2	1	1	4-5	8-9
800	800	MCPY10	Igunga	Management of waste and accidental release of oil or chemicals	Groundwater	Contamination of groundwater		C		Y	TZ 8.7	4	1	1	4	10	Waste management plan	2	1	1	4-5	8-9

Table E3-1 Location Specific Impacts Register

KP Start	KP End	Location	District	Aspect	VEC	Potential Impact	Impact Detail	Phase		High Stakeholder Concern	ESIA Section	Pre-mitigation Impact					Management Plan(s)	Residual Impacts				
								C	O			M	D	E	S	SS		M	D	E	S	SS
914.7	914.7	MCPY11	Singida	Management of waste and accidental release of oil or chemicals	Groundwater	Contamination of groundwater		C		Y	TZ 8.7	4	1	1	4	10	Waste management plan	2	1	1	4-5	8-9
1035	1035	MCPY12	Kondoa	Management of waste and accidental release of oil or chemicals	Groundwater	Contamination of groundwater		C		Y	TZ 8.7	4	1	1	4	10	Waste management plan	2	1	1	4-5	8-9
1144	1144	MCPY13	Kiteto	Management of waste and accidental release of oil or chemicals	Groundwater	Contamination of groundwater		C		Y	TZ 8.7	4	1	1	4	10	Waste management plan	2	1	1	4-5	8-9
1238	1238	MCPY14	Kilindi	Management of waste and accidental release of oil or chemicals	Groundwater	Contamination of groundwater		C		Y	TZ 8.7	4	1	1	4	10	Waste management plan	2	1	1	4-5	8-9
1318	1318	MCPY15	Handeni Township Authority	Management of waste and accidental release of oil or chemicals	Groundwater	Contamination of groundwater		C		Y	TZ 8.7	4	1	1	4	10	Waste management plan	2	1	1	4-5	8-9
1404	1404	MCPY16	Muheza	Management of waste and accidental release of oil or chemicals	Groundwater	Contamination of groundwater		C		Y	TZ 8.7	4	1	1	4	10	Waste management plan	2	1	1	4-5	8-9
701	702	Coating facility	Nzega	Management of waste and accidental release of oil or chemicals	Groundwater	Contamination of groundwater		C		Y	TZ 8.7	4	1	1	4	10	Waste management plan	2	1	1	4-5	8-9
405.4	405.4	PS3	Muleba	Management of waste and accidental release of oil or chemicals	Groundwater	Contamination of groundwater		C		Y	TZ 8.7	4	1	1	4	10	Waste management plan	2	1	1	4-5	8-9
610	610	PS4	Mbogwe	Management of waste and accidental release of oil or chemicals	Groundwater	Contamination of groundwater		C		Y	TZ 8.7	4	1	1	4	10	Waste management plan	2	1	1	4-5	8-9
824.9	824.9	PS5	Igunga	Management of waste and accidental release of oil or chemicals	Groundwater	Contamination of groundwater		C		Y	TZ 8.7	4	1	1	4	10	Waste management plan	2	1	1	4-5	8-9

Table E3-1 Location Specific Impacts Register

KP Start	KP End	Location	District	Aspect	VEC	Potential Impact	Impact Detail	Phase		High Stakeholder Concern	ESIA Section	Pre-mitigation Impact					Management Plan(s)	Residual Impacts				
								C	O			M	D	E	S	SS		M	D	E	S	SS
914.7	914.7	PS6	Singida	Management of waste and accidental release of oil or chemicals	Groundwater	Contamination of groundwater		C		Y	TZ 8.7	4	1	1	4	10	Waste management plan	2	1	1	4-5	8-9
1330	1330	PRS2	Handeni	Management of waste and accidental release of oil or chemicals	Groundwater	Contamination of groundwater		C		Y	TZ 8.7	4	1	1	4	10	Waste management plan	2	1	1	4-5	8-9
1443	1443	MST and LOF	Tanga	Management of waste and accidental release of oil or chemicals	Groundwater	Contamination of groundwater		C		Y	TZ 8.7	4	1	1	4	10	Waste management plan	2	1	1	4-5	8-9
405.4	405.4	PS3	Muleba	Management of waste and accidental release of oil or chemicals	Groundwater	Contamination of groundwater			O	Y	TZ 8.7	4	1	1	4	10	Natural resource management plan	2	4	1	4-5	11-12
610	610	PS4	Mbogwe	Management of waste and accidental release of oil or chemicals	Groundwater	Contamination of groundwater			O	Y	TZ 8.7	4	1	1	4	10	Natural resource management plan	2	4	1	4-5	11-12
824.9	824.9	PS5	Igunga	Management of waste and accidental release of oil or chemicals	Groundwater	Contamination of groundwater			O	Y	TZ 8.7	4	1	1	4	10	Natural resource management plan	2	4	1	4-5	11-12
914.7	914.7	PS6	Singida	Management of waste and accidental release of oil or chemicals	Groundwater	Contamination of groundwater			O	Y	TZ 8.7	4	1	1	4	10	Natural resource management plan	2	4	1	4-5	11-12
1330	1330	PRS2	Handeni	Management of waste and accidental release of oil or chemicals	Groundwater	Contamination of groundwater			O	Y	TZ 8.7	4	1	1	4	10	Natural resource management plan	2	4	1	4-5	11-12
1443	1443	MST and LOF	Tanga	Management of waste and accidental release of oil or chemicals	Groundwater	Contamination of groundwater			O	Y	TZ 8.7	4	1	1	4	10	Natural resource management plan	2	4	1	4-5	11-12
325.5	325.5	MCPY5	Missenyi	Abstraction of groundwater	Groundwater	Decreased water level due to water abstraction for project use		C		Y	TZ 8.7	4	4	2	5	15	Natural resource management plan	2	1	1	5	9
419	419	MCPY6	Muleba	Abstraction of groundwater	Groundwater	Decreased water level due to water abstraction for project use		C		Y	TZ 8.7	4	1	2	5	12	Natural resource management plan	2	1	1	5	9

Table E3-1 Location Specific Impacts Register

KP Start	KP End	Location	District	Aspect	VEC	Potential Impact	Impact Detail	Phase		High Stakeholder Concern	ESIA Section	Pre-mitigation Impact					Management Plan(s)	Residual Impacts				
								C	O			M	D	E	S	SS		M	D	E	S	SS
513	513	MCPY7	Chato	Abstraction of groundwater	Groundwater	Decreased water level due to water abstraction for project use		C		Y	TZ 8.7	4	1	2	5	12	Natural resource management plan	2	1	1	5	9
594.5	594.5	MCPY8	Bukombe	Abstraction of groundwater	Groundwater	Decreased water level due to water abstraction for project use		C		Y	TZ 8.7	4	1	2	5	12	Natural resource management plan	2	1	1	5	9
702	702	MCPY9	Nzega	Abstraction of groundwater	Groundwater	Decreased water level due to water abstraction for project use		C		Y	TZ 8.7	4	1	2	5	12	Natural resource management plan	2	1	1	5	9
800	800	MCPY10	Igunga	Abstraction of groundwater	Groundwater	Decreased water level due to water abstraction for project use		C		Y	TZ 8.7	4	1	2	5	12	Natural resource management plan	2	1	1	5	9
914.7	914.7	MCPY11	Singida	Abstraction of groundwater	Groundwater	Decreased water level due to water abstraction for project use		C		Y	TZ 8.7	4	1	2	5	12	Natural resource management plan	2	1	1	5	9
1035	1035	MCPY12	Kondoa	Abstraction of groundwater	Groundwater	Decreased water level due to water abstraction for project use		C		Y	TZ 8.7	4	1	2	5	12	Natural resource management plan	2	1	1	5	9
1144	1144	MCPY13	Kiteto	Abstraction of groundwater	Groundwater	Decreased water level due to water abstraction for project use		C		Y	TZ 8.7	4	1	2	5	12	Natural resource management plan	2	1	1	5	9
1238	1238	MCPY14	Kilindi	Abstraction of groundwater	Groundwater	Decreased water level due to water abstraction for project use		C		Y	TZ 8.7	4	1	2	5	12	Natural resource management plan	2	1	1	5	9
1318	1318	MCPY15	Handeni Township Authority	Abstraction of groundwater	Groundwater	Decreased water level due to water abstraction for project use		C		Y	TZ 8.7	4	1	2	5	12	Natural resource management plan	2	1	1	5	9
1404	1404	MCPY16	Muheza	Abstraction of groundwater	Groundwater	Decreased water level due to water abstraction for project use		C		Y	TZ 8.7	4	1	2	5	12	Natural resource management plan	2	1	1	5	9
701	702	Coating facility	Nzega	Abstraction of groundwater	Groundwater	Decreased water level due to water abstraction for project use		C		Y	TZ 8.7	4	1	2	5	12	Natural resource management plan	2	1	1	5	9
405.4	405.4	PS3	Muleba	Abstraction of groundwater	Groundwater	Decreased water level due to water abstraction for project use			O	Y	TZ 8.7	4	4	2	5	15	Natural resource management plan	2	4	2	5	13
610	610	PS4	Mbogwe	Abstraction of groundwater	Groundwater	Decreased water level due to water abstraction for project use			O	Y	TZ 8.7	4	4	2	5	15	Natural resource management plan	2	4	2	5	13
824.9	824.9	PS5	Igunga	Abstraction of groundwater	Groundwater	Decreased water level due to water abstraction for project use			O	Y	TZ 8.7	4	4	2	5	15	Natural resource management plan	2	4	2	5	13
914.7	914.7	PS6	Singida	Abstraction of groundwater	Groundwater	Decreased water level due to water abstraction for project use			O	Y	TZ 8.7	4	4	2	5	15	Natural resource management plan	2	4	2	5	13
1172	1172	PRS1	Kiteto	Abstraction of groundwater	Groundwater	Decreased water level due to water abstraction for project use			O	Y	TZ 8.7	4	4	2	5	15	Natural resource management plan	2	4	2	5	13

Table E3-1 Location Specific Impacts Register

KP Start	KP End	Location	District	Aspect	VEC	Potential Impact	Impact Detail	Phase		High Stakeholder Concern	ESIA Section	Pre-mitigation Impact					Management Plan(s)	Residual Impacts				
								C	O			M	D	E	S	SS		M	D	E	S	SS
1330	1330	PRS2	Handeni	Abstraction of groundwater	Groundwater	Decreased water level due to water abstraction for project use			O	Y	TZ 8.7	4	4	2	5	15	Natural resource management plan	2	4	2	5	13
1443	1443	MST and LOF	Tanga	Abstraction of groundwater	Groundwater	Decreased water level due to water abstraction for project use			O	Y	TZ 8.7	4	4	2	5	15	Natural resource management plan	2	4	2	5	13
420.5	469	Ruiga River Forest Reserve and Burigi-Biharamulo Game Reserves	Muleba, Biharamulo, Chato	Visual intrusion of project components into landscape	Landscape	Change of landscape character	Tree removal in RoW within Ruiga River Forest Reserve and Burigi-Biharamulo Game Reserves	C		–	TZ 8.8	6	5	2	3–4	16–17	Biodiversity management plan	4	5	2	3–4	16–17
420.5	469	Ruiga River Forest Reserve and Burigi-Biharamulo Game Reserves	Muleba, Biharamulo, Chato	Visual intrusion of project components into landscape	Landscape	Change of views	Tree removal in RoW affecting views from settlements and roads	C		–	TZ 8.8	4	5	2	2	13	Biodiversity management plan	4	5	2	2	13
1082	1106	Potential blasting locations	Chemba	Visual intrusion of project components into landscape	Landscape	Change of landscape character	Impact of blasting in area of natural scenic value	C		–	TZ 8.8	6	5	2	3	16	Waste management plan	2	5	2	3	12
1082	1106	Potential blasting locations	Chemba	Visual intrusion of project components into landscape	Landscape	Change of views	Impact of blasting on views from small settlements, farms and unsealed roads	C		–	TZ 8.8	6	5	2	2	15	Waste management plan	2	5	2	2	11
TBC	TBC	Side slope areas with permanent benching	TBC	Visual intrusion of project components into landscape	Landscape	Change of landscape character	Permanent benching of RoW in side slope areas	C		–	TZ 8.8	6	5	2	2–4	15–17	Reinstatement plan. Soil management plan.	4	5	2	2–4	13–15
TBC	TBC	Side slope areas with permanent benching	TBC	Visual intrusion of project components into landscape	Landscape	Change of views	In areas of permanent benching of RoW in side slope areas affecting views from small settlements, farms and unsealed roads	C		–	TZ 8.8	6	5	2	2	15	Reinstatement plan. Soil management plan.	4	5	2	2	13
325.5	325.5	MCPY5	Missenyi	Visual intrusion of project components into landscape	Landscape	Change of landscape character	Site clearance and fencing for construction camp affecting farmland landscape	C		–	TZ 8.8	4	2	2	2	10	Reinstatement plan	2	1	2	2	7
325.5	325.5	MCPY5	Missenyi	Visual intrusion of project components into landscape	Landscape	Change of landscape character	Operation and reinstatement of construction camp affecting farmland landscape	C		–	TZ 8.8	4	2	2	2	10	Reinstatement plan	2	2	2	2	8
325.5	325.5	MCPY5	Missenyi	Visual intrusion of project	Landscape	Change of landscape character	Retention of part of the construction camp by		O	–	TZ 8.8	4	5	2	2	13	Reinstatement plan	4	5	2	2	13

Table E3-1 Location Specific Impacts Register

KP Start	KP End	Location	District	Aspect	VEC	Potential Impact	Impact Detail	Phase		High Stakeholder Concern	ESIA Section	Pre-mitigation Impact					Management Plan(s)	Residual Impacts				
								C	O			M	D	E	S	SS		M	D	E	S	SS
				components into landscape			government affecting farmland landscape															
325.5	325.5	MCPY5	Missenyi	Visual intrusion of project components into landscape	Landscape	Change of views	Site clearance and fencing of construction camps affecting views from small towns and main roads	C		–	TZ 8.8	4	1	2	2	9	Reinstatement plan	2	1	2	2	7
325.5	325.5	MCPY5	Missenyi	Visual intrusion of project components into landscape	Landscape	Change of views	Operation and reinstatement of construction camps affecting views from small towns and main roads	C		–	TZ 8.8	4	2	2	2	10	Reinstatement plan	2	2	2	2	8
325.5	325.5	MCPY5	Missenyi	Visual intrusion of project components into landscape	Landscape	Change of views	Retention of part of the construction camp by government, affecting views from receptors are small towns and main roads		O	–	TZ 8.8	4	5	2	2	13	Reinstatement plan	4	5	2	2	13
419	419	MCPY6	Muleba	Visual intrusion of project components into landscape	Landscape	Change of landscape character	Site clearance and fencing for camp affecting Ruiga River Forest Reserve and Burigi-Biharamulo Game Reserve, 1 km from MCPY6	C		–	TZ 8.8	2	1	2	2	7	Reinstatement plan	2	1	2	2	7
419	419	MCPY6	Muleba	Visual intrusion of project components into landscape	Landscape	Change of landscape character	Operation and reinstatement of construction camp affecting Ruiga River Forest Reserve and Burigi-Biharamulo Game Reserve	C		–	TZ 8.8	2	2	2	2	8	Reinstatement plan	2	2	2	2	8
419	419	MCPY6	Muleba	Visual intrusion of project components into landscape	Landscape	Change of landscape character	Retention of part of the construction camp by government, affecting Ruiga River Forest Reserve and Burigi-Biharamulo Game Reserve		O	–	TZ 8.8	2	5	2	2	11	Reinstatement plan	2	5	2	2	11
419	419	MCPY6	Muleba	Visual intrusion of project components into landscape	Landscape	Change of views	Site clearance and fencing of camp affecting views from small settlements, farms	C		–	TZ 8.8	2	1	2	2	7	Reinstatement plan	2	1	2	2	7

Table E3-1 Location Specific Impacts Register

KP Start	KP End	Location	District	Aspect	VEC	Potential Impact	Impact Detail	Phase		High Stakeholder Concern	ESIA Section	Pre-mitigation Impact					Management Plan(s)	Residual Impacts				
								C	O			M	D	E	S	SS		M	D	E	S	SS
							and unsealed roads															
419	419	MCPY6	Muleba	Visual intrusion of project components into landscape	Landscape	Change of views	Operation and reinstatement of construction camp affecting views from small settlements, farms and unsealed roads	C		–	TZ 8.8	2	2	2	2	8	Reinstatement plan	2	2	2	2	8
419	419	MCPY6	Muleba	Visual intrusion of project components into landscape	Landscape	Change of views	Retention of part of the construction camp by government, affecting views from small settlements, farms and unsealed roads		O	–	TZ 8.8	2	5	2	2	11	Reinstatement plan	2	5	2	2	11
513	513	MCPY7	Chato	Visual intrusion of project components into landscape	Landscape	Change of landscape character	Site clearance and fencing for camp affecting farmland landscape	C		–	TZ 8.8	4	1	2	2	9	Reinstatement plan	2	1	2	2	7
513	513	MCPY7	Chato	Visual intrusion of project components into landscape	Landscape	Change of landscape character	Operation and reinstatement of construction camp affecting farmland landscape	C		–	TZ 8.8	4	2	2	2	10	Reinstatement plan	2	2	2	2	8
513	513	MCPY7	Chato	Visual intrusion of project components into landscape	Landscape	Change of landscape character	Retention of part of the construction camp by government affecting farmland landscape		O	–	TZ 8.8	4	5	2	2	13	Reinstatement plan	4	5	2	2	13
513	513	MCPY7	Chato	Visual intrusion of project components into landscape	Landscape	Change of views	Site clearance and fencing of camp affecting views from small settlements, farms and unsealed roads	C		–	TZ 8.8	4	1	2	2	9	Reinstatement plan	2	1	2	2	7
513	513	MCPY7	Chato	Visual intrusion of project components into landscape	Landscape	Change of views	Operation and reinstatement of construction camp affecting views from small settlements, farms and unsealed roads	C		–	TZ 8.8	4	2	2	2	10	Reinstatement plan	2	2	2	2	8
513	513	MCPY7	Chato	Visual intrusion of project components into landscape	Landscape	Change of views	Retention of part of the construction camp by government,		O	–	TZ 8.8	4	5	2	2	13	Reinstatement plan	4	5	2	2	13

Table E3-1 Location Specific Impacts Register

KP Start	KP End	Location	District	Aspect	VEC	Potential Impact	Impact Detail	Phase		High Stakeholder Concern	ESIA Section	Pre-mitigation Impact					Management Plan(s)	Residual Impacts				
								C	O			M	D	E	S	SS		M	D	E	S	SS
							affecting views from small settlements, farms and unsealed roads															
594.5	594.5	MCPY8	Bukombe	Visual intrusion of project components into landscape	Landscape	Change of landscape character	Site clearance and fencing for camp affecting farmland landscape	C		–	TZ 8.8	4	1	2	2	9	Reinstatement plan	2	1	2	2	7
594.5	594.5	MCPY8	Bukombe	Visual intrusion of project components into landscape	Landscape	Change of landscape character	Operation and reinstatement of construction camp affecting farmland landscape	C		–	TZ 8.8	4	2	2	2	10	Reinstatement plan	2	2	2	2	8
594.5	594.5	MCPY8	Bukombe	Visual intrusion of project components into landscape	Landscape	Change of landscape character	Retention of part of the construction camp by government, affecting farmland landscape		O	–	TZ 8.8	4	5	2	2	13	Reinstatement plan	4	5	2	2	13
594.5	594.5	MCPY8	Bukombe	Visual intrusion of project components into landscape	Landscape	Change of views	Site clearance and fencing of camp affecting views from small towns and main roads	C		–	TZ 8.8	4	1	2	2	9	Reinstatement plan	2	1	2	2	7
594.5	594.5	MCPY8	Bukombe	Visual intrusion of project components into landscape	Landscape	Change of views	Operation and reinstatement of construction camp affecting small towns and main roads	C		–	TZ 8.8	4	2	2	2	10	Reinstatement plan	2	2	2	2	8
594.5	594.5	MCPY8	Bukombe	Visual intrusion of project components into landscape	Landscape	Change of views	Retention of part of the construction camp by government, affecting views from small towns and main roads		O	–	TZ 8.8	4	5	2	2	13	Reinstatement plan	4	5	2	2	13
702	702	MCPY9	Nzega	Visual intrusion of project components into landscape	Landscape	Change of landscape character	Site clearance and fencing for camp affecting Mwakalundi Forest Reserve, 1 km from MCPY9	C		–	TZ 8.8	6	1	2	2	11	Reinstatement plan	4	1	2	2	9
702	702	MCPY9	Nzega	Visual intrusion of project components into landscape	Landscape	Change of landscape character	Site clearance and fencing for camp affecting Mwakalundi Forest Reserve	C		–	TZ 8.8	6	2	2	2	12	Reinstatement plan	4	2	2	2	10

Table E3-1 Location Specific Impacts Register

KP Start	KP End	Location	District	Aspect	VEC	Potential Impact	Impact Detail	Phase		High Stakeholder Concern	ESIA Section	Pre-mitigation Impact					Management Plan(s)	Residual Impacts				
								C	O			M	D	E	S	SS		M	D	E	S	SS
702	702	MCPY9	Nzega	Visual intrusion of project components into landscape	Landscape	Change of landscape character	Retention of part of the construction camp by government affecting Mwakalundi Forest Reserve		O	–	TZ 8.8	4	5	2	2	13	Reinstatement plan	4	5	2	2	13
702	702	MCPY9	Nzega	Visual intrusion of project components into landscape	Landscape	Change of views	Site clearance and fencing of camp affecting views from small settlements, farms and unsealed roads	C		–	TZ 8.8	6	1	2	2	11	Reinstatement plan	4	1	2	2	9
702	702	MCPY9	Nzega	Visual intrusion of project components into landscape	Landscape	Change of views	Operation and reinstatement of construction camp affecting views from small settlements, farms and unsealed roads	C		–	TZ 8.8	6	2	2	2	12	Reinstatement plan	4	2	2	2	10
702	702	MCPY9	Nzega	Visual intrusion of project components into landscape	Landscape	Change of views	Retention of part of the construction camp by government, affecting views from small settlements, farms and unsealed roads		O	–	TZ 8.8	4	5	2	2	13	Reinstatement plan	4	5	2	2	13
800	800	MCPY10	Igunga	Visual intrusion of project components into landscape	Landscape	Change of landscape character	Site clearance and fencing for camp affecting farmland landscape	C		–	TZ 8.8	4	1	2	2	9	Reinstatement plan	2	1	2	2	7
800	800	MCPY10	Igunga	Visual intrusion of project components into landscape	Landscape	Change of landscape character	Operation and reinstatement of construction camp affecting farmland landscape	C		–	TZ 8.8	4	2	2	2	10	Reinstatement plan	2	2	2	2	8
800	800	MCPY10	Igunga	Visual intrusion of project components into landscape	Landscape	Change of landscape character	Retention of part of the construction camp by government affecting farmland landscape		O	–	TZ 8.8	4	5	2	2	13	Reinstatement plan	4	5	2	2	13
800	800	MCPY10	Igunga	Visual intrusion of project components into landscape	Landscape	Change of views	Site clearance and fencing of camp affecting views from small towns and main roads	C		–	TZ 8.8	4	1	2	2	9	Reinstatement plan	2	1	2	2	7
800	800	MCPY10	Igunga	Visual intrusion of project	Landscape	Change of views	Operation and reinstatement of	C		–	TZ 8.8	4	2	2	2	10	Reinstatement plan	2	2	2	2	8

Table E3-1 Location Specific Impacts Register

KP Start	KP End	Location	District	Aspect	VEC	Potential Impact	Impact Detail	Phase		High Stakeholder Concern	ESIA Section	Pre-mitigation Impact					Management Plan(s)	Residual Impacts				
								C	O			M	D	E	S	SS		M	D	E	S	SS
				components into landscape			construction camp affecting views from small towns and main roads															
800	800	MCPY10	Igunga	Visual intrusion of project components into landscape	Landscape	Change of views	Retention of part of the construction camp by government, affecting views from small towns and main roads		O	–	TZ 8.8	4	5	2	2	13	Reinstatement plan	4	5	2	2	13
914.7	914.7	MCPY11	Singida	Visual intrusion of project components into landscape	Landscape	Change of landscape character	Site clearance and fencing for camp affecting farmland landscape	C		–	TZ 8.8	4	1	2	2	9	Reinstatement plan	2	1	2	2	7
914.7	914.7	MCPY11	Singida	Visual intrusion of project components into landscape	Landscape	Change of landscape character	Operation and reinstatement of construction camp affecting farmland landscape	C		–	TZ 8.8	4	2	2	2	10	Reinstatement plan	2	2	2	2	8
914.7	914.7	MCPY11	Singida	Visual intrusion of project components into landscape	Landscape	Change of landscape character	Retention of part of the construction camp by government affecting farmland landscape		O	–	TZ 8.8	4	5	2	2	13	Reinstatement plan	4	5	2	2	13
914.7	914.7	MCPY11	Singida	Visual intrusion of project components into landscape	Landscape	Change of views	Site clearance and fencing of camp affecting views from small towns and main roads	C		–	TZ 8.8	4	1	2	2	9	Reinstatement plan	2	1	2	2	7
914.7	914.7	MCPY11	Singida	Visual intrusion of project components into landscape	Landscape	Change of views	Operation and reinstatement of construction camp affecting views from small towns and main roads	C		–	TZ 8.8	4	2	2	2	10	Reinstatement plan	2	2	2	2	8
914.7	914.7	MCPY11	Singida	Visual intrusion of project components into landscape	Landscape	Change of views	Retention of part of the construction camp by government, affecting views from small towns and main roads		O	–	TZ 8.8	4	5	2	2	13	Reinstatement plan	4	5	2	2	13
1035	1035	MCPY12	Kondoa	Visual intrusion of project components into landscape	Landscape	Change of landscape character	Site clearance and fencing for camp affecting Swaga Swaga Game Reserve, 0.55 km from MCPY12	C		–	TZ 8.8	4	1	2	2	9	Reinstatement plan	2	1	2	2	7
1035	1035	MCPY12	Kondoa	Visual intrusion of project	Landscape	Change of landscape character	Operation and reinstatement of construction camp	C		–	TZ 8.8	4	2	2	2	10	Reinstatement plan	2	2	2	2	8

Table E3-1 Location Specific Impacts Register

KP Start	KP End	Location	District	Aspect	VEC	Potential Impact	Impact Detail	Phase		High Stakeholder Concern	ESIA Section	Pre-mitigation Impact					Management Plan(s)	Residual Impacts				
								C	O			M	D	E	S	SS		M	D	E	S	SS
				components into landscape			affecting Swaga Swaga Game Reserve 0.55 km from MCPY12															
1035	1035	MCPY12	Kondoa	Visual intrusion of project components into landscape	Landscape	Change of views	Site clearance and fencing of camp affecting views from small settlements, farms and unsealed roads	C		–	TZ 8.8	4	1	2	2	9	Reinstatement plan	2	1	2	2	7
1035	1035	MCPY12	Kondoa	Visual intrusion of project components into landscape	Landscape	Change of views	Operation and reinstatement of construction camp affecting views from small settlements, farms and unsealed roads	C		–	TZ 8.8	4	2	2	2	10	Reinstatement plan	2	2	2	2	8
1144	1144	MCPY13	Kiteto	Visual intrusion of project components into landscape	Landscape	Change of landscape character	Site clearance and fencing for camp affecting Talamai Open Area, 0.01 km from MCPY13	C		–	TZ 8.8	4	1	2	4	11	Reinstatement plan	4	1	2	4	11
1144	1144	MCPY13	Kiteto	Visual intrusion of project components into landscape	Landscape	Change of landscape character	Operation and reinstatement of construction camp affecting Talamai Open Area, 0.01 km from MCPY13	C		–	TZ 8.8	6	2	2	4	14	Reinstatement plan	4	2	2	4	12
1144	1144	MCPY13	Kiteto	Visual intrusion of project components into landscape	Landscape	Change of landscape character	Retention of the pipe yard by government, affecting Talamai Open Area, 0.01 km from MCPY13		O	–	TZ 8.8	6	5	2	4	17	Reinstatement plan	5	5	2	4	16
1144	1144	MCPY13	Kiteto	Visual intrusion of project components into landscape	Landscape	Change of views	Site clearance and fencing of camp affecting views from small settlements, farms and unsealed roads	C		–	TZ 8.8	4	1	2	2	9	Reinstatement plan	2	1	2	2	7
1144	1144	MCPY13	Kiteto	Visual intrusion of project components into landscape	Landscape	Change of views	Operation and reinstatement of construction camp affecting views from small settlements, farms	C		–	TZ 8.8	4	2	2	2	10	Reinstatement plan	2	2	2	2	8

Table E3-1 Location Specific Impacts Register

KP Start	KP End	Location	District	Aspect	VEC	Potential Impact	Impact Detail	Phase		High Stakeholder Concern	ESIA Section	Pre-mitigation Impact					Management Plan(s)	Residual Impacts				
								C	O			M	D	E	S	SS		M	D	E	S	SS
							and unsealed roads															
1144	1144	MCPY13	Kiteto	Visual intrusion of project components into landscape	Landscape	Change of views	Retention of the pipe yard by government, affecting views from small settlements, farms and unsealed roads		O	–	TZ 8.8	4	5	2	2	13	Reinstatement plan	3	5	2	2	12
1238	1238	MCPY14	Kilindi	Visual intrusion of project components into landscape	Landscape	Change of landscape character	Site clearance and fencing for camp affecting Kitwai Game Controlled Area, 0.6 km from MCPY14	C		–	TZ 8.8	4	1	2	2	9	Reinstatement plan	2	1	2	2	7
1238	1238	MCPY14	Kilindi	Visual intrusion of project components into landscape	Landscape	Change of landscape character	Operation and reinstatement of construction camp affecting Kitwai Game Controlled Area	C		–	TZ 8.8	4	2	2	2	10	Reinstatement plan	2	2	2	2	8
1238	1238	MCPY14	Kilindi	Visual intrusion of project components into landscape	Landscape	Change of landscape character	Retention of part of the construction camp by government, affecting Kitwai Game Controlled Area		O	–	TZ 8.8	4	5	2	2	13	Reinstatement plan	4	5	2	2	13
1238	1238	MCPY14	Kilindi	Visual intrusion of project components into landscape	Landscape	Change of views	Site clearance and fencing of camp affecting views from small settlements, farms and unsealed roads	C		–	TZ 8.8	4	1	2	2	9	Reinstatement plan	2	1	2	2	7
1238	1238	MCPY14	Kilindi	Visual intrusion of project components into landscape	Landscape	Change of views	Operation and reinstatement of construction camp affecting views from small settlements, farms and unsealed roads	C		–	TZ 8.8	4	2	2	2	10	Reinstatement plan	2	2	2	2	8

Table E3-1 Location Specific Impacts Register

KP Start	KP End	Location	District	Aspect	VEC	Potential Impact	Impact Detail	Phase		High Stakeholder Concern	ESIA Section	Pre-mitigation Impact					Management Plan(s)	Residual Impacts				
								C	O			M	D	E	S	SS		M	D	E	S	SS
1238	1238	MCPY14	Kilindi	Visual intrusion of project components into landscape	Landscape	Change of views	Retention of part of the construction camp by government, affecting views from small settlements, farms and unsealed roads		O	–	TZ 8.8	4	5	2	2	13	Reinstatement plan	4	5	2	2	13
1318	1318	MCPY15	Handeni Township Authority	Visual intrusion of project components into landscape	Landscape	Change of landscape character	Site clearance and fencing for camp affecting farmland landscape	C		–	TZ 8.8	4	1	2	2	9	Reinstatement plan	2	1	2	2	7
1318	1318	MCPY15	Handeni Township Authority	Visual intrusion of project components into landscape	Landscape	Change of landscape character	Operation and reinstatement of construction camp affecting farmland landscape	C		–	TZ 8.8	4	2	2	2	10	Reinstatement plan	2	2	2	2	8
1318	1318	MCPY15	Handeni Township Authority	Visual intrusion of project components into landscape	Landscape	Change of landscape character	Retention of part of the construction camp by government affecting farmland landscape		O	–	TZ 8.8	4	5	2	2	13	Reinstatement plan	4	5	2	2	13
1318	1318	MCPY15	Handeni Township Authority	Visual intrusion of project components into landscape	Landscape	Change of views	Site clearance and fencing of camp affecting views from small towns and main roads	C		–	TZ 8.8	4	1	2	2	9	Reinstatement plan	2	1	2	2	7
1318	1318	MCPY15	Handeni Township Authority	Visual intrusion of project components into landscape	Landscape	Change of views	Operation and reinstatement of construction camp affecting small towns and main roads	C		–	TZ 8.8	4	2	2	2	10	Reinstatement plan	2	2	2	2	8
1318	1318	MCPY15	Handeni Township Authority	Visual intrusion of project components into landscape	Landscape	Change of views	Retention of part of the construction camp by government, affecting views from small towns and main roads		O	–	TZ 8.8	4	5	2	2	13	Reinstatement plan	4	5	2	2	13
1404	1404	MCPY16	Muheza	Visual intrusion of project components into landscape	Landscape	Change of landscape character	Site clearance and fencing for camp affecting farmland landscape	C		–	TZ 8.8	4	1	2	2	9	Reinstatement plan	2	1	2	2	7
1404	1404	MCPY16	Muheza	Visual intrusion of project components into landscape	Landscape	Change of landscape character	Operation and reinstatement of construction camp affecting farmland landscape	C		–	TZ 8.8	4	2	2	2	10	Reinstatement plan	2	2	2	2	8

Table E3-1 Location Specific Impacts Register

KP Start	KP End	Location	District	Aspect	VEC	Potential Impact	Impact Detail	Phase		High Stakeholder Concern	ESIA Section	Pre-mitigation Impact					Management Plan(s)	Residual Impacts				
								C	O			M	D	E	S	SS		M	D	E	S	SS
1404	1404	MCPY16	Muheza	Visual intrusion of project components into landscape	Landscape	Change of landscape character	Retention of part of the construction camp by government affecting farmland landscape		O	–	TZ 8.8	4	5	2	2	13	Reinstatement plan	4	5	2	2	13
1404	1404	MCPY16	Muheza	Visual intrusion of project components into landscape	Landscape	Change of views	Site clearance and fencing of camp affecting views from small towns and main roads	C		–	TZ 8.8	4	1	2	2	9	Reinstatement plan	2	1	2	2	7
1404	1404	MCPY16	Muheza	Visual intrusion of project components into landscape	Landscape	Change of views	Operation and reinstatement of construction camp affecting small towns and main roads	C		–	TZ 8.8	4	2	2	2	10	Reinstatement plan	2	2	2	2	8
1404	1404	MCPY16	Muheza	Visual intrusion of project components into landscape	Landscape	Change of views	Retention of part of the construction camp by government, affecting views from small towns and main roads		O	–	TZ 8.8	4	5	2	2	13	Reinstatement plan	4	5	2	2	13
701	701	Coating facility	Nzega	Visual intrusion of project components into landscape	Landscape	Change of landscape character	Site clearance and fencing for camp affecting Mwakalundi Forest Reserve, 0.3 km from CF	C		–	TZ 8.8	6	1	2	2	11	Reinstatement plan	4	1	2	2	9
701	701	Coating facility	Nzega	Visual intrusion of project components into landscape	Landscape	Change of landscape character	Operation and reinstatement of construction camp affecting Mwakalundi Forest Reserve	C		–	TZ 8.8	6	2	2	2	12	Reinstatement plan	4	2	2	2	10
701	701	Coating facility	Nzega	Visual intrusion of project components into landscape	Landscape	Change of landscape character	Retention of part of the construction camp by government, affecting Mwakalundi Forest Reserve		O	–	TZ 8.8	4	5	2	2	13	Reinstatement plan	4	5	2	2	13
701	701	Coating facility	Nzega	Visual intrusion of project components into landscape	Landscape	Change of views	Site clearance and fencing of camp affecting views from Sojo village, farms and regional road R393	C		–	TZ 8.8	6	1	2	2	11	Reinstatement plan	4	1	2	2	9
701	701	Coating facility	Nzega	Visual intrusion of project components into landscape	Landscape	Change of views	Operation and reinstatement of construction camp affecting views	C		–	TZ 8.8	6	2	2	2	12	Reinstatement plan	4	2	2	2	10

Table E3-1 Location Specific Impacts Register

KP Start	KP End	Location	District	Aspect	VEC	Potential Impact	Impact Detail	Phase		High Stakeholder Concern	ESIA Section	Pre-mitigation Impact					Management Plan(s)	Residual Impacts				
								C	O			M	D	E	S	SS		M	D	E	S	SS
							from Sojo village, farms and regional road R393															
701	701	Coating facility	Nzega	Visual intrusion of project components into landscape	Landscape	Change of views	Retention of part of the construction camp by government, affecting views from Sojo village, farms and regional road R393		O	–	TZ 8.8	4	5	2	2	13	Reinstatement plan	4	5	2	2	13
405.4	405.4	PS3	Muleba	Visual intrusion of project components into landscape	Landscape	Change of landscape character	Construction and commissioning of AGIs affecting area of some natural scenic value	C		–	TZ 8.8	6	2	2	3	13	Reinstatement plan	6	2	2	3	13
405.4	405.4	PS3	Muleba	Visual intrusion of project components into landscape	Landscape	Change of landscape character	Operation of AGIs affecting area of some natural scenic value		O	–	TZ 8.8	6	4	2	3	15	Reinstatement plan. Pollution prevention plan.	6	4	2	3	15
405.4	405.4	PS3	Muleba	Visual intrusion of project components into landscape	Landscape	Change of landscape character	Construction and commission of AGIs affecting farmland landscape 1.3 km from PS3	C		–	TZ 8.8	4	2	2	2	10	Reinstatement plan	4	2	2	2	10
405.4	405.4	PS3	Muleba	Visual intrusion of project components into landscape	Landscape	Change of landscape character	Operation of AGIs, affecting farmland landscape 1.3 km from PS3		O	–	TZ 8.8	4	4	2	2	12	Reinstatement plan	4	4	2	2	12
405.4	405.4	PS3	Muleba	Visual intrusion of project components into landscape	Landscape	Change of views	Construction and commissioning of AGIs affecting views from small settlements, farms and unsealed roads	C		–	TZ 8.8	4	2	2	2	10	Reinstatement plan	4	2	2	2	10
405.4	405.4	PS3	Muleba	Visual intrusion of project components into landscape	Landscape	Change of views	Operation of AGIs, affecting views from small settlements, farms and unsealed roads		O	–	TZ 8.8	4	4	2	2	12	Reinstatement plan. Pollution prevention plan.	4	4	2	2	12
610	610	PS4	Mbogwe	Visual intrusion of project components into landscape	Landscape	Change of landscape character	Construction and commissioning of AGIs affecting farmland landscape	C		–	TZ 8.8	6	2	2	2	12	Reinstatement plan	6	2	2	2	12
610	610	PS4	Mbogwe	Visual intrusion of project components into landscape	Landscape	Change of landscape character	Operation of AGIs affecting farmland landscape		O	–	TZ 8.8	6	4	2	2	14	Reinstatement plan. Pollution prevention plan.	6	4	2	2	14

Table E3-1 Location Specific Impacts Register

KP Start	KP End	Location	District	Aspect	VEC	Potential Impact	Impact Detail	Phase		High Stakeholder Concern	ESIA Section	Pre-mitigation Impact					Management Plan(s)	Residual Impacts				
								C	O			M	D	E	S	SS		M	D	E	S	SS
610	610	PS4	Mbogwe	Visual intrusion of project components into landscape	Landscape	Change of views	Construction and commissioning of AGIs affecting views from Masumbwe and Lubebo settlements and main road	C		–	TZ 8.8	4	2	2	2	10	Reinstatement plan	4	2	2	2	10
610	610	PS4	Mbogwe	Visual intrusion of project components into landscape	Landscape	Change of views	Operation of AGIs, affecting views from Masumbwe and Lubebo settlements and main road		O	–	TZ 8.8	4	4	2	2	12	Reinstatement plan. Pollution prevention plan.	4	4	2	2	12
610	610	PS4	Mbogwe	Visual intrusion of project components into landscape	Landscape	Change of views	Construction and commissioning of AGIs affecting views from small settlements, farms and unsealed roads	C		–	TZ 8.8	4	2	2	2	10	Reinstatement plan	4	2	2	2	10
610	610	PS4	Mbogwe	Visual intrusion of project components into landscape	Landscape	Change of views	Operation of AGIs, affecting views from small settlements, farms and unsealed roads		O	–	TZ 8.8	4	4	2	2	12	Reinstatement plan. Pollution prevention plan.	4	4	2	2	12
824.9	824.9	PS5	Igunga	Visual intrusion of project components into landscape	Landscape	Change of landscape character	Construction and commissioning of AGIs affecting farmland landscape	C		–	TZ 8.8	6	2	2	2	12	Reinstatement plan	6	2	2	2	12
824.9	824.9	PS5	Igunga	Visual intrusion of project components into landscape	Landscape	Change of landscape character	Operation of AGIs affecting farmland landscape		O	–	TZ 8.8	6	4	2	2	14	Reinstatement plan. Pollution prevention plan.	6	4	2	2	14
824.9	824.9	PS5	Igunga	Visual intrusion of project components into landscape	Landscape	Change of landscape character	Construction and commissioning of AGIs affecting Wembere Steppe, 3.4 km from PS5	C		–	TZ 8.8	4	2	2	2	10	Reinstatement plan	4	2	2	2	10
824.9	824.9	PS5	Igunga	Visual intrusion of project components into landscape	Landscape	Change of landscape character	Operation of AGIs, affecting Wembere Steppe, 3.4 km from PS5		O	–	TZ 8.8	4	4	2	2	12	Reinstatement plan. Pollution prevention plan.	4	4	2	2	12
824.9	824.9	PS5	Igunga	Visual intrusion of project components into landscape	Landscape	Change of views	Construction and commissioning of AGIs affecting views from Igunga and main road	C		–	TZ 8.8	4	2	2	2	10	Reinstatement plan	4	2	2	2	10

Table E3-1 Location Specific Impacts Register

KP Start	KP End	Location	District	Aspect	VEC	Potential Impact	Impact Detail	Phase		High Stakeholder Concern	ESIA Section	Pre-mitigation Impact					Management Plan(s)	Residual Impacts				
								C	O			M	D	E	S	SS		M	D	E	S	SS
824.9	824.9	PS5	Igunga	Visual intrusion of project components into landscape	Landscape	Change of views	Operation of AGIs, affecting views from Igunga and main road		O	–	TZ 8.8	4	4	2	2	12	Reinstatement plan. Pollution prevention plan.	4	4	2	2	12
824.9	824.9	PS5	Igunga	Visual intrusion of project components into landscape	Landscape	Change of views	Construction and commissioning of AGIs affecting views from Mkomero and unsealed road	C		–	TZ 8.8	4	2	2	2	10	Reinstatement plan	4	2	2	2	10
824.9	824.9	PS5	Igunga	Visual intrusion of project components into landscape	Landscape	Change of views	Operation of AGIs, affecting views from Mkomero and unsealed road		O	–	TZ 8.8	4	4	2	2	12	Reinstatement plan. Pollution prevention plan.	4	4	2	2	12
824.9	824.9	PS5	Igunga	Visual intrusion of project components into landscape	Landscape	Change of views	Construction and commissioning of AGIs affecting views from small settlements, farms and unsealed roads	C		–	TZ 8.8	8	2	2	2	14	Reinstatement plan	8	2	2	2	14
824.9	824.9	PS5	Igunga	Visual intrusion of project components into landscape	Landscape	Change of views	Operation of AGIs, affecting views from small settlements, farms and unsealed roads		O	–	TZ 8.8	6	4	2	2	14	Reinstatement plan. Pollution prevention plan.	6	4	2	2	14
914.7	914.7	PS6	Singida	Visual intrusion of project components into landscape	Landscape	Change of landscape character	Construction and commissioning of AGIs affecting grazing land, grassland and scrub	C		–	TZ 8.8	6	2	2	2	12	Reinstatement plan	6	2	2	2	12
914.7	914.7	PS6	Singida	Visual intrusion of project components into landscape	Landscape	Change of landscape character	Operation of AGIs affecting grazing land, grassland and scrub		O	–	TZ 8.8	6	4	2	2	14	Reinstatement plan. Pollution prevention plan.	6	4	2	2	14
914.7	914.7	PS6	Singida	Visual intrusion of project components into landscape	Landscape	Change of views	Construction and commissioning of AGIs affecting views from small settlements, farms and unsealed roads	C		–	TZ 8.8	4	2	2	2	10	Reinstatement plan	4	2	2	2	10
914.7	914.7	PS6	Singida	Visual intrusion of project components into landscape	Landscape	Change of views	Operation of AGIs, affecting views from small settlements, farms and unsealed roads		O	–	TZ 8.8	4	4	2	2	12	Reinstatement plan. Pollution prevention plan.	4	4	2	2	12
1172	1172	PRS1	Kiteto	Visual intrusion of project	Landscape	Change of landscape character	Construction and commissioning of	C		–	TZ 8.8	6	2	2	4	14	Reinstatement plan	6	2	2	4	14

Table E3-1 Location Specific Impacts Register

KP Start	KP End	Location	District	Aspect	VEC	Potential Impact	Impact Detail	Phase		High Stakeholder Concern	ESIA Section	Pre-mitigation Impact					Management Plan(s)	Residual Impacts				
								C	O			M	D	E	S	SS		M	D	E	S	SS
				components into landscape			AGIs affecting Talamai Open Area															
1172	1172	PRS1	Kiteto	Visual intrusion of project components into landscape	Landscape	Change of landscape character	Operation of AGIs affecting Talamai Open Area		O	–	TZ 8.8	6	4	2	4	16	Reinstatement plan. Pollution prevention plan.	6	4	2	4	16
1172	1172	PRS1	Kiteto	Visual intrusion of project components into landscape	Landscape	Change of views	Construction and commissioning of AGIs affecting views from small settlements, farms and unsealed roads	C		–	TZ 8.8	4	2	2	2	10	Reinstatement plan	4	2	2	2	10
1172	1172	PRS1	Kiteto	Visual intrusion of project components into landscape	Landscape	Change of views	Operation of AGIs, affecting views from small settlements, farms and unsealed roads		O	–	TZ 8.8	4	4	2	2	12	Reinstatement plan. Pollution prevention plan.	4	4	2	2	12
1330	1330	PRS2	Handeni	Visual intrusion of project components into landscape	Landscape	Change of landscape character	Construction and commissioning of AGIs affecting grazing land, grassland and scrub	C		–	TZ 8.8	6	2	2	2	12	Reinstatement plan	6	2	2	2	12
1330	1330	PRS2	Handeni	Visual intrusion of project components into landscape	Landscape	Change of landscape character	Operation of AGIs affecting grazing land, grassland and scrub		O	–	TZ 8.8	6	4	2	2	14	Reinstatement plan. Pollution prevention plan.	6	4	2	2	14
1330	1330	PRS2	Handeni	Visual intrusion of project components into landscape	Landscape	Change of views	Construction and commissioning of AGIs affecting views from Sindeni and main road	C		–	TZ 8.8	4	2	2	2	10	Reinstatement plan	4	2	2	2	10
1330	1330	PRS2	Handeni	Visual intrusion of project components into landscape	Landscape	Change of views	Operation of AGIs, affecting views from Sindeni and main road		O	–	TZ 8.8	4	4	2	2	12	Reinstatement plan. Pollution prevention plan.	4	4	2	2	12
1330	1330	PRS2	Handeni	Visual intrusion of project components into landscape	Landscape	Change of views	Construction and commissioning of AGIs affecting views from small settlements, farms and unsealed roads	C		–	TZ 8.8	4	2	2	2	10	Reinstatement plan	4	2	2	2	10
1330	1330	PRS2	Handeni	Visual intrusion of project components into landscape	Landscape	Change of views	Operation of AGIs, affecting views from small settlements, farms and unsealed roads		O	–	TZ 8.8	4	4	2	2	12	Reinstatement plan. Pollution prevention plan.	4	4	2	2	12

Table E3-1 Location Specific Impacts Register

KP Start	KP End	Location	District	Aspect	VEC	Potential Impact	Impact Detail	Phase		High Stakeholder Concern	ESIA Section	Pre-mitigation Impact					Management Plan(s)	Residual Impacts				
								C	O			M	D	E	S	SS		M	D	E	S	SS
1443	1443	MST and LOF	Tanga	Visual intrusion of project components into landscape	Landscape	Change of landscape character	Construction and commissioning of MST and LOF affecting farmland landscape	C		–	TZ 8.8	6	2	2	2	12	Reinstatement plan	6	2	2	2	12
1443	1443	MST and LOF	Tanga	Visual intrusion of project components into landscape	Landscape	Change of landscape character	Operation of MST and LOF affecting farmland landscape		O	–	TZ 8.8	6	4	2	2	14	Reinstatement plan. Pollution prevention plan.	4	4	2	2	12
1443	1443	MST and LOF	Tanga	Visual intrusion of project components into landscape	Landscape	Change of landscape character	Construction and commissioning of MST and LOF affecting Mangrove forest reserve and marine reserves	C		–	TZ 8.8	6	2	2	4	14	Reinstatement plan	6	2	2	4	14
1443	1443	MST and LOF	Tanga	Visual intrusion of project components into landscape	Landscape	Change of landscape character	Operation of MST and LOF affecting Mangrove forest reserve and marine reserves		O	–	TZ 8.8	6	4	2	4	16	Reinstatement plan. Pollution prevention plan.	4	4	2	4	14
1443	1443	MST and LOF	Tanga	Visual intrusion of project components into landscape	Landscape	Change of views	Construction and commissioning of MST and LOF affecting views from tourist area within Tanga and marine areas used by tourists	C		–	TZ 8.8	6	2	2	4	14	Reinstatement plan	6	2	2	4	14
1443	1443	MST and LOF	Tanga	Visual intrusion of project components into landscape	Landscape	Change of views	Operation of MST and LOF affecting views from tourist area within Tanga and marine areas used by tourists		O	–	TZ 8.8	6	4	2	4	16	Reinstatement plan. Pollution prevention plan.	4	4	2	4	14
1443	1443	MST and LOF	Tanga	Visual intrusion of project components into landscape	Landscape	Change of views	Construction and commissioning of MST and LOF affecting views from Tanga, Mabokweni and Mpirani Mtaa and main sealed road	C		–	TZ 8.8	6	2	2	2	12	Reinstatement plan	4	2	2	2	10
1443	1443	MST and LOF	Tanga	Visual intrusion of project components into landscape	Landscape	Change of views	Operation of MST and LOF affecting views from Tanga, Mabokweni and Mpirani Mtaa and main sealed road		O	–	TZ 8.8	6	4	2	2	14	Reinstatement plan. Pollution prevention plan.	4	4	2	2	12
1443	1443	MST and LOF	Tanga	Visual intrusion of project components into landscape	Landscape	Change of views	Construction and commissioning of MST and LOF affecting views from Putini,	C		–	TZ 8.8	2	2	2	2	8	Reinstatement plan	2	2	2	2	8

Table E3-1 Location Specific Impacts Register

KP Start	KP End	Location	District	Aspect	VEC	Potential Impact	Impact Detail	Phase		High Stakeholder Concern	ESIA Section	Pre-mitigation Impact					Management Plan(s)	Residual Impacts				
								C	O			M	D	E	S	SS		M	D	E	S	SS
							Chongoleani, Ndaoya and Helani villages and unsealed road															
1443	1443	MST and LOF	Tanga	Visual intrusion of project components into landscape	Landscape	Change of views	Operation of MST and LOF affecting views from Putini, Chongoleani, Ndaoya and Helani villages and unsealed road		O	–	TZ 8.8	2	4	2	2	10	Reinstatement plan. Pollution prevention plan.	2	4	2	2	10
1443	1443	MST and LOF	Tanga	Visual intrusion of project components into landscape	Landscape	Change of views	Construction and commissioning of MST and LOF affecting views from small settlements, farms and unsealed roads	C		–	TZ 8.8	2	2	2	2	8	Reinstatement plan	2	2	2	2	8
1443	1443	MST and LOF	Tanga	Visual intrusion of project components into landscape	Landscape	Change of views	Operation of MST and LOF affecting views from small settlements, farms and unsealed roads		O	–	TZ 8.8	2	4	2	2	10	Reinstatement plan. Pollution prevention plan.	2	4	2	2	10
325.5	325.5	MCPY5	Missenyi	Release of gases, exhausts and vapours to atmosphere	Air quality	Emissions of gaseous substances causing reduced air quality from operation of generators		C		–	TZ 8.9	6	1–2	2	1–2	10–12	Pollution prevention plan	4	1–2	2	1–2	8–10
419	419	MCPY6	Muleba	Release of gases, exhausts and vapours to atmosphere	Air quality	Emissions of gaseous substances causing reduced air quality from operation of generators		C		–	TZ 8.9	6	1–2	2	1–2	10–12	Pollution prevention plan	4	1–2	2	1–2	8–10
513	513	MCPY7	Chato	Release of gases, exhausts and vapours to atmosphere	Air quality	Emissions of gaseous substances causing reduced air quality from operation of generators		C		–	TZ 8.9	6	1–2	2	1–2	10–12	Pollution prevention plan	4	1–2	2	1–2	8–10
594.5	594.5	MCPY8	Bukombe	Release of gases, exhausts and vapours to atmosphere	Air quality	Emissions of gaseous substances causing reduced air quality from operation of generators		C		–	TZ 8.9	6	1–2	2	1–2	10–12	Pollution prevention plan	4	1–2	2	1–2	8–10
702	702	MCPY9	Nzega	Release of gases, exhausts and vapours to atmosphere	Air quality	Emissions of gaseous substances causing reduced air quality from operation of generators		C		–	TZ 8.9	6	1–2	2	1–2	10–12	Pollution prevention plan	4	1–2	2	1–2	8–10
800	800	MCPY10	Igunga	Release of gases, exhausts and vapours to atmosphere	Air quality	Emissions of gaseous substances causing reduced air quality from operation of generators		C		–	TZ 8.9	6	1–2	2	1–2	10–12	Pollution prevention plan	4	1–2	2	1–2	8–10
914.7	914.7	MCPY11	Singida	Release of gases, exhausts	Air quality	Emissions of gaseous substances causing		C		–	TZ 8.9	6	1–2	2	1–2	10–12	Pollution prevention plan	4	1–2	2	1–2	8–10

Table E3-1 Location Specific Impacts Register

KP Start	KP End	Location	District	Aspect	VEC	Potential Impact	Impact Detail	Phase		High Stakeholder Concern	ESIA Section	Pre-mitigation Impact					Management Plan(s)	Residual Impacts				
								C	O			M	D	E	S	SS		M	D	E	S	SS
				and vapours to atmosphere		reduced air quality from operation of generators																
1035	1035	MCPY12	Kondoa	Release of gases, exhausts and vapours to atmosphere	Air quality	Emissions of gaseous substances causing reduced air quality from operation of generators		C		–	TZ 8.9	6	1–2	2	1–2	10–12	Pollution prevention plan	4	1–2	2	1–2	8–10
1144	1144	MCPY13	Kiteto	Release of gases, exhausts and vapours to atmosphere	Air quality	Emissions of gaseous substances causing reduced air quality from operation of generators		C		–	TZ 8.9	6	1–2	2	1–2	10–12	Pollution prevention plan	4	1–2	2	1–2	8–10
1238	1238	MCPY14	Kilindi	Release of gases, exhausts and vapours to atmosphere	Air quality	Emissions of gaseous substances causing reduced air quality from operation of generators		C		–	TZ 8.9	6	1–2	2	1–2	10–12	Pollution prevention plan	4	1–2	2	1–2	8–10
1318	1318	MCPY15	Handeni Township Authority	Release of gases, exhausts and vapours to atmosphere	Air quality	Emissions of gaseous substances causing reduced air quality from operation of generators		C		–	TZ 8.9	6	1–2	2	1–2	10–12	Pollution prevention plan	4	1–2	2	1–2	8–10
1404	1404	MCPY16	Muheza	Release of gases, exhausts and vapours to atmosphere	Air quality	Emissions of gaseous substances causing reduced air quality from operation of generators		C		–	TZ 8.9	6	1–2	2	1–2	10–12	Pollution prevention plan	4	1–2	2	1–2	8–10
TBC	TBC	Hydrotest sections	TBC	Release of gases, exhausts and vapours to atmosphere	Air quality	Emissions of gaseous substances causing reduced air quality from operation of generators		C		–	TZ 8.9	6	1–2	2	1–2	10–12	Pollution prevention plan	4	1–2	2	1–2	8–10
325.5	325.5	MCPY5	Missenyi	Release of gases, exhausts and vapours to atmosphere	Air quality	Emissions of fine particulate matter causing reduced air quality from operation of generators		C		–	TZ 8.9	6	1–2	2	2–4	11–14	Pollution prevention plan	4	1–2	2	2–4	9–12
419	419	MCPY6	Muleba	Release of gases, exhausts and vapours to atmosphere	Air quality	Emissions of fine particulate matter causing reduced air quality from operation of generators		C		–	TZ 8.9	6	1–2	2	2–4	11–14	Pollution prevention plan	4	1–2	2	2–4	9–12
513	513	MCPY7	Chato	Release of gases, exhausts and vapours to atmosphere	Air quality	Emissions of fine particulate matter causing reduced air quality from operation of generators		C		–	TZ 8.9	6	1–2	2	2–4	11–14	Pollution prevention plan	4	1–2	2	2–4	9–12
594.5	594.5	MCPY8	Bukombe	Release of gases, exhausts and vapours to atmosphere	Air quality	Emissions of fine particulate matter causing reduced air quality from operation of generators		C		–	TZ 8.9	6	1–2	2	2–4	11–14	Pollution prevention plan	4	1–2	2	2–4	9–12
702	702	MCPY9	Nzega	Release of gases, exhausts and vapours to atmosphere	Air quality	Emissions of fine particulate matter causing reduced air quality from operation of generators		C		–	TZ 8.9	6	1–2	2	2–4	11–14	Pollution prevention plan	4	1–2	2	2–4	9–12

Table E3-1 Location Specific Impacts Register

KP Start	KP End	Location	District	Aspect	VEC	Potential Impact	Impact Detail	Phase		High Stakeholder Concern	ESIA Section	Pre-mitigation Impact					Management Plan(s)	Residual Impacts				
								C	O			M	D	E	S	SS		M	D	E	S	SS
800	800	MCPY10	Igunga	Release of gases, exhausts and vapours to atmosphere	Air quality	Emissions of fine particulate matter from operation of generators causing reduced air quality		C		–	TZ 8.9	6	1–2	2	2–4	11–14	Pollution prevention plan	4	1–2	2	2–4	9–12
914.7	914.7	MCPY11	Singida	Release of gases, exhausts and vapours to atmosphere	Air quality	Emissions of fine particulate matter causing reduced air quality from operation of generators		C		–	TZ 8.9	6	1–2	2	2–4	11–14	Pollution prevention plan	4	1–2	2	2–4	9–12
1035	1035	MCPY12	Kondoa	Release of gases, exhausts and vapours to atmosphere	Air quality	Emissions of fine particulate matter causing reduced air quality from operation of generators		C		–	TZ 8.9	6	1–2	2	2–4	11–14	Pollution prevention plan	4	1–2	2	2–4	9–12
1144	1144	MCPY13	Kiteto	Release of gases, exhausts and vapours to atmosphere	Air quality	Emissions of fine particulate matter causing reduced air quality from operation of generators		C		–	TZ 8.9	6	1–2	2	2–4	11–14	Pollution prevention plan	4	1–2	2	2–4	9–12
1238	1238	MCPY14	Kilindi	Release of gases, exhausts and vapours to atmosphere	Air quality	Emissions of fine particulate matter causing reduced air quality from operation of generators		C		–	TZ 8.9	6	1–2	2	2–4	11–14	Pollution prevention plan	4	1–2	2	2–4	9–12
1318	1318	MCPY15	Handeni Township Authority	Release of gases, exhausts and vapours to atmosphere	Air quality	Emissions of fine particulate matter causing reduced air quality from operation of generators		C		–	TZ 8.9	6	1–2	2	2–4	11–14	Pollution prevention plan	4	1–2	2	2–4	9–12
1404	1404	MCPY16	Muheza	Release of gases, exhausts and vapours to atmosphere	Air quality	Emissions of fine particulate matter causing reduced air quality from operation of generators		C		–	TZ 8.9	6	1–2	2	2–4	11–14	Pollution prevention plan	4	1–2	2	2–4	9–12
TBC	TBC	Hydrotest sections	TBC	Release of gases, exhausts and vapours to atmosphere	Air quality	Emissions of fine particulate matter causing reduced air quality from operation of generators		C		–	TZ 8.9	6	1–2	2	2–4	11–14	Pollution prevention plan	4	1–2	2	2–4	9–12
325.5	325.5	MCPY5	Missenyi	Dust	Air quality	Nuisance from mobilisation of dust by project vehicles		C		–	TZ 8.9	4	4	2	1–3	11–13	Pollution prevention plan. Traffic and road safety management plan.	2	4	2	1–3	9–11
419	419	MCPY6	Muleba	Dust	Air quality	Nuisance from mobilisation of dust by project vehicles		C		–	TZ 8.9	4	4	2	1–3	11–13	Pollution prevention plan. Traffic and road safety management plan.	2	4	2	1–3	9–11

Table E3-1 Location Specific Impacts Register

KP Start	KP End	Location	District	Aspect	VEC	Potential Impact	Impact Detail	Phase		High Stakeholder Concern	ESIA Section	Pre-mitigation Impact					Management Plan(s)	Residual Impacts				
								C	O			M	D	E	S	SS		M	D	E	S	SS
513	513	MCPY7	Chato	Dust	Air quality	Nuisance from mobilisation of dust by project vehicles		C		–	TZ 8.9	4	4	2	1–3	11–13	Pollution prevention plan. Traffic and road safety management plan.	2	4	2	1–3	9–11
594.5	594.5	MCPY8	Bukombe	Dust	Air quality	Nuisance from mobilisation of dust by project vehicles		C		–	TZ 8.9	4	4	2	1–3	11–13	Pollution prevention plan. Traffic and road safety management plan.	2	4	2	1–3	9–11
702	702	MCPY9	Nzega	Dust	Air quality	Nuisance from mobilisation of dust by project vehicles		C		–	TZ 8.9	4	4	2	1–3	11–13	Pollution prevention plan. Traffic and road safety management plan.	2	4	2	1–3	9–11
800	800	MCPY10	Igunga	Dust	Air quality	Nuisance from mobilisation of dust by project vehicles		C		–	TZ 8.9	4	4	2	1–3	11–13	Pollution prevention plan. Traffic and road safety management plan.	2	4	2	1–3	9–11
914.7	914.7	MCPY11	Singida	Dust	Air quality	Nuisance from mobilisation of dust by project vehicles		C		–	TZ 8.9	4	4	2	1–3	11–13	Pollution prevention plan. Traffic and road safety management plan.	2	4	2	1–3	9–11
1035	1035	MCPY12	Kondoa	Dust	Air quality	Nuisance from mobilisation of dust by project vehicles		C		–	TZ 8.9	4	4	2	1–3	11–13	Pollution prevention plan. Traffic and road safety management plan.	2	4	2	1–3	9–11
1144	1144	MCPY13	Kiteto	Dust	Air quality	Nuisance from mobilisation of dust by project vehicles		C		–	TZ 8.9	4	4	2	1–3	11–13	Pollution prevention plan. Traffic and road safety management plan.	2	4	2	1–3	9–11
1238	1238	MCPY14	Kilindi	Dust	Air quality	Nuisance from mobilisation of dust by project vehicles		C		–	TZ 8.9	4	4	2	1–3	11–13	Pollution prevention plan. Traffic and road safety management plan.	2	4	2	1–3	9–11
1318	1318	MCPY15	Handeni Township Authority	Dust	Air quality	Nuisance from mobilisation of dust by project vehicles		C		–	TZ 8.9	4	4	2	1–3	11–13	Pollution prevention plan. Traffic and road safety management plan.	2	4	2	1–3	9–11

Table E3-1 Location Specific Impacts Register

KP Start	KP End	Location	District	Aspect	VEC	Potential Impact	Impact Detail	Phase		High Stakeholder Concern	ESIA Section	Pre-mitigation Impact					Management Plan(s)	Residual Impacts				
								C	O			M	D	E	S	SS		M	D	E	S	SS
																	management plan.					
1404	1404	MCPY16	Muheza	Dust	Air quality	Nuisance from mobilisation of dust by project vehicles		C		–	TZ 8.9	4	4	2	1–3	11–13	Pollution prevention plan. Traffic and road safety management plan.	2	4	2	1–3	9–11
TBC	TBC	Hydrotest sections	TBC	Dust	Air quality	Nuisance from mobilisation of dust by project vehicles		C		–	TZ 8.9	4	4	2	1–3	11–13	Pollution prevention plan. Traffic and road safety management plan.	2	4	2	1–3	9–11
701	702	Coating facility	Nzega	Release of gases, exhausts and vapours to atmosphere	Air quality	Emissions to air from the coating facility during operation		C		–	TZ 8.9	10	2	2	1–2	15–16	Pollution prevention plan.	8	2	2	1–2	13–14
405.4	405.4	PS3	Muleba	Release of gases, exhausts and vapours to atmosphere	Air quality	Increased NO2 concentrations at ground level from operation of generators and bulk heaters (long and short term)			O	–	TZ 8.9	10	4	2	2	18	Pollution prevention plan.	4	4	2	2	12
824.9	824.9	PS5	Igunga	Release of gases, exhausts and vapours to atmosphere	Air quality	Increased NO2 concentrations at ground level from operation of generators and bulk heaters (long and short term)			O	–	TZ 8.9	10	4	2	2	18	Pollution prevention plan.	4	4	2	2	12
1443	1443	MST and LOF	Tanga	Release of gases, exhausts and vapours to atmosphere	Air quality	Increased NO2 concentrations at ground level from operation of generators and bulk heaters (long and short term)			O	–	TZ 8.9	10	4	2	2	18	Pollution prevention plan.	4	4	2	2	12
610	610	PS4	Mbogwe	Release of gases, exhausts and vapours to atmosphere	Air quality	Increased NO2 concentrations at ground level from operation of bulk heaters (long and short term)			O	–	TZ 8.9	4	4	2	3	13	Pollution prevention plan.	2	4	2	1	9
914.7	914.7	PS6	Singida	Release of gases, exhausts and vapours to atmosphere	Air quality	Increased NO2 concentrations at ground level from operation of bulk heaters (long and short term)			O	–	TZ 8.9	4	4	2	1	11	Pollution prevention plan.	2	4	2	1	9
405.4	405.4	PS3	Muleba	Release of gases, exhausts and vapours to atmosphere	Air quality	Increased PM10 and PM2.5 concentrations at ground level from operation of generators and bulk heaters (long and short term)			O	–	TZ 8.9	10	4	2	5	21	Pollution prevention plan.	4	4	2	3–5	13–15

Table E3-1 Location Specific Impacts Register

KP Start	KP End	Location	District	Aspect	VEC	Potential Impact	Impact Detail	Phase		High Stakeholder Concern	ESIA Section	Pre-mitigation Impact					Management Plan(s)	Residual Impacts				
								C	O			M	D	E	S	SS		M	D	E	S	SS
824.9	824.9	PS5	Igunga	Release of gases, exhausts and vapours to atmosphere	Air quality	Increased PM10 and PM2.5 concentrations at ground level from operation of generators and bulk heaters (long and short term)			O	–	TZ 8.9	10	4	2	3	19	Pollution prevention plan.	4	4	2	3–5	13-15
1443	1443	MST and LOF	Tanga	Release of gases, exhausts and vapours to atmosphere	Air quality	Increased PM10 and PM2.5 concentrations at ground level from operation of generators and bulk heaters (long and short term)			O	–	TZ 8.9	8	4	2	3	17	Pollution prevention plan.	4	4	2	3–5	13-15
610	610	PS4	Mbogwe	Release of gases, exhausts and vapours to atmosphere	Air quality	Increased PM2.5 and PM10 concentrations at ground level from operation of bulk heaters (long and short term)			O	–	TZ 8.9	4	4	2	3	13	Pollution prevention plan.	2	4	2	2–3	10–11
914.7	914.7	PS6	Singida	Release of gases, exhausts and vapours to atmosphere	Air quality	Increased PM2.5 and PM10 concentrations at ground level from operation of bulk heaters (long and short term)			O	–	TZ 8.9	4	4	2	3	13	Pollution prevention plan.	2	4	2	2–3	10–11
325.5	325.5	MCPY5	Missenyi	Noise	Acoustic environment	Disturbance or nuisance from noise generation during development of construction facilities		C		–	TZ 8.10	10	1	2	4	17	Pollution prevention plan	4	1	2	4	11
419	419	MCPY6	Muleba	Noise	Acoustic environment	Disturbance or nuisance from noise generation during development of construction facilities		C		–	TZ 8.10	10	1	2	4	17	Pollution prevention plan	4	1	2	4	11
513	513	MCPY7	Chato	Noise	Acoustic environment	Disturbance or nuisance from noise generation during development of construction facilities		C		–	TZ 8.10	10	1	2	4	17	Pollution prevention plan	4	1	2	4	11
594.5	594.5	MCPY8	Bukombe	Noise	Acoustic environment	Disturbance or nuisance from noise generation during development of construction facilities		C		–	TZ 8.10	10	1	2	4	17	Pollution prevention plan	4	1	2	4	11
702	702	MCPY9	Nzega	Noise	Acoustic environment	Disturbance or nuisance from noise generation during development of construction facilities		C		–	TZ 8.10	10	1	2	4	17	Pollution prevention plan	4	1	2	4	11
800	800	MCPY10	Igunga	Noise	Acoustic environment	Disturbance or nuisance from noise generation during development of construction facilities		C		–	TZ 8.10	10	1	2	4	17	Pollution prevention plan	4	1	2	4	11
914.7	914.7	MCPY11	Singida	Noise	Acoustic environment	Disturbance or nuisance from noise generation during development of construction facilities		C		–	TZ 8.10	10	1	2	4	17	Pollution prevention plan	4	1	2	4	11

Table E3-1 Location Specific Impacts Register

KP Start	KP End	Location	District	Aspect	VEC	Potential Impact	Impact Detail	Phase		High Stakeholder Concern	ESIA Section	Pre-mitigation Impact					Management Plan(s)	Residual Impacts				
								C	O			M	D	E	S	SS		M	D	E	S	SS
1035	1035	MCPY12	Kondoa	Noise	Acoustic environment	Disturbance or nuisance from noise generation during development of construction facilities		C		–	TZ 8.10	10	1	2	4	17	Pollution prevention plan	4	1	2	4	11
1144	1144	MCPY13	Kiteto	Noise	Acoustic environment	Disturbance or nuisance from noise generation during development of construction facilities		C		–	TZ 8.10	10	1	2	4	17	Pollution prevention plan	4	1	2	4	11
1238	1238	MCPY14	Kilindi	Noise	Acoustic environment	Disturbance or nuisance from noise generation during development of construction facilities		C		–	TZ 8.10	10	1	2	4	17	Pollution prevention plan	4	1	2	4	11
1318	1318	MCPY15	Handeni Township Authority	Noise	Acoustic environment	Disturbance or nuisance from noise generation during development of construction facilities		C		–	TZ 8.10	10	1	2	4	17	Pollution prevention plan	4	1	2	4	11
1404	1404	MCPY16	Muheza	Noise	Acoustic environment	Disturbance or nuisance from noise generation during development of construction facilities		C		–	TZ 8.10	10	1	2	4	17	Pollution prevention plan	4	1	2	4	11
701	702	Coating facility	Nzega	Noise	Acoustic environment	Disturbance or nuisance from noise generation during development of construction facilities		C		–	TZ 8.10	10	1	2	4	17	Pollution prevention plan	4	1	2	4	11
325.5	325.5	MCPY5	Missenyi	Vibration	Acoustic environment	Disturbance or damage from vibration generation during decommissioning of construction facilities		C		–	TZ 8.10	4	1	2	4	11	Pollution prevention plan Stakeholder engagement plan	4	1	2	4	11
419	419	MCPY6	Muleba	Vibration	Acoustic environment	Disturbance or damage from vibration generation during decommissioning of construction facilities		C		–	TZ 8.10	4	1	2	4	11	Pollution prevention plan Stakeholder engagement plan	4	1	2	4	11
513	513	MCPY7	Chato	Vibration	Acoustic environment	Disturbance or damage from vibration generation during decommissioning of construction facilities		C		–	TZ 8.10	4	1	2	4	11	Pollution prevention plan Stakeholder engagement plan	4	1	2	4	11
594.5	594.5	MCPY8	Bukombe	Vibration	Acoustic environment	Disturbance or damage from vibration generation during decommissioning of construction facilities		C		–	TZ 8.10	4	1	2	4	11	Pollution prevention plan Stakeholder engagement plan	4	1	2	4	11
702	702	MCPY9	Nzega	Vibration	Acoustic environment	Disturbance or damage from vibration generation during decommissioning of construction facilities		C		–	TZ 8.10	4	1	2	4	11	Pollution prevention plan	4	1	2	4	11

Table E3-1 Location Specific Impacts Register

KP Start	KP End	Location	District	Aspect	VEC	Potential Impact	Impact Detail	Phase		High Stakeholder Concern	ESIA Section	Pre-mitigation Impact					Management Plan(s)	Residual Impacts				
								C	O			M	D	E	S	SS		M	D	E	S	SS
																	Stakeholder engagement plan					
800	800	MCPY10	Igunga	Vibration	Acoustic environment	Disturbance or damage from vibration generation during decommissioning of construction facilities		C		–	TZ 8.10	4	1	2	4	11	Pollution prevention plan Stakeholder engagement plan	4	1	2	4	11
914.7	914.7	MCPY11	Singida	Vibration	Acoustic environment	Disturbance or damage from vibration generation during decommissioning of construction facilities		C		–	TZ 8.10	4	1	2	4	11	Pollution prevention plan Stakeholder engagement plan	4	1	2	4	11
1035	1035	MCPY12	Kondoa	Vibration	Acoustic environment	Disturbance or damage from vibration generation during decommissioning of construction facilities		C		–	TZ 8.10	4	1	2	4	11	Pollution prevention plan Stakeholder engagement plan	4	1	2	4	11
1144	1144	MCPY13	Kiteto	Vibration	Acoustic environment	Disturbance or damage from vibration generation during decommissioning of construction facilities		C		–	TZ 8.10	4	1	2	4	11	Pollution prevention plan Stakeholder engagement plan	4	1	2	4	11
1238	1238	MCPY14	Kilindi	Vibration	Acoustic environment	Disturbance or damage from vibration generation during decommissioning of construction facilities		C		–	TZ 8.10	4	1	2	4	11	Pollution prevention plan Stakeholder engagement plan	4	1	2	4	11
1318	1318	MCPY15	Handeni Township Authority	Vibration	Acoustic environment	Disturbance or damage from vibration generation during decommissioning of construction facilities		C		–	TZ 8.10	4	1	2	4	11	Pollution prevention plan Stakeholder engagement plan	4	1	2	4	11
1404	1404	MCPY16	Muheza	Vibration	Acoustic environment	Disturbance or damage from vibration generation during decommissioning of construction facilities		C		–	TZ 8.10	4	1	2	4	11	Pollution prevention plan Stakeholder engagement plan	4	1	2	4	11
701	702	Coating facility	Nzega	Vibration	Acoustic environment	Disturbance or damage from vibration generation during decommissioning of construction facilities		C		–	TZ 8.10	4	1	2	4	11	Pollution prevention plan Stakeholder engagement plan	4	1	2	4	11
325.5	325.5	MCPY5	Missenyi	Noise	Acoustic environment	Disturbance or nuisance from operation of the MCPYs		C		–	TZ 8.10	10	2	2	4	17	Pollution prevention plan	4	2	2	4	12

Table E3-1 Location Specific Impacts Register

KP Start	KP End	Location	District	Aspect	VEC	Potential Impact	Impact Detail	Phase		High Stakeholder Concern	ESIA Section	Pre-mitigation Impact					Management Plan(s)	Residual Impacts				
								C	O			M	D	E	S	SS		M	D	E	S	SS
419	419	MCPY6	Muleba	Noise	Acoustic environment	Disturbance or nuisance from operation of the MCPYs		C		–	TZ 8.10	10	2	2	4	17	Pollution prevention plan	4	2	2	4	12
513	513	MCPY7	Chato	Noise	Acoustic environment	Disturbance or nuisance from operation of the MCPYs		C		–	TZ 8.10	10	2	2	4	17	Pollution prevention plan	4	2	2	4	12
594.5	594.5	MCPY8	Bukombe	Noise	Acoustic environment	Disturbance or nuisance from operation of the MCPYs		C		–	TZ 8.10	10	2	2	4	17	Pollution prevention plan	4	2	2	4	12
702	702	MCPY9	Nzega	Noise	Acoustic environment	Disturbance or nuisance from operation of the MCPYs		C		–	TZ 8.10	10	2	2	4	17	Pollution prevention plan	4	2	2	4	12
800	800	MCPY10	Igunga	Noise	Acoustic environment	Disturbance or nuisance from operation of the MCPYs		C		–	TZ 8.10	10	2	2	4	17	Pollution prevention plan	4	2	2	4	12
914.7	914.7	MCPY11	Singida	Noise	Acoustic environment	Disturbance or nuisance from operation of the MCPYs		C		–	TZ 8.10	10	2	2	4	17	Pollution prevention plan	4	2	2	4	12
1035	1035	MCPY12	Kondoa	Noise	Acoustic environment	Disturbance or nuisance from operation of the MCPYs		C		–	TZ 8.10	10	2	2	4	17	Pollution prevention plan	4	2	2	4	12
1144	1144	MCPY13	Kiteto	Noise	Acoustic environment	Disturbance or nuisance from operation of the MCPYs		C		–	TZ 8.10	10	2	2	4	17	Pollution prevention plan	4	2	2	4	12
1238	1238	MCPY14	Kilindi	Noise	Acoustic environment	Disturbance or nuisance from operation of the MCPYs		C		–	TZ 8.10	10	2	2	4	17	Pollution prevention plan	4	2	2	4	12
1318	1318	MCPY15	Handeni Township Authority	Noise	Acoustic environment	Disturbance or nuisance from operation of the MCPYs		C		–	TZ 8.10	10	2	2	4	17	Pollution prevention plan	4	2	2	4	12
1404	1404	MCPY16	Muheza	Noise	Acoustic environment	Disturbance or nuisance from operation of the MCPYs		C		–	TZ 8.10	10	2	2	4	17	Pollution prevention plan	4	2	2	4	12
701	702	Coating facility	Nzega	Noise	Acoustic environment	Disturbance or nuisance from operation of the coating facility		C		–	TZ 8.10	10	2	2	4	17	Pollution prevention plan	4	2	2	4	12
1082	1106	Potential blasting locations	Chemba	Vibration	Acoustic environment	Damage to structures from blasting during construction with charges up to 2 kg MIC		C		–	TZ 8.10	10	5	2	4	21	Pollution prevention plan Stakeholder engagement plan	4	5	2	5	16
701	702	Coating facility	Nzega	Noise	Acoustic environment	Disturbance or nuisance from noise generation during decommissioning of construction facilities		C		–	TZ 8.10	10	1	2	4	17	Pollution prevention plan	4	1	2	4	11
1424	1424	Sigi River crossing	Tanga	Noise	Acoustic environment	Disturbance or nuisance from noise generated by		C		–	TZ 8.10	4	1	2	4	11	Pollution prevention plan	4	1	2	4	11

Table E3-1 Location Specific Impacts Register

KP Start	KP End	Location	District	Aspect	VEC	Potential Impact	Impact Detail	Phase		High Stakeholder Concern	ESIA Section	Pre-mitigation Impact					Management Plan(s)	Residual Impacts				
								C	O			M	D	E	S	SS		M	D	E	S	SS
						horizontal directional drilling																
324	324	Kagera River crossing	Missenyi	Noise	Acoustic environment	Disturbance or nuisance from noise generated by horizontal directional drilling		C		–	TZ 8.10	6	3	2	4	15	Pollution prevention plan	4	1	2	4	11
1424	1424	Sigi River crossing	Tanga	Vibration	Acoustic environment	Generation of ground borne vibration causing potential structural or cosmetic damage during HDD		C		–	TZ 8.10	4	1	2	4	11	Pollution prevention plan Stakeholder engagement plan	4	1	2	4	11
324	324	Kagera River crossing	Missenyi	Vibration	Acoustic environment	Generation of ground borne vibration causing potential structural or cosmetic damage during HDD		C		–	TZ 8.10	10	1	2	4	17	Pollution prevention plan Stakeholder engagement plan	4	1	2	4	11
405.4	405.4	PS3	Muleba	Noise	Acoustic environment	Increase in existing baseline noise environment causing disturbance and nuisance from operation			O	–	TZ 8.10	10	4	2	4	20	Pollution prevention plan	4	4	2	4	14
610	610	PS4	Mbogwe	Noise	Acoustic environment	Increase in existing baseline noise environment causing disturbance and nuisance from operation			O	–	TZ 8.10	8	4	2	4	18	Pollution prevention plan	4	4	2	4	14
824.9	824.9	PS5	Igunga	Noise	Acoustic environment	Increase in existing baseline noise environment causing disturbance and nuisance from operation			O	–	TZ 8.10	10	4	2	4	20	Pollution prevention plan	4	4	2	4	14
914.7	914.7	PS6	Singida	Noise	Acoustic environment	Increase in existing baseline noise environment causing disturbance and nuisance from operation			O	–	TZ 8.10	8	4	2	4	18	Pollution prevention plan	4	4	2	4	14
1443	1443	MST	Tanga	Noise	Acoustic environment	Increase in existing baseline noise environment causing disturbance and nuisance from operation			O	–	TZ 8.10	10	4	2	4	20	Pollution prevention plan	4	4	2	4	14
1442	1442	LOF	Tanga	Noise	Acoustic environment	Increase in existing baseline noise environment causing disturbance and nuisance from operation			O	–	TZ 8.10	4	4	2	4	14	Pollution prevention plan	4	4	2	4	14
1172	1172	PRS1	Kiteto	Noise	Acoustic environment	Increase in existing baseline noise environment causing			O	–	TZ 8.10	4	4	2	4	14	Pollution prevention plan	4	4	2	4	14

Table E3-1 Location Specific Impacts Register

KP Start	KP End	Location	District	Aspect	VEC	Potential Impact	Impact Detail	Phase		High Stakeholder Concern	ESIA Section	Pre-mitigation Impact					Management Plan(s)	Residual Impacts				
								C	O			M	D	E	S	SS		M	D	E	S	SS
						disturbance and nuisance from operation																
1330	1330	PRS2	Handeni	Noise	Acoustic environment	Increase in existing baseline noise environment causing disturbance and nuisance from operation			O	–	TZ 8.10	4	4	2	4	14	Pollution prevention plan	4	4	2	4	14
1169	1169	Kimana	Kiteto	Provision of goods and services	Local economy (nonland-based livelihoods)	Improvements in road conditions for business owners and public transport		C		Y	TZ 8.12	B					N/A	B				
1405	1405	Tanganyika	Muheza	Employment	Local economy (nonland-based livelihoods)	Competition over employment opportunities		C		Y	TZ 8.12	10	2	2	5	19	Project-induced in-migration management plan. Stakeholder engagement plan.	6	2	2	5	15
418.5	418.5	Nkomero	Muleba	Temporary Road Closure	Local economy (nonland-based livelihoods)	Increased transportation costs and travel time with economic consequences		C		-	TZ 8.12	8	2	2	5	17	Infrastructure and utilities management plan. Stakeholder engagement plan	6	2	2	5	15
1039	1039	Serya	Kondoa	Temporary Road Closure	Local economy (nonland-based livelihoods)	Increased transportation costs and travel time with economic consequences		C		-	TZ 8.12	8	2	2	5	17	Infrastructure and utilities management plan. Stakeholder engagement plan	6	2	2	5	15
1140	1140	Ndaleta	Chemba	Temporary Road Closure	Local economy (nonland-based livelihoods)	Increased transportation costs and travel time with economic consequences		C		-	TZ 8.12	8	2	2	5	17	Infrastructure and utilities management plan. Stakeholder engagement plan	6	2	2	5	15
513	513	Mkungo	Chato	Temporary Road Closure	Local economy (nonland-based livelihoods)	Increased transportation costs and travel time with economic consequences		C		-	TZ 8.12	8	2	2	5	17	Infrastructure and utilities management plan. Stakeholder engagement plan	6	2	2	5	15
1441	1443	Putini and Chongoleani	Tanga	Employment	Local economy (nonland-based livelihoods)	Dissatisfaction arising from unmet expectations		C		Y	TZ 8.12	10	2	2	5	19	Stakeholder engagement plan. Project-induced in-migration management plan.	6	2	2	5	15
1441	1443	Putini and Chongoleani	Tanga	Employment	Local economy (nonland-based livelihoods)	Competition over employment opportunities		C		Y	TZ 8.12	10	2	2	5	19	Stakeholder engagement plan. Project-induced in-migration management plan.	6	2	2	5	15
1441	1443	Putini and Chongoleani	Tanga	Employment	Local economy (nonland-based livelihoods)	The generation of project local employment opportunities			O	Y	TZ 8.12	B	–	–	–	–	Procurement and supply chain management	B	–	–	–	–

Table E3-1 Location Specific Impacts Register

KP Start	KP End	Location	District	Aspect	VEC	Potential Impact	Impact Detail	Phase		High Stakeholder Concern	ESIA Section	Pre-mitigation Impact					Management Plan(s)	Residual Impacts				
								C	O			M	D	E	S	SS		M	D	E	S	SS
					based livelihoods)												plan. Labour management plan. Stakeholder engagement plan.					
1441	1443	Putini and Chongoleani	Tanga	Employment	Local economy (nonland-based livelihoods)	The provision of training and skill development opportunities within employment			O	Y	TZ 8.12	B	-	-	-	-	Labour management plan. Procurement and supply chain management plan.	B	-	-	-	-
1441	1443	Putini and Chongoleani	Tanga	Provision of goods and services	Local economy (nonland-based livelihoods)	Project procurement providing opportunities for local businesses			O	Y	TZ 8.12	B	-	-	-	-	Procurement and supply chain management plan. . Labour management plan.	B	-	-	-	-
325.5	325.5	PACs near MCPY5	Missenyi	Loss/severance of land and disruption to land-based livelihoods	Land-based livelihoods	Permanent loss of grazing land		C		Y	TZ 8.13	10	5	1	5	21	Pollution prevention plan. Resettlement action plan. Monitoring and reporting plan.	4	2	1	5	12
419	419	PACs near MCPY6	Muleba	Loss/severance of land and disruption to land-based livelihoods	Land-based livelihoods	Permanent loss of grazing land		C		Y	TZ 8.13	10	5	1	5	21	Pollution prevention plan. Resettlement action plan. Monitoring and reporting plan.	4	2	1	5	12
513	513	PACs near MCPY7	Chato	Loss/severance of land and disruption to land-based livelihoods	Land-based livelihoods	Permanent loss of grazing land		C		Y	TZ 8.13	10	5	1	5	21	Pollution prevention plan. Resettlement action plan. Monitoring and reporting plan.	4	2	1	5	12
594.5	594.5	PACs near MCPY8	Bukombe	Loss/severance of land and disruption to land-based livelihoods	Land-based livelihoods	Permanent loss of grazing land		C		Y	TZ 8.13	10	5	2	5	21	Pollution prevention plan. Resettlement action plan. Monitoring and reporting plan.	4	2	1	5	12
701	702	PACs near MCPY9	Nzega	Loss/severance of land and disruption to land-based livelihoods	Land-based livelihoods	Permanent loss of grazing land		C		Y	TZ 8.13	10	5	2	5	21	Pollution prevention plan. Resettlement action plan. Monitoring and reporting plan.	4	2	1	5	12
701	702	PACs near Coating Facility	Nzega	Loss/severance of land and disruption to land-based livelihoods	Land-based livelihoods	Permanent loss of grazing land		C		Y	TZ 8.13	10	5	2	5	21	Pollution prevention plan. Resettlement action plan. Monitoring and reporting plan.	4	2	1	5	12

Table E3-1 Location Specific Impacts Register

KP Start	KP End	Location	District	Aspect	VEC	Potential Impact	Impact Detail	Phase		High Stakeholder Concern	ESIA Section	Pre-mitigation Impact					Management Plan(s)	Residual Impacts				
								C	O			M	D	E	S	SS		M	D	E	S	SS
800	800	PACs near MCPY10	Igunga	Loss/severance of land and disruption to land-based livelihoods	Land-based livelihoods	Permanent loss of grazing land		C		Y	TZ 8.13	10	5	2	5	21	Pollution prevention plan. Resettlement action plan. Monitoring and reporting plan.	4	2	1	5	12
914.7	914.7	PACs near MCPY11	Singida	Loss/severance of land and disruption to land-based livelihoods	Land-based livelihoods	Permanent loss of grazing land		C		Y	TZ 8.13	10	5	2	5	21	Pollution prevention plan. Resettlement action plan. Monitoring and reporting plan.	4	2	1	5	12
1035	1035	PACs near MCPY12	Kondoa	Loss/severance of land and disruption to land-based livelihoods	Land-based livelihoods	Permanent loss of grazing land		C		Y	TZ 8.13	10	5	2	5	21	Pollution prevention plan. Resettlement action plan. Monitoring and reporting plan.	4	2	1	5	12
114	1144	PACs near MCPY13	Kiteto	Loss/severance of land and disruption to land-based livelihoods	Land-based livelihoods	Permanent loss of grazing land		C		Y	TZ 8.13	10	5	2	5	21	Pollution prevention plan. Resettlement action plan. Monitoring and reporting plan.	4	2	1	5	12
1238	1238	PACs near MCPY14	Kilindi	Loss/severance of land and disruption to land-based livelihoods	Land-based livelihoods	Permanent loss of grazing land		C		Y	TZ 8.13	10	5	2	5	21	Pollution prevention plan. Resettlement action plan. Monitoring and reporting plan.	4	2	1	5	12
1318	1318	PACs near MCPY15	Handeni Township Authority	Loss/severance of land and disruption to land-based livelihoods	Land-based livelihoods	Permanent loss of grazing land		C		Y	TZ 8.13	10	5	2	5	21	Pollution prevention plan. Resettlement action plan. Monitoring and reporting plan.	4	2	1	5	12
1404	1404	PACs near MCPY16	Muheza	Loss/severance of land and disruption to land-based livelihoods	Land-based livelihoods	Permanent loss of grazing land		C		Y	TZ 8.13	10	5	2	5	21	Pollution prevention plan. Resettlement action plan. Monitoring and reporting plan.	4	2	1	5	12
325.5	325.5	PACs near MCPY5	Missenyi	Employment	Land-based livelihoods	Household members seeking employment with the project will no longer be available for land-based livelihood activities		C		–	TZ 8.13	8	3	1	4	16	Stakeholder engagement plan. Labour management plan.	4	3	1	4	12
419	419	PACs near MCPY6	Muleba	Employment	Land-based livelihoods	Household members seeking employment with the project will no longer be available for		C		–	TZ 8.13	8	3	1	4	16	Stakeholder engagement plan. Labour management plan.	4	3	1	4	12

Table E3-1 Location Specific Impacts Register

KP Start	KP End	Location	District	Aspect	VEC	Potential Impact	Impact Detail	Phase		High Stakeholder Concern	ESIA Section	Pre-mitigation Impact					Management Plan(s)	Residual Impacts				
								C	O			M	D	E	S	SS		M	D	E	S	SS
						land-based livelihood activities																
513	513	PACs near MCPY7	Chato	Employment	Land-based livelihoods	Household members seeking employment with the project will no longer be available for land-based livelihood activities		C		–	TZ 8.13	8	3	1	4	16	Stakeholder engagement plan. Labour management plan.	4	3	1	4	12
594.5	594.5	PACs near MCPY8	Bukombe	Employment	Land-based livelihoods	Household members seeking employment with the project will no longer be available for land-based livelihood activities		C		–	TZ 8.13	8	3	1	4	16	Stakeholder engagement plan. Labour management plan.	4	3	1	4	12
701	702	PACs near MCPY9	Nzega	Employment	Land-based livelihoods	Household members seeking employment with the project will no longer be available for land-based livelihood activities		C		–	TZ 8.13	8	3	1	4	16	Stakeholder engagement plan. Labour management plan.	4	3	1	4	12
701	702	PACs near Coating Facility	Nzega	Employment	Land-based livelihoods	Household members seeking employment with the project will no longer be available for land-based livelihood activities		C		–	TZ 8.13	8	3	1	4	16	Stakeholder engagement plan. Labour management plan.	4	3	1	4	12
800	800	PACs in proximity to MCPY10	Igunga	Employment	Land-based livelihoods	Household members seeking employment with the project will no longer be available for land-based livelihood activities		C		–	TZ 8.13	8	3	1	4	16	Stakeholder engagement plan. Labour management plan.	4	3	1	4	12
914.7	914.7	PACs in proximity to MCPY11	Singida	Employment	Land-based livelihoods	Household members seeking employment with the project will no longer be available for land-based livelihood activities		C		–	TZ 8.13	8	3	1	4	16	Stakeholder engagement plan. Labour management plan.	4	3	1	4	12
1035	1035	PACs in proximity to MCPY12	Kondoa	Employment	Land-based livelihoods	Household members seeking employment with the project will no longer be available for land-based livelihood activities		C		–	TZ 8.13	8	3	1	4	16	Stakeholder engagement plan. Labour management plan.	4	3	1	4	12
1144	1144	PACs in proximity to MCPY13	Kiteto	Employment	Land-based livelihoods	Household members seeking employment with the project will no longer be available for land-based livelihood activities		C		–	TZ 8.13	8	3	1	4	16	Stakeholder engagement plan. Labour management plan.	4	3	1	4	12
1238	1238	PACs in proximity to MCPY14	Kilindi	Employment	Land-based livelihoods	Household members seeking employment with the project will no		C		–	TZ 8.13	8	3	1	4	16	Stakeholder engagement plan. Labour	4	3	1	4	12

Table E3-1 Location Specific Impacts Register

KP Start	KP End	Location	District	Aspect	VEC	Potential Impact	Impact Detail	Phase		High Stakeholder Concern	ESIA Section	Pre-mitigation Impact					Management Plan(s)	Residual Impacts				
								C	O			M	D	E	S	SS		M	D	E	S	SS
						longer be available for land-based livelihood activities											management plan.					
1318	1318	PACs in proximity to MCPY15	Handeni Township Authority	Employment	Land-based livelihoods	Household members seeking employment with the project will no longer be available for land-based livelihood activities		C		–	TZ 8.13	8	3	1	4	16	Stakeholder engagement plan. Labour management plan.	4	3	1	4	12
1404	1404	PACs in proximity to MCPY16	Muheza	Employment	Land-based livelihoods	Household members seeking employment with the project will no longer be available for land-based livelihood activities		C		–	TZ 8.13	8	3	1	4	16	Stakeholder engagement plan. Labour management plan.	4	3	1	4	12
405.4	405.4	PACs near PS3	Muleba	Loss/severance of land and disruption to land-based livelihoods	Land-based livelihoods	Accidental damage to crops during maintenance activities			O	–	TZ 8.13	6	1	1	5	13	Stakeholder engagement plan. Labour management plan.	4	1	1	5	11
610	610	PACs near PS4	Mbogwe	Loss/severance of land and disruption to land-based livelihoods	Land-based livelihoods	Accidental damage to crops during maintenance activities			O	–	TZ 8.13	6	1	1	5	13	Stakeholder engagement plan. Labour management plan.	4	1	1	5	11
824.9	824.9	PACs near PS5	Igunga	Loss/severance of land and disruption to land-based livelihoods	Land-based livelihoods	Accidental damage to crops during maintenance activities			O	–	TZ 8.13	6	1	1	5	13	Stakeholder engagement plan. Labour management plan.	4	1	1	5	11
914.7	914.7	PACs near PS6	Singida	Loss/severance of land and disruption to land-based livelihoods	Land-based livelihoods	Accidental damage to crops during maintenance activities			O	–	TZ 8.13	6	1	1	5	13	Stakeholder engagement plan. Labour management plan.	4	1	1	5	11
552	552	Iparamasa Village	Chato	Loss/severance of land and disruption to land-based livelihoods	Land-based livelihoods	Permanent loss of access to artisanal mining sites		C		Y	TZ 8.13	10	4	1	5	20	Pollution prevention plan. Resettlement action plan. Monitoring and reporting plan.	4	2	1	5	12
608	608	Lubeho Village	Mbogwe	Loss/severance of land and disruption to land-based livelihoods	Land-based livelihoods	Permanent loss of access to artisanal mining sites		C		Y	TZ 8.13	10	4	1	5	20	Pollution prevention plan. Resettlement action plan. Monitoring and reporting plan.	4	2	1	5	12
665	665	Zongomera Village	Kahama Township Authority	Loss/severance of land and disruption to land-based livelihoods	Land-based livelihoods	Permanent loss of access to artisanal mining sites		C		Y	TZ 8.13	10	4	1	5	20	Pollution prevention plan. Resettlement action plan.	4	2	1	5	12

Table E3-1 Location Specific Impacts Register

KP Start	KP End	Location	District	Aspect	VEC	Potential Impact	Impact Detail	Phase		High Stakeholder Concern	ESIA Section	Pre-mitigation Impact					Management Plan(s)	Residual Impacts				
								C	O			M	D	E	S	SS		M	D	E	S	SS
																	Monitoring and reporting plan.					
1169	1169	Kimana Village	Kiteto	Loss/severance of land and disruption to land-based livelihoods	Land-based livelihoods	Permanent loss of access to artisanal mining sites		C		Y	TZ 8.13	10	4	1	5	20	Pollution prevention plan. Resettlement action plan. Monitoring and reporting plan.	4	2	1	5	12
557.4	583.9	Mbogwe district	Mbogwe	Loss/severance of land and disruption to land-based livelihoods	Land-based livelihoods	Permanent loss of access to licensed mining concessions		C		Y	TZ 8.13	10	4	1	5	20	Pollution prevention plan. Resettlement action plan. Monitoring and reporting plan.	4	4	1	4	13
604.7	639.7	Mbogwe district	Mbogwe	Loss/severance of land and disruption to land-based livelihoods	Land-based livelihoods	Permanent loss of access to licensed mining concessions		C		Y	TZ 8.13	10	4	1	5	20	Pollution prevention plan. Resettlement action plan. Monitoring and reporting plan.	4	4	1	4	13
639.8	694.3	Kahama Township Authority	Kahama Township Authority	Loss/severance of land and disruption to land-based livelihoods	Land-based livelihoods	Permanent loss of access to licensed mining concessions		C		Y	TZ 8.13	10	4	1	5	20	Pollution prevention plan. Resettlement action plan. Monitoring and reporting plan.	4	4	1	4	13
556.4	557.4	Geita district	Geita	Loss/severance of land and disruption to land-based livelihoods	Land-based livelihoods	Permanent loss of access to licensed mining concessions		C		Y	TZ 8.13	10	4	1	5	20	Pollution prevention plan. Resettlement action plan. Monitoring and reporting plan.	4	4	1	4	13
405.4	405.4	PACs near PS3	Muleba	Loss/severance of land and disruption to land-based livelihoods	Land-based livelihoods	Permanent loss of grazing land		C		Y	TZ 8.13	10	5	1	5	21	Pollution prevention plan. Resettlement action plan. Monitoring and reporting plan.	4	2	1	5	12
610	610	PACs near PS4	Mbogwe	Loss/severance of land and disruption to land-based livelihoods	Land-based livelihoods	Permanent loss of grazing land		C		Y	TZ 8.13	10	5	1	5	21	Pollution prevention plan. Resettlement action plan. Monitoring and reporting plan.	4	2	1	5	12
824.9	824.9	PACs near PS5	Igunga	Loss/severance of land and disruption to land-based livelihoods	Land-based livelihoods	Permanent loss of grazing land		C		Y	TZ 8.13	10	5	1	5	21	Pollution prevention plan. Resettlement action plan. Monitoring and reporting plan.	4	2	1	5	12
914.7	914.7	PACs near PS6	Singida	Loss/severance of land and disruption to	Land-based livelihoods	Permanent loss of grazing land		C		Y	TZ 8.13	10	5	1	5	21	Pollution prevention plan. Resettlement	4	2	1	5	12

Table E3-1 Location Specific Impacts Register

KP Start	KP End	Location	District	Aspect	VEC	Potential Impact	Impact Detail	Phase		High Stakeholder Concern	ESIA Section	Pre-mitigation Impact					Management Plan(s)	Residual Impacts				
								C	O			M	D	E	S	SS		M	D	E	S	SS
				land-based livelihoods													action plan. Monitoring and reporting plan.					
1442	1442	PACs near the MST	Tanga	Loss/severance of land and disruption to land-based livelihoods	Land-based livelihoods	Permanent loss of grazing land		C		Y	TZ 8.13	10	5	1	5	21	Pollution prevention plan. Resettlement action plan. Monitoring and reporting plan.	4	2	1	5	12
419	419	PACs near MCPY6	Muleba	PIIM	River, lake and marine-based livelihoods	Reduction in local fish stocks due to PIIM.		C		Y	TZ 8.14	6	2	1	3	12	Project-induced in-migration management plan.	4	2	1	3	10
701	702	PACs near MCPY9	Nzega	PIIM	River, lake and marine-based livelihoods	Reduction in local fish stocks due to PIIM.		C		Y	TZ 8.14	6	2	1	3	12	Project-induced in-migration management plan.	4	2	1	3	10
701	702	PACs near Coating Facility	Nzega	PIIM	River, lake and marine-based livelihoods	Reduction in local fish stocks due to PIIM.		C		Y	TZ 8.14	6	2	1	3	12	Project-induced in-migration management plan.	4	2	1	3	10
1318	1318	PACs in proximity to MCPY15	Handeni Township Authority	PIIM	River, lake and marine-based livelihoods	Reduction in local fish stocks due to PIIM.		C		Y	TZ 8.14	6	2	1	3	12	Project-induced in-migration management plan.	4	2	1	3	10
1404	1404	PACs in proximity to MCPY16	Muheza	PIIM	River, lake and marine-based livelihoods	Reduction in local fish stocks due to PIIM.		C		Y	TZ 8.14	6	2	1	3	12	Project-induced in-migration management plan.	4	2	1	3	10
TBC	TBC	PACs close to pipeline river crossings	TBC	Impeded flow in watercourses	River, lake and marine-based livelihoods	Reduction in artisanal fish catches due to changes in water flows and increased levels of sediment during open-cut crossing construction		C		–	TZ 8.14	8	2	1	5	16	Pollution prevention plan. Reinstatement plan.	4	2	1	2	9
1429	1443	Mleni mtaa, Mabokweni mtaa, Helani hamlet, Putini mtaa and Chongoleani mtaa	Tanga	Impeded flow in watercourses	River, lake and marine-based livelihoods	Loss of, or restriction of access to, existing fishing grounds, transit routes, fish landing sites and market sites due to the MEZ		C	O	Y	TZ 8.14	10	5	1	5	21	Resettlement action plan (includes a marine livelihoods restoration plan).	4	2	1	5	12
1429	1443	Mleni mtaa, Mabokweni mtaa, Helani hamlet, Putini mtaa and Chongoleani mtaa	Tanga	Impeded flow in watercourses	River, lake and marine-based livelihoods	Loss of, or restriction of access to, intertidal gleaning sites due to the MEZ		C	O	Y	TZ 8.14	10	5	1	5	21	Resettlement action plan (includes a marine livelihoods restoration plan).	4	2	1	5	12
1429	1443	Mleni mtaa, Mabokweni mtaa, Helani hamlet, Putini mtaa and Chongoleani mtaa	Tanga	Impeded flow in watercourses	River, lake and marine-based livelihoods	Damage to, or displacement of, fishing gear by project construction vessels		C	O	–	TZ 8.14	8	2	1	5	16	Community health, safety and security plan. Stakeholder engagement plan. Marine vessel	4	2	1	5	12

Table E3-1 Location Specific Impacts Register

KP Start	KP End	Location	District	Aspect	VEC	Potential Impact	Impact Detail	Phase		High Stakeholder Concern	ESIA Section	Pre-mitigation Impact					Management Plan(s)	Residual Impacts				
								C	O			M	D	E	S	SS		M	D	E	S	SS
																	management plan.					
1429	1443	Mleni mtaa, Mabokweni mtaa, Helani hamlet, Putini mtaa and Chongoleani mtaa	Tanga	Impeded flow in watercourses	River, lake and marine-based livelihoods	Displacement of fishing effort (from loss of, or restriction of access to, grounds) into adjacent grounds		C	O	Y	TZ 8.14	10	4	1	4	19	Resettlement action plan (includes a marine livelihoods restoration plan). Stakeholder engagement plan. Monitoring and reporting plan.	6	2	1	4	13
1429	1443	Mleni mtaa, Mabokweni mtaa, Helani hamlet, Putini mtaa and Chongoleani mtaa	Tanga	Noise	River, lake and marine-based livelihoods	Loss or displacement of fish due to construction activities affecting fishing livelihoods		C		Y	TZ 8.14	8	4	1	4	17	Resettlement action plan (includes a marine livelihoods restoration plan). Stakeholder engagement plan. Monitoring and reporting plan.	6	2	1	4	13
1429	1443	Mleni mtaa, Mabokweni mtaa, Helani hamlet, Putini mtaa and Chongoleani mtaa	Tanga	Noise	River, lake and marine-based livelihoods	Noise impacts on fisherfolk		C		–	TZ 8.14	6	3	1	4	14	Stakeholder engagement plan. Community health, safety and security plan. Resettlement action plan. Marine vessel management plan. Monitoring and reporting plan.	4	2	1	4	11
1429	1443	Mleni mtaa, Mabokweni mtaa, Helani hamlet, Putini mtaa and Chongoleani mtaa	Tanga	Community safety	River, lake and marine-based livelihoods	Increased risk of accidents due to increased boat traffic outside the restricted areas		C	O	Y	TZ 8.14	8	4	1	5	18	Community health, safety and security plan. Resettlement action plan. Marine vessel management plan. Stakeholder engagement plan. Monitoring and reporting plan.	4	4	1	5	14
1429	1443	Mleni mtaa, Mabokweni mtaa, Helani hamlet, Putini mtaa and Chongoleani mtaa	Tanga	PIIM	River, lake and marine-based livelihoods	Reduction in local fish stocks due to PIIM		C			TZ 8.14	8	4	1	5	18	Project-induced in-migration management plan.	6	2	1	5	14

Table E3-1 Location Specific Impacts Register

KP Start	KP End	Location	District	Aspect	VEC	Potential Impact	Impact Detail	Phase		High Stakeholder Concern	ESIA Section	Pre-mitigation Impact					Management Plan(s)	Residual Impacts				
								C	O			M	D	E	S	SS		M	D	E	S	SS
325.5	325.5	PACs near MCPY5	Missenyi	Resettlement	Land and property	Permanent loss of private land due to project land acquisition		C		Y	TZ 8.15	10	5	2	5	22	Resettlement action plan. Stakeholder engagement plan. Community health, safety and security plan. Monitoring and reporting plan.	4	2	1	5	12
419	419	PACs near MCPY6	Muleba	Resettlement	Land and property	Permanent loss of private land due to project land acquisition		C		Y	TZ 8.15	10	5	2	5	22	Resettlement action plan. Stakeholder engagement plan. Community health, safety and security plan. Monitoring and reporting plan.	4	2	1	5	12
513	513	PACs near MCPY7	Chato	Resettlement	Land and property	Permanent loss of private land due to project land acquisition		C		Y	TZ 8.15	10	5	2	5	22	Resettlement action plan. Stakeholder engagement plan. Community health, safety and security plan. Monitoring and reporting plan.	4	2	1	5	12
594.5	594.5	PACs near MCPY8	Bukombe	Resettlement	Land and property	Permanent loss of private land due to project land acquisition		C		Y	TZ 8.15	10	5	2	5	22	Resettlement action plan. Stakeholder engagement plan. Community health, safety and security plan. Monitoring and reporting plan.	4	2	1	5	12
701	702	PACs near MCPY9	Nzega	Resettlement	Land and property	Permanent loss of private land due to project land acquisition		C		Y	TZ 8.15	10	5	2	5	22	Resettlement action plan. Stakeholder engagement plan. Community health, safety and security plan. Monitoring and reporting plan.	4	2	1	5	12
701	702	PACs near Coating Facility	Nzega	Resettlement	Land and property	Permanent loss of private land due to project land acquisition		C		Y	TZ 8.15	10	5	2	5	22	Resettlement action plan. Stakeholder engagement plan. Community health, safety and security plan. Monitoring and reporting plan.	4	2	1	5	12

Table E3-1 Location Specific Impacts Register

KP Start	KP End	Location	District	Aspect	VEC	Potential Impact	Impact Detail	Phase		High Stakeholder Concern	ESIA Section	Pre-mitigation Impact					Management Plan(s)	Residual Impacts				
								C	O			M	D	E	S	SS		M	D	E	S	SS
800	800	PACs in proximity to MCPY10	Igunga	Resettlement	Land and property	Permanent loss of private land due to project land acquisition		C		Y	TZ 8.15	10	5	2	5	22	Resettlement action plan. Stakeholder engagement plan. Community health, safety and security plan. Monitoring and reporting plan.	4	2	1	5	12
914.7	914.7	PACs in proximity to MCPY11	Singida	Resettlement	Land and property	Permanent loss of private land due to project land acquisition		C		Y	TZ 8.15	10	5	2	5	22	Resettlement action plan. Stakeholder engagement plan. Community health, safety and security plan. Monitoring and reporting plan.	4	2	1	5	12
1035	1035	PACs in proximity to MCPY12	Kondoa	Resettlement	Land and property	Permanent loss of private land due to project land acquisition		C		Y	TZ 8.15	10	5	2	5	22	Resettlement action plan. Stakeholder engagement plan. Community health, safety and security plan. Monitoring and reporting plan.	4	2	1	5	12
1144	1144	PACs in proximity to MCPY13	Kiteto	Resettlement	Land and property	Permanent loss of private land due to project land acquisition		C		Y	TZ 8.15	10	5	2	5	22	Resettlement action plan. Stakeholder engagement plan. Community health, safety and security plan. Monitoring and reporting plan.	4	2	1	5	12
1238	1238	PACs in proximity to MCPY14	Kilindi	Resettlement	Land and property	Permanent loss of private land due to project land acquisition		C		Y	TZ 8.15	10	5	2	5	22	Resettlement action plan. Stakeholder engagement plan. Community health, safety and security plan. Monitoring and reporting plan.	4	2	1	5	12
1318	1318	PACs in proximity to MCPY15	Handeni Township Authority	Resettlement	Land and property	Permanent loss of private land due to project land acquisition		C		Y	TZ 8.15	10	5	2	5	22	Resettlement action plan. Stakeholder engagement plan. Community health, safety and security plan. Monitoring and reporting plan.	4	2	1	5	12

Table E3-1 Location Specific Impacts Register

KP Start	KP End	Location	District	Aspect	VEC	Potential Impact	Impact Detail	Phase		High Stakeholder Concern	ESIA Section	Pre-mitigation Impact					Management Plan(s)	Residual Impacts				
								C	O			M	D	E	S	SS		M	D	E	S	SS
1404	1404	PACs in proximity to MCPY16	Muheza	Resettlement	Land and property	Permanent loss of private land due to project land acquisition		C		Y	TZ 8.15	10	5	2	5	22	Resettlement action plan. Stakeholder engagement plan. Community health, safety and security plan. Monitoring and reporting plan.	4	2	1	5	12
325.5	325.5	PACs near MCPY5	Missenyi	Resettlement	Land and property	Land speculation by third parties		C		Y	TZ 8.15	10	5	1	5	21	Resettlement action plan. Stakeholder engagement plan. Community health, safety and security plan. Monitoring and reporting plan.	4	2	1	5	12
419	419	PACs near MCPY6	Muleba	Resettlement	Land and property	Land speculation by third parties		C		Y	TZ 8.15	10	5	1	5	21	Resettlement action plan. Stakeholder engagement plan. Community health, safety and security plan. Monitoring and reporting plan.	4	2	1	5	12
513	513	PACs near MCPY7	Chato	Resettlement	Land and property	Land speculation by third parties		C		Y	TZ 8.15	10	5	1	5	21	Resettlement action plan. Stakeholder engagement plan. Community health, safety and security plan. Monitoring and reporting plan.	4	2	1	5	12
594.5	594.5	PACs near MCPY8	Bukombe	Resettlement	Land and property	Land speculation by third parties		C		Y	TZ 8.15	10	5	1	5	21	Resettlement action plan. Stakeholder engagement plan. Community health, safety and security plan. Monitoring and reporting plan.	4	2	1	5	12
701	702	PACs near MCPY9	Nzega	Resettlement	Land and property	Land speculation by third parties		C		Y	TZ 8.15	10	5	1	5	21	Resettlement action plan. Stakeholder engagement plan. Community health, safety and security plan. Monitoring and reporting plan.	4	2	1	5	12

Table E3-1 Location Specific Impacts Register

KP Start	KP End	Location	District	Aspect	VEC	Potential Impact	Impact Detail	Phase		High Stakeholder Concern	ESIA Section	Pre-mitigation Impact					Management Plan(s)	Residual Impacts				
								C	O			M	D	E	S	SS		M	D	E	S	SS
701	702	PACs near Coating Facility	Nzega	Resettlement	Land and property	Land speculation by third parties		C		Y	TZ 8.15	10	5	1	5	21	Resettlement action plan. Stakeholder engagement plan. Community health, safety and security plan. Monitoring and reporting plan.	4	2	1	5	12
800	800	PACs near MCPY10	Igunga	Resettlement	Land and property	Land speculation by third parties		C		Y	TZ 8.15	10	5	1	5	21	Resettlement action plan. Stakeholder engagement plan. Community health, safety and security plan. Monitoring and reporting plan.	4	2	1	5	12
914.7	914.7	PACs near MCPY11	Singida	Resettlement	Land and property	Land speculation by third parties		C		Y	TZ 8.15	10	5	1	5	21	Resettlement action plan. Stakeholder engagement plan. Community health, safety and security plan. Monitoring and reporting plan.	4	2	1	5	12
1035	1035	PACs near MCPY12	Kondoa	Resettlement	Land and property	Land speculation by third parties		C		Y	TZ 8.15	10	5	1	5	21	Resettlement action plan. Stakeholder engagement plan. Community health, safety and security plan. Monitoring and reporting plan.	4	2	1	5	12
1144	1144	PACs near MCPY13	Kiteto	Resettlement	Land and property	Land speculation by third parties		C		Y	TZ 8.15	10	5	1	5	21	Resettlement action plan. Stakeholder engagement plan. Community health, safety and security plan. Monitoring and reporting plan.	4	2	1	5	12
1238	1238	PACs near MCPY14	Kilindi	Resettlement	Land and property	Land speculation by third parties		C		Y	TZ 8.15	10	5	1	5	21	Resettlement action plan. Stakeholder engagement plan. Community health, safety and security plan. Monitoring and reporting plan.	4	2	1	5	12

Table E3-1 Location Specific Impacts Register

KP Start	KP End	Location	District	Aspect	VEC	Potential Impact	Impact Detail	Phase		High Stakeholder Concern	ESIA Section	Pre-mitigation Impact					Management Plan(s)	Residual Impacts				
								C	O			M	D	E	S	SS		M	D	E	S	SS
1318	1318	PACs near MCPY15	Handeni Township Authority	Resettlement	Land and property	Land speculation by third parties		C		Y	TZ 8.15	10	5	1	5	21	Resettlement action plan. Stakeholder engagement plan. Community health, safety and security plan. Monitoring and reporting plan.	4	2	1	5	12
1404	1404	PACs near MCPY16	Muheza	Resettlement	Land and property	Land speculation by third parties		C		Y	TZ 8.15	10	5	1	5	21	Resettlement action plan. Stakeholder engagement plan. Community health, safety and security plan. Monitoring and reporting plan.	4	2	1	5	12
325.5	325.5	PACs near MCPY5	Missenyi	Resettlement	Land and property	Land and property speculation by landowners		C		Y	TZ 8.15	8	2	1	4	15	Resettlement action plan. Stakeholder engagement plan. Community health, safety and security plan. Monitoring and reporting plan.	4	2	1	4	11
419	419	PACs near MCPY6	Muleba	Resettlement	Land and property	Land and property speculation by landowners		C		Y	TZ 8.15	8	2	1	4	15	Resettlement action plan. Stakeholder engagement plan. Community health, safety and security plan. Monitoring and reporting plan.	4	2	1	4	11
513	513	PACs near MCPY7	Chato	Resettlement	Land and property	Land and property speculation by landowners		C		Y	TZ 8.15	8	2	1	4	15	Resettlement action plan. Stakeholder engagement plan. Community health, safety and security plan. Monitoring and reporting plan.	4	2	1	4	11
594.5	594.5	PACs near MCPY8	Bukombe	Resettlement	Land and property	Land and property speculation by landowners		C		Y	TZ 8.15	8	2	1	4	15	Resettlement action plan. Stakeholder engagement plan. Community health, safety and security plan. Monitoring and reporting plan.	4	2	1	4	11

Table E3-1 Location Specific Impacts Register

KP Start	KP End	Location	District	Aspect	VEC	Potential Impact	Impact Detail	Phase		High Stakeholder Concern	ESIA Section	Pre-mitigation Impact					Management Plan(s)	Residual Impacts				
								C	O			M	D	E	S	SS		M	D	E	S	SS
701	702	PACs near MCPY9	Nzega	Resettlement	Land and property	Land and property speculation by landowners		C		Y	TZ 8.15	8	2	1	4	15	Resettlement action plan. Stakeholder engagement plan. Community health, safety and security plan. Monitoring and reporting plan.	4	2	1	4	11
701	702	PACs near Coating Facility	Nzega	Resettlement	Land and property	Land and property speculation by landowners		C		Y	TZ 8.15	8	2	1	4	15	Resettlement action plan. Stakeholder engagement plan. Community health, safety and security plan. Monitoring and reporting plan.	4	2	1	4	11
800	800	PACs near MCPY10	Igunga	Resettlement	Land and property	Land and property speculation by landowners		C		Y	TZ 8.15	8	2	1	4	15	Resettlement action plan. Stakeholder engagement plan. Community health, safety and security plan. Monitoring and reporting plan.	4	2	1	4	11
914.7	914.7	PACs near MCPY11	Singida	Resettlement	Land and property	Land and property speculation by landowners		C		Y	TZ 8.15	8	2	1	4	15	Resettlement action plan. Stakeholder engagement plan. Community health, safety and security plan. Monitoring and reporting plan.	4	2	1	4	11
1035	1035	PACs near MCPY12	Kondoa	Resettlement	Land and property	Land and property speculation by landowners		C		Y	TZ 8.15	8	2	1	4	15	Resettlement action plan. Stakeholder engagement plan. Community health, safety and security plan. Monitoring and reporting plan.	4	2	1	4	11
1144	1144	PACs near MCPY13	Kiteto	Resettlement	Land and property	Land and property speculation by landowners		C		Y	TZ 8.15	8	2	1	4	15	Resettlement action plan. Stakeholder engagement plan. Community health, safety and security plan. Monitoring and reporting plan.	4	2	1	4	11

Table E3-1 Location Specific Impacts Register

KP Start	KP End	Location	District	Aspect	VEC	Potential Impact	Impact Detail	Phase		High Stakeholder Concern	ESIA Section	Pre-mitigation Impact					Management Plan(s)	Residual Impacts				
								C	O			M	D	E	S	SS		M	D	E	S	SS
1238	1238	PACs near MCPY14	Kilindi	Resettlement	Land and property	Land and property speculation by landowners		C		Y	TZ 8.15	8	2	1	4	15	Resettlement action plan. Stakeholder engagement plan. Community health, safety and security plan. Monitoring and reporting plan.	4	2	1	4	11
1318	1318	PACs near MCPY15	Handeni Township Authority	Resettlement	Land and property	Land and property speculation by landowners		C		Y	TZ 8.15	8	2	1	4	15	Resettlement action plan. Stakeholder engagement plan. Community health, safety and security plan. Monitoring and reporting plan.	4	2	1	4	11
1404	1404	PACs near MCPY16	Muheza	Resettlement	Land and property	Land and property speculation by landowners		C		Y	TZ 8.15	8	2	1	4	15	Resettlement action plan. Stakeholder engagement plan. Community health, safety and security plan. Monitoring and reporting plan.	4	2	1	4	11
325.5	325.5	PACs near MCPY5	Missenyi	Resettlement	Land and property	New disputes and exacerbation of pre-existing disputes and conflict around land and property		C		Y	TZ 8.15	10	4	1	5	20	Resettlement action plan. Stakeholder engagement plan. Community health, safety and security plan. Monitoring and reporting plan.	6	4	1	5	16
419	419	PACs near MCPY6	Muleba	Resettlement	Land and property	New disputes and exacerbation of pre-existing disputes and conflict around land and property		C		Y	TZ 8.15	10	4	1	5	20	Resettlement action plan. Stakeholder engagement plan. Community health, safety and security plan. Monitoring and reporting plan.	6	4	1	5	16
513	513	PACs near MCPY7	Chato	Resettlement	Land and property	New disputes and exacerbation of pre-existing disputes and conflict around land and property		C		Y	TZ 8.15	10	4	1	5	20	Resettlement action plan. Stakeholder engagement plan. Community health, safety and security plan. Monitoring and reporting plan.	6	4	1	5	16

Table E3-1 Location Specific Impacts Register

KP Start	KP End	Location	District	Aspect	VEC	Potential Impact	Impact Detail	Phase		High Stakeholder Concern	ESIA Section	Pre-mitigation Impact					Management Plan(s)	Residual Impacts				
								C	O			M	D	E	S	SS		M	D	E	S	SS
594.5	594.5	PACs near MCPY8	Bukombe	Resettlement	Land and property	New disputes and exacerbation of pre-existing disputes and conflict around land and property		C		Y	TZ 8.15	10	4	1	5	20	Resettlement action plan. Stakeholder engagement plan. Community health, safety and security plan. Monitoring and reporting plan.	6	4	1	5	16
701	702	PACs near MCPY9	Nzega	Resettlement	Land and property	New disputes and exacerbation of pre-existing disputes and conflict around land and property		C		Y	TZ 8.15	10	4	1	5	20	Resettlement action plan. Stakeholder engagement plan. Community health, safety and security plan. Monitoring and reporting plan.	6	4	1	5	16
701	702	PACs near Coating Facility	Nzega	Resettlement	Land and property	New disputes and exacerbation of pre-existing disputes and conflict around land and property		C		Y	TZ 8.15	10	4	1	5	20	Resettlement action plan. Stakeholder engagement plan. Community health, safety and security plan. Monitoring and reporting plan.	6	4	1	5	16
800	800	PACs near MCPY10	Igunga	Resettlement	Land and property	New disputes and exacerbation of pre-existing disputes and conflict around land and property		C		Y	TZ 8.15	10	4	1	5	20	Resettlement action plan. Stakeholder engagement plan. Community health, safety and security plan. Monitoring and reporting plan.	6	4	1	5	16
914.7	914.7	PACs near MCPY11	Singida	Resettlement	Land and property	New disputes and exacerbation of pre-existing disputes and conflict around land and property		C		Y	TZ 8.15	10	4	1	5	20	Resettlement action plan. Stakeholder engagement plan. Community health, safety and security plan. Monitoring and reporting plan.	6	4	1	5	16
1035	1035	PACs near MCPY12	Kondoa	Resettlement	Land and property	New disputes and exacerbation of pre-existing disputes and conflict around land and property		C		Y	TZ 8.15	10	4	1	5	20	Resettlement action plan. Stakeholder engagement plan. Community health, safety and security plan. Monitoring and reporting plan.	6	4	1	5	16

Table E3-1 Location Specific Impacts Register

KP Start	KP End	Location	District	Aspect	VEC	Potential Impact	Impact Detail	Phase		High Stakeholder Concern	ESIA Section	Pre-mitigation Impact					Management Plan(s)	Residual Impacts				
								C	O			M	D	E	S	SS		M	D	E	S	SS
1144	1144	PACs near MCPY13	Kiteto	Resettlement	Land and property	New disputes and exacerbation of pre-existing disputes and conflict around land and property		C		Y	TZ 8.15	10	4	1	5	20	Resettlement action plan. Stakeholder engagement plan. Community health, safety and security plan. Monitoring and reporting plan.	6	4	1	5	16
1238	1238	PACs near MCPY14	Kilindi	Resettlement	Land and property	New disputes and exacerbation of pre-existing disputes and conflict around land and property		C		Y	TZ 8.15	10	4	1	5	20	Resettlement action plan. Stakeholder engagement plan. Community health, safety and security plan. Monitoring and reporting plan.	6	4	1	5	16
1318	1318	PACs near MCPY15	Handeni Township Authority	Resettlement	Land and property	New disputes and exacerbation of pre-existing disputes and conflict around land and property		C		Y	TZ 8.15	10	4	1	5	20	Resettlement action plan. Stakeholder engagement plan. Community health, safety and security plan. Monitoring and reporting plan.	6	4	1	5	16
1404	1404	PACs near MCPY16	Muheza	Resettlement	Land and property	New disputes and exacerbation of pre-existing disputes and conflict around land and property		C		Y	TZ 8.15	10	4	1	5	20	Resettlement action plan. Stakeholder engagement plan. Community health, safety and security plan. Monitoring and reporting plan.	6	4	1	5	16
325.5	325.5	PACs near MCPY5	Missenyi	Resettlement	Land and property	Permanent loss of physical structures due to project land acquisition		C		Y	TZ 8.15	10	5	1	5	21	Resettlement action plan. Stakeholder engagement plan. Occupational health, safety and security plan. Community health, safety and security plan. Labour management plan. Monitoring and reporting plan.	4	2	1	5	12

Table E3-1 Location Specific Impacts Register

KP Start	KP End	Location	District	Aspect	VEC	Potential Impact	Impact Detail	Phase		High Stakeholder Concern	ESIA Section	Pre-mitigation Impact					Management Plan(s)	Residual Impacts				
								C	O			M	D	E	S	SS		M	D	E	S	SS
419	419	PACs near MCPY6	Muleba	Resettlement	Land and property	Permanent loss of physical structures due to project land acquisition		C		Y	TZ 8.15	10	5	1	5	21	Resettlement action plan. Stakeholder engagement plan. Occupational health, safety and security plan. Community health, safety and security plan. Labour management plan. Monitoring and reporting plan.	4	2	1	5	12
513	513	PACs near MCPY7	Chato	Resettlement	Land and property	Permanent loss of physical structures due to project land acquisition		C		Y	TZ 8.15	10	5	1	5	21	Resettlement action plan. Stakeholder engagement plan. Occupational health, safety and security plan. Community health, safety and security plan. Labour management plan. Monitoring and reporting plan.	4	2	1	5	12
594.5	594.5	PACs near MCPY8	Bukombe	Resettlement	Land and property	Permanent loss of physical structures due to project land acquisition		C		Y	TZ 8.15	10	5	1	5	21	Resettlement action plan. Stakeholder engagement plan. Occupational health, safety and security plan. Community health, safety and security plan. Labour management plan. Pollution prevention plan. Monitoring and reporting plan.	4	2	1	5	12
701	702	PACs near MCPY9	Nzega	Resettlement	Land and property	Permanent loss of physical structures due to project land acquisition		C		Y	TZ 8.15	10	5	1	5	21	Resettlement action plan. Stakeholder engagement plan. Occupational health, safety and security plan. Community health, safety and security plan.	4	2	1	5	12

Table E3-1 Location Specific Impacts Register

KP Start	KP End	Location	District	Aspect	VEC	Potential Impact	Impact Detail	Phase		High Stakeholder Concern	ESIA Section	Pre-mitigation Impact					Management Plan(s)	Residual Impacts				
								C	O			M	D	E	S	SS		M	D	E	S	SS
																	Labour management plan. Pollution prevention plan. Monitoring and reporting plan.					
701	702	PACs near Coating Facility	Nzega	Resettlement	Land and property	Permanent loss of physical structures due to project land acquisition		C		Y	TZ 8.15	10	5	1	5	21	Resettlement action plan. Stakeholder engagement plan. Occupational health, safety and security plan. Community health, safety and security plan. Labour management plan. Pollution prevention plan. Monitoring and reporting plan.	4	2	1	5	12
800	800	PACs in proximity to MCPY10	Igunga	Resettlement	Land and property	Permanent loss of physical structures due to project land acquisition		C		Y	TZ 8.15	10	5	1	5	21	Resettlement action plan. Stakeholder engagement plan. Occupational health, safety and security plan. Community health, safety and security plan. Labour management plan. Pollution prevention plan. Monitoring and reporting plan.	4	2	1	5	12
914.7	914.7	PACs in proximity to MCPY11	Singida	Resettlement	Land and property	Permanent loss of physical structures due to project land acquisition		C		Y	TZ 8.15	10	5	1	5	21	Resettlement action plan. Stakeholder engagement plan. Occupational health, safety and security plan. Community health, safety and security plan. Labour management plan. Pollution prevention plan. Monitoring and reporting plan.	4	2	1	5	12

Table E3-1 Location Specific Impacts Register

KP Start	KP End	Location	District	Aspect	VEC	Potential Impact	Impact Detail	Phase		High Stakeholder Concern	ESIA Section	Pre-mitigation Impact					Management Plan(s)	Residual Impacts				
								C	O			M	D	E	S	SS		M	D	E	S	SS
1035	1035	PACs in proximity to MCPY12	Kondoa	Resettlement	Land and property	Permanent loss of physical structures due to project land acquisition		C		Y	TZ 8.15	10	5	1	5	21	Resettlement action plan. Stakeholder engagement plan. Occupational health, safety and security plan. Community health, safety and security plan. Labour management plan. Pollution prevention plan. Monitoring and reporting plan.	4	2	1	5	12
1144	1144	PACs in proximity to MCPY13	Kiteto	Resettlement	Land and property	Permanent loss of physical structures due to project land acquisition		C		Y	TZ 8.15	10	5	1	5	21	Resettlement action plan. Stakeholder engagement plan. Occupational health, safety and security plan. Community health, safety and security plan. Labour management plan. Pollution prevention plan. Monitoring and reporting plan.	4	2	1	5	12
1238	1238	PACs in proximity to MCPY14	Kilindi	Resettlement	Land and property	Permanent loss of physical structures due to project land acquisition		C		Y	TZ 8.15	10	5	1	5	21	Resettlement action plan. Stakeholder engagement plan. Occupational health, safety and security plan. Community health, safety and security plan. Labour management plan. Pollution prevention plan. Monitoring and reporting plan.	4	2	1	5	12

Table E3-1 Location Specific Impacts Register

KP Start	KP End	Location	District	Aspect	VEC	Potential Impact	Impact Detail	Phase		High Stakeholder Concern	ESIA Section	Pre-mitigation Impact					Management Plan(s)	Residual Impacts				
								C	O			M	D	E	S	SS		M	D	E	S	SS
1318	1318	PACs in proximity to MCPY15	Handeni Township Authority	Resettlement	Land and property	Permanent loss of physical structures due to project land acquisition		C		Y	TZ 8.15	10	5	1	5	21	Resettlement action plan. Stakeholder engagement plan. Occupational health, safety and security plan. Community health, safety and security plan. Labour management plan. Pollution prevention plan. Monitoring and reporting plan.	4	2	1	5	12
1404	1404	PACs in proximity to MCPY16	Muheza	Resettlement	Land and property	Permanent loss of physical structures due to project land acquisition		C		Y	TZ 8.15	10	5	1	5	21	Resettlement action plan. Stakeholder engagement plan. Occupational health, safety and security plan. Community health, safety and security plan. Labour management plan. Pollution prevention plan. Monitoring and reporting plan.	4	2	1	5	12
325.5	325.5	PACs near MCPY5	Missenyi	Resettlement	Land and property	Loss of access to informal support networks and social services after physical displacement due to project land acquisition		C		Y	TZ 8.15	6	3	1	4	14	Resettlement action plan. Stakeholder engagement plan. Community health, safety and security plan. Monitoring and reporting plan.	4	3	1	4	12
419	419	PACs near MCPY6	Muleba	Resettlement	Land and property	Loss of access to informal support networks and social services after physical displacement due to project land acquisition		C		Y	TZ 8.15	6	3	1	4	14	Resettlement action plan. Stakeholder engagement plan. Community health, safety and security plan. Monitoring and reporting plan.	4	3	1	4	12
513	513	PACs near MCPY7	Chato	Resettlement	Land and property	Loss of access to informal support networks and social services after physical		C		Y	TZ 8.15	6	3	1	4	14	Resettlement action plan. Stakeholder engagement plan. Community	4	3	1	4	12

Table E3-1 Location Specific Impacts Register

KP Start	KP End	Location	District	Aspect	VEC	Potential Impact	Impact Detail	Phase		High Stakeholder Concern	ESIA Section	Pre-mitigation Impact					Management Plan(s)	Residual Impacts				
								C	O			M	D	E	S	SS		M	D	E	S	SS
						displacement due to project land acquisition											health, safety and security plan. Monitoring and reporting plan.					
594.5	594.5	PACs near MCPY8	Bukombe	Resettlement	Land and property	Loss of access to informal support networks and social services after physical displacement due to project land acquisition		C		Y	TZ 8.15	6	3	1	4	14	Resettlement action plan. Stakeholder engagement plan. Community health, safety and security plan. Monitoring and reporting plan.	4	3	1	4	12
701	702	PACs near MCPY9	Nzega	Resettlement	Land and property	Loss of access to informal support networks and social services after physical displacement due to project land acquisition		C		Y	TZ 8.15	6	3	1	4	14	Resettlement action plan. Stakeholder engagement plan. Community health, safety and security plan. Monitoring and reporting plan.	4	3	1	4	12
701	702	PACs near Coating Facility	Nzega	Resettlement	Land and property	Loss of access to informal support networks and social services after physical displacement due to project land acquisition		C		Y	TZ 8.15	6	3	1	4	14	Resettlement action plan. Stakeholder engagement plan. Community health, safety and security plan. Monitoring and reporting plan.	4	3	1	4	12
800	800	PACs near MCPY10	Igunga	Resettlement	Land and property	Loss of access to informal support networks and social services after physical displacement due to project land acquisition		C		Y	TZ 8.15	6	3	1	4	14	Resettlement action plan. Stakeholder engagement plan. Community health, safety and security plan. Monitoring and reporting plan.	4	3	1	4	12
914.7	914.7	PACs near MCPY11	Singida	Resettlement	Land and property	Loss of access to informal support networks and social services after physical displacement due to project land acquisition		C		Y	TZ 8.15	6	3	1	4	14	Resettlement action plan. Stakeholder engagement plan. Community health, safety and security plan. Monitoring and reporting plan.	4	3	1	4	12
1035	1035	PACs near MCPY12	Kondoa	Resettlement	Land and property	Loss of access to informal support networks and social services after physical		C		Y	TZ 8.15	6	3	1	4	14	Resettlement action plan. Stakeholder engagement plan. Community	4	3	1	4	12

Table E3-1 Location Specific Impacts Register

KP Start	KP End	Location	District	Aspect	VEC	Potential Impact	Impact Detail	Phase		High Stakeholder Concern	ESIA Section	Pre-mitigation Impact					Management Plan(s)	Residual Impacts				
								C	O			M	D	E	S	SS		M	D	E	S	SS
						displacement due to project land acquisition											health, safety and security plan. Monitoring and reporting plan.					
1144	1144	PACs near MCPY13	Kiteto	Resettlement	Land and property	Loss of access to informal support networks and social services after physical displacement due to project land acquisition		C		Y	TZ 8.15	6	3	1	4	14	Resettlement action plan. Stakeholder engagement plan. Community health, safety and security plan. Monitoring and reporting plan.	4	3	1	4	12
1238	1238	PACs near MCPY14	Kilindi	Resettlement	Land and property	Loss of access to informal support networks and social services after physical displacement due to project land acquisition		C		Y	TZ 8.15	6	3	1	4	14	Resettlement action plan. Stakeholder engagement plan. Community health, safety and security plan. Monitoring and reporting plan.	4	3	1	4	12
1318	1318	PACs near MCPY15	Handeni Township Authority	Resettlement	Land and property	Loss of access to informal support networks and social services after physical displacement due to project land acquisition		C		Y	TZ 8.15	6	3	1	4	14	Resettlement action plan. Stakeholder engagement plan. Community health, safety and security plan. Monitoring and reporting plan.	4	3	1	4	12
1404	1404	PACs near MCPY16	Muheza	Resettlement	Land and property	Loss of access to informal support networks and social services after physical displacement due to project land acquisition		C		Y	TZ 8.15	6	3	1	4	14	Resettlement action plan. Stakeholder engagement plan. Community health, safety and security plan. Monitoring and reporting plan.	4	3	1	4	12
1006	1006	Masusu	Hanang	Resettlement	Land and property	New disputes and exacerbation of pre-existing disputes and conflict around land and property		C		Y	TZ 8.15	10	4	1	5	20	Resettlement action plan. Stakeholder engagement plan. Community health, safety and security plan. Monitoring and reporting plan.	4	4	1	5	14
1082	1106	PACs between KP1082 and KP1106	Chemba	Vibration	Land and property	The generation of vibration during construction works		C		Y	TZ 8.15	8	2	2	5	17	Infrastructure and utilities management plan. Blast	4	2	2	5	13

Table E3-1 Location Specific Impacts Register

KP Start	KP End	Location	District	Aspect	VEC	Potential Impact	Impact Detail	Phase		High Stakeholder Concern	ESIA Section	Pre-mitigation Impact					Management Plan(s)	Residual Impacts				
								C	O			M	D	E	S	SS		M	D	E	S	SS
																	management plan.					
1380	1410	PACs between KP1380 and KP1410	Muheza	Resettlement	Land and property	Permanent loss of private land due to project land acquisition		C		Y	TZ 8.15	10	5	1	5	21	Resettlement action plan. Stakeholder engagement plan. Community health, safety and security plan. Monitoring and reporting plan.	4	2	1	5	12
1380	1410	PACs between KP1380 and KP1410	Muheza	Resettlement	Land and property	New disputes and exacerbation of pre-existing disputes and conflict around land and property		C		Y	TZ 8.15	10	4	1	5	20	Resettlement action plan. Stakeholder engagement plan. Community health, safety and security plan. Monitoring and reporting plan.	4	4	1	5	14
1380	1410	PACs between KP1380 and KP1410	Muheza	Resettlement	Land and property	Permanent loss of physical structures due to project land acquisition		C		Y	TZ 8.15	10	5	1	5	21	Resettlement action plan. Stakeholder engagement plan. Community health, safety and security plan. Monitoring and reporting plan.	4	2	1	5	12
1442	1443	Putini mtaa and Chongoleani mtaa	Tanga	Resettlement	Land and property	New disputes and exacerbation of pre-existing disputes and conflict around land and property		C		Y	TZ 8.15	10	4	1	5	20	Resettlement action plan. Stakeholder engagement plan. Community health, safety and security plan. Monitoring and reporting plan.	4	4	1	5	14
325.5	325.5	PACs near MCPY5	Missenyi	Employment	Workers' health, safety and welfare	Increased risk of vector-related diseases among the local workforce		C			TZ 8.16	8	4	1	5	18	Occupational health, safety and security plan.	4	2	1	5	12
419	419	PACs near MCPY6	Muleba	Employment	Workers' health, safety and welfare	Increased risk of vector-related diseases among the local workforce		C			TZ 8.16	8	4	1	5	18	Occupational health, safety and security plan.	4	2	1	5	12
513	513	PACs near MCPY7	Chato	Employment	Workers' health, safety and welfare	Increased risk of vector-related diseases among the local workforce		C			TZ 8.16	8	4	1	5	18	Occupational health, safety and security plan.	4	2	1	5	12
594.5	594.5	PACs near MCPY8	Bukombe	Employment	Workers' health, safety and welfare	Increased risk of vector-related diseases among the local workforce		C			TZ 8.16	8	4	1	5	18	Occupational health, safety and security plan.	4	2	1	5	12

Table E3-1 Location Specific Impacts Register

KP Start	KP End	Location	District	Aspect	VEC	Potential Impact	Impact Detail	Phase		High Stakeholder Concern	ESIA Section	Pre-mitigation Impact					Management Plan(s)	Residual Impacts				
								C	O			M	D	E	S	SS		M	D	E	S	SS
701	702	PACs near MCPY9	Nzega	Employment	Workers' health, safety and welfare	Increased risk of vector-related diseases among the local workforce		C			TZ 8.16	8	4	1	5	18	Occupational health, safety and security plan.	4	2	1	5	12
701	702	PACs near Coating Facility	Nzega	Employment	Workers' health, safety and welfare	Increased risk of vector-related diseases among the local workforce		C			TZ 8.16	8	4	1	5	18	Occupational health, safety and security plan..	4	2	1	5	12
800	800	PACs in proximity to MCPY10	Igunga	Employment	Workers' health, safety and welfare	Increased risk of vector-related diseases among the local workforce		C			TZ 8.16	8	4	1	5	18	Occupational health, safety and security plan.	4	2	1	5	12
914.7	914.7	PACs in proximity to MCPY11	Singida	Employment	Workers' health, safety and welfare	Increased risk of vector-related diseases among the local workforce		C			TZ 8.16	8	4	1	5	18	Occupational health, safety and security plan.	4	2	1	5	12
1035	1035	PACs in proximity to MCPY12	Kondoa	Employment	Workers' health, safety and welfare	Increased risk of vector-related diseases among the local workforce		C			TZ 8.16	8	4	1	5	18	Occupational health, safety and security plan.	4	2	1	5	12
1144	1144	PACs in proximity to MCPY13	Kiteto	Employment	Workers' health, safety and welfare	Increased risk of vector-related diseases among the local workforce		C			TZ 8.16	8	4	1	5	18	Occupational health, safety and security plan.	4	2	1	5	12
1238	1238	PACs in proximity to MCPY14	Kilindi	Employment	Workers' health, safety and welfare	Increased risk of vector-related diseases among the local workforce		C			TZ 8.16	8	4	1	5	18	Occupational health, safety and security plan.	4	2	1	5	12
1318	1318	PACs in proximity to MCPY15	Handeni Township Authority	Employment	Workers' health, safety and welfare	Increased risk of vector-related diseases among the local workforce		C			TZ 8.16	8	4	1	5	18	Occupational health, safety and security plan.	4	2	1	5	12
1404	1404	PACs in proximity to MCPY16	Muheza	Employment	Workers' health, safety and welfare	Increased risk of vector-related diseases among the local workforce		C			TZ 8.16	8	4	1	5	18	Occupational health, safety and security plan.	4	2	1	5	12
405.4	405.4	PACS near PS3	Muleba	Employment	Workers' health, safety and welfare	Increased risk of developing noncommunicable diseases in local workers			O	–	TZ 8.16	8	4	1	3	16	Occupational health, safety and security plan.	4	2	1	3	10
824.9	824.9	PACS near PS5	Igunga	Employment	Workers' health, safety and welfare	Increased risk of developing noncommunicable diseases in local workers			O	–	TZ 8.16	8	4	1	3	16	Occupational health, safety and security plan.	4	2	1	3	10
1442	1442	PACs near MST and LOF	Tanga	Employment	Workers' health, safety and welfare	Increased risk of developing noncommunicable diseases in local workers			O	–	TZ 8.16	8	4	1	3	16	Occupational health, safety and security plan.	4	2	1	3	10
419	419	PACs near MCPY6	Muleba	Damage to third-party infrastructure (pipeline, cables and community infrastructure)	Social infrastructure and services	Temporary disruption to power supply due to planned outage or accidental damage to cables or other pipelines during pipeline construction		C		-	TZ 8.17	6	1	2	2	11	Infrastructure and utilities management plan	4	1	2	2	9
701	702	PACs near MCPY 12	Kondoa	Damage to third-party infrastructure (pipeline, cables	Social infrastructure and services	Temporary disruption to power supply due to planned outage or accidental damage to		C		-	TZ 8.17	6	1	2	2	11	Infrastructure and utilities management plan	4	1	2	2	9

Table E3-1 Location Specific Impacts Register

KP Start	KP End	Location	District	Aspect	VEC	Potential Impact	Impact Detail	Phase		High Stakeholder Concern	ESIA Section	Pre-mitigation Impact					Management Plan(s)	Residual Impacts				
								C	O			M	D	E	S	SS		M	D	E	S	SS
				and community infrastructure)		cables or other pipelines during pipeline construction																
1405	1405	Tanganyika	Muheza	Use of Road Network	Social infrastructure and services	Traffic congestion leading to delays		C		-	TZ 8.17	6	2	2	3	13	Stakeholder engagement plan. Transport and road safety management plan.	6	2	2	3	13
325.5	325.5	PACs near MCPY5	Missenyi	Abstraction of groundwater	Community health	Reduced availability of groundwater		C		Y	TZ 8.18	6	2	2	4	14	Natural resource management plan. Pollution prevention plan. Waste management plan. Stakeholder engagement plan.	4	1	2	4	11
419	419	PACs near MCPY6	Muleba	Abstraction of groundwater	Community health	Reduced availability of groundwater		C		Y	TZ 8.18	6	2	2	4	14	Natural resource management plan. Pollution prevention plan. Waste management plan. Stakeholder engagement plan.	4	1	2	4	11
513	513	PACs near MCPY7	Chato	Abstraction of groundwater	Community health	Reduced availability of groundwater		C		Y	TZ 8.18	6	2	2	4	14	Natural resource management plan. Pollution prevention plan. Waste management plan. Stakeholder engagement plan.	4	1	2	4	11
594.5	594.5	PACs near MCPY8	Bukombe	Abstraction of groundwater	Community health	Reduced availability of groundwater		C		Y	TZ 8.18	6	2	2	4	14	Natural resource management plan. Pollution prevention plan. Waste management plan. Stakeholder engagement plan.	4	1	2	4	11
701	702	PACs near MCPY9	Nzega	Abstraction of groundwater	Community health	Reduced availability of groundwater		C		Y	TZ 8.18	6	2	2	4	14	Natural resource management plan. Pollution prevention plan. Waste management plan. Stakeholder engagement plan.	4	1	2	4	11
701	702	PACs near Coating Facility	Nzega	Abstraction of groundwater	Community health	Reduced availability of groundwater		C		Y	TZ 8.18	6	2	2	4	14	Natural resource management plan. Pollution prevention plan. Waste	4	1	2	4	11

Table E3-1 Location Specific Impacts Register

KP Start	KP End	Location	District	Aspect	VEC	Potential Impact	Impact Detail	Phase		High Stakeholder Concern	ESIA Section	Pre-mitigation Impact					Management Plan(s)	Residual Impacts				
								C	O			M	D	E	S	SS		M	D	E	S	SS
																	management plan. Stakeholder engagement plan.					
800	800	PACs in proximity to MCPY10	Igunga	Abstraction of groundwater	Community health	Reduced availability of groundwater		C		Y	TZ 8.18	6	2	2	4	14	Natural resource management plan. Pollution prevention plan. Waste management plan. Stakeholder engagement plan.	4	1	2	4	11
914.7	914.7	PACs in proximity to MCPY11	Singida	Abstraction of groundwater	Community health	Reduced availability of groundwater		C		Y	TZ 8.18	6	2	2	4	14	Natural resource management plan. Pollution prevention plan. Waste management plan. Stakeholder engagement plan.	4	1	2	4	11
1035	1035	PACs in proximity to MCPY12	Kondoa	Abstraction of groundwater	Community health	Reduced availability of groundwater		C		Y	TZ 8.18	6	2	2	4	14	Natural resource management plan. Pollution prevention plan. Waste management plan. Stakeholder engagement plan.	4	1	2	4	11
1144	1144	PACs in proximity to MCPY13	Kiteto	Abstraction of groundwater	Community health	Reduced availability of groundwater		C		Y	TZ 8.18	6	2	2	4	14	Natural resource management plan. Pollution prevention plan. Waste management plan. Stakeholder engagement plan.	4	1	2	4	11
1238	1238	PACs in proximity to MCPY14	Kilindi	Abstraction of groundwater	Community health	Reduced availability of groundwater		C		Y	TZ 8.18	6	2	2	4	14	Natural resource management plan. Pollution prevention plan. Waste management plan. Stakeholder engagement plan.	4	1	2	4	11
1318	1318	PACs in proximity to MCPY15	Handeni Township Authority	Abstraction of groundwater	Community health	Reduced availability of groundwater		C		Y	TZ 8.18	6	2	2	4	14	Natural resource management plan. Pollution prevention plan. Waste management plan. Stakeholder engagement plan.	4	1	2	4	11
325.5	325.5	PACs near MCPY5	Missenyi	Employment	Community health	The transmission of communicable diseases between the project's		C		Y	TZ 8.18	10	4	2	5	21	Community health, safety and security plan.	6	2	2	5	15

Table E3-1 Location Specific Impacts Register

KP Start	KP End	Location	District	Aspect	VEC	Potential Impact	Impact Detail	Phase		High Stakeholder Concern	ESIA Section	Pre-mitigation Impact					Management Plan(s)	Residual Impacts				
								C	O			M	D	E	S	SS		M	D	E	S	SS
						externally contracted workforce and PACs											Occupational health, safety and security plan. Natural resource management plan. Pollution prevention plan. Waste management plan. Stakeholder engagement plan.					
419	419	PACs near MCPY6	Muleba	Employment	Community health	The transmission of communicable diseases between the project's externally contracted workforce and PACs		C		Y	TZ 8.18	10	4	2	5	21	Community health, safety and security plan. Occupational health, safety and security plan. Natural resource management plan. Pollution prevention plan. Waste management plan. Stakeholder engagement plan.	6	2	2	5	15
513	513	PACs near MCPY7	Chato	Employment	Community health	The transmission of communicable diseases between the project's externally contracted workforce and PACs		C		Y	TZ 8.18	10	4	2	5	21	Community health, safety and security plan. Occupational health, safety and security plan. Natural resource management plan. Pollution prevention plan. Waste management plan. Stakeholder engagement plan.	6	2	2	5	15
594.5	594.5	PACs near MCPY8	Bukombe	Employment	Community health	The transmission of communicable diseases between the project's externally contracted workforce and PACs		C		Y	TZ 8.18	10	4	2	5	21	Community health, safety and security plan. Occupational health, safety and security plan. Natural resource management plan. Pollution prevention plan. Waste management plan. Stakeholder engagement plan.	6	2	2	5	15
701	702	PACs near MCPY9	Nzega	Employment	Community health	The transmission of communicable diseases between the project's		C		Y	TZ 8.18	10	4	2	5	21	Community health, safety and security plan.	6	2	2	5	15

Table E3-1 Location Specific Impacts Register

KP Start	KP End	Location	District	Aspect	VEC	Potential Impact	Impact Detail	Phase		High Stakeholder Concern	ESIA Section	Pre-mitigation Impact					Management Plan(s)	Residual Impacts				
								C	O			M	D	E	S	SS		M	D	E	S	SS
						externally contracted workforce and PACs											Occupational health, safety and security plan. Natural resource management plan. Pollution prevention plan. Waste management plan. Stakeholder engagement plan.					
701	702	PACs near Coating Facility	Nzega	Employment	Community health	The transmission of communicable diseases between the project's externally contracted workforce and PACs		C		Y	TZ 8.18	10	4	2	5	21	Community health, safety and security plan. Occupational health, safety and security plan. Natural resource management plan. Pollution prevention plan. Waste management plan. Stakeholder engagement plan.	6	2	2	5	15
800	800	PACs in proximity to MCPY10	Igunga	Employment	Community health	The transmission of communicable diseases between the project's externally contracted workforce and PACs		C		Y	TZ 8.18	10	4	2	5	21	Community health, safety and security plan. Occupational health, safety and security plan. Natural resource management plan. Pollution prevention plan. Waste management plan. Stakeholder engagement plan.	6	2	2	5	15
914.7	914.7	PACs in proximity to MCPY11	Singida	Employment	Community health	The transmission of communicable diseases between the project's externally contracted workforce and PACs		C		Y	TZ 8.18	10	4	2	5	21	Community health, safety and security plan. Occupational health, safety and security plan. Natural resource management plan. Pollution prevention plan. Waste management plan. Stakeholder engagement plan.	6	2	2	5	15
1035	1035	PACs in proximity to MCPY12	Kondoa	Employment	Community health	The transmission of communicable diseases between the project's		C		Y	TZ 8.18	10	4	2	5	21	Community health, safety and security plan.	6	2	2	5	15

Table E3-1 Location Specific Impacts Register

KP Start	KP End	Location	District	Aspect	VEC	Potential Impact	Impact Detail	Phase		High Stakeholder Concern	ESIA Section	Pre-mitigation Impact					Management Plan(s)	Residual Impacts				
								C	O			M	D	E	S	SS		M	D	E	S	SS
						externally contracted workforce and PACs											Occupational health, safety and security plan. Natural resource management plan. Pollution prevention plan. Waste management plan. Stakeholder engagement plan.					
1144	1144	PACs in proximity to MCPY13	Kiteto	Employment	Community health	The transmission of communicable diseases between the project's externally contracted workforce and PACs		C		Y	TZ 8.18	10	4	2	5	21	Community health, safety and security plan. Occupational health, safety and security plan. Natural resource management plan. Pollution prevention plan. Waste management plan. Stakeholder engagement plan.	6	2	2	5	15
1238	1238	PACs in proximity to MCPY14	Kilindi	Employment	Community health	The transmission of communicable diseases between the project's externally contracted workforce and PACs		C		Y	TZ 8.18	10	4	2	5	21	Community health, safety and security plan. Occupational health, safety and security plan. Natural resource management plan. Pollution prevention plan. Waste management plan. Stakeholder engagement plan.	6	2	2	5	15
1318	1318	PACs in proximity to MCPY15	Handeni Township Authority	Employment	Community health	The transmission of communicable diseases between the project's externally contracted workforce and PACs		C		Y	TZ 8.18	10	4	2	5	21	Community health, safety and security plan. Occupational health, safety and security plan. Natural resource management plan. Pollution prevention plan. Waste management plan. Stakeholder engagement plan.	6	2	2	5	15
1404	1404	PACs in proximity to MCPY16	Muheza	Employment	Community health	The transmission of communicable diseases between the project's		C		Y	TZ 8.18	10	4	2	5	21	Community health, safety and security plan.	6	2	2	5	15

Table E3-1 Location Specific Impacts Register

KP Start	KP End	Location	District	Aspect	VEC	Potential Impact	Impact Detail	Phase		High Stakeholder Concern	ESIA Section	Pre-mitigation Impact					Management Plan(s)	Residual Impacts				
								C	O			M	D	E	S	SS		M	D	E	S	SS
						externally contracted workforce and PACs											Occupational health, safety and security plan. Natural resource management plan. Pollution prevention plan. Waste management plan. Stakeholder engagement plan.					
1404	1404	PACs in proximity to MCPY16	Muheza	Employment	Community health	The transmission of communicable diseases between the project's externally contracted workforce and PACs		C		Y	TZ 8.18	10	4	2	5	21	Community health, safety and security plan. Occupational health, safety and security plan. Resettlement action plan. Natural resource management plan. Pollution prevention plan. Waste management plan. Stakeholder engagement plan.	6	2	2	5	15
325.5	325.5	PACs near MCPY5	Missenyi	Employment	Community health	Outbreaks of infectious diseases within MCPYs affecting the health of PACs		C		Y	TZ 8.18	10	4	1	5	20	Community health, safety and security plan. Occupational health, safety and security plan. Natural resource management plan. Pollution prevention plan. Waste management plan. Stakeholder engagement plan.	6	4	1	4	15
419	419	PACs near MCPY6	Muleba	Employment	Community health	Outbreaks of infectious diseases within MCPYs affecting the health of PACs		C		Y	TZ 8.18	10	4	1	5	20	Community health, safety and security plan. Occupational health, safety and security plan. Natural resource management plan. Pollution prevention plan. Waste management plan. Stakeholder engagement plan.	6	4	1	4	15

Table E3-1 Location Specific Impacts Register

KP Start	KP End	Location	District	Aspect	VEC	Potential Impact	Impact Detail	Phase		High Stakeholder Concern	ESIA Section	Pre-mitigation Impact					Management Plan(s)	Residual Impacts				
								C	O			M	D	E	S	SS		M	D	E	S	SS
513	513	PACs near MCPY7	Chato	Employment	Community health	Outbreaks of infectious diseases within MCPYs affecting the health of PACs		C		Y	TZ 8.18	10	4	1	5	20	Community health, safety and security plan. Occupational health, safety and security plan. Natural resource management plan. Pollution prevention plan. Waste management plan. Stakeholder engagement plan.	6	4	1	4	15
594.5	594.5	PACs near MCPY8	Bukombe	Employment	Community health	Outbreaks of infectious diseases within MCPYs affecting the health of PACs		C		Y	TZ 8.18	10	4	1	5	20	Community health, safety and security plan. Occupational health, safety and security plan. Natural resource management plan. Pollution prevention plan. Waste management plan. Stakeholder engagement plan.	6	4	1	4	15
701	702	PACs near MCPY9	Nzega	Employment	Community health	Outbreaks of infectious diseases within MCPYs affecting the health of PACs		C		Y	TZ 8.18	10	4	1	5	20	Community health, safety and security plan. Occupational health, safety and security plan. Natural resource management plan. Pollution prevention plan. Waste management plan. Stakeholder engagement plan.	6	4	1	4	15
701	702	PACs near Coating Facility	Nzega	Employment	Community health	Outbreaks of infectious diseases within MCPYs affecting the health of PACs		C		Y	TZ 8.18	10	4	1	5	20	Community health, safety and security plan. Occupational health, safety and security plan. Natural resource management plan. Pollution prevention plan. Waste management plan. Stakeholder engagement plan.	6	4	1	4	15

Table E3-1 Location Specific Impacts Register

KP Start	KP End	Location	District	Aspect	VEC	Potential Impact	Impact Detail	Phase		High Stakeholder Concern	ESIA Section	Pre-mitigation Impact					Management Plan(s)	Residual Impacts				
								C	O			M	D	E	S	SS		M	D	E	S	SS
800	800	PACs in proximity to MCPY10	Igunga	Employment	Community health	Outbreaks of infectious diseases within MCPYs affecting the health of PACs		C		Y	TZ 8.18	10	4	1	5	20	Community health, safety and security plan. Occupational health, safety and security plan. Natural resource management plan. Pollution prevention plan. Waste management plan. Stakeholder engagement plan.	6	4	1	4	15
914.7	914.7	PACs in proximity to MCPY11	Singida	Employment	Community health	Outbreaks of infectious diseases within MCPYs affecting the health of PACs		C		Y	TZ 8.18	10	4	1	5	20	Community health, safety and security plan. Occupational health, safety and security plan. Natural resource management plan. Pollution prevention plan. Waste management plan. Stakeholder engagement plan.	6	4	1	4	15
1035	1035	PACs in proximity to MCPY12	Kondoa	Employment	Community health	Outbreaks of infectious diseases within MCPYs affecting the health of PACs		C		Y	TZ 8.18	10	4	1	5	20	Community health, safety and security plan. Occupational health, safety and security plan. Natural resource management plan. Pollution prevention plan. Waste management plan. Stakeholder engagement plan.	6	4	1	4	15
1144	1144	PACs in proximity to MCPY13	Kiteto	Employment	Community health	Outbreaks of infectious diseases within MCPYs affecting the health of PACs		C		Y	TZ 8.18	10	4	1	5	20	Community health, safety and security plan. Occupational health, safety and security plan. Natural resource management plan. Pollution prevention plan. Waste management plan. Stakeholder engagement plan.	6	4	1	4	15

Table E3-1 Location Specific Impacts Register

KP Start	KP End	Location	District	Aspect	VEC	Potential Impact	Impact Detail	Phase		High Stakeholder Concern	ESIA Section	Pre-mitigation Impact					Management Plan(s)	Residual Impacts				
								C	O			M	D	E	S	SS		M	D	E	S	SS
1238	1238	PACs in proximity to MCPY14	Kilindi	Employment	Community health	Outbreaks of infectious diseases within MCPYs affecting the health of PACs		C		Y	TZ 8.18	10	4	1	5	20	Community health, safety and security plan. Occupational health, safety and security plan. Natural resource management plan. Pollution prevention plan. Waste management plan. Stakeholder engagement plan.	6	4	1	4	15
1318	1318	PACs in proximity to MCPY15	Handeni Township Authority	Employment	Community health	Outbreaks of infectious diseases within MCPYs affecting the health of PACs		C		Y	TZ 8.18	10	4	1	5	20	Community health, safety and security plan. Occupational health, safety and security plan. Natural resource management plan. Pollution prevention plan. Waste management plan. Stakeholder engagement plan.	6	4	1	4	15
1404	1404	PACs in proximity to MCPY16	Muheza	Employment	Community health	Outbreaks of infectious diseases within MCPYs affecting the health of PACs		C		Y	TZ 8.18	10	4	1	5	20	Community health, safety and security plan. Occupational health, safety and security plan. Natural resource management plan. Pollution prevention plan. Waste management plan. Stakeholder engagement plan.	6	4	1	4	15
325.5	325.5	PACs near MCPY5	Missenyi	PIIM	Community health	PIIM of job seekers affecting PACs	Carrying communicable diseases	C		Y	TZ 8.18	8	5	3	5	21	Project-induced in-migration management plan. Community health, safety and security plan. Stakeholder engagement plan.	6	4	3	5	18
419	419	PACs near MCPY6	Muleba	PIIM	Community health	PIIM of job seekers affecting PACs	Carrying communicable diseases	C		Y	TZ 8.18	8	5	3	5	21	Project-induced in-migration management plan. Community health, safety and	6	4	3	5	18

Table E3-1 Location Specific Impacts Register

KP Start	KP End	Location	District	Aspect	VEC	Potential Impact	Impact Detail	Phase		High Stakeholder Concern	ESIA Section	Pre-mitigation Impact					Management Plan(s)	Residual Impacts				
								C	O			M	D	E	S	SS		M	D	E	S	SS
																	security plan. Stakeholder engagement plan.					
513	513	PACs near MCPY7	Chato	PIIM	Community health	PIIM of job seekers affecting PACs	Carrying communicable diseases	C		Y	TZ 8.18	8	5	3	5	21	Project-induced in-migration management plan. Community health, safety and security plan. Stakeholder engagement plan.	6	4	3	5	18
594.5	594.5	PACs near MCPY8	Bukombe	PIIM	Community health	PIIM of job seekers affecting PACs	Carrying communicable diseases	C		Y	TZ 8.18	8	5	3	5	21	Project-induced in-migration management plan. Community health, safety and security plan. Stakeholder engagement plan.	6	4	3	5	18
701	702	PACs near MCPY9	Nzega	PIIM	Community health	PIIM of job seekers affecting PACs	Carrying communicable diseases	C		Y	TZ 8.18	8	5	3	5	21	Project-induced in-migration management plan. Community health, safety and security plan. Stakeholder engagement plan.	6	4	3	5	18
701	702	PACs near Coating Facility	Nzega	PIIM	Community health	PIIM of job seekers affecting PACs	Carrying communicable diseases	C		Y	TZ 8.18	8	5	3	5	21	Project-induced in-migration management plan. Community health, safety and security plan. Stakeholder engagement plan.	6	4	3	5	18
800	800	PACs in proximity to MCPY10	Igunga	PIIM	Community health	PIIM of job seekers affecting PACs	Carrying communicable diseases	C		Y	TZ 8.18	8	5	3	5	21	Project-induced in-migration management plan. Community health, safety and security plan. Stakeholder engagement plan.	6	4	3	5	18
914.7	914.7	PACs in proximity to MCPY11	Singida	PIIM	Community health	PIIM of job seekers affecting PACs	Carrying communicable diseases	C		Y	TZ 8.18	8	5	3	5	21	Project-induced in-migration management plan. Community health, safety and security plan. Stakeholder engagement plan.	6	4	3	5	18

Table E3-1 Location Specific Impacts Register

KP Start	KP End	Location	District	Aspect	VEC	Potential Impact	Impact Detail	Phase		High Stakeholder Concern	ESIA Section	Pre-mitigation Impact					Management Plan(s)	Residual Impacts				
								C	O			M	D	E	S	SS		M	D	E	S	SS
1035	1035	PACs in proximity to MCPY12	Kondoa	PIIM	Community health	PIIM of job seekers affecting PACs	Carrying communicable diseases	C		Y	TZ 8.18	8	5	3	5	21	Project-induced in-migration management plan. Community health, safety and security plan. Stakeholder engagement plan.	6	4	3	5	18
1144	1144	PACs in proximity to MCPY13	Kiteto	PIIM	Community health	PIIM of job seekers affecting PACs	Carrying communicable diseases	C		Y	TZ 8.18	8	5	3	5	21	Project-induced in-migration management plan. Community health, safety and security plan. Stakeholder engagement plan.	6	4	3	5	18
1238	1238	PACs in proximity to MCPY14	Kilindi	PIIM	Community health	PIIM of job seekers affecting PACs	Carrying communicable diseases	C		Y	TZ 8.18	8	5	3	5	21	Project-induced in-migration management plan. Community health, safety and security plan. Stakeholder engagement plan.	6	4	3	5	18
1318	1318	PACs in proximity to MCPY15	Handeni Township Authority	PIIM	Community health	PIIM of job seekers affecting PACs	Carrying communicable diseases	C		Y	TZ 8.18	8	5	3	5	21	Project-induced in-migration management plan. Community health, safety and security plan. Stakeholder engagement plan.	6	4	3	5	18
1404	1404	PACs in proximity to MCPY16	Muheza	PIIM	Community health	PIIM of job seekers affecting PACs	Carrying communicable diseases	C		Y	TZ 8.18	8	5	3	5	21	Project-induced in-migration management plan. Community health, safety and security plan. Stakeholder engagement plan.	6	4	3	5	18
325.5	325.5	PACs near MCPY5	Missenyi	PIIM	Community health	PIIM of job seekers affecting PACs	Causing environmental changes in PACs that promote vector breeding	C		Y	TZ 8.18	8	3	2	4	17	Project-induced in-migration management plan. Community health, safety and security plan. Occupational health, safety and security plan. Resettlement action plan. Natural resource management plan. Pollution prevention plan.	6	3	2	4	15

Table E3-1 Location Specific Impacts Register

KP Start	KP End	Location	District	Aspect	VEC	Potential Impact	Impact Detail	Phase		High Stakeholder Concern	ESIA Section	Pre-mitigation Impact					Management Plan(s)	Residual Impacts				
								C	O			M	D	E	S	SS		M	D	E	S	SS
																	Waste management plan. Stakeholder engagement plan.					
419	419	PACs near MCPY6	Muleba	PIIM	Community health	PIIM of job seekers affecting PACs	Causing environmental changes in PACs that promote vector breeding	C		Y	TZ 8.18	8	3	2	4	17	Project-induced in-migration management plan. Community health, safety and security plan. Occupational health, safety and security plan. Resettlement action plan. Natural resource management plan. Pollution prevention plan. Waste management plan. Stakeholder engagement plan.	6	3	2	4	15
513	513	PACs near MCPY7	Chato	PIIM	Community health	PIIM of job seekers affecting PACs	Causing environmental changes in PACs that promote vector breeding	C		Y	TZ 8.18	8	3	2	4	17	Project-induced in-migration management plan. Community health, safety and security plan. Occupational health, safety and security plan. Resettlement action plan. Natural resource management plan. Pollution prevention plan. Waste management plan. Stakeholder engagement plan.	6	3	2	4	15
594.5	594.5	PACs near MCPY8	Bukombe	PIIM	Community health	PIIM of job seekers affecting PACs	Causing environmental changes in PACs that promote vector breeding	C		Y	TZ 8.18	8	3	2	4	17	Project-induced in-migration management plan. Community health, safety and security plan. Occupational health, safety and security plan. Resettlement action plan. Natural resource management plan. Pollution prevention plan. Waste management plan. Stakeholder engagement plan.	6	3	2	4	15

Table E3-1 Location Specific Impacts Register

KP Start	KP End	Location	District	Aspect	VEC	Potential Impact	Impact Detail	Phase		High Stakeholder Concern	ESIA Section	Pre-mitigation Impact					Management Plan(s)	Residual Impacts				
								C	O			M	D	E	S	SS		M	D	E	S	SS
																	prevention plan. Waste management plan. Stakeholder engagement plan.					
701	702	PACs near MCPY9	Nzega	PIIM	Community health	PIIM of job seekers affecting PACs	Causing environmental changes in PACs that promote vector breeding	C		Y	TZ 8.18	8	3	2	4	17	Project-induced in-migration management plan. Community health, safety and security plan. Occupational health, safety and security plan. Resettlement action plan. Natural resource management plan. Pollution prevention plan. Waste management plan. Stakeholder engagement plan.	6	3	2	4	15
701	702	PACs near Coating Facility	Nzega	PIIM	Community health	PIIM of job seekers affecting PACs	Causing environmental changes in PACs that promote vector breeding	C		Y	TZ 8.18	8	3	2	4	17	Project-induced in-migration management plan. Community health, safety and security plan. Occupational health, safety and security plan. Resettlement action plan. Natural resource management plan. Pollution prevention plan. Waste management plan. Stakeholder engagement plan.	6	3	2	4	15
800	800	PACs in proximity to MCPY10	Igunga	PIIM	Community health	PIIM of job seekers affecting PACs	Causing environmental changes in PACs that promote vector breeding	C		Y	TZ 8.18	8	3	2	4	17	Project-induced in-migration management plan. Community health, safety and security plan. Occupational health, safety and security plan. Resettlement action plan. Natural resource management	6	3	2	4	15

Table E3-1 Location Specific Impacts Register

KP Start	KP End	Location	District	Aspect	VEC	Potential Impact	Impact Detail	Phase		High Stakeholder Concern	ESIA Section	Pre-mitigation Impact					Management Plan(s)	Residual Impacts				
								C	O			M	D	E	S	SS		M	D	E	S	SS
																	plan. Pollution prevention plan. Waste management plan. Stakeholder engagement plan.					
914.7	914.7	PACs in proximity to MCPY11	Singida	PIIM	Community health	PIIM of job seekers affecting PACs	Causing environmental changes in PACs that promote vector breeding	C		Y	TZ 8.18	8	3	2	4	17	Project-induced in-migration management plan. Community health, safety and security plan. Occupational health, safety and security plan. Resettlement action plan. Natural resource management plan. Pollution prevention plan. Waste management plan. Stakeholder engagement plan.	6	3	2	4	15
1035	1035	PACs in proximity to MCPY12	Kondoa	PIIM	Community health	PIIM of job seekers affecting PACs	Causing environmental changes in PACs that promote vector breeding	C		Y	TZ 8.18	8	3	2	4	17	Project-induced in-migration management plan. Community health, safety and security plan. Occupational health, safety and security plan. Resettlement action plan. Natural resource management plan. Pollution prevention plan. Waste management plan. Stakeholder engagement plan.	6	3	2	4	15
1144	1144	PACs in proximity to MCPY13	Kiteto	PIIM	Community health	PIIM of job seekers affecting PACs	Causing environmental changes in PACs that promote vector breeding	C		Y	TZ 8.18	8	3	2	4	17	Project induced in-migration management plan. Community health, safety and security plan. Occupational health, safety and security plan. Resettlement action plan. Natural resource	6	3	2	4	15

Table E3-1 Location Specific Impacts Register

KP Start	KP End	Location	District	Aspect	VEC	Potential Impact	Impact Detail	Phase		High Stakeholder Concern	ESIA Section	Pre-mitigation Impact					Management Plan(s)	Residual Impacts				
								C	O			M	D	E	S	SS		M	D	E	S	SS
																	management plan. Pollution prevention plan. Waste management plan. Stakeholder engagement plan.					
1238	1238	PACs in proximity to MCPY14	Kilindi	PIIM	Community health	PIIM of job seekers affecting PACs	Causing environmental changes in PACs that promote vector breeding	C		Y	TZ 8.18	8	3	2	4	17	Project-induced in-migration management plan. Community health, safety and security plan. Occupational health, safety and security plan. Resettlement action plan. Natural resource management plan. Pollution prevention plan. Waste management plan. Stakeholder engagement plan.	6	3	2	4	15
1318	1318	PACs in proximity to MCPY15	Handeni Township Authority	PIIM	Community health	PIIM of job seekers affecting PACs	Causing environmental changes in PACs that promote vector breeding	C		Y	TZ 8.18	8	3	2	4	17	Project-induced in-migration management plan. Community health, safety and security plan. Occupational health, safety and security plan. Resettlement action plan. Natural resource management plan. Pollution prevention plan. Waste management plan. Stakeholder engagement plan.	6	3	2	4	15
1404	1404	PACs in proximity to MCPY16	Muheza	PIIM	Community health	PIIM of job seekers affecting PACs	Causing environmental changes in PACs that promote vector breeding	C		Y	TZ 8.18	8	3	2	4	17	Project-induced in-migration management plan. Community health, safety and security plan. Occupational health, safety and security plan. Resettlement action plan.	6	3	2	4	15

Table E3-1 Location Specific Impacts Register

KP Start	KP End	Location	District	Aspect	VEC	Potential Impact	Impact Detail	Phase		High Stakeholder Concern	ESIA Section	Pre-mitigation Impact					Management Plan(s)	Residual Impacts				
								C	O			M	D	E	S	SS		M	D	E	S	SS
																	Natural resource management plan. Pollution prevention plan. Waste management plan. Stakeholder engagement plan.					
325.5	325.5	PACs near MCPY5	Missenyi	PIIM	Community health	PIIM of job seekers affecting PACs	Causing increased pressure on existing health services at a PAC level	C		Y	TZ 8.18	6	3	2	5	16	Project-induced in-migration management plan. Community health, safety and security plan. Occupational health, safety and security plan. Resettlement action plan. Natural resource management plan. Pollution prevention plan. Waste management plan. Stakeholder engagement plan.	4	2	2	5	13
419	419	PACs near MCPY6	Muleba	PIIM	Community health	PIIM of job seekers affecting PACs	Causing increased pressure on existing health services at a PAC level	C		Y	TZ 8.18	6	3	2	5	16	Project-induced in-migration management plan. Community health, safety and security plan. Occupational health, safety and security plan. Resettlement action plan. Natural resource management plan. Pollution prevention plan. Waste management plan. Stakeholder engagement plan.	4	2	2	5	13
513	513	PACs near MCPY7	Chato	PIIM	Community health	PIIM of job seekers affecting PACs	Causing increased pressure on existing health services at a PAC level	C		Y	TZ 8.18	6	3	2	5	16	Project-induced in-migration management plan. Community health, safety and security plan. Occupational health, safety and security plan. Resettlement	4	2	2	5	13

Table E3-1 Location Specific Impacts Register

KP Start	KP End	Location	District	Aspect	VEC	Potential Impact	Impact Detail	Phase		High Stakeholder Concern	ESIA Section	Pre-mitigation Impact					Management Plan(s)	Residual Impacts				
								C	O			M	D	E	S	SS		M	D	E	S	SS
																	action plan. Natural resource management plan. Pollution prevention plan. Waste management plan. Stakeholder engagement plan.					
594.5	594.5	PACs near MCPY8	Bukombe	PIIM	Community health	PIIM of job seekers affecting PACs	Causing increased pressure on existing health services at a PAC level	C		Y	TZ 8.18	6	3	2	5	16	Project-induced in-migration management plan. Community health, safety and security plan. Occupational health, safety and security plan. Resettlement action plan. Natural resource management plan. Pollution prevention plan. Waste management plan. Stakeholder engagement plan.	4	2	2	5	13
701	702	PACs near MCPY9	Nzega	PIIM	Community health	PIIM of job seekers affecting PACs	Causing increased pressure on existing health services at a PAC level	C		Y	TZ 8.18	6	3	2	5	16	Project-induced in-migration management plan. Community health, safety and security plan. Occupational health, safety and security plan. Resettlement action plan. Natural resource management plan. Pollution prevention plan. Waste management plan. Stakeholder engagement plan.	4	2	2	5	13
701	702	PACs near Coating Facility	Nzega	PIIM	Community health	PIIM of job seekers affecting PACs	Causing increased pressure on existing health services at a PAC level	C		Y	TZ 8.18	6	3	2	5	16	Project-induced in-migration management plan. Community health, safety and security plan. Occupational health, safety and security plan.	4	2	2	5	13

Table E3-1 Location Specific Impacts Register

KP Start	KP End	Location	District	Aspect	VEC	Potential Impact	Impact Detail	Phase		High Stakeholder Concern	ESIA Section	Pre-mitigation Impact					Management Plan(s)	Residual Impacts				
								C	O			M	D	E	S	SS		M	D	E	S	SS
																	Resettlement action plan. Natural resource management plan. Pollution prevention plan. Waste management plan. Stakeholder engagement plan.					
800	800	PACs in proximity to MCPY10	Igunga	PIIM	Community health	PIIM of job seekers affecting PACs	Causing increased pressure on existing health services at a PAC level	C		Y	TZ 8.18	6	3	2	5	16	Project-induced in-migration management plan. Community health, safety and security plan. Occupational health, safety and security plan. Resettlement action plan. Natural resource management plan. Pollution prevention plan. Waste management plan. Stakeholder engagement plan.	4	2	2	5	13
914.7	914.7	PACs in proximity to MCPY11	Singida	PIIM	Community health	PIIM of job seekers affecting PACs	Causing increased pressure on existing health services at a PAC level	C		Y	TZ 8.18	6	3	2	5	16	Project-induced in-migration management plan. Community health, safety and security plan. Occupational health, safety and security plan. Resettlement action plan. Natural resource management plan. Pollution prevention plan. Waste management plan. Stakeholder engagement plan.	4	2	2	5	13
1035	1035	PACs in proximity to MCPY12	Kondoa	PIIM	Community health	PIIM of job seekers affecting PACs	Causing increased pressure on existing health services at a PAC level	C		Y	TZ 8.18	6	3	2	5	16	Project-induced in-migration management plan. Community health, safety and security plan. Occupational health, safety and security plan.	4	2	2	5	13

Table E3-1 Location Specific Impacts Register

KP Start	KP End	Location	District	Aspect	VEC	Potential Impact	Impact Detail	Phase		High Stakeholder Concern	ESIA Section	Pre-mitigation Impact					Management Plan(s)	Residual Impacts				
								C	O			M	D	E	S	SS		M	D	E	S	SS
																	security plan. Resettlement action plan. Natural resource management plan. Pollution prevention plan. Waste management plan. Stakeholder engagement plan.					
1144	1144	PACs in proximity to MCPY13	Kiteto	PIIM	Community health	PIIM of job seekers affecting PACs	Causing increased pressure on existing health services at a PAC level	C		Y	TZ 8.18	6	3	2	5	16	Project-induced in-migration management plan. Community health, safety and security plan. Occupational health, safety and security plan. Resettlement action plan. Natural resource management plan. Pollution prevention plan. Waste management plan. Stakeholder engagement plan.	4	2	2	5	13
1238	1238	PACs in proximity to MCPY14	Kilindi	PIIM	Community health	PIIM of job seekers affecting PACs	Causing increased pressure on existing health services at a PAC level	C		Y	TZ 8.18	6	3	2	5	16	Project-induced in-migration management plan. Community health, safety and security plan. Occupational health, safety and security plan. Resettlement action plan. Natural resource management plan. Pollution prevention plan. Waste management plan. Stakeholder engagement plan.	4	2	2	5	13
1318	1318	PACs in proximity to MCPY15	Handeni Township Authority	PIIM	Community health	PIIM of job seekers affecting PACs	Causing increased pressure on existing health services at a PAC level	C		Y	TZ 8.18	6	3	2	5	16	Project-induced in-migration management plan. Community health, safety and security plan. Occupational	4	2	2	5	13

Table E3-1 Location Specific Impacts Register

KP Start	KP End	Location	District	Aspect	VEC	Potential Impact	Impact Detail	Phase		High Stakeholder Concern	ESIA Section	Pre-mitigation Impact					Management Plan(s)	Residual Impacts				
								C	O			M	D	E	S	SS		M	D	E	S	SS
																	health, safety and security plan. Resettlement action plan. Natural resource management plan. Pollution prevention plan. Waste management plan. Stakeholder engagement plan.					
1404	1404	PACs in proximity to MCPY16	Muheza	PIIM	Community health	PIIM of job seekers affecting PACs	Causing increased pressure on existing health services at a PAC level	C		Y	TZ 8.18	6	3	2	5	16	Project-induced in-migration management plan. Community health, safety and security plan. Occupational health, safety and security plan. Resettlement action plan. Natural resource management plan. Pollution prevention plan. Waste management plan. Stakeholder engagement plan.	4	2	2	5	13
325.5	325.5	PACs near MCPY5	Missenyi	PIIM	Community health	PIIM of job seekers affecting PACs	Causing uncontrolled disposal of waste in PACs	C		–	TZ 8.18	6	2	2	5	15	Project-induced in-migration management plan. Community health, safety and security plan. Occupational health, safety and security plan. Resettlement action plan. Natural resource management plan. Pollution prevention plan. Waste management plan. Stakeholder engagement plan.	4	2	2	5	13
419	419	PACs near MCPY6	Muleba	PIIM	Community health	PIIM of job seekers affecting PACs	Causing uncontrolled disposal of waste in PACs	C		–	TZ 8.18	6	2	2	5	15	Project-induced in-migration management plan. Community health, safety and security plan.	4	2	2	5	13

Table E3-1 Location Specific Impacts Register

KP Start	KP End	Location	District	Aspect	VEC	Potential Impact	Impact Detail	Phase		High Stakeholder Concern	ESIA Section	Pre-mitigation Impact					Management Plan(s)	Residual Impacts				
								C	O			M	D	E	S	SS		M	D	E	S	SS
																	Occupational health, safety and security plan. Resettlement action plan. Natural resource management plan. Pollution prevention plan. Waste management plan. Stakeholder engagement plan.					
513	513	PACs near MCPY7	Chato	PIIM	Community health	PIIM of job seekers affecting PACs	Causing uncontrolled disposal of waste in PACs	C		–	TZ 8.18	6	2	2	5	15	Project-induced in-migration management plan. Community health, safety and security plan. Occupational health, safety and security plan. Resettlement action plan. Natural resource management plan. Pollution prevention plan. Waste management plan. Stakeholder engagement plan.	4	2	2	5	13
594.5	594.5	PACs near MCPY8	Bukombe	PIIM	Community health	PIIM of job seekers affecting PACs	Causing uncontrolled disposal of waste in PACs	C		–	TZ 8.18	6	2	2	15	25	Project-induced in-migration management plan. Community health, safety and security plan. Occupational health, safety and security plan. Resettlement action plan. Natural resource management plan. Pollution prevention plan. Waste management plan. Stakeholder engagement plan.	4	2	2	5	13
701	702	PACs near MCPY9	Nzega	PIIM	Community health	PIIM of job seekers affecting PACs	Causing uncontrolled disposal of waste in PACs	C		–	TZ 8.18	6	2	2	5	15	Project-induced in-migration management plan. Community health, safety and	4	2	2	5	13

Table E3-1 Location Specific Impacts Register

KP Start	KP End	Location	District	Aspect	VEC	Potential Impact	Impact Detail	Phase		High Stakeholder Concern	ESIA Section	Pre-mitigation Impact					Management Plan(s)	Residual Impacts				
								C	O			M	D	E	S	SS		M	D	E	S	SS
																	security plan. Occupational health, safety and security plan. Resettlement action plan. Natural resource management plan. Pollution prevention plan. Waste management plan. Stakeholder engagement plan.					
701	702	PACs near Coating Facility	Nzega	PIIM	Community health	PIIM of job seekers affecting PACs	Causing uncontrolled disposal of waste in PACs	C		–	TZ 8.18	6	2	2	5	15	Project-induced in-migration management plan. Community health, safety and security plan. Occupational health, safety and security plan. Resettlement action plan. Natural resource management plan. Pollution prevention plan. Waste management plan. Stakeholder engagement plan.	4	2	2	5	13
800	800	PACs in proximity to MCPY10	Igunga	PIIM	Community health	PIIM of job seekers affecting PACs	Causing uncontrolled disposal of waste in PACs	C		–	TZ 8.18	6	2	2	5	15	Project-induced in-migration management plan. Community health, safety and security plan. Occupational health, safety and security plan. Resettlement action plan. Natural resource management plan. Pollution prevention plan. Waste management plan. Stakeholder engagement plan.	4	2	2	5	13
914.7	914.7	PACs in proximity to MCPY11	Singida	PIIM	Community health	PIIM of job seekers affecting PACs	Causing uncontrolled disposal of waste in PACs	C		–	TZ 8.18	6	2	2	5	15	Project-induced in-migration management plan. Community	4	2	2	5	13

Table E3-1 Location Specific Impacts Register

KP Start	KP End	Location	District	Aspect	VEC	Potential Impact	Impact Detail	Phase		High Stakeholder Concern	ESIA Section	Pre-mitigation Impact					Management Plan(s)	Residual Impacts				
								C	O			M	D	E	S	SS		M	D	E	S	SS
																	health, safety and security plan. Occupational health, safety and security plan. Resettlement action plan. Natural resource management plan. Pollution prevention plan. Waste management plan. Stakeholder engagement plan.					
1035	1035	PACs in proximity to MCPY12	Kondoa	PIIM	Community health	PIIM of job seekers affecting PACs	Causing uncontrolled disposal of waste in PACs	C		–	TZ 8.18	6	2	2	5	15	Project-induced in-migration management plan. Community health, safety and security plan. Occupational health, safety and security plan. Resettlement action plan. Natural resource management plan. Pollution prevention plan. Waste management plan. Stakeholder engagement plan.	4	2	2	5	13
1144	1144	PACs in proximity to MCPY13	Kiteto	PIIM	Community health	PIIM of job seekers affecting PACs	Causing uncontrolled disposal of waste in PACs	C		–	TZ 8.18	6	2	2	5	15	Project-induced in-migration management plan. Community health, safety and security plan. Occupational health, safety and security plan. Resettlement action plan. Natural resource management plan. Pollution prevention plan. Waste management plan. Stakeholder engagement plan.	4	2	2	5	13
1238	1238	PACs in proximity to MCPY14	Kilindi	PIIM	Community health	PIIM of job seekers affecting PACs	Causing uncontrolled	C		–	TZ 8.18	6	2	2	5	15	Project-induced in-migration management	4	2	2	5	13

Table E3-1 Location Specific Impacts Register

KP Start	KP End	Location	District	Aspect	VEC	Potential Impact	Impact Detail	Phase		High Stakeholder Concern	ESIA Section	Pre-mitigation Impact					Management Plan(s)	Residual Impacts				
								C	O			M	D	E	S	SS		M	D	E	S	SS
							disposal of waste in PACs										plan. Community health, safety and security plan. Occupational health, safety and security plan. Resettlement action plan. Natural resource management plan. Pollution prevention plan. Waste management plan. Stakeholder engagement plan.					
1318	1318	PACs in proximity to MCPY15	Handeni Township Authority	PIIM	Community health	PIIM of job seekers affecting PACs	Causing uncontrolled disposal of waste in PACs	C		–	TZ 8.18	6	2	2	5	15	Project-induced in-migration management plan. Community health, safety and security plan. Occupational health, safety and security plan. Resettlement action plan. Natural resource management plan. Pollution prevention plan. Waste management plan. Stakeholder engagement plan.	4	2	2	5	13
1404	1404	PACs in proximity to MCPY16	Muheza	PIIM	Community health	PIIM of job seekers affecting PACs	Causing uncontrolled disposal of waste in PACs	C		–	TZ 8.18	6	2	2	5	15	Project-induced in-migration management plan. Community health, safety and security plan. Occupational health, safety and security plan. Resettlement action plan. Natural resource management plan. Pollution prevention plan. Waste management plan. Stakeholder engagement plan.	4	2	2	5	13
325.5	325.5	PACs near MCPY5	Missenyi	PIIM	Community health	Reduction in the availability of potable		C		Y	TZ 8.18	8	4	2	5	19	Project-induced in-migration	4	2	2	5	13

Table E3-1 Location Specific Impacts Register

KP Start	KP End	Location	District	Aspect	VEC	Potential Impact	Impact Detail	Phase		High Stakeholder Concern	ESIA Section	Pre-mitigation Impact					Management Plan(s)	Residual Impacts				
								C	O			M	D	E	S	SS		M	D	E	S	SS
						water in PACs due to PIIM											management plan. Community health, safety and security plan. Occupational health, safety and security plan. Resettlement action plan. Natural resource management plan. Pollution prevention plan. Waste management plan. Stakeholder engagement plan.					
419	419	PACs near MCPY6	Muleba	PIIM	Community health	Reduction in the availability of potable water in PACs due to PIIM		C		Y	TZ 8.18	8	4	2	5	19	Project-induced in-migration management plan. Community health, safety and security plan. Occupational health, safety and security plan. Resettlement action plan. Natural resource management plan. Pollution prevention plan. Waste management plan. Stakeholder engagement plan.	4	2	2	5	13

Table E3-1 Location Specific Impacts Register

KP Start	KP End	Location	District	Aspect	VEC	Potential Impact	Impact Detail	Phase		High Stakeholder Concern	ESIA Section	Pre-mitigation Impact					Management Plan(s)	Residual Impacts				
								C	O			M	D	E	S	SS		M	D	E	S	SS
513	513	PACs near MCPY7	Chato	PIIM	Community health	Reduction in the availability of potable water in PACs due to PIIM		C		Y	TZ 8.18	8	4	2	5	19	Project-induced in-migration management plan. Community health, safety and security plan. Occupational health, safety and security plan. Resettlement action plan. Natural resource management plan. Pollution prevention plan. Waste management plan. Stakeholder engagement plan.	4	2	2	5	13
594.5	594.5	PACs near MCPY8	Bukombe	PIIM	Community health	Reduction in the availability of potable water in PACs due to PIIM		C		Y	TZ 8.18	8	4	2	5	19	Project-induced in-migration management plan. Community health, safety and security plan. Occupational health, safety and security plan. Resettlement action plan. Natural resource management plan. Pollution prevention plan. Waste management plan. Stakeholder engagement plan.	4	2	2	5	13
701	702	PACs near MCPY9	Nzega	PIIM	Community health	Reduction in the availability of potable water in PACs due to PIIM		C		Y	TZ 8.18	8	4	2	5	19	Project-induced in-migration management plan. Community health, safety and security plan. Occupational health, safety and security plan. Resettlement action plan. Natural resource management plan. Pollution prevention plan. Waste management	4	2	2	5	13

Table E3-1 Location Specific Impacts Register

KP Start	KP End	Location	District	Aspect	VEC	Potential Impact	Impact Detail	Phase		High Stakeholder Concern	ESIA Section	Pre-mitigation Impact					Management Plan(s)	Residual Impacts				
								C	O			M	D	E	S	SS		M	D	E	S	SS
																	plan. Stakeholder engagement plan.					
701	702	PACs near Coating Facility	Nzega	PIIM	Community health	Reduction in the availability of potable water in PACs due to PIIM		C		Y	TZ 8.18	8	4	2	5	19	Project-induced in-migration management plan. Community health, safety and security plan. Occupational health, safety and security plan. Resettlement action plan. Natural resource management plan. Pollution prevention plan. Waste management plan. Stakeholder engagement plan.	4	2	2	5	13
800	800	PACs in proximity to MCPY10	Igunga	PIIM	Community health	Reduction in the availability of potable water in PACs due to PIIM		C		Y	TZ 8.18	8	4	2	5	19	Project-induced in-migration management plan. Community health, safety and security plan. Occupational health, safety and security plan. Resettlement action plan. Natural resource management plan. Pollution prevention plan. Waste management plan. Stakeholder engagement plan.	4	2	2	5	13
914.7	914.7	PACs in proximity to MCPY11	Singida	PIIM	Community health	Reduction in the availability of potable water in PACs due to PIIM		C		Y	TZ 8.18	8	4	2	5	19	Project-induced in-migration management plan. Community health, safety and security plan. Occupational health, safety and security plan. Resettlement action plan. Natural resource management plan. Pollution prevention plan. Waste	4	2	2	5	13

Table E3-1 Location Specific Impacts Register

KP Start	KP End	Location	District	Aspect	VEC	Potential Impact	Impact Detail	Phase		High Stakeholder Concern	ESIA Section	Pre-mitigation Impact					Management Plan(s)	Residual Impacts				
								C	O			M	D	E	S	SS		M	D	E	S	SS
																	management plan. Stakeholder engagement plan.					
1035	1035	PACs in proximity to MCPY12	Kondoa	PIIM	Community health	Reduction in the availability of potable water in PACs due to PIIM		C		Y	TZ 8.18	8	4	2	5	19	Project-induced in-migration management plan. Community health, safety and security plan. Occupational health, safety and security plan. Resettlement action plan. Natural resource management plan. Pollution prevention plan. Waste management plan. Stakeholder engagement plan.	4	2	2	5	13
1144	1144	PACs in proximity to MCPY13	Kiteto	PIIM	Community health	Reduction in the availability of potable water in PACs due to PIIM		C		Y	TZ 8.18	8	4	2	5	19	Project-induced in-migration management plan. Community health, safety and security plan. Occupational health, safety and security plan. Resettlement action plan. Natural resource management plan. Pollution prevention plan. Waste management plan. Stakeholder engagement plan.	4	2	2	5	13
1238	1238	PACs in proximity to MCPY14	Kilindi	PIIM	Community health	Reduction in the availability of potable water in PACs due to PIIM		C		Y	TZ 8.18	8	4	2	5	19	Project-induced in-migration management plan. Community health, safety and security plan. Occupational health, safety and security plan. Resettlement action plan. Natural resource management plan. Pollution prevention plan.	4	2	2	5	13

Table E3-1 Location Specific Impacts Register

KP Start	KP End	Location	District	Aspect	VEC	Potential Impact	Impact Detail	Phase		High Stakeholder Concern	ESIA Section	Pre-mitigation Impact					Management Plan(s)	Residual Impacts				
								C	O			M	D	E	S	SS		M	D	E	S	SS
																	Waste management plan. Stakeholder engagement plan.					
1318	1318	PACs in proximity to MCPY15	Handeni Township Authority	PIIM	Community health	Reduction in the availability of potable water in PACs due to PIIM		C		Y	TZ 8.18	8	4	2	5	19	Project-induced in-migration management plan. Community health, safety and security plan. Occupational health, safety and security plan. Resettlement action plan. Natural resource management plan. Pollution prevention plan. Waste management plan. Stakeholder engagement plan.	4	2	2	5	13
1404	1404	PACs in proximity to MCPY16	Muheza	PIIM	Community health	Reduction in the availability of potable water in PACs due to PIIM		C		Y	TZ 8.18	8	4	2	5	19	Project-induced in-migration management plan. Community health, safety and security plan. Occupational health, safety and security plan. Resettlement action plan. Natural resource management plan. Pollution prevention plan. Waste management plan. Stakeholder engagement plan.	4	2	2	5	13
325.5	325.5	PACs near MCPY5	Missenyi	Provision of goods and services	Community health	Nutrition of PACs compromised by reduced food security		C		Y	TZ 8.18	8	2	2	5	17	Community health, safety and security plan. Occupational health, safety and security plan. Resettlement action plan. Natural resource management plan. Pollution prevention plan. Waste management	4	2	2	5	13

Table E3-1 Location Specific Impacts Register

KP Start	KP End	Location	District	Aspect	VEC	Potential Impact	Impact Detail	Phase		High Stakeholder Concern	ESIA Section	Pre-mitigation Impact					Management Plan(s)	Residual Impacts				
								C	O			M	D	E	S	SS		M	D	E	S	SS
																	plan. Stakeholder engagement plan.					
419	419	PACs near MCPY6	Muleba	Provision of goods and services	Community health	Nutrition of PACs compromised by reduced food security		C		Y	TZ 8.18	8	2	2	5	17	Community health, safety and security plan. Occupational health, safety and security plan. Resettlement action plan. Natural resource management plan. Pollution prevention plan. Waste management plan. Stakeholder engagement plan.	4	2	2	5	13
513	513	PACs near MCPY7	Chato	Provision of goods and services	Community health	Nutrition of PACs compromised by reduced food security		C		Y	TZ 8.18	8	2	2	5	17	Community health, safety and security plan. Occupational health, safety and security plan. Resettlement action plan. Natural resource management plan. Pollution prevention plan. Waste management plan. Stakeholder engagement plan.	4	2	2	5	13
594.5	594.5	PACs near MCPY8	Bukombe	Provision of goods and services	Community health	Nutrition of PACs compromised by reduced food security		C		Y	TZ 8.18	8	2	2	5	17	Community health, safety and security plan. Occupational health, safety and security plan. Resettlement action plan. Natural resource management plan. Pollution prevention plan. Waste management plan. Stakeholder engagement plan.	4	2	2	5	13

Table E3-1 Location Specific Impacts Register

KP Start	KP End	Location	District	Aspect	VEC	Potential Impact	Impact Detail	Phase		High Stakeholder Concern	ESIA Section	Pre-mitigation Impact					Management Plan(s)	Residual Impacts				
								C	O			M	D	E	S	SS		M	D	E	S	SS
701	702	PACs near MCPY9	Nzega	Provision of goods and services	Community health	Nutrition of PACs compromised by reduced food security		C		Y	TZ 8.18	8	2	2	5	17	Community health, safety and security plan. Occupational health, safety and security plan. Resettlement action plan. Natural resource management plan. Pollution prevention plan. Waste management plan. Stakeholder engagement plan.	4	2	2	5	13
701	702	PACs near Coating Facility	Nzega	Provision of goods and services	Community health	Nutrition of PACs compromised by reduced food security		C		Y	TZ 8.18	8	2	2	5	17	Community health, safety and security plan. Occupational health, safety and security plan. Resettlement action plan. Natural resource management plan. Pollution prevention plan. Waste management plan. Stakeholder engagement plan.	4	2	2	5	13
800	800	PACs in proximity to MCPY10	Igunga	Provision of goods and services	Community health	Nutrition of PACs compromised by reduced food security		C		Y	TZ 8.18	8	2	2	5	17	Community health, safety and security plan. Occupational health, safety and security plan. Resettlement action plan. Natural resource management plan. Pollution prevention plan. Waste management plan. Stakeholder engagement plan.	4	2	2	5	13

Table E3-1 Location Specific Impacts Register

KP Start	KP End	Location	District	Aspect	VEC	Potential Impact	Impact Detail	Phase		High Stakeholder Concern	ESIA Section	Pre-mitigation Impact					Management Plan(s)	Residual Impacts				
								C	O			M	D	E	S	SS		M	D	E	S	SS
914.7	914.7	PACs in proximity to MCPY11	Singida	Provision of goods and services	Community health	Nutrition of PACs compromised by reduced food security		C		Y	TZ 8.18	8	2	2	5	17	Community health, safety and security plan. Occupational health, safety and security plan. Resettlement action plan. Natural resource management plan. Pollution prevention plan. Waste management plan. Stakeholder engagement plan.	4	2	2	5	13
1035	1035	PACs in proximity to MCPY12	Kondoa	Provision of goods and services	Community health	Nutrition of PACs compromised by reduced food security		C		Y	TZ 8.18	8	2	2	5	17	Community health, safety and security plan. Occupational health, safety and security plan. Resettlement action plan. Natural resource management plan. Pollution prevention plan. Waste management plan. Stakeholder engagement plan.	4	2	2	5	13
1144	1144	PACs in proximity to MCPY13	Kiteto	Provision of goods and services	Community health	Nutrition of PACs compromised by reduced food security		C		Y	TZ 8.18	8	2	2	5	17	Community health, safety and security plan. Occupational health, safety and security plan. Resettlement action plan. Natural resource management plan. Pollution prevention plan. Waste management plan. Stakeholder engagement plan.	4	2	2	5	13

Table E3-1 Location Specific Impacts Register

KP Start	KP End	Location	District	Aspect	VEC	Potential Impact	Impact Detail	Phase		High Stakeholder Concern	ESIA Section	Pre-mitigation Impact					Management Plan(s)	Residual Impacts				
								C	O			M	D	E	S	SS		M	D	E	S	SS
1238	1238	PACs in proximity to MCPY14	Kilindi	Provision of goods and services	Community health	Nutrition of PACs compromised by reduced food security		C		Y	TZ 8.18	8	2	2	5	17	Community health, safety and security plan. Occupational health, safety and security plan. Resettlement action plan. Natural resource management plan. Pollution prevention plan. Waste management plan. Stakeholder engagement plan.	4	2	2	5	13
1318	1318	PACs in proximity to MCPY15	Handeni Township Authority	Provision of goods and services	Community health	Nutrition of PACs compromised by reduced food security		C		Y	TZ 8.18	8	2	2	5	17	Community health, safety and security plan. Occupational health, safety and security plan. Resettlement action plan. Natural resource management plan. Pollution prevention plan. Waste management plan. Stakeholder engagement plan.	4	2	2	5	13
1404	1404	PACs in proximity to MCPY16	Muheza	Provision of goods and services	Community health	Nutrition of PACs compromised by reduced food security		C		Y	TZ 8.18	8	2	2	5	17	Community health, safety and security plan. Occupational health, safety and security plan. Resettlement action plan. Natural resource management plan. Pollution prevention plan. Waste management plan. Stakeholder engagement plan.	4	2	2	5	13
405.4	405.4	PACs near PS3	Muleba	Noise	Community health	Excessive noise exposure due to project activities			O	–	TZ 8.18	8	4	1	4	17	Community health, safety and security plan. Pollution prevention plan. Stakeholder engagement plan.	4	4	1	4	13

Table E3-1 Location Specific Impacts Register

KP Start	KP End	Location	District	Aspect	VEC	Potential Impact	Impact Detail	Phase		High Stakeholder Concern	ESIA Section	Pre-mitigation Impact					Management Plan(s)	Residual Impacts				
								C	O			M	D	E	S	SS		M	D	E	S	SS
610	610	PACs near PS4	Mbogwe	Noise	Community health	Excessive noise exposure due to project activities			O	–	TZ 8.18	8	4	1	4	17	Community health, safety and security plan. Pollution prevention plan. Stakeholder engagement plan.	4	4	1	4	13
824.9	824.9	PACs near PS5	Igunga	Noise	Community health	Excessive noise exposure due to project activities			O	–	TZ 8.18	8	4	1	4	17	Community health, safety and security plan. Pollution prevention plan. Stakeholder engagement plan.	4	4	1	4	13
1442	1442	PACs near MST	Tanga	Noise	Community health	Excessive noise exposure due to project activities			O	–	TZ 8.18	8	4	1	4	17	Community health, safety and security plan. Pollution prevention plan. Stakeholder engagement plan.	4	4	1	4	13
1442	1442	PACs near MST and LOF	Tanga	Noise	Community health	Excessive noise exposure due to project activities			O	–	TZ 8.18	8	4	1	4	17	Community health, safety and security plan. Pollution prevention plan. Stakeholder engagement plan.	4	4	1	4	13
405.4	405.4	PACs near PS3	Muleba	Disposal of solid and liquid waste	Community health	Increased pressure on regional waste management facilities due to project activities			O	–	TZ 8.18	6	4	2	5	17	Waste management plan.	4	4	2	5	15
610	610	PACs near PS4	Mbogwe	Disposal of solid and liquid waste	Community health	Increased pressure on regional waste management facilities due to project activities			O	–	TZ 8.18	6	4	2	5	17	Waste management plan.	4	4	2	5	15
824.9	824.9	PACs near PS5	Igunga	Disposal of solid and liquid waste	Community health	Increased pressure on regional waste management facilities due to project activities			O	–	TZ 8.18	6	4	2	5	17	Waste management plan.	4	4	2	5	15
914.7	914.7	PACs near PS6	Singida	Disposal of solid and liquid waste	Community health	Increased pressure on regional waste management facilities due to project activities			O	–	TZ 8.18	6	4	2	5	17	Waste management plan.	4	4	2	5	15
1442	1442	PACs near MST	Tanga	Disposal of solid and liquid waste	Community health	Increased pressure on regional waste management facilities due to project activities			O	–	TZ 8.18	6	4	2	5	17	Waste management plan.	4	4	2	5	15
405.4	405.4	PACs near PS3	Muleba	Release of gases, exhausts and vapours to atmosphere	Community health	Increased risk of respiratory diseases due to project activities			O	Y	TZ 8.18	8	5	1	5	19	Pollution prevention plan.	4	5	1	5	15

Table E3-1 Location Specific Impacts Register

KP Start	KP End	Location	District	Aspect	VEC	Potential Impact	Impact Detail	Phase		High Stakeholder Concern	ESIA Section	Pre-mitigation Impact					Management Plan(s)	Residual Impacts				
								C	O			M	D	E	S	SS		M	D	E	S	SS
824.9	824.9	PACs near PS5	Igunga	Release of gases, exhausts and vapours to atmosphere	Community health	Increased risk of respiratory diseases due to project activities			O	Y	TZ 8.18	8	5	1	5	19	Pollution prevention plan.	4	5	1	5	15
1442	1442	PACs near MST	Tanga	Release of gases, exhausts and vapours to atmosphere	Community health	Increased risk of respiratory diseases due to project activities			O	Y	TZ 8.18	8	5	1	5	19	Pollution prevention plan.	4	5	1	5	15
701	702	PACs near Coating Facility	Nzega	Community welfare	Community safety, security and welfare	Conversion of MCPY structures into community facilities, leading to improved service provision in PACs.		C		Y	TZ 8.19	B				-	N/A	B				
800	800	PACs in proximity to MCPY10	Igunga	Community welfare	Community safety, security and welfare	Conversion of MCPY structures into community facilities, leading to improved service provision in PACs.		C		Y	TZ 8.19	B				-	N/A	B				
914.7	914.7	PACs in proximity to MCPY11	Singida	Community welfare	Community safety, security and welfare	Conversion of MCPY structures into community facilities, leading to improved service provision in PACs.		C		Y	TZ 8.19	B				-	N/A	B				
1035	1035	PACs in proximity to MCPY12	Kondoa	Community welfare	Community safety, security and welfare	Conversion of MCPY structures into community facilities, leading to improved service provision in PACs.		C		Y	TZ 8.19	B				-	N/A	B				
1144	1144	PACs in proximity to MCPY13	Kiteto	Community welfare	Community safety, security and welfare	Conversion of MCPY structures into community facilities, leading to improved service provision in PACs.		C		Y	TZ 8.19	B				-	N/A	B				
1238	1238	PACs in proximity to MCPY14	Kilindi	Community welfare	Community safety, security and welfare	Conversion of MCPY structures into community facilities, leading to improved service provision in PACs.		C		Y	TZ 8.19	B				-	N/A	B				
1318	1318	PACs in proximity to MCPY15	Handeni Township Authority	Community welfare	Community safety, security and welfare	Conversion of MCPY structures into community facilities, leading to improved service provision in PACs.		C		Y	TZ 8.19	B				-	N/A	B				
1404	1404	PACs in proximity to MCPY16	Muheza	Community welfare	Community safety,	Conversion of MCPY structures into		C		Y	TZ 8.19	B				-	N/A	B				

Table E3-1 Location Specific Impacts Register

KP Start	KP End	Location	District	Aspect	VEC	Potential Impact	Impact Detail	Phase		High Stakeholder Concern	ESIA Section	Pre-mitigation Impact					Management Plan(s)	Residual Impacts				
								C	O			M	D	E	S	SS		M	D	E	S	SS
					security and welfare	community facilities, leading to improved service provision in PACs.																
325.5	325.5	PACs near MCPY5	Missenyi	Community welfare	Community safety, security and welfare	Conversion of MCPY structures into community facilities, leading to improved service provision in PACs.		C		Y	TZ 8.19	B				-	N/A	B				
419	419	PACs near MCPY6	Muleba	Community welfare	Community safety, security and welfare	Conversion of MCPY structures into community facilities, leading to improved service provision in PACs.		C		Y	TZ 8.19	B				-	N/A	B				
513	513	PACs near MCPY7	Chato	Community welfare	Community safety, security and welfare	Conversion of MCPY structures into community facilities, leading to improved service provision in PACs.		C		Y	TZ 8.19	B				-	N/A	B				
594.5	594.5	PACs near MCPY8	Bukombe	Community welfare	Community safety, security and welfare	Conversion of MCPY structures into community facilities, leading to improved service provision in PACs.		C		Y	TZ 8.19	B				-	N/A	B				
701	702	PACs near MCPY9	Nzega	Community welfare	Community safety, security and welfare	Conversion of MCPY structures into community facilities, leading to improved service provision in PACs.		C		Y	TZ 8.19	B				-	N/A	B				
325.5	325.5	PACs near MCPY5	Missenyi	Community dynamics	Community safety, security and welfare	Change in local community dynamics due to employment opportunities		C		Y	TZ 8.19	6	3	2	4	15	Project-induced in-migration management plan. Community health, safety and security plan. Stakeholder engagement plan.	4	2	2	4	12
419	419	PACs near MCPY6	Muleba	Community dynamics	Community safety, security and welfare	Change in local community dynamics due to employment opportunities		C		Y	TZ 8.19	6	3	2	4	15	Project-induced in-migration management plan. Community health, safety and security plan. Stakeholder engagement plan.	4	2	2	4	12

Table E3-1 Location Specific Impacts Register

KP Start	KP End	Location	District	Aspect	VEC	Potential Impact	Impact Detail	Phase		High Stakeholder Concern	ESIA Section	Pre-mitigation Impact					Management Plan(s)	Residual Impacts				
								C	O			M	D	E	S	SS		M	D	E	S	SS
513	513	PACs near MCPY7	Chato	Community dynamics	Community safety, security and welfare	Change in local community dynamics due to employment opportunities		C		Y	TZ 8.19	6	3	2	4	15	Project-induced in-migration management plan. Community health, safety and security plan. Stakeholder engagement plan.	4	2	2	4	12
594.5	594.5	PACs near MCPY8	Bukombe	Community dynamics	Community safety, security and welfare	Change in local community dynamics due to employment opportunities		C		Y	TZ 8.19	6	3	2	4	15	Project-induced in-migration management plan. Community health, safety and security plan. Stakeholder engagement plan.	4	2	2	4	12
701	702	PACs near MCPY9	Nzega	Community dynamics	Community safety, security and welfare	Change in local community dynamics due to employment opportunities		C		Y	TZ 8.19	6	3	2	4	15	Project-induced in-migration management plan. Community health, safety and security plan. Stakeholder engagement plan.	4	2	2	4	12
701	702	PACs near Coating Facility	Nzega	Community dynamics	Community safety, security and welfare	Change in local community dynamics due to employment opportunities		C		Y	TZ 8.19	6	3	2	4	15	Project-induced in-migration management plan. Community health, safety and security plan. Stakeholder engagement plan.	4	2	2	4	12
800	800	PACs in proximity to MCPY10	Igunga	Community dynamics	Community safety, security and welfare	Change in local community dynamics due to employment opportunities		C		Y	TZ 8.19	6	3	2	4	15	Project-induced in-migration management plan. Community health, safety and security plan. Stakeholder engagement plan.	4	2	2	4	12
914.7	914.7	PACs in proximity to MCPY11	Singida	Community dynamics	Community safety, security and welfare	Change in local community dynamics due to employment opportunities		C		Y	TZ 8.19	6	3	2	4	15	Project-induced in-migration management plan. Community health, safety and security plan. Stakeholder engagement plan.	4	2	2	4	12
1035	1035	PACs in proximity to MCPY12	Kondoa	Community dynamics	Community safety, security and welfare	Change in local community dynamics due to employment opportunities		C		Y	TZ 8.19	6	3	2	4	15	Project-induced in-migration management plan. Community health, safety and security plan.	4	2	2	4	12

Table E3-1 Location Specific Impacts Register

KP Start	KP End	Location	District	Aspect	VEC	Potential Impact	Impact Detail	Phase		High Stakeholder Concern	ESIA Section	Pre-mitigation Impact					Management Plan(s)	Residual Impacts				
								C	O			M	D	E	S	SS		M	D	E	S	SS
																	Stakeholder engagement plan.					
1144	1144	PACs in proximity to MCPY13	Kiteto	Community dynamics	Community safety, security and welfare	Change in local community dynamics due to employment opportunities		C		Y	TZ 8.19	6	3	2	4	15	Project-induced in-migration management plan. Community health, safety and security plan. Stakeholder engagement plan.	4	2	2	4	12
1238	1238	PACs in proximity to MCPY14	Kilindi	Community dynamics	Community safety, security and welfare	Change in local community dynamics due to employment opportunities		C		Y	TZ 8.19	6	3	2	4	15	Project-induced in-migration management plan. Community health, safety and security plan. Stakeholder engagement plan.	4	2	2	4	12
1318	1318	PACs in proximity to MCPY15	Handeni Township Authority	Community dynamics	Community safety, security and welfare	Change in local community dynamics due to employment opportunities		C		Y	TZ 8.19	6	3	2	4	15	Project-induced in-migration management plan. Community health, safety and security plan. Stakeholder engagement plan.	4	2	2	4	12
1404	1404	PACs in proximity to MCPY16	Muheza	Community dynamics	Community safety, security and welfare	Change in local community dynamics due to employment opportunities		C		Y	TZ 8.19	6	3	2	4	15	Project-induced in-migration management plan. Community health, safety and security plan. Stakeholder engagement plan.	4	2	2	4	12
325.5	325.5	PACs near MCPY5	Missenyi	Community dynamics	Community safety, security and welfare	PIIM causing an increase in social ills		C		Y	TZ 8.19	6	2	2	4	14	Project-induced in-migration management plan. Community health, safety and security plan. Stakeholder engagement plan.	4	2	2	4	12
419	419	PACs near MCPY6	Muleba	Community dynamics	Community safety, security and welfare	PIIM causing an increase in social ills		C		Y	TZ 8.19	6	2	2	4	14	Project-induced in-migration management plan. Community health, safety and security plan. Stakeholder engagement plan.	4	2	2	4	12
513	513	PACs near MCPY7	Chato	Community dynamics	Community safety,	PIIM causing an increase in social ills		C		Y	TZ 8.19	6	2	2	4	14	Project-induced in-migration management plan. Community	4	2	2	4	12

Table E3-1 Location Specific Impacts Register

KP Start	KP End	Location	District	Aspect	VEC	Potential Impact	Impact Detail	Phase		High Stakeholder Concern	ESIA Section	Pre-mitigation Impact					Management Plan(s)	Residual Impacts				
								C	O			M	D	E	S	SS		M	D	E	S	SS
					security and welfare												health, safety and security plan. Stakeholder engagement plan.					
594.5	594.5	PACs near MCPY8	Bukombe	Community dynamics	Community safety, security and welfare	PIIM causing an increase in social ills		C		Y	TZ 8.19	6	2	2	4	14	Project-induced in-migration management plan. Community health, safety and security plan. Stakeholder engagement plan.	4	2	2	4	12
701	702	PACs near MCPY9	Nzega	Community dynamics	Community safety, security and welfare	PIIM causing an increase in social ills		C		Y	TZ 8.19	6	2	2	4	14	Project-induced in-migration management plan. Community health, safety and security plan. Stakeholder engagement plan.	4	2	2	4	12
701	702	PACs near Coating Facility	Nzega	Community dynamics	Community safety, security and welfare	PIIM causing an increase in social ills		C		Y	TZ 8.19	6	2	2	4	14	Project-induced in-migration management plan. Community health, safety and security plan. Stakeholder engagement plan.	4	2	2	4	12
800	800	PACs in proximity to MCPY10	Igunga	Community dynamics	Community safety, security and welfare	PIIM causing an increase in social ills		C		Y	TZ 8.19	6	2	2	4	14	Project-induced in-migration management plan. Community health, safety and security plan. Stakeholder engagement plan.	4	2	2	4	12
914.7	914.7	PACs in proximity to MCPY11	Singida	Community dynamics	Community safety, security and welfare	PIIM causing an increase in social ills		C		Y	TZ 8.19	6	2	2	4	14	Project-induced in-migration management plan. Community health, safety and security plan. Stakeholder engagement plan.	4	2	2	4	12
1035	1035	PACs in proximity to MCPY12	Kondoa	Community dynamics	Community safety, security and welfare	PIIM causing an increase in social ills		C		Y	TZ 8.19	6	2	2	4	14	Project-induced in-migration management plan. Community health, safety and security plan. Stakeholder engagement plan.	4	2	2	4	12

Table E3-1 Location Specific Impacts Register

KP Start	KP End	Location	District	Aspect	VEC	Potential Impact	Impact Detail	Phase		High Stakeholder Concern	ESIA Section	Pre-mitigation Impact					Management Plan(s)	Residual Impacts				
								C	O			M	D	E	S	SS		M	D	E	S	SS
1144	1144	PACs in proximity to MCPY13	Kiteto	Community dynamics	Community safety, security and welfare	PIIM causing an increase in social ills		C		Y	TZ 8.19	6	2	2	4	14	Project-induced in-migration management plan. Community health, safety and security plan. Stakeholder engagement plan.	4	2	2	4	12
1238	1238	PACs in proximity to MCPY14	Kilindi	Community dynamics	Community safety, security and welfare	PIIM causing an increase in social ills		C		Y	TZ 8.19	6	2	2	4	14	Project-induced in-migration management plan. Community health, safety and security plan. Stakeholder engagement plan.	4	2	2	4	12
1318	1318	PACs in proximity to MCPY15	Handeni Township Authority	Community dynamics	Community safety, security and welfare	PIIM causing an increase in social ills		C		Y	TZ 8.19	6	2	2	4	14	Project-induced in-migration management plan. Community health, safety and security plan. Stakeholder engagement plan.	4	2	2	4	12
1404	1404	PACs in proximity to MCPY16	Muheza	Community dynamics	Community safety, security and welfare	PIIM causing an increase in social ills		C		Y	TZ 8.19	6	2	2	4	14	Project-induced in-migration management plan. Community health, safety and security plan. Stakeholder engagement plan.	4	2	2	4	12
325.5	325.5	PACs near MCPY5	Missenyi	Community dynamics	Community safety, security and welfare	Tensions between non-local construction workforce and PACs		C		Y	TZ 8.19	8	2	2	5	17	Community health, safety and security plan. Stakeholder engagement plan. Resettlement action plan.	4	2	2	5	13
419	419	PACs near MCPY6	Muleba	Community dynamics	Community safety, security and welfare	Tensions between non-local construction workforce and PACs		C		Y	TZ 8.19	8	2	2	5	17	Community health, safety and security plan. Stakeholder engagement plan. Resettlement action plan.	4	2	2	5	13
513	513	PACs near MCPY7	Chato	Community dynamics	Community safety, security and welfare	Tensions between non-local construction workforce and PACs		C		Y	TZ 8.19	8	2	2	5	17	Community health, safety and security plan. Stakeholder engagement plan. Resettlement action plan.	4	2	2	5	13

Table E3-1 Location Specific Impacts Register

KP Start	KP End	Location	District	Aspect	VEC	Potential Impact	Impact Detail	Phase		High Stakeholder Concern	ESIA Section	Pre-mitigation Impact					Management Plan(s)	Residual Impacts				
								C	O			M	D	E	S	SS		M	D	E	S	SS
594.5	594.5	PACs near MCPY8	Bukombe	Community dynamics	Community safety, security and welfare	Tensions between non-local construction workforce and PACs		C		Y	TZ 8.19	8	2	2	5	17	Community health, safety and security plan. Stakeholder engagement plan. Resettlement action plan.	4	2	2	5	13
701	702	PACs near MCPY9	Nzega	Community dynamics	Community safety, security and welfare	Tensions between non-local construction workforce and PACs		C		Y	TZ 8.19	8	2	2	5	17	Community health, safety and security plan. Stakeholder engagement plan. Resettlement action plan.	4	2	2	5	13
701	702	PACs near Coating Facility	Nzega	Community dynamics	Community safety, security and welfare	Tensions between non-local construction workforce and PACs		C		Y	TZ 8.19	8	2	2	5	17	Community health, safety and security plan. Stakeholder engagement plan. Resettlement action plan.	4	2	2	5	13
800	800	PACs in proximity to MCPY10	Igunga	Community dynamics	Community safety, security and welfare	Tensions between non-local construction workforce and PACs		C		Y	TZ 8.19	8	2	2	5	17	Community health, safety and security plan. Stakeholder engagement plan. Resettlement action plan.	4	2	2	5	13
914.7	914.7	PACs in proximity to MCPY11	Singida	Community dynamics	Community safety, security and welfare	Tensions between non-local construction workforce and PACs		C		Y	TZ 8.19	8	2	2	5	17	Community health, safety and security plan. Stakeholder engagement plan. Resettlement action plan.	4	2	2	5	13
1035	1035	PACs in proximity to MCPY12	Kondoa	Community dynamics	Community safety, security and welfare	Tensions between non-local construction workforce and PACs		C		Y	TZ 8.19	8	2	2	5	17	Community health, safety and security plan. Stakeholder engagement plan. Resettlement action plan.	4	2	2	5	13
1144	1144	PACs in proximity to MCPY13	Kiteto	Community dynamics	Community safety, security and welfare	Tensions between non-local construction workforce and PACs		C		Y	TZ 8.19	8	2	2	5	17	Community health, safety and security plan. Stakeholder engagement plan. Resettlement action plan.	4	2	2	5	13
1238	1238	PACs in proximity to MCPY14	Kilindi	Community dynamics	Community safety, security and welfare	Tensions between non-local construction workforce and PACs		C		Y	TZ 8.19	8	2	2	5	17	Community health, safety and security plan. Stakeholder	4	2	2	5	13

Table E3-1 Location Specific Impacts Register

KP Start	KP End	Location	District	Aspect	VEC	Potential Impact	Impact Detail	Phase		High Stakeholder Concern	ESIA Section	Pre-mitigation Impact					Management Plan(s)	Residual Impacts				
								C	O			M	D	E	S	SS		M	D	E	S	SS
																	engagement plan. Resettlement action plan.					
1318	1318	PACs in proximity to MCPY15	Handeni Township Authority	Community dynamics	Community safety, security and welfare	Tensions between non-local construction workforce and PACs		C		Y	TZ 8.19	8	2	2	5	17	Community health, safety and security plan. Stakeholder engagement plan. Resettlement action plan.	4	2	2	5	13
1404	1404	PACs in proximity to MCPY16	Muheza	Community dynamics	Community safety, security and welfare	Tensions between non-local construction workforce and PACs		C		Y	TZ 8.19	8	2	2	5	17	Community health, safety and security plan. Stakeholder engagement plan. Resettlement action plan.	4	2	2	5	13
1429	1443	Mleni mtaa, Mabokweni mtaa, Helani hamlet, Putini mtaa and Chongoleani mtaa(KP1429–1442.5)	Tanga	Community dynamics	Community safety, security and welfare	Conflict between PACs and project security personnel		C	O	–	TZ 8.19	10	4	2	5	21	Community health, safety and security plan. Stakeholder engagement plan. Resettlement action plan.	4	2	2	5	13
325.3	325.3	CHT068: Major mound	Missenyi	Disturbance or loss of cultural heritage	Category 1 tangible cultural heritage	Damage or disturbance of feature	Located within the AOI but not within the project footprint	C		TBC	TZ 8.20	1	2	1	2	6	Cultural heritage management plan	1	2	1	2	6
325.5	325.5	CHT069: Remains of mud walls, evidence of recently abandoned houses	Missenyi	Disturbance or loss of cultural heritage	Category 1 tangible cultural heritage	Damage or disturbance of feature	Located within the AOI but not within the project footprint	C		TBC	TZ 8.20	1	2	1	2	6	Cultural heritage management plan	1	2	1	2	6
325.6	325.6	CHT074: Remains of mud walls, evidence of recently abandoned houses	Missenyi	Disturbance or loss of cultural heritage	Category 1 tangible cultural heritage	Damage or disturbance of feature	Located within the AOI but not within the project footprint	C		TBC	TZ 8.20	1	2	1	2	6	Cultural heritage management plan	1	2	1	2	6
325.7	325.7	CHT085: Major mound	Missenyi	Disturbance or loss of cultural heritage	Category 1 tangible cultural heritage	Damage or disturbance of feature	Located within the AOI but not within the project footprint	C		TBC	TZ 8.20	1	2	1	2	6	Cultural heritage management plan	1	2	1	2	6
357.6	357.6	CHT347: surface potsherds, Shahitogi	Bukoba Rural	Disturbance or loss of cultural heritage	Category 1 tangible cultural heritage	Damage or disturbance of feature	Located within project footprint	C		TBC	TZ 8.20	2	5	1	4	12	Cultural heritage management plan	2	5	1	4	12
357.8	357.8	CHT086: Two tombs	Bukoba Rural	Disturbance or loss of cultural heritage	Category 2 tangible cultural heritage with strong	Damage or disturbance of feature	Located within the AOI but not within the project footprint	C		Y	TZ 8.20	1	1	2	8	12	Cultural heritage management plan	1	1	2	8	12

Table E3-1 Location Specific Impacts Register

KP Start	KP End	Location	District	Aspect	VEC	Potential Impact	Impact Detail	Phase		High Stakeholder Concern	ESIA Section	Pre-mitigation Impact					Management Plan(s)	Residual Impacts				
								C	O			M	D	E	S	SS		M	D	E	S	SS
					intangible element																	
405.9	405.9	CH348: Grave at Kigagati	Muleba	Disturbance or loss of cultural heritage	Category 2 tangible cultural heritage with strong intangible element	Damage or disturbance of feature	Located within project footprint	C		Y	TZ 8.20	2	5	2	8	17	Cultural heritage management plan	2	1	2	8	13
423.1	423.1	CH350: Surface potsherds, Bikokwa	Muleba	Disturbance or loss of cultural heritage	Category 1 tangible cultural heritage	Damage or disturbance of feature	Located within project footprint	C		TBC	TZ 8.20	2	5	1	4	12	Cultural heritage management plan	2	5	1	4	12
492.8	492.8	CHT088: Cultural mound with ashes within a farmland	Chato	Disturbance or loss of cultural heritage	Category 1 tangible cultural heritage	Damage or disturbance of feature	Located within the AOI but not within the project footprint	C		TBC	TZ 8.20	2	5	1	2	10	Cultural heritage management plan	2	5	1	2	10
506.4	506.4	CHT310: Surface lithics, Kasozibakaya	Biharamulo	Disturbance or loss of cultural heritage	Category 1 tangible cultural heritage	Damage or disturbance of feature	Located within project footprint	C		TBC	TZ 8.20	2	5	1	4	12	Cultural heritage management plan	2	5	1	4	12
520.2	520.2	CHT194: One potsherd	Chato	Disturbance or loss of cultural heritage	Category 1 tangible cultural heritage	Damage or disturbance of feature	Located within project footprint	C		TBC	TZ 8.20	2	5	1	2	10	Cultural heritage management plan	2	5	1	2	10
527.8	527.8	CHT195: Nine lithic materials	Chato	Disturbance or loss of cultural heritage	Category 1 tangible cultural heritage	Damage or disturbance of feature	Located within project footprint	C		TBC	TZ 8.20	2	5	2	2	11	Cultural heritage management plan	2	5	2	2	11
528.5	528.5	CHT090: Cultural mound	Chato	Disturbance or loss of cultural heritage	Category 1 tangible cultural heritage	Damage or disturbance of feature	Located within the AOI but not within the project footprint	C		TBC	TZ 8.20	1	2	1	2	6	Cultural heritage management plan	1	2	1	2	6
549	549	CHT091: Ethnographic objects; contemporary ceramics with decoration	Chato	Disturbance or loss of cultural heritage	Category 1 tangible cultural heritage	Damage or disturbance of feature	Located within the AOI but not within the project footprint	C		TBC	TZ 8.20	1	2	1	4	8	Cultural heritage management plan	1	2	1	4	8
551.2	551.2	CHT092: Cultural mound with many diagnostic ceramics	Chato	Disturbance or loss of cultural heritage	Category 1 tangible cultural heritage	Damage or disturbance of feature	Located within project footprint	C		TBC	TZ 8.20	2	5	2	4	13	Cultural heritage management plan	2	5	2	4	13
552.5	552.5	CHT093: Scatters of ceramics about 400 m². Late Stone Age materials. Number of diagnostic decorated ceramics. Area of	Chato	Disturbance or loss of cultural heritage	Category 1 tangible cultural heritage	Damage or disturbance of feature	Located within project footprint	C		TBC	TZ 8.20	2	5	1	6	14	Cultural heritage management plan	2	5	1	6	14

Table E3-1 Location Specific Impacts Register

KP Start	KP End	Location	District	Aspect	VEC	Potential Impact	Impact Detail	Phase		High Stakeholder Concern	ESIA Section	Pre-mitigation Impact					Management Plan(s)	Residual Impacts				
								C	O			M	D	E	S	SS		M	D	E	S	SS
		archaeological potential.																				
557.8	557.8	CHT197: Grave	Mbogwe	Disturbance or loss of cultural heritage	Category 2 tangible cultural heritage with strong intangible element	Damage or disturbance of feature	Located within project footprint	C		Y	TZ 8.20	2	5	1	8	16	Cultural heritage management plan	2	1	1	8	12
557.8	557.8	CHT198: Grave	Mbogwe	Disturbance or loss of cultural heritage	Category 2 tangible cultural heritage with strong intangible element	Damage or disturbance of feature	Located within project footprint	C		Y	TZ 8.20	2	5	1	8	16	Cultural heritage management plan	2	1	1	8	12
557.9	557.9	CHT200: Six potsherds	Mbogwe	Disturbance or loss of cultural heritage	Category 1 tangible cultural heritage	Damage or disturbance of feature	Located within project footprint	C		TBC	TZ 8.20	2	5	2	2	11	Cultural heritage management plan	2	5	2	2	11
566.5	566.5	CHT256: Mwingilo-lbambula ritual site	Mbogwe	Disturbance or loss of cultural heritage	Category 3 intangible cultural heritage	Damage or disturbance of traditional beliefs or practices	Located within project footprint	C		Y	TZ 8.20	–	–	–	–	–	Cultural heritage management plan	–	–	–	–	–
608.1	608.1	CHT205: Four potsherds	Mbogwe	Disturbance or loss of cultural heritage	Category 1 tangible cultural heritage	Damage or disturbance of feature	Located within project footprint	C		TBC	TZ 8.20	2	5	1	2	10	Cultural heritage management plan	2	5	1	2	10
611.3	611.3	CH314: Surface potsherds, Lubeho	Mbogwe	Disturbance or loss of cultural heritage	Category 1 tangible cultural heritage	Damage or disturbance of feature	Located within project footprint	C		TBC	TZ 8.20	2	5	1	4	12	Cultural heritage management plan	2	5	1	4	12
616.5	616.5	CHT094: Three tombs; according to Mstafaka Saliboko, these belong to the Mpangabure family	Mbogwe	Disturbance or loss of cultural heritage	Category 2 tangible cultural heritage with strong intangible element	Damage or disturbance of feature	Located within the AOI but not within the project footprint	C		Y	TZ 8.20	1	1	1	8	11	Cultural heritage management plan	1	1	1	8	11
621.4	621.4	CHT209: One lithic-like tool	Mbogwe	Disturbance or loss of cultural heritage	Category 1 tangible cultural heritage	Damage or disturbance of feature	Located within project footprint	C		TBC	TZ 8.20	2	5	2	2	11	CUH01, CUH02, CUH03	2	5	2	2	11
633	633	CHT210: Four potsherds	Mbogwe	Disturbance or loss of cultural heritage	Category 1 tangible cultural heritage	Damage or disturbance of feature	Located within project footprint	C		TBC	TZ 8.20	2	5	2	2	11	Cultural heritage management plan	2	5	2	2	11
658.5	658.5	CHT211: Two decorated potsherds	Kahama Township Authority	Disturbance or loss of cultural heritage	Category 1 tangible cultural heritage	Damage or disturbance of feature	Located within project footprint	C		TBC	TZ 8.20	2	5	2	2	11	Cultural heritage management plan	2	5	2	2	11

Table E3-1 Location Specific Impacts Register

KP Start	KP End	Location	District	Aspect	VEC	Potential Impact	Impact Detail	Phase		High Stakeholder Concern	ESIA Section	Pre-mitigation Impact					Management Plan(s)	Residual Impacts				
								C	O			M	D	E	S	SS		M	D	E	S	SS
658.6	658.6	CHT264: Family members agreed that grave can be relocated, if affected, and liaison is required with the family at an appropriate time in advance of construction	Kahama Township Authority	Disturbance or loss of cultural heritage	Category 2 tangible cultural heritage with strong intangible element	Damage or disturbance of feature	Located within the AOI but not within the project footprint	C		Y	TZ 8.20	1	1	2	8	12	Cultural heritage management plan	1	1	2	8	12
658.6	658.6	CHT315: Malindi Ritual site with Mahari grave	Kahama Township Authority	Disturbance or loss of cultural heritage	Category 2 tangible cultural heritage with strong intangible element and Category 3 intangible cultural heritage	Damage or disturbance of traditional beliefs or practices	Located within project footprint	C		Y	TZ 8.20	3	5	3	8	19	Cultural heritage management plan	3	4	3	8	18
658.6	658.6	CHT265: Ritual tree with grave. Villagers use the tree for ritual performances. According to the village leadership, both can be relocated and liaison is required with the village leadership at an appropriate time in advance of construction.	Kahama Township Authority	Disturbance or loss of cultural heritage	Category 3 intangible cultural heritage	Damage or disturbance of traditional beliefs or practices	Located within project footprint	C		Y	TZ 8.20	–	5	–	–	5	Cultural heritage management plan	–	–	–	–	–
664.5	664.5	CHT252: Nyahanga graveyard site	Kahama Township Authority	Disturbance or loss of cultural heritage	Category 2 tangible cultural heritage with strong intangible element	Damage or disturbance of feature	Located within the AOI but not within the project footprint	C		Y	TZ 8.20	1	5	2	8	16	Cultural heritage management plan	1	1	2	8	12
667.5	667.5	CHT251: Mhungula graveyard site	Kahama Township Authority	Disturbance or loss of cultural heritage	Category 2 tangible cultural heritage with strong intangible element	Damage or disturbance of feature	Located within the AOI but not within the project footprint	C		Y	TZ 8.20	1	1	2	8	12	Cultural heritage management plan	1	1	2	8	12
683.6	683.6	CH316: Surface potsherds, Bumbiti	Kahama Township Authority	Disturbance or loss of cultural heritage	Category 1 tangible cultural heritage	Damage or disturbance of feature	Located within project footprint	C		TBC	TZ 8.20	2	5	1	4	12	CUH01, CUH02, CUH03	2	5	1	4	12

Table E3-1 Location Specific Impacts Register

KP Start	KP End	Location	District	Aspect	VEC	Potential Impact	Impact Detail	Phase		High Stakeholder Concern	ESIA Section	Pre-mitigation Impact					Management Plan(s)	Residual Impacts				
								C	O			M	D	E	S	SS		M	D	E	S	SS
699.2	699.2	CHT096: Daub that signifies an abandoned settlement	Nzega	Disturbance or loss of cultural heritage	Category 1 tangible cultural heritage	Damage or disturbance of feature	Located within project footprint	C		TBC	TZ 8.20	2	5	1	2	10	Cultural heritage management plan	2	5	1	2	10
699.2	699.2	CHT097: Cultural mound	Nzega	Disturbance or loss of cultural heritage	Category 1 tangible cultural heritage	Damage or disturbance of feature	Located within project footprint	C		TBC	TZ 8.20	2	5	1	2	10	Cultural heritage management plan	2	5	1	2	10
699.5	699.5	CHT095: Recorded iron ore but no evidence of iron smelting nearby	Nzega	Disturbance or loss of cultural heritage	Category 1 tangible cultural heritage	Damage or disturbance of feature	Located within project footprint	C		TBC	TZ 8.20	2	5	2	4	13	Cultural heritage management plan	2	5	2	4	13
703.1	703.1	CHT266: Three stone tools; three potsherds	Nzega	Disturbance or loss of cultural heritage	Category 1 tangible cultural heritage	Damage or disturbance of feature	Located within project footprint	C		TBC	TZ 8.20	2	5	2	4	13	Cultural heritage management plan	2	5	2	4	13
705.5	705.5	CHT267: One potsherd	Nzega	Disturbance or loss of cultural heritage	Category 1 tangible cultural heritage	Damage or disturbance of feature	Located within project footprint	C		TBC	TZ 8.20	2	5	1	2	10	Cultural heritage management plan	2	5	1	2	10
728.5	728.5	CH317: Grave at Sagida	Nzega	Disturbance or loss of cultural heritage	Category 2 tangible cultural heritage with strong intangible element	Damage or disturbance of feature	Located within project footprint	C		TBC	TZ 8.20	3	5	2	8	18	CUH01, CUH02, CUH03	3	1	2	8	14
742.4	742.4	CHT268: Three potsherds	Nzega	Disturbance or loss of cultural heritage	Category 1 tangible cultural heritage	Damage or disturbance of feature	Located within project footprint	C		TBC	TZ 8.20	2	5	2	2	11	Cultural heritage management plan	2	5	2	2	11
773.1	773.1	CHT269: Two potsherds; stone tool	Igunga	Disturbance or loss of cultural heritage	Category 1 tangible cultural heritage	Damage or disturbance of feature	Located within project footprint	C		TBC	TZ 8.20	2	5	1	2	10	Cultural heritage management plan	2	5	1	2	10
803.4	803.4	CHT249: Pottery Site 2	Igunga	Disturbance or loss of cultural heritage	Category 1 tangible cultural heritage	Damage or disturbance of feature	Located within the AOI but not within the project footprint	C		TBC	TZ 8.20	1	5	1	4	11	Cultural heritage management plan	1	5	1	4	11
805.2	805.2	CHT250: Pottery Site 3	Igunga	Disturbance or loss of cultural heritage	Category 1 tangible cultural heritage	Damage or disturbance of feature	Located within the AOI but not within the project footprint	C		TBC	TZ 8.20	1	5	1	2	9	Cultural heritage management plan	1	5	1	2	9
822.5	822.5	CHT270: Four lithic materials	Igunga	Disturbance or loss of cultural heritage	Category 1 tangible cultural heritage	Damage or disturbance of feature	Located within project footprint	C		TBC	TZ 8.20	2	3	1	4	10	Cultural heritage management plan	2	3	1	4	10
873.1	873.1	CHT271: One grave	Iramba	Disturbance or loss of cultural heritage	Category 2 tangible cultural heritage with	Damage or disturbance of feature	Located within the AOI but not within the project footprint	C		Y	TZ 8.20	1	1	1	8	11	Cultural heritage management plan	1	1	1	8	11

Table E3-1 Location Specific Impacts Register

KP Start	KP End	Location	District	Aspect	VEC	Potential Impact	Impact Detail	Phase		High Stakeholder Concern	ESIA Section	Pre-mitigation Impact					Management Plan(s)	Residual Impacts				
								C	O			M	D	E	S	SS		M	D	E	S	SS
					strong intangible element																	
873.2	873.2	CHT272: Two decorated potsherds	Iramba	Disturbance or loss of cultural heritage	Category 1 tangible cultural heritage	Damage or disturbance of feature	Located within the AOI but not within the project footprint	C		TBC	TZ 8.20	1	2	1	4	8	Cultural heritage management plan	1	2	1	4	8
877	877	CHT061: Ntwiga 3. Information from members of the ESIA team indicate that the site is 40 km away from here, no local knowledge of the site but site retained in the database of sites until position confirmed.	Iramba	Disturbance or loss of cultural heritage	Category 1 tangible cultural heritage	Damage or disturbance of feature	Located within the AOI but not within the project footprint	C		TBC	TZ 8.20	1	3	1	2	7	Cultural heritage management plan	1	3	1	2	7
878.2	878.2	CHT102: Cultural mounds	Iramba	Disturbance or loss of cultural heritage	Category 1 tangible cultural heritage	Damage or disturbance of feature	Located within the AOI but not within the project footprint	C		TBC	TZ 8.20	2	3	1	2	8	Cultural heritage management plan	2	3	1	2	8
882.5	882.5	CHT123: Scatter of ceramics	Iramba	Disturbance or loss of cultural heritage	Category 1 tangible cultural heritage	Damage or disturbance of feature	Located within the AOI but not within the project footprint	C		TBC	TZ 8.20	2	3	1	2	8	Cultural heritage management plan	2	3	1	2	8
882.9	882.9	CHT273: Four graves. When Lunuwa well dries, the elders of Mukulu conduct rituals on top of these old graves. They slaughter black sheep on the grave and eat its meat without salt. They take the manure of the sheep to Lunuwa well and spread it in the well. Thereafter, the well will fill with water.	Iramba	Disturbance or loss of cultural heritage	Category 2 tangible cultural heritage with strong intangible element	Damage or disturbance of feature	Located within project footprint	C		Y	TZ 8.20	2	5	1	8	16	Cultural heritage management plan	2	2	1	8	13
883.2	883.2	CHT274: Stone microlith, late Stone Age	Iramba	Disturbance or loss of cultural heritage	Category 1 tangible cultural heritage	Damage or disturbance of feature	Located within project footprint	C		TBC	TZ 8.20	2	2	1	6	11	Cultural heritage management plan	2	2	1	6	11
899.1	899.1	CHT275: One potsherd to stone tools	Iramba	Disturbance or loss of cultural heritage	Category 1 tangible	Damage or disturbance of feature	Located within project footprint	C		TBC	TZ 8.20	2	5	2	2	11	Cultural heritage management plan	2	5	2	2	11

Table E3-1 Location Specific Impacts Register

KP Start	KP End	Location	District	Aspect	VEC	Potential Impact	Impact Detail	Phase		High Stakeholder Concern	ESIA Section	Pre-mitigation Impact					Management Plan(s)	Residual Impacts				
								C	O			M	D	E	S	SS		M	D	E	S	SS
					cultural heritage																	
899.2	899.2	CHT276: Two graves	Iramba	Disturbance or loss of cultural heritage	Category 2 tangible cultural heritage with strong intangible element	Damage or disturbance of feature	Located within the AOI but not within the project footprint	C		Y	TZ 8.20	2	1	1	8	12	Cultural heritage management plan	2	1	1	8	12
931.1	931.1	CHT277: Two graves	Singida	Disturbance or loss of cultural heritage	Category 2 tangible cultural heritage with strong intangible element	Damage or disturbance of feature	Located within the AOI but not within the project footprint	C		Y	TZ 8.20	1	1	1	8	11	Cultural heritage management plan	1	1	1	8	11
931.2	931.2	CHT278: Two graves at PS6	Singida	Disturbance or loss of cultural heritage	Category 2 tangible cultural heritage with strong intangible element	Damage or disturbance of feature	Located within project footprint	C		Y	TZ 8.20	2	5	1	8	16	Cultural heritage management plan	2	1	1	8	12
931.3	931.3	CHT279: Amburiya clan bury people in this area. More than seven graves. This area is still used for burials.	Singida	Disturbance or loss of cultural heritage	Category 2 tangible cultural heritage with strong intangible element	Damage or disturbance of feature	Located within project footprint	C		Y	TZ 8.20	2	5	1	8	16	Cultural heritage management plan	2	1	1	8	12
932.8	932.8	CHT125: Four grinding stones, six pestles and materials of later Stone Age	Singida	Disturbance or loss of cultural heritage	Category 1 tangible cultural heritage	Damage or disturbance of feature	Located within the AOI but not within the project footprint	C		TBC	TZ 8.20	1	2	2	4	9	Cultural heritage management plan	1	2	2	4	9
932.9	932.9	CHT280: Six graves. Sometimes the Igauri villagers conduct rituals on the graves whenever there are socio-cultural problems.	Singida	Disturbance or loss of cultural heritage	Category 2 tangible cultural heritage with strong intangible element	Damage or disturbance of feature	Located within the AOI but not within the project footprint	C		Y	TZ 8.20	1	1	1	8	11	Cultural heritage management plan	1	1	1	8	11
933.2	933.2	CHT281: Three potsherds and one grinding stone	Singida	Disturbance or loss of cultural heritage	Category 1 tangible cultural heritage	Damage or disturbance of feature	Located within project footprint	C		TBC	TZ 8.20	2	5	2	2	11	Cultural heritage management plan	2	5	2	2	11
937.5	937.5	CHT282: Four graves: Leti Nyuha, Change Nyuha, Mbula Nyuha and Mwinga Nyuha; all buried 1936	Singida	Disturbance or loss of cultural heritage	Category 2 tangible cultural heritage with strong	Damage or disturbance of feature	Located within the AOI but not within the project footprint	C		Y	TZ 8.20	1	1	2	8	12	Cultural heritage management plan	1	1	2	8	12

Table E3-1 Location Specific Impacts Register

KP Start	KP End	Location	District	Aspect	VEC	Potential Impact	Impact Detail	Phase		High Stakeholder Concern	ESIA Section	Pre-mitigation Impact					Management Plan(s)	Residual Impacts				
								C	O			M	D	E	S	SS		M	D	E	S	SS
					intangible element																	
938.1	938.1	CHT238: Ifombou Mosque southwest of KP938	Singida	Disturbance or loss of cultural heritage	Category 2 tangible cultural heritage with strong intangible element	Damage or disturbance of feature	Located within the AOI but not within the project footprint	C		Y	TZ 8.20	1	1	1	6	9	Cultural heritage management plan	1	1	1	6	9
938.1	938.1	CH320: Graveyard, Ifombou II	Singida	Disturbance or loss of cultural heritage	Category 1 tangible cultural heritage	Damage or disturbance of feature	Located within project footprint	C		TBC	TZ 8.20	2	5	3	8	18	Cultural heritage management plan	2	1	3	8	14
938.1	938.1	CH321: Graveyard, Ifombou I	Singida	Disturbance or loss of cultural heritage	Category 1 tangible cultural heritage	Damage or disturbance of feature	Located within project footprint	C		TBC	TZ 8.20	2	5	2	8	17	Cultural heritage management plan	2	1	2	8	13
938.2	938.2	CHT283: Three Graves: Sita Nkunguli Msagha, Tandu Msaghu Nyuha and Muna Wawa Nyuha; all buried before 1936	Singida	Disturbance or loss of cultural heritage	Category 2 tangible cultural heritage with strong intangible element	Damage or disturbance of feature	Located within project footprint	C		Y	TZ 8.20	2	5	2	8	17	Cultural heritage management plan	2	1	2	8	13
938.2	938.2	CH322: Graveyard, Ifombou III	Singida	Disturbance or loss of cultural heritage	Category 1 tangible cultural heritage	Damage or disturbance of feature	Located within project footprint	C		TBC	TZ 8.20	2	5	2	8	17	Cultural heritage management plan	2	1	2	8	13
938.3	938.3	CHT284: Five potsherds	Singida	Disturbance or loss of cultural heritage	Category 1 tangible cultural heritage	Damage or disturbance of feature	Located within project footprint	C		TBC	TZ 8.20	2	5	1	2	10	Cultural heritage management plan	2	5	1	2	10
938.3	938.3	CHT285: Old grave of Ihafwa Muna Kingi. The only mark is a tree called Moghiankuya in the Nyaturu language.	Singida	Disturbance or loss of cultural heritage	Category 2 tangible cultural heritage with strong intangible element	Damage or disturbance of feature	Located within project footprint	C		Y	TZ 8.20	2	5	2	8	17	Cultural heritage management plan	2	1	2	8	13
943.2	943.2	CH323: STP78 Pottery, Mrama	Singida	Disturbance or loss of cultural heritage	Category 1 tangible cultural heritage	Damage or disturbance of feature	Located within project footprint	C		TBC	TZ 8.20	2	5	1	4	12	Cultural heritage management plan	2	5	1	4	12
943.3	943.3	CHT286: Three historic potsherds	Singida	Disturbance or loss of cultural heritage	Category 1 tangible cultural heritage	Damage or disturbance of feature	Located within project footprint	C		TBC	TZ 8.20	2	5	1	2	10	Cultural heritage management plan	2	5	1	2	10
943.4	943.4	CHT287: 10 graves belonging to the Wanyamninga clan	Singida	Disturbance or loss of cultural heritage	Category 2 tangible cultural heritage with strong	Damage or disturbance of feature	Located within project footprint	C		Y	TZ 8.20	2	5	2	8	17	Cultural heritage management plan	2	1	2	8	13

Table E3-1 Location Specific Impacts Register

KP Start	KP End	Location	District	Aspect	VEC	Potential Impact	Impact Detail	Phase		High Stakeholder Concern	ESIA Section	Pre-mitigation Impact					Management Plan(s)	Residual Impacts				
								C	O			M	D	E	S	SS		M	D	E	S	SS
					intangible element																	
943.4	943.4	CHT288: Old grave belonging to Makiya	Singida	Disturbance or loss of cultural heritage	Category 2 tangible cultural heritage with strong intangible element	Damage or disturbance of feature	Located within project footprint	C		Y	TZ 8.20	2	5	1	8	16	Cultural heritage management plan	2	1	1	8	12
954.4	954.4	CHT289: Four historic potsherds	Singida	Disturbance or loss of cultural heritage	Category 1 tangible cultural heritage	Damage or disturbance of feature	Located within project footprint	C		TBC	TZ 8.20	2	5	1	2	10	Cultural heritage management plan	2	5	1	2	10
954.4	954.4	CHT290: Two graves: Juma Hango (1995) and Said Hango Ghambuja (1995)	Singida	Disturbance or loss of cultural heritage	Category 2 tangible cultural heritage with strong intangible element	Damage or disturbance of feature	Located within project footprint	C		Y	TZ 8.20	2	5	1	8	16	Cultural heritage management plan	2	1	1	8	12
954.6	954.6	CHT291: One grave believed to be very old	Singida	Disturbance or loss of cultural heritage	Category 2 tangible cultural heritage with strong intangible element	Damage or disturbance of feature	Located within project footprint	C		Y	TZ 8.20	2	5	1	8	16	Cultural heritage management plan	2	1	1	8	12
956.2	956.2	CHT176: Recorded rock art; diagnostic ceramics probably dating to the Iron Age	Singida	Disturbance or loss of cultural heritage	Category 1 tangible cultural heritage	Damage or disturbance of feature	Located within the AOI but not within the project footprint	C		TBC	TZ 8.20	1	2	1	4	8	Cultural heritage management plan	1	2	1	4	8
957.8	957.8	CHT292: Grave of Marove Sangwa, buried 1968	Singida	Disturbance or loss of cultural heritage	Category 2 tangible cultural heritage with strong intangible element	Damage or disturbance of feature	Located within the AOI but not within the project footprint	C		Y	TZ 8.20	1	1	1	8	11	Cultural heritage management plan	1	1	1	8	11
957.8	957.8	CHT293: Three potsherds	Singida	Disturbance or loss of cultural heritage	Category 1 tangible cultural heritage	Damage or disturbance of feature	Located within project footprint	C		TBC	TZ 8.20	2	5	1	2	10	Cultural heritage management plan	2	5	1	2	10
959.1	959.1	CHT295: Three graves: Shabani Gufa (2000), Mwanjuma Gufa (1998) and Hawa Shabani Gufa (1996)	Singida	Disturbance or loss of cultural heritage	Category 2 tangible cultural heritage with strong intangible element	Damage or disturbance of feature	Located within project footprint	C		Y	TZ 8.20	2	5	1	8	16	Cultural heritage management plan	2	1	1	8	12

Table E3-1 Location Specific Impacts Register

KP Start	KP End	Location	District	Aspect	VEC	Potential Impact	Impact Detail	Phase		High Stakeholder Concern	ESIA Section	Pre-mitigation Impact					Management Plan(s)	Residual Impacts				
								C	O			M	D	E	S	SS		M	D	E	S	SS
961.9	961.9	CHT047: Fifteen potsherds	Singida	Disturbance or loss of cultural heritage	Category 1 tangible cultural heritage	Damage or disturbance of feature	Located within project footprint	C		TBC	TZ 8.20	2	5	2	2	11	Cultural heritage management plan	2	5	2	2	11
962.7	962.7	CHT053: Mrama tree. Under the Mrama tree, the elders of the Nyankindi clan normally conduct rituals when they need rainfall. They slaughter a black sheep, eat its meat without salt and burn the bones.	Singida	Disturbance or loss of cultural heritage	Category 3 intangible cultural heritage	Damage or disturbance of traditional beliefs or practices	Located within project footprint	C		Y	TZ 8.20	-	-	-	-	-	Cultural heritage management plan	-	-	-	-	-
964.3	964.3	CHT296: Seven historic potsherds on the surface	Singida	Disturbance or loss of cultural heritage	Category 1 tangible cultural heritage	Damage or disturbance of feature	Located within project footprint	C		TBC	TZ 8.20	2	5	2	4	13	Cultural heritage management plan	2	5	2	4	13
971.5	971.5	CHT183: Daub and limited cultural mounds, 19th-century settlement that was probably abandoned during villagisation	Singida	Disturbance or loss of cultural heritage	Category 1 tangible cultural heritage	Damage or disturbance of feature	Located within project footprint	C		TBC	TZ 8.20	2	5	1	2	10	Cultural heritage management plan	2	5	1	2	10
974.6	974.6	CHT297: One diagnostic pottery sherd	Singida	Disturbance or loss of cultural heritage	Category 1 tangible cultural heritage	Damage or disturbance of feature	Located within project footprint	C		TBC	TZ 8.20	2	5	1	2	10	Cultural heritage management plan	2	5	1	2	10
997.3	997.3	CHT298: Worshipping tree (tiita) for local people. Villagers normally pray when rain is needed.	Hanang	Disturbance or loss of cultural heritage	Category 3 intangible cultural heritage	Damage or disturbance of traditional beliefs or practices	Located within project footprint	C		Y	TZ 8.20	-	-	-	-	-	Cultural heritage management plan	-	-	-	-	-
997.4	997.4	CHT299: Three ritual trees for rainmaking and other social activities	Hanang	Disturbance or loss of cultural heritage	Category 3 intangible cultural heritage	Damage or disturbance of traditional beliefs or practices	Located within the AOI but not within the project footprint	C		Y	TZ 8.20	-	-	-	-	-	Cultural heritage management plan	-	-	-	-	-
1007	1007	CH324: STP64 lithic tool, Masusu	Hanang	Disturbance or loss of cultural heritage	Category 1 tangible cultural heritage	Damage or disturbance of feature	Located within project footprint	C		TBC	TZ 8.20	2	5	1	4	12	Cultural heritage management plan	2	5	1	4	12
1030	1030	CHT301: Grave	Kondoa	Disturbance or loss of cultural heritage	Category 2 tangible cultural heritage with	Damage or disturbance of feature	Located within project footprint	C		Y	TZ 8.20	2	5	2	8	17	Cultural heritage management plan	2	1	2	8	13

Table E3-1 Location Specific Impacts Register

KP Start	KP End	Location	District	Aspect	VEC	Potential Impact	Impact Detail	Phase		High Stakeholder Concern	ESIA Section	Pre-mitigation Impact					Management Plan(s)	Residual Impacts				
								C	O			M	D	E	S	SS		M	D	E	S	SS
					strong intangible element																	
1037	1037	CHT302: Furnace walls, slags, tuyeres, pottery and charcoal	Kondoa	Disturbance or loss of cultural heritage	Category 1 tangible cultural heritage	Damage or disturbance of feature	Located within project footprint	C		TBC	TZ 8.20	2	5	2	6	15	Cultural heritage management plan	2	5	2	6	15
1040	1040	CHT263: Five Christian graves southwest of pipeline	Kondoa	Disturbance or loss of cultural heritage	Category 2 tangible cultural heritage with strong intangible element	Damage or disturbance of feature	Located within the AOI but not within the project footprint	C		Y	TZ 8.20	1	1	1	8	11	Cultural heritage management plan	1	1	1	8	11
1065	1065	CH325: Family graveyard, Cheku B	Chemba	Disturbance or loss of cultural heritage	Category 1 tangible cultural heritage	Damage or disturbance of feature	Located within project footprint	C		TBC	TZ 8.20	2	5	2	8	17	Cultural heritage management plan	2	1	2	8	13
1075	1075	CH326: Surface potsherds, Salala	Chemba	Disturbance or loss of cultural heritage	Category 1 tangible cultural heritage	Damage or disturbance of feature	Located within the AOI but not within the project footprint	C		TBC	TZ 8.20	1	0	0	4	5	Cultural heritage management plan	1	0	0	4	5
1116	1116	CHT304: Kulaki Early Iron Age pottery site	Chemba	Disturbance or loss of cultural heritage	Category 1 tangible cultural heritage	Damage or disturbance of feature	Located within project footprint	C		TBC	TZ 8.20	2	5	2	8	17	Cultural heritage management plan	2	5	2	8	17
1161	1161	CHT303: Kalikala Early Iron Age pottery site	Kiteto	Disturbance or loss of cultural heritage	Category 1 tangible cultural heritage	Damage or disturbance of feature	Located within project footprint	C		TBC	TZ 8.20	2	5	2	8	17	Cultural heritage management plan	2	5	2	8	17
1205	1205	CHT228: Amei historic pottery site northwest to KP1205	Kiteto	Disturbance or loss of cultural heritage	Category 1 tangible cultural heritage	Damage or disturbance of feature	Located within the AOI but not within the project footprint	C		TBC	TZ 8.20	1	5	1	8	15	Cultural heritage management plan	1	5	1	8	15
1209	1209	CHT227: Olpulu site	Kiteto	Disturbance or loss of cultural heritage	Category 3 intangible cultural heritage	Damage or disturbance of traditional beliefs or practices	Located within project footprint	C		Y	TZ 8.20	–	–	–	–	–	Cultural heritage management plan	–	–	–	–	–
1229	1229	CH327: surface lithic materials, Loolera	Kiteto	Disturbance or loss of cultural heritage	Category 1 tangible cultural heritage	Damage or disturbance of feature	Located within project footprint	C		TBC	TZ 8.20	2	5	2	6	15	Cultural heritage management plan	2	5	2	6	15
1235	1235	CH328: STP30 potsherds, Loolera	Kiteto	Disturbance or loss of cultural heritage	Category 1 tangible cultural heritage	Damage or disturbance of feature	Located within project footprint	C		TBC	TZ 8.20	2	5	2	6	15	Cultural heritage management plan	2	5	2	6	15
1246	1246	CH329: STP29 lithics and surface potsherds, Ngiligili	Kilindi	Disturbance or loss of cultural heritage	Category 1 tangible cultural heritage	Damage or disturbance of feature	Located within project footprint	C		TBC	TZ 8.20	2	5	2	6	15	Cultural heritage management plan	2	5	2	6	15

Table E3-1 Location Specific Impacts Register

KP Start	KP End	Location	District	Aspect	VEC	Potential Impact	Impact Detail	Phase		High Stakeholder Concern	ESIA Section	Pre-mitigation Impact					Management Plan(s)	Residual Impacts				
								C	O			M	D	E	S	SS		M	D	E	S	SS
1285	1285	CH330: STP25 lithics Stone Age stratified site, Komukota	Kilindi	Disturbance or loss of cultural heritage	Category 1 tangible cultural heritage	Damage or disturbance of feature	Located within project footprint	C		TBC	TZ 8.20	2	5	2	6	15	Cultural heritage management plan	2	5	2	6	15
1292	1292	CHT331: STP23 lithics and potsherds, Kikwembe	Kilindi	Disturbance or loss of cultural heritage	Category 1 tangible cultural heritage	Damage or disturbance of feature	Located within project footprint	C		TBC	TZ 8.20	2	5	1	4	12	Cultural heritage management plan	2	5	1	4	12
1300	1300	CHT332: STP24 lithic materials, Matembo	Kilindi	Disturbance or loss of cultural heritage	Category 1 tangible cultural heritage	Damage or disturbance of feature	Located within project footprint	C		TBC	TZ 8.20	2	5	2	6	15	Cultural heritage management plan	2	5	2	6	15
1304	1304	CHT114: Kwamadule graveyard	Handeni Township Authority	Disturbance or loss of cultural heritage	Category 2 tangible cultural heritage with strong intangible element	Damage or disturbance of feature	Located within the AOI but not within the project footprint	C		Y	TZ 8.20	1	1	1	8	11	Cultural heritage management plan	1	1	1	8	11
1310	1310	CHT115: Ruins	Handeni	Disturbance or loss of cultural heritage	Category 1 tangible cultural heritage	Damage or disturbance of feature	Located within project footprint	C		TBC	TZ 8.20	2	5	1	2	10	Cultural heritage management plan	2	5	1	2	10
1310	1310	CHT333: Surface potsherds, Misima	Handeni	Disturbance or loss of cultural heritage	Category 1 tangible cultural heritage	Damage or disturbance of feature	Located within project footprint	C		TBC	TZ 8.20	2	5	1	4	12	Cultural heritage management plan	2	5	1	4	12
1312	1312	CHT117: Settlement	Handeni	Disturbance or loss of cultural heritage	Category 1 tangible cultural heritage	Damage or disturbance of feature	Located within project footprint	C		TBC	TZ 8.20	2	5	1	2	10	Cultural heritage management plan	2	5	1	2	10
1329	1329	CHT334: Said Daudi, 12-year-old grave	Handeni	Disturbance or loss of cultural heritage	Category 1 tangible cultural heritage	Damage or disturbance of feature	Located within the AOI but not within the project footprint	C		TBC	TZ 8.20	3	5	2	8	18	Cultural heritage management plan	3	1	2	8	14
1329	1329	CHT335: Sonyoro Kalau, 5-year-old grave	Handeni	Disturbance or loss of cultural heritage	Category 1 tangible cultural heritage	Damage or disturbance of feature	Located within project footprint	C		TBC	TZ 8.20	1	5	2	8	16	Cultural heritage management plan	1	0	2	8	11
1330	1330	CHT337: STP18 potsherd and lithic materials, Nkale	Handeni	Disturbance or loss of cultural heritage	Category 1 tangible cultural heritage	Damage or disturbance of feature	Located within project footprint	C		TBC	TZ 8.20	2	5	1	4	12	Cultural heritage management plan	2	5	1	4	12
1330	1330	CHT118: Enclosure	Handeni	Disturbance or loss of cultural heritage	Category 1 tangible cultural heritage	Damage or disturbance of feature	Located within project footprint	C		TBC	TZ 8.20	2	5	1	2	10	Cultural heritage management plan	2	5	1	2	10

Table E3-1 Location Specific Impacts Register

KP Start	KP End	Location	District	Aspect	VEC	Potential Impact	Impact Detail	Phase		High Stakeholder Concern	ESIA Section	Pre-mitigation Impact					Management Plan(s)	Residual Impacts				
								C	O			M	D	E	S	SS		M	D	E	S	SS
1332	1332	CHT120: Sindeni Kwamwenkubi traditional forest	Handeni	Disturbance or loss of cultural heritage	Category 3 intangible cultural heritage	Damage or disturbance of traditional beliefs or practices	Located within the AOI but not within the project footprint	C		Y	TZ 8.20	-	-	-	-	-	Cultural heritage management plan	-	-	-	-	-
1336	1336	CHT338: STP15 potsherds, Sindeni	Handeni	Disturbance or loss of cultural heritage	Category 1 tangible cultural heritage	Damage or disturbance of feature	Located within project footprint	C		TBC	TZ 8.20	2	5	1	4	12	Cultural heritage management plan	2	5	1	4	12
1337	1337	CHT339: STP16 potsherds, Sindeni	Handeni	Disturbance or loss of cultural heritage	Category 1 tangible cultural heritage	Damage or disturbance of feature	Located within project footprint	C		TBC	TZ 8.20	2	5	1	4	12	Cultural heritage management plan	2	5	1	4	12
1366	1366	CHT127: Chang'ombe Sir Juma graves	Handeni	Disturbance or loss of cultural heritage	Category 2 tangible cultural heritage with strong intangible element	Damage or disturbance of feature	Located within project footprint	C		Y	TZ 8.20	2	5	2	8	17	Cultural heritage management plan	2	1	2	8	13
1378	1378	CHT340: STP12 daub and surface potsherds, Mamboleo	Muheza	Disturbance or loss of cultural heritage	Category 1 tangible cultural heritage	Damage or disturbance of feature	Located within project footprint	C		TBC	TZ 8.20	2	5	1	4	12	Cultural heritage management plan	2	5	1	4	12
1395	1395	CHT145: Kibanda Pottery Site 2	Muheza	Disturbance or loss of cultural heritage	Category 1 tangible cultural heritage	Damage or disturbance of feature	Located within the AOI but not within the project footprint	C		TBC	TZ 8.20	1	5	1	2	9	Cultural heritage management plan	1	5	1	2	9
1402	1402	CHT159: Sembwana Dawa graves	Muheza	Disturbance or loss of cultural heritage	Category 2 tangible cultural heritage with strong intangible element	Damage or disturbance of feature	Located within project footprint	C		Y	TZ 8.20	2	5	2	8	17	Cultural heritage management plan	2	1	2	8	13
1402	1402	CHT160: Seif Lupatu graves	Muheza	Disturbance or loss of cultural heritage	Category 2 tangible cultural heritage with strong intangible element	Damage or disturbance of feature	Located within the AOI but not within the project footprint	C		Y	TZ 8.20	1	1	2	8	12	Cultural heritage management plan	1	1	2	8	12
1408	1408	CHT258: Colonial railway	Muheza	Disturbance or loss of cultural heritage	Category 1 tangible cultural heritage	Damage or disturbance of feature	Located within project footprint	C		TBC	TZ 8.20	1	5	1	2	9	Cultural heritage management plan	1	5	1	2	9
1409	1409	CHT345: surface potsherds, Mkanyageni GP4	Muheza	Disturbance or loss of cultural heritage	Category 1 tangible cultural heritage	Damage or disturbance of feature	Located within project footprint	C		TBC	TZ 8.20	0	0	0	4	4	Cultural heritage management plan	0	0	0	4	4

Table E3-1 Location Specific Impacts Register

KP Start	KP End	Location	District	Aspect	VEC	Potential Impact	Impact Detail	Phase		High Stakeholder Concern	ESIA Section	Pre-mitigation Impact					Management Plan(s)	Residual Impacts				
								C	O			M	D	E	S	SS		M	D	E	S	SS
1410	1410	CHT259: Colonial railway siding	Muheza	Disturbance or loss of cultural heritage	Category 1 tangible cultural heritage	Damage or disturbance of feature	Located within project footprint	C		TBC	TZ 8.20	1	5	1	2	9	Cultural heritage management plan	1	5	1	2	9
1436	1436	CHT207: Helani/Ndaoya	Tanga	Disturbance or loss of cultural heritage	Category 2 tangible cultural heritage with strong intangible element	Damage or disturbance of feature	Located within the AOI but not within the project footprint	C		Y	TZ 8.20	2	1	1	6	10	Cultural heritage management plan	2	1	1	6	10
1437	1437	CHT185: Spread of ceramics over 20 m² area	Tanga	Disturbance or loss of cultural heritage	Category 1 tangible cultural heritage	Damage or disturbance of feature	Located within the AOI but not within the project footprint	C		TBC	TZ 8.20	1	2	1	2	6	Cultural heritage management plan	1	2	1	2	6
1438	1438	CHT037: Graves from one family	Tanga	Disturbance or loss of cultural heritage	Category 2 tangible cultural heritage with strong intangible element	Damage or disturbance of feature	Located within the AOI but not within the project footprint	C		Y	TZ 8.20	2	1	1	8	12	Cultural heritage management plan	2	1	1	8	12
1441	1441	CHT212: Chongoleani spiritual site	Tanga	Disturbance or loss of cultural heritage	Category 3 intangible cultural heritage	Damage or disturbance of traditional beliefs or practices	Located within the AOI but not within the project footprint	C		Y	TZ 8.20	-	-	-	-	-	Cultural heritage management plan	-	-	-	-	-
1442	1442	CHT213: Chongoleani archaeology	Tanga	Disturbance or loss of cultural heritage	Category 1 tangible cultural heritage	Damage or disturbance of feature	Located within the AOI but not within the project footprint	C		TBC	TZ 8.20	2	2	1	2	7	Cultural heritage management plan	2	2	1	2	7
1442	1442	CHT214: Chongoleani spiritual site	Tanga	Disturbance or loss of cultural heritage	Category 3 intangible cultural heritage	Damage or disturbance of traditional beliefs or practices	Located within the AOI but not within the project footprint	C		Y	TZ 8.20	-	-	-	-	-	Cultural heritage management plan	-	-	-	-	-
1443	1443	CHT187: Spread of ceramics and a shrine under the baobab tree at MST	Tanga	Disturbance or loss of cultural heritage	Category 3 intangible cultural heritage	Damage or disturbance of traditional beliefs or practices	Located within the AOI but not within the project footprint	C		Y	TZ 8.20	-	-	-	-	-	Cultural heritage management plan	-	-	-	-	-

E4 ENVIRONMENTAL AND SOCIAL MANAGEMENT PLANS

E4.1 Introduction

This ESIA appendix lists the mitigation measures developed throughout the impact assessment in order to avoid or reduce the potential impacts on VECs. These mitigation commitments form the minimum content of the project's environmental and social management plans and will be implemented throughout project lifetime.

The mitigation measures can either be generic, i.e., apply throughout the project to the identified project components, or location specific. Each mitigation measure is given a unique code e.g. SOL for soil and a number, see Table E4.1-1 for a list of the codes and the primary section where they are described. Some of the mitigation measures are not included (resulting in a gap in sequence) because they are applicable to the EACOP Uganda ESIA.

Table E4.1-1 Mitigation Measure Codes and Associated Primary Section

Code	Topic	Primary Impact Assessment Subsection
ACO	Acoustics	8.10 Acoustic Environment
AIR	Air quality	8.9 Air Quality
BIO	Biodiversity	8.2 Biodiversity: Habitats of Conservation Importance 8.3 Biodiversity: Flora and Fauna Species of Conservation Importance 8.4 Biodiversity: Legally Protected, Internationally or Nationally Recognised Areas
CHSW	Community health, safety, security and welfare	8.18 Community Health 8.19 Community Safety, Security and Welfare
CUH	Cultural heritage	8.20 Tangible and Intangible Cultural Heritage
ECO	Economy	8.11 Economy 8.12 Local Economy
GNL	General	Cross-cutting mitigations and cumulative impacts mitigations – various subsections
HR	Human rights	Cross-cutting mitigations – various subsections
INF	Infrastructure and services	8.17 Social Infrastructure and Services
LIV	Livelihoods	8.13 Land-Based Livelihoods 8.14 River, Lake and Marine-Based Livelihoods
LNP	Land and property	8.15 Land and Property
LSC	Landscape	8.8 Landscape

Table E4.1-1 Mitigation Measure Codes and Associated Primary Section

Code	Topic	Primary Impact Assessment Subsection
RES	Resource management	8.21 Ecosystem Services
SOL	Soil	8.5 Soil
WHSW	Workers health, safety and welfare	8.16 Workers' Health, Safety and Welfare
WTR	Water	8.6 Surface water 8.7 Groundwater

Additional mitigation measures may be developed after the ESIA report issue where the need for further impact control is identified.

E4.2 Construction Phase

E4.2.1 Biodiversity Management Plan

The biodiversity management plan (BMP) will define the approach to reduce impacts on biodiversity and will include the mitigation measures listed below.

Table E4.2-1 Biodiversity Management Plan – Construction Phase

ID	Mitigation Commitment
BIO01	Preconstruction biodiversity surveys will be undertaken at locations identified in the baseline appendices of the environmental and social impact assessment to record details of habitats and species of conservation importance within the working areas. This information will be used to produce site specific biodiversity management plans that will identify fine-scale route changes (where feasible), mark features for retention and protection, develop biorestation measures including seed collection, translocation and species propagation and provide details of the specific mitigation measures (such as seasonal construction restrictions) to be implemented to reduce impacts on biodiversity during construction.
BIO02	Supplementary preconstruction biodiversity baseline surveys will be undertaken in locations identified in the baseline appendices of the environmental and social impact assessment in order to produce a Biodiversity Action Plan to identify further enhancement and conservation measures.
BIO03	As part of the Biodiversity Management plan a vegetation removal method statement to reduce impacts on biodiversity will be developed. This will include but not be limited to measures such as: <ul style="list-style-type: none"> • directional felling of trees on land inside the right-of-way • avoiding damage to trees outside the right-of-way • identifying areas where strimming, coppicing or other works will be undertaken in advance of clearing.

Table E4.2-1 Biodiversity Management Plan – Construction Phase

ID	Mitigation Commitment
BIO04	Location-specific biodiversity management plans will be developed and implemented allowing for progressive, active habitat restoration (including seed collection, propagation and supplementary planting if required), habitat enhancement measures where applicable and post-restoration monitoring. Locations are identified in the ESIA baseline appendices and include the following habitat types: <ul style="list-style-type: none"> • miombo woodland • Itigi-like thicket • whistling thorn woodland (preferred habitat of the endemic and IUCN Karamoja apalis) • coastal thicket and coastal woodland
BIO05	Hunting, fishing, unauthorised gathering of products (including plants and firewood) and deliberate disturbance or harassment of fauna will be prohibited for project personnel. The Project will restrict the purchase of wildlife related products and crafts by project workers.
BIO06	Appropriate measures will be implemented to prevent fauna or people from entering welded pipe sections or open excavations; there will be fauna ladders placed at suitable intervals in all open excavations. Animals will be removed safely and released into suitable habitat away from the working area.
BIO07	During open-cut watercourse crossing activities, bank and bed material will be segregated, stored away from the active channels, and not be placed where flow or drainage will be obstructed.
BIO08	A biodiversity survey strategy will be developed to include timings and methods of surveys to be undertaken, including but not limited to: <ul style="list-style-type: none"> • supplemental preconstruction flora and fauna surveys • supplemental preconstruction biodiversity surveys of pre identified species of conservation concern • a biodiversity assessment of watercourses and wetlands • an assessment of fish spawning habitat at open-cut river crossings where the watercourse crossing is planned to occur during the fish-spawning season and International Union for Conservation of Nature or Red Data Book species are known or likely to occur • preconstruction checks on the right-of-way.
BIO09	Before construction starts, a plan will be prepared for translocating fauna and flora in areas identified in the environmental and social impact assessment and preconstruction surveys. The preclearance surveys will be referred to when deciding suitable locations for replanting of translocated species or species planted to compensate for those removed during construction.
BIO10	A written and photographic record will be kept of translocated species for verification and potential post-construction monitoring. The success of translocation will be monitored during and post-construction for species of conservation importance.
BIO11	Information on seasonal constraints recorded within the baseline appendices environmental and social impact assessment will be used to identify activities that need to be undertaken at a specific time of year or periods when activities cannot be completed without project approval of a deviation (e.g., during sensitive periods such as breeding and migration of species).
BIO12	Where a section of the right-of-way is through habitats with high biodiversity value (as identified in the baseline appendices of the environmental and social impact assessment), the area will be reviewed to determine if the working width can be reduced to limit impacts as much as possible.

Table E4.2-1 Biodiversity Management Plan – Construction Phase

ID	Mitigation Commitment
BIO13	Open-cut river crossings will be undertaken during the dry season where possible; where not possible site-specific method statements will be developed addressing ecological sensitivities.
BIO14	As much riparian vegetation as possible will be left in place until immediately before a watercourse crossing needs to be made to maintain stability of the banks. During site preparation, the height of vegetation on the riverbanks will be reduced, but roots will not be disturbed, to dissuade animals from nesting. The vegetation will then be removed when the crossing is made and the area reinstated as quickly as possible.
BIO15	The maximum length of open trench at any one time (per spread) will be defined based on: <ul style="list-style-type: none"> • the habitats present and potential ecological sensitivities (e.g., terrestrial commuting routes for large mammals) • community safety. Gaps will also be left in soil stacks and pipe strings at strategic locations to allow passage of animals where it is considered safe to do so.
BIO16	If dams and pumps are used to maintain water flow during the construction of watercourse crossings or abstraction of water from watercourses is required, fish screens will be used on the end of the pump inlet hose. Any fish caught within dammed areas either side of the crossing will be transferred up or downstream as appropriate by suitably experienced personnel.
BIO17	Where watercourse bank reinforcement is required, the impact on riparian habitats and riparian fauna will be assessed to determine if the reinstatement or reinforcement is sufficient to maintain connectivity along the riparian elements of the watercourse. Mitigation will be installed to maintain habitat connectivity.
BIO18	All incidences of accidental injury or death of fauna will be recorded, including details of the circumstances, time, species, size and habitat. The report will be reviewed to determine if any action should be taken to prevent further incidents.
BIO19	Biosecurity measures will be developed and implemented that will include a strategy for weed and pest control and measures to prevent the introduction or spread of alien invasive species on the RoW, work sites and camp facilities. The biosecurity measures will also outline specifics to protect the aquatic environment from alien invasive species.
BIO21	Species' populations will be monitored pre and post construction. The project will employ adaptive management in response to findings.
BIO22	Construction activities within 500 m of seasonal wetland habitat will be avoided where feasible when the wetland is wet and is supporting species of conservation importance.
BIO23	The use of pesticides, rodenticides and other chemicals is prohibited in proximity to raptor habitat.
BIO24	The total duration of construction disturbance (i.e. the time between initial site clearing and final reinstatement/biorestorement) will be minimised.
BIO25	Vegetation clearing in suitable nesting habitat for vultures will be undertaken in advance of the dry season (when nesting occurs). A preclearance check for occupied vulture nests will be undertaken in suitable nesting habitat within 500m of the RoW. If any occupied nests are found, avoid construction until the chick has fully fledged or install noise and visual screening to minimise disturbance.
BIO26	The Project will support the relevant management authority with capacity-building, for example by contributing to additional ranger support or other activities identified in the

Table E4.2-1 Biodiversity Management Plan – Construction Phase

ID	Mitigation Commitment
	existing protected area management plan prepared by the relevant management authority.
BIO27	All practicable efforts will be taken to retain and protect mature baobab and borassus palm trees within the RoW.
BIO28	Preclearance checks for bubbling puddle frog will be undertaken within the defined RoW; any discovered individuals will be translocated to nearby ponds outside the RoW.
BIO29	Layout of HDD working area will be designed to minimise clearing of the coastal thicket and coastal woodland.
BIO30	MCPY-12 will be fully decommissioned and actively revegetated on completion of construction activities.
BIO31	MC-13 will be fully decommissioned and actively revegetated on completion of construction activities.
BIO32	Lighting of the MST will be designed to reduce spill from MST on surrounding habitat used by bats.
BIO33	Two small temporary project access tracks on either side of the forested ridge within the Burigi-Biharamulo Game Reserve/Important Bird Area will be decommissioned and fully reinstated on completion of pipeline construction.
BIO35	The Project will engage with the Tanzania Forest Services to identify support for the demarcation of the boundary of the North Makere Forest Reserve close to the Coating Facility and inform PACs of relevant land use constraints.
BIO36	<p>A strategy for tree removal and replanting will be developed; the strategy will consider:</p> <ul style="list-style-type: none"> • where trees are to be removed, the species and size/age of trees that will be recorded prior to removal; data to be recorded includes: trunk diameter at chest height, number of each species, species and, location • the number of trees and species to be removed during construction • conservation value of the species to be removed • variety of species to be replanted • provenance of species used for replanting • the region-specific environmental characteristics influencing replanting success. <p>Preconstruction surveys will be referred to when deciding suitable locations for replanting of translocated species or species planted to compensate for those removed during construction.</p>
BIO37	<p>The need to compensate for trees removed will be determined on a site-by-site basis and will take into account the species removed.</p> <p>Preference will be given to native species representative of adjacent undisturbed areas. No exotic species will be planted unless specifically required by the forestry agency. In areas of plantation forestry, the requirements of the forestry agency will be met (e.g., ratios for compensation planting).</p>
BIO38	Ways to achieve an increasing trend in vegetation regrowth and diversity of desired species, specifically species composition and, plant species that support forage, refuge and nesting for species of conservation importance, in reinstated areas will be sought, with reference to nearby areas undisturbed by project activities. The re-establishment of vegetation will be monitored following reinstatement until long term re-vegetation targets have been reached.
BIO39	The Project will prohibit all staff and contractors from the possession, purchase, trade or collection of wildlife or living natural resources that are nationally legally protected, CITES listed, or classed as threatened by the IUCN Red List.

Table E4.2-1 Biodiversity Management Plan – Construction Phase

ID	Mitigation Commitment
CHSW20	Vehicle movements will be restricted to defined access routes and demarcated working areas (unless in the event of an emergency).
SOL11	Seeds of species that have the potential to outcompete local plant species will not be used in revegetation seed mixes. Where biorestore is required, local species will be used as far as available.
WTR04	Watercourse banks will be stabilised directly after backfilling and subsequently restored to near original conditions. Where this is not possible, site-specific solutions will be proposed with engineering justification and assessment of potential impacts (including habitat connectivity).
WTR06	Where water is abstracted from a surface waterbody, the flow, water level or water volume in the waterbody will be assessed before and during abstraction. Abstraction rates and the frequency of assessment of the water flow, level or volume will be monitored based on permit conditions. During abstraction from surface waters, inlet hoses will be fitted with suitably sized fish screens.
WTR09	Other than when required for crossings excavations, construction equipment and traffic will normally not enter watercourses. Vehicles and equipment will cross watercourses via appropriately sized temporary culverts and bridging arrangements.
WTR10	Bathing or washing clothes, vehicles and equipment by project employees will be prohibited in watercourses.
WTR15	If temporary damming of a watercourse is required, a preconstruction engineering, social and environmental evaluation will be undertaken to plan the work and so the duration of the flow interruption is limited and to determine the need for pump around to maintain flows.

E4.2.2 Pollution Prevention Plan

The pollution prevention plan (PPP) will define the approach to prevent pollution and will include the mitigation measures listed below.

Table E4.2-2 Pollution Prevention Plan – Construction Phase

ID	Mitigation Commitment
ACO01	Meeting the PES will be the project target.
ACO02	Location specific assessments will be undertaken at sensitive receptors in proximity to project activities occurring between 7 p.m. and 7 a.m. to identify appropriate mitigation where there is potential to cause disturbance from noise and vibration.
ACO03	A preconstruction record of condition, including a photographic log, will be developed. The validity of any claims of damage resulting from project activities will be assessed against the preconstruction record of condition, repairs will be undertaken or appropriate compensation paid if damage is proven.
ACO04	Preference will be given to selecting low noise and vibration emitting equipment for all Project activities.

Table E4.2-2 Pollution Prevention Plan – Construction Phase

ID	Mitigation Commitment
ACO05	Activities that generate high levels of noise and vibration will be assessed to determine potential impacts and mitigation will be implemented where appropriate. Notifications of work will be given at least 72 hrs in advance of work to residents / occupants located within: <ul style="list-style-type: none"> • 100 m of RoW prior to trenching • 50 m of RoW prior to lowering and laying of pipe • 50 m of RoW prior to backfilling and compaction • 250 m of any road upgrades and new access roads.
ACO06	Potential noise and vibration impacts will be assessed where piling is to be undertaken close to sensitive receptors. Where possible, alternative techniques or materials will be used to reduce potential impacts, e.g. restrictions on times and duration in any given day that piling activities are undertaken.
ACO07	Where possible new access roads will be constructed a minimum of 100 m away from sensitive receptors (hospitals, educational facilities or dwellings).
ACO08	Blasting will only be used where other excavation methods are considered technically impracticable or uneconomic. Where blasting is undertaken, a Blast Management Plan will be developed to consider the effects of noise, air overpressure and vibration on dwellings, structures and wildlife, and develop appropriate mitigation where required. The Blast Management Plan will be prepared by a competent person and peer reviewed.
AIR01	Where Project generated dust may affect sensitive receptors, the following mitigation measures will be considered: <ul style="list-style-type: none"> • dust suppression at work-sites and transport routes • adherence to RoW speed limits supplemented by awareness training • sheeting of fine materials being transported or stored on-site
AIR02	To minimise emissions to air, vehicles, machines and equipment will: <ul style="list-style-type: none"> • be appropriate for the task required • have a valid maintenance and inspection certificate or log books • be allocated a unique identifier to be used in a maintenance log • be maintained regularly in accordance with the manufacturer's recommendations to maximise fuel efficiency and help reduce emissions • not be allowed to idle – engines will be switched off when not in use.
AIR03	Vehicles or equipment seen to be emitting excessive black smoke will not be permitted to continue work and will be sent for maintenance.
AIR04	The pipe coating facility will be designed to abate process VOC emissions to within the relevant emission limits and or air quality guidelines.
AIR05	All combustion plant will be designed to meet national regulations and project standards with regards to air quality and emission limits.
AIR06	The project will monitor and report its greenhouse gas emissions annually.
BIO32	Lighting of the MST will be designed to reduce spill from MST on surrounding habitat used by bats.
CHSW25	A monitoring plan will be developed and implemented to ensure that environmental noise exposure levels are periodically monitored and documented. Procedures for corrective measures will be incorporated and implemented in the event of exceedances.

Table E4.2-2 Pollution Prevention Plan – Construction Phase

ID	Mitigation Commitment
CLI01	Electrical equipment of a size that is appropriate for the functions to be performed will be selected with a view to maximising energy efficiency. Electrical equipment will be turned off when not in use.
EPR02	Spill response equipment, such as absorbents and spill kits, will be available at all work site locations and on fuel bowzers and tankers. The spill kits will be inspected regularly to ensure they remain adequate for the needs of the project. The spill kits will be logged, inventoried and maintained.
EPR04	In the event of a spillage of hazardous materials the following actions will take place: <ul style="list-style-type: none"> • A trained rapid response team will be mobilised • Spill response personnel and equipment will be provided to contain, cleanup and remediate (Tier 1 spills). A wider range of resources will be utilised to contain, cleanup and remediate Tier 2 and Tier 3 spills.
LSC01	Measures to keep light pollution to a minimum will be implemented. These include using: <ul style="list-style-type: none"> • modern specification lighting at PRS1 and the MST to reduce light spill to surrounding areas • daylight sensors at PRS1 and the MST where possible to prevent unnecessary lighting during the day • low level, low-impact bollard lighting in the camp accommodation areas at the MST, where possible.
SOL12	Procedures will be developed, incorporating plans for erosion and sediment control and reinstatement. These will be produced before work begins at areas of fragile, sensitive or thin topsoil, side slopes or narrow ridges and at watercourse crossings. Sediment interception measures will be installed, inspected and maintained to prevent sediment runoff from the right-of-way or construction sites affecting watercourses, wetlands, waterbodies or environmentally sensitive areas. Procedures will include additional precautions to be taken and increased monitoring (minimum twice per week), with the aim of preserving the topsoil for subsequent replacement.
SOL14	Areas of surface contamination identified prior to construction within the project footprint will be remediated before or during project construction. Where cleanup of pre-existing contaminated land is required, a remediation proposal will be implemented including but not limited to: <ul style="list-style-type: none"> • remediation techniques • the cleanup standard to be achieved • monitoring and analysis of remediated land to be undertaken • all regulatory and project documentation requirements • appropriate environmental and occupational health and safety protection measures to be adopted. <p>All cleanup and remediation activities will be adequately documented.</p>
SOL15	Contaminated material storage areas will be provided with containment measures (e.g., bunds, ditches, impermeable base membranes and covers) to prevent runoff and airborne losses.
WTR01	The storage of hazardous materials will be restricted to designated impermeable hazardous materials storage areas at least 50 m from any wetlands, surface watercourse or seasonal water channel. Such storage locations will be subject to site-specific environmental and social risk assessment that will inform site selection and the adoption of any additional mitigation measures. Storage areas for hazardous materials

Table E4.2-2 Pollution Prevention Plan – Construction Phase

ID	Mitigation Commitment
	will be bunded (no drainage valves/holes), have impermeable floor and will be covered to minimise the ingress of rainwater.
WTR02	<p>A refuelling procedure will be developed and implemented which will include but not be limited to:</p> <ul style="list-style-type: none"> • details of mobile and static refuelling areas and equipment (e.g. impermeable drip trays) • regulatory / GIIP constraints of refuelling operations to sensitive environmental receptors • spill prevention measures • training on refuelling procedures.
WTR03	<p>Site specific erosion risk assessments will be completed by a qualified fluvial geomorphologist or soil scientist as appropriate; the information will be used to prepare a soil management plan and a reinstatement plan prior to construction. Erosion control measures will include but not be limited to:</p> <ul style="list-style-type: none"> • consideration of information from preconstruction surveys • locations where soil compaction may result in increased sediment laden runoff to watercourses and waterbodies • details on construction through soft ground, considering the use of load-bearing materials to support heavy loads in soft ground • measures for working in areas of fragile and sensitive soils • restrictions to the storage of materials on steep slopes • provision for erosion and sediment control at watercourses.
WTR05	<p>Location-specific method statements will be produced for watercourse crossing construction. These method statements will incorporate plans for:</p> <ul style="list-style-type: none"> • erosion control • sediment control • maintaining environmental base flows downstream of water crossings for example by using measures such as pumping, channel diversions and fluming • notifying fisherfolk as appropriate • reinstatement • spill response equipment.
WTR07	<p>As a requirement of the PPP, locations for discharging excavated pipeline trench water will be identified as part of a 'Permit to Pump Procedure' which will be implemented during the construction phase. Appropriate sediment control measures in line with recognised industry best practices will be implemented at each location.</p>
WTR09	<p>Other than when required for crossings excavations, construction equipment and traffic will normally not enter watercourses. Vehicles and equipment will cross watercourses via appropriately sized temporary culverts and bridging arrangements.</p>
WTR10	<p>Bathing or washing clothes, vehicles and equipment by project employees will be prohibited in watercourses.</p>
WTR11	<p>Surface water that could be affected by runoff from the pipeline route or worksites will be visually inspected on a regular basis and remedial measures implemented if sediment or contamination arising from project activities are visible.</p>
WTR16	<p>An environmental and social evaluation of potential treated wastewater discharge locations will be undertaken as the basis for the development of measures to mitigate impacts from discharges on surface water ecology, downstream water users or terrestrial ecology. The evaluations will take into account the compliance with project environmental standards and will support applications for discharge permits. All licences and consents will be obtained before planned liquid discharges.</p>

Table E4.2-2 Pollution Prevention Plan – Construction Phase

ID	Mitigation Commitment
WTR20	Surface water run-off from construction areas and AGIs will be discharged in accordance with project environmental standards.
WTR22	All licences and consents for hydrostatic test water discharge will be obtained following preparation of a hydrostatic test effluent disposal risk assessment. This will undergo internal technical evaluation before submitting the permit application to the appropriate water resources regulatory authority.
WTR25	No oil-based muds will be used for drilling of groundwater exploration and water supply boreholes.
WTR27	The Monitoring and Reporting Plan will detail robust monitoring and inspection requirements to be completed at locations with sensitive groundwater resources; to verify correct implementation of the PPP.
WTR29	A method statement will be prepared for horizontal directional drilling (HDD) operations and storage of HDD waste. This will include but not be limited to: <ul style="list-style-type: none"> • good management practices for HDD drilling muds • use of water-based drilling muds • daily checks of waste containment areas to assure integrity • a contingency plan for cleanup and remediation to be implemented in the event of a break out of HDD mud on land and water • liaison with downstream users in the event of break out in water.

E4.2.3 Waste Management Plan

The waste management plan (WMP) will define the approach to reduce potential waste related impacts and will include the mitigation measures listed below.

Table E4.2-3 Waste Management Plan – Construction Phase

ID	Mitigation Commitment
LSC03	Options will be considered for the use of surplus rock from blasting including: <ul style="list-style-type: none"> • crushing and onsite re-use • offsite re-use • offsite disposal • onsite placement. if this is in keeping with the local landscape character.
RES01	All excavated materials will be screened and reused where possible to reduce the need for newly quarried aggregates.
RES02	If timber is cleared (e.g., as part of right-of-way clearance), it will be reused for construction activities as far as possible. Release of any and all chemically treated waste timber will be made by on a case-by-case basis.
SOL02	Environmental and social evaluations will be undertaken to identify suitable offsite disposal sites for waste soil and rock, and appropriate management measures to be implemented. All temporary borrow pits and soil and rock disposal sites will be reinstated, unless instructed otherwise by the regulatory authorities, in accordance with pre-entry agreements with landowner and location-specific reinstatement plans will be prepared and implemented.
WHSW01	Provision of food to workers will be planned to cater for workforce requirements and therefore minimise food waste as far as possible.

Table E4.2-3 Waste Management Plan – Construction Phase

ID	Mitigation Commitment
WTR08	The grey water stream will be separated from black water (e.g. sewage), treated and either reused (e.g., for toilet flushing, dust suppression) or discharged, in accordance with the environment project standards and national environmental guidance and regulations. All wastewater discharges will comply with permit conditions and the project environmental standards.
WTR17	An industry-recognised manufactured grease trap will be installed at the outlet of the kitchen(s) facilities to prevent greases and fats from entering the grey water streams.
WTR18	Treated sewage effluent which is not reused will be preferentially discharged to land. Before any discharge, the soil permeability will be evaluated, and engineered soakaways will be constructed, where required, to avoid impacts on land, surface water drainage and groundwater.
WTR19	A contingency plan for wastewater treatment plant maintenance periods or downtime will be developed. This will include, as a minimum, the provision of holding tanks that can be used to retain emergency overflows or discharges that do not meet project environmental standards.
WTR21	All potentially contaminated wastewater, excluding sanitary wastewater, will be routed to an appropriately sized treatment unit capable of achieving consent conditions and project environmental standards.

E4.2.4 Natural Resource Management Plan

The natural resource management plan (NRMP) will define the approach to manage natural resource use and will include the mitigation measures listed below.

Table E4.2-4 Natural Resource Management Plan – Construction Phase

ID	Mitigation Commitment
ECO02	Project use of third-party quarries and borrow pits will require verification of national regulatory and project standard compliance; where suppliers do not meet project standards an action plan will be implemented to build capacity, so the supplier can meet the project standard in a timely manner.
LNP02	Any new aggregate extraction sites and batching plants sites, including 3rd party sites, will undergo environmental and social evaluation prior to use; and, where possible, new sites will be located as close as possible to the existing road network to reduce the requirement for new access roads.
RES01	All excavated materials will be screened and reused where possible to reduce the need for newly quarried aggregates.
RES02	If timber is cleared (e.g., as part of right-of-way clearance), it will be reused for construction activities as far as possible. Release of any and all chemically treated waste timber will be made by on a case-by-case basis.
WTR06	Where water is abstracted from a surface waterbody, the flow, water level or water volume in the waterbody will be assessed before and during abstraction. Abstraction rates and the frequency of assessment of the water flow, level or volume will be monitored based on permit conditions. During abstraction from surface waters, inlet hoses will be fitted with suitably sized fish screens.

Table E4.2-4 Natural Resource Management Plan – Construction Phase

ID	Mitigation Commitment
WTR08	The grey water stream will be separated from black water (e.g. sewage), treated and either reused (e.g., for toilet flushing, dust suppression) or discharged, in accordance with the environment project standards and national environmental guidance and regulations. All wastewater discharges will comply with permit conditions and the project environmental standards.
WTR13	Water meters will be installed to measure the quantities of water supplied and wastewater discharged at the camps and detailed records will be kept of quantities of water reused and the purposes for which water is reused as part of the water management plan and the data used for monitoring water usage and project reporting requirements.
WTR14	Water conservation initiatives and opportunities to reuse water, e.g., for dust suppression or concrete mixing, will be identified, assessed for impacts on the environment and human health and those deemed suitable will be implemented.
WTR15	If temporary damming of a watercourse is required, a preconstruction engineering, social and environmental evaluation will be undertaken to plan the work and so the duration of the flow interruption is limited and to determine the need for pump around to maintain flows.
WTR23	The water quality and sustainability of water abstracted from either new or existing boreholes or surface water will be monitored at suitable frequencies to confirm that supply meets permit conditions and project environmental standards and does not impact adversely on other known users.
WTR24	As part of the permit application, hydraulic testing and hydrogeological impact assessments will be undertaken to evaluate the potential impact on local groundwater abstraction points. If the assessment indicates potential impacts to local users, alternative borehole locations will be considered and these alternative locations will be subject to the same testing and impact assessment process.
WTR26	All groundwater exploration and supply boreholes will be designed by suitably experienced and qualified hydrogeologists to avoid contaminant migration pathways between different aquifers and geological formations.
WTR28	Groundwater levels will be monitored once every two weeks by the Project at all sites where groundwater abstraction occurs for the project. The location of monitoring well(s) will be determined by a qualified hydrogeologist to ensure that they are installed in the correct formation and at the correct distance between project abstraction boreholes and community water points. If the local water supplies are derogated to the extent that complaints are made by the community as a result of project abstraction, then the Project will provide alternative water supplies at a convenient location for the community that is not or is less influenced by the project's abstraction.

E4.2.5 Soil Management Plan

The soil management plan (SMP) will define the approach to soil management and temporary erosion control and will include the mitigation measures listed below.

Table E4.2-5 Soil Management Plan – Construction Phase

ID	Mitigation Commitment
BIO07	During open-cut watercourse crossing activities, bank and bed material will be segregated, stored away from the active channels, and not be placed where flow or drainage will be obstructed.
SOL01	Where required, imported soil will have similar physical characteristics to soil in the area where it will be deposited. Soil will be checked, and analysed if needed, for presence of invasive species and contamination.
SOL02	Environmental and social evaluations will be undertaken to identify suitable offsite disposal sites for waste soil and rock, and appropriate management measures to be implemented. All temporary borrow pits and soil and rock disposal sites will be reinstated, unless instructed otherwise by the regulatory authorities, in accordance with pre-entry agreements with landowner and location-specific reinstatement plans will be prepared and implemented.
SOL03	Where benching is required then the areas will be re-contoured to original profiles. Side casting in areas of steep terrain will be prohibited. The effects of accidental spoil slippage on steep slopes will be mitigated, e.g., by using fences or a geotextile membrane.
SOL04	Load-bearing/ ground protection materials, such as bog mats and geotextile membranes under temporary haul roads, will be used to support heavy loads in areas of soft ground, including wetland areas.
SOL06	Topsoil and subsoil stockpiles will be stored in accordance with the Soil Management Plan, be free draining and include gaps left in strategic locations to allow potential floodwater through.
SOL07	If topsoil is stored for more than six months, the stacks will be monitored for: <ul style="list-style-type: none"> • the presence of weeds, which will be controlled in accordance with the weed and pest control programme • compaction and erosion – corrective measures will be implemented if either is identified. Reinstatement will be undertaken as early as practicable following completion of construction activities in any ROW section or site.
SOL08	A preconstruction soil survey will be undertaken of the RoW and MCPY and other construction facilities, based on a representative sample, to: <ul style="list-style-type: none"> • measure the depth of the topsoil layer along the pipeline route to inform requisite stripping depth • identify areas of fragile, sensitive and thin topsoil • identify areas lacking topsoil.
WTR03	Site specific erosion risk assessments will be completed by a qualified fluvial geomorphologist or soil scientist as appropriate; the information will be used to prepare a soil management plan and a reinstatement plan prior to construction. Erosion control measures will include but not be limited to: <ul style="list-style-type: none"> • consideration of information from preconstruction surveys • locations where soil compaction may result in increased sediment laden runoff to watercourses and waterbodies • details on construction through soft ground, considering the use of load-bearing materials to support heavy loads in soft ground • measures for working in areas of fragile and sensitive soils • restrictions to the storage of materials on steep slopes • provision for erosion and sediment control at watercourses.

E4.2.6 Cultural Heritage Management Plan

The cultural heritage management plan (CHMP) will define the approach to the identification, assessment and mitigation of potential impacts on tangible and intangible cultural heritage and will include the mitigation measures listed below.

Table E4.2-6 Cultural Heritage Management Plan – Construction Phase

ID	Mitigation Commitment
CUH01	<p>A preconstruction survey of the RoW will be undertaken to collect data on location, extent and mitigation measures of known and unknown assets (tangible and intangible cultural heritage (TCH and ICH)) and to consult community leaders about ICH sites or practices not yet identified.</p> <p>A report including a GIS file will be prepared that will recommend location-specific actions to be undertaken that could include:</p> <ul style="list-style-type: none"> • Avoidance of a site • Access constraints to reduce disturbance to a site • Excavation of a site • a watching brief during vegetation removal or topsoil stripping • requirements to maintain access to cultural heritage assets <p>A schedule of sites and actions to be undertaken will be prepared and included in the cultural heritage management plan (CHMP) and any appropriate licences obtained.</p>
CUH02	<p>A senior cultural heritage monitor (SCHM) will ensure that the cultural heritage management plan (CHMP) will be implemented, in agreement with relevant government authorities, in advance of construction. The CHMP will include a chance finds procedure. The cultural heritage team will schedule regular meetings and progress reports so that government authorities and appropriate community leaders are kept informed, including:</p> <ul style="list-style-type: none"> • regular report on progress of excavations • a post-excavation assessment report • a research archive • a final publication of results of tangible or intangible heritage investigations as appropriate to the significance of the outcomes. • chance finds reports will be provided to the government authority and relevant stakeholders. <p>The SCHM will be supported by a tangible cultural heritage monitor (TCHM) and an intangible cultural heritage monitor (ICHM) to evaluate the effectiveness of the cultural heritage protection measures and deliver awareness training for all project personnel.</p>
CUH03	<p>A written scheme of investigation (WSI) will be prepared where an intervention is needed and appended to the cultural heritage management plan (CHMP). Until investigation and recording in accordance with the WSI, or avoidance or management activity is signed off by government authorities, construction may not proceed in that area.</p>
CUH04	<p>The senior cultural heritage monitor (SCHM) will prepare the chance finds procedure (CFP); Chance finds will be excavated by suitably qualified and approved archaeologists, in accordance with the CFP and authorised by the relevant government authority.</p>
CUH05	<p>Information on intangible cultural heritage (ICH) collected during the preconstruction surveys will be evaluated and integrated into the cultural heritage management plan (CHMP). This will include information on indigenous peoples and vulnerable groups if present.</p>
CUH07	<p>Collection of cultural heritage artefacts by workers for their own use is prohibited. Any cultural heritage artefacts found by workers will be left in situ and reported to the worksite supervisor or the cultural heritage monitor as required by the chance finds procedure.</p>

Table E4.2-6 Cultural Heritage Management Plan – Construction Phase

ID	Mitigation Commitment
CUH08	Any decompaction/ripping or other ground disturbance activities required during reinstatement will be planned to avoid any cultural heritage feature that has been preserved in situ.

E4.2.7 Reinstatement Plan

The reinstatement plan (RP) will define the approach to manage reinstatement incorporating permanent erosion control and bio-restoration, and will include the mitigation measures listed below.

Table E4.2-7 Reinstatement Plan – Construction Phase

ID	Mitigation Commitment
BIO04	Location-specific biodiversity management plans will be developed and implemented allowing for progressive, active habitat restoration (including seed collection, propagation and supplementary planting if required), habitat enhancement measures where applicable and post-restoration monitoring. Locations are identified in the ESIA baseline appendices and include the following habitat types: <ul style="list-style-type: none"> • miombo woodland • Itigi-like thicket • whistling thorn woodland (preferred habitat of the endemic and IUCN Karamoja apalis) • coastal thicket and coastal woodland
BIO17	Where watercourse bank reinforcement is required, the impact on riparian habitats and riparian fauna will be assessed to determine if the reinstatement or reinforcement is sufficient to maintain connectivity along the riparian elements of the watercourse. Mitigation will be installed to maintain habitat connectivity.
BIO30	MCPY-12 will be fully decommissioned and actively revegetated on completion of construction activities.
BIO31	MC-13 will be fully decommissioned and actively revegetated on completion of construction activities.
BIO33	Two small temporary project access tracks on either side of the forested ridge within the Burigi-Biharamulo Game Reserve/Important Bird Area will be decommissioned and fully reinstated on completion of pipeline construction.
BIO36	A strategy for tree removal and replanting will be developed; the strategy will consider: <ul style="list-style-type: none"> • where trees are to be removed, the species and size/age of trees that will be recorded prior to removal; data to be recorded includes: trunk diameter at chest height, number of each species, species and, location • the number of trees and species to be removed during construction • conservation value of the species to be removed • variety of species to be replanted • provenance of species used for replanting • the region-specific environmental characteristics influencing replanting success. Preconstruction surveys will be referred to when deciding suitable locations for replanting of translocated species or species planted to compensate for those removed during construction.

Table E4.2-7 Reinstatement Plan – Construction Phase

ID	Mitigation Commitment
BIO37	The need to compensate for trees removed will be determined on a site-by-site basis and will take into account the species removed. Preference will be given to native species representative of adjacent undisturbed areas. No exotic species will be planted unless specifically required by the forestry agency. In areas of plantation forestry, the requirements of the forestry agency will be met (e.g., ratios for compensation planting).
CUH08	Any decompaction/ripping or other ground disturbance activities required during reinstatement will be planned to avoid any cultural heritage feature that has been preserved in situ.
LNP01	A preconstruction survey, including photographs, will be undertaken to document the condition of the land including immovable assets, crops and improvements required to the land before construction.
LSC02	Materials and colours will be selected to reduce the visual impact of the MST and LOF.
SOL02	Environmental and social evaluations will be undertaken to identify suitable offsite disposal sites for waste soil and rock, and appropriate management measures to be implemented. All temporary borrow pits and soil and rock disposal sites will be reinstated, unless instructed otherwise by the regulatory authorities, in accordance with pre-entry agreements with landowner and location-specific reinstatement plans will be prepared and implemented.
SOL09	Recontouring should be sympathetic and in keeping with preconstruction profiles, where this is not precluded by risk to integrity of the pipeline or erosion considerations.
SOL10	Before construction personnel and equipment are demobilised, temporary buildings and equipment, aboveground and belowground infrastructure, utilities, tools and any excess material brought onsite or generated during construction and commissioning will be removed. All off ROW sites impacted upon will be reinstated to meet pre-entry agreements with the landowner and in accordance with location-specific reinstatement method statements or plans to be prepared and implemented. Location-specific closeout reports, including photographs, will be produced to document the condition of temporary sites at handover following reinstatement.
SOL11	Seeds of species that have the potential to outcompete local plant species will not be used in revegetation seed mixes. Where bio restoration is required, local species will be used as far as available.
SOL13	A preconstruction survey, including photographs, will be undertaken to document the condition of the land on which the RoW, construction and permanent facilities and access roads will be located. The survey will include immovable assets, crops and any remediation required to the land before construction. The survey will: <ul style="list-style-type: none"> • provide baseline evidence in the event of a claim for damage • identify existing contamination such as illegal disposal • inform community engagement with regard to landusers who's access, drainage or irrigation may be temporarily disrupted • inform site reinstatement plans and remediation with respect to disrupted access, drainage or irrigation Through community engagement, remediation / reinstatement plans will be agreed with relevant landusers prior to access onto a site

Table E4.2-7 Reinstatement Plan – Construction Phase

ID	Mitigation Commitment
SOL14	<p>Areas of surface contamination identified prior to construction within the project footprint will be remediated before or during project construction. Where cleanup of pre-existing contaminated land is required, a remediation proposal will be implemented including but not limited to:</p> <ul style="list-style-type: none"> • remediation techniques • the cleanup standard to be achieved • monitoring and analysis of remediated land to be undertaken • all regulatory and project documentation requirements • appropriate environmental and occupational health and safety protection measures to be adopted. <p>All cleanup and remediation activities will be adequately documented.</p>
SOL17	Trench breakers will be installed in the pipeline trench where downhill flow within the backfilled trench may lead to erosion.
SOL18	New access roads will follow existing tracks, where possible, and will be designed with adequate slope and cross fall drainage to channel runoff safely to off-road soakaways without causing erosion or siltation.
WTR03	<p>Site specific erosion risk assessments will be completed by a qualified fluvial geomorphologist or soil scientist as appropriate; the information will be used to prepare a soil management plan and a reinstatement plan prior to construction. Erosion control measures will include but not be limited to:</p> <ul style="list-style-type: none"> • consideration of information from preconstruction surveys • locations where soil compaction may result in increased sediment laden runoff to watercourses and waterbodies • details on construction through soft ground, considering the use of load-bearing materials to support heavy loads in soft ground • measures for working in areas of fragile and sensitive soils • restrictions to the storage of materials on steep slopes • provision for erosion and sediment control at watercourses.
WTR04	Watercourse banks will be stabilised directly after backfilling and subsequently restored to near original conditions. Where this is not possible, site-specific solutions will be proposed with engineering justification and assessment of potential impacts (including habitat connectivity).
WTR05	<p>Location-specific method statements will be produced for watercourse crossing construction. These method statements will incorporate plans for:</p> <ul style="list-style-type: none"> • erosion control • sediment control • maintaining environmental base flows downstream of water crossings for example by using measures such as pumping, channel diversions and fluming • notifying fisherfolk as appropriate • reinstatement • spill response equipment.
WTR11	Surface water that could be affected by runoff from the pipeline route or worksites will be visually inspected on a regular basis and remedial measures implemented if sediment or contamination arising from project activities are visible.
WTR15	If temporary damming of a watercourse is required, a preconstruction engineering, social and environmental evaluation will be undertaken to plan the work and so the duration of the flow interruption is limited and to determine the need for pump around to maintain flows.

E4.2.8 Stakeholder Engagement Plan

The stakeholder engagement plan (SEP) will define the approach to maintain a social licence to operate¹ among project-affected communities (PACs) and will include the mitigation measures listed below.

Table E4.2-8 Stakeholder Engagement Plan – Construction Phase

ID	Mitigation Commitment
ACO03	A preconstruction record of condition, including a photographic log, will be developed. The validity of any claims of damage resulting from project activities will be assessed against the preconstruction record of condition, repairs will be undertaken or appropriate compensation paid if damage is proven.
ACO05	Activities that generate high levels of noise and vibration will be assessed to determine potential impacts and mitigation will be implemented where appropriate. Notifications of work will be given at least 72 hrs in advance of work to residents / occupants located within: <ul style="list-style-type: none"> • 100 m of RoW prior to trenching • 50 m of RoW prior to lowering and laying of pipe • 50 m of RoW prior to backfilling and compaction • 250 m of any road upgrades and new access roads.
ACO08	Blasting will only be used where other excavation methods are considered technically impracticable or uneconomic. Where blasting is undertaken, a Blast Management Plan will be developed to consider the effects of noise, air overpressure and vibration on dwellings, structures and wildlife, and develop appropriate mitigation where required. The Blast Management Plan will be prepared by a competent person and peer reviewed.
ACO09	The Project will conduct regular inspection of access roads to check for damage caused by project vehicles to repair damage in a timely and efficient manner. Strict load management will be enforced on all project vehicles.
BIO06	Appropriate measures will be implemented to prevent fauna or people from entering welded pipe sections or open excavations; there will be fauna ladders placed at suitable intervals in all open excavations. Animals will be removed safely and released into suitable habitat away from the working area.
BIO26	The Project will support the relevant management authority with capacity-building, for example by contributing to additional ranger support or other activities identified in the existing protected area management plan prepared by the relevant management authority.
BIO35	The Project will engage with the Tanzania Forest Services to identify support for the demarcation of the boundary of the North Makere Forest Reserve close to the Coating Facility and inform PACs of relevant land use constraints.
BIO37	The need to compensate for trees removed will be determined on a site-by-site basis and will take into account the species removed. Preference will be given to native species representative of adjacent undisturbed areas. No exotic species will be planted unless specifically required by the forestry agency. In areas of plantation forestry, the requirements of the forestry agency will be met (e.g., ratios for compensation planting).

¹ A social licence to operate exists when a project has ongoing approval or acceptance within the local community and other stakeholders.

Table E4.2-8 Stakeholder Engagement Plan – Construction Phase

ID	Mitigation Commitment
CHSW02	Local people will be consulted on the optimum location of crossing points and pastoralists informed of the access restrictions in advance, advising them to avoid cultivated areas. Crossing points will be provided across open trenches and welded pipes and gaps will be left in soil stacks and pipe strings at strategic locations. Incidents in conflicts between crop farmers and herders in the vicinity of the project footprint will be monitored and support will be provided to local authorities to obtain a resolution in cases of conflict wherever possible.
CHSW17	Community liaison officers will encourage PAC Leadership to provide advance warning of local events so that construction activities can be avoided at these times.
CHSW18	Regular meetings will be held with PAC representatives, during construction in their area, to update them on construction progress and to receive comments or queries. A community liaison log will be maintained detailing the content of all meetings.
CHSW19	Community awareness programmes will be developed and implemented in project-affected communities to explain: <ul style="list-style-type: none"> • road safety risks and how to increase the safety of pedestrians particularly children • how to ensure their safety during construction • the measures that have been, or will be, implemented to protect their health and safety (e.g., provision of safe access).
CHSW21	Public awareness programmes for stakeholders will include a specific section about the security presence around camps and security protocols which apply.
CHSW22	A Stakeholder Engagement Plan will be developed and implemented, identifying how the Project will engage and consult with internal and external stakeholders to keep them informed about project activities, understand and respond to their concerns and report to them on the project's environmental and social performance.
CHSW27	Spouses will be consulted and present during the land surveys, entitlement briefings and compensation agreements and both spouses will sign the compensation agreements.
CHSW28	The project will work closely with local authorities to monitor any emerging tensions between crop farmers and pastoralists related to project impacts.
CHSW29	The Project will liaise with other third-party developments and relevant government bodies to share information about their worker and community health management strategies, as well as information about worker movements, to ensure that they are commensurate and enable an efficient and coordinated response to any potential disease outbreak.
CHSW34	As part of the CHSSP, a cooperation agreement with the Council Health Management Teams (CHMT) will be reached including periodic meetings to discuss potential health impacts, proposed mitigation measures and longitudinal monitoring of specific key health indicators during construction.
CHSW35	Project will engage with relevant stakeholders (authorities and civil society) in order to identify patterns of population in-migration, associated consequences and identify appropriate mitigation measures and interventions.

Table E4.2-8 Stakeholder Engagement Plan – Construction Phase

ID	Mitigation Commitment
CUH01	<p>A preconstruction survey of the RoW will be undertaken to collect data on location, extent and mitigation measures of known and unknown assets (tangible and intangible cultural heritage (TCH and ICH)) and to consult community leaders about ICH sites or practices not yet identified.</p> <p>A report including a GIS file will be prepared that will recommend location-specific actions to be undertaken that could include:</p> <ul style="list-style-type: none"> • Avoidance of a site • Access constraints to reduce disturbance to a site • Excavation of a site • a watching brief during vegetation removal or topsoil stripping • requirements to maintain access to cultural heritage assets <p>A schedule of sites and actions to be undertaken will be prepared and included in the cultural heritage management plan (CHMP) and any appropriate licences obtained.</p>
CUH02	<p>A senior cultural heritage monitor (SCHM) will ensure that the cultural heritage management plan (CHMP) will be implemented, in agreement with relevant government authorities, in advance of construction. The CHMP will include a chance finds procedure.</p> <p>The cultural heritage team will schedule regular meetings and progress reports so that government authorities and appropriate community leaders are kept informed, including:</p> <ul style="list-style-type: none"> • regular report on progress of excavations • a post-excavation assessment report • a research archive • a final publication of results of tangible or intangible heritage investigations as appropriate to the significance of the outcomes. • chance finds reports will be provided to the government authority and relevant stakeholders. <p>The SCHM will be supported by a tangible cultural heritage monitor (TCHM) and an intangible cultural heritage monitor (ICHM) to evaluate the effectiveness of the cultural heritage protection measures and deliver awareness training for all project personnel.</p>
CUH03	<p>A written scheme of investigation (WSI) will be prepared where an intervention is needed and appended to the cultural heritage management plan (CHMP). Until investigation and recording in accordance with the WSI, or avoidance or management activity is signed off by government authorities, construction may not proceed in that area.</p>
CUH04	<p>The senior cultural heritage monitor (SCHM) will prepare the chance finds procedure (CFP); Chance finds will be excavated by suitably qualified and approved archaeologists, in accordance with the CFP and authorised by the relevant government authority.</p>

Table E4.2-8 Stakeholder Engagement Plan – Construction Phase

ID	Mitigation Commitment
ECO04	<p>An approved recruitment procedure will be implemented that:</p> <ul style="list-style-type: none"> • Is transparent and open to all regardless of race, political opinion, colour, creed, sexuality or gender. • Includes a local recruitment strategy. • Considers social and cultural sensitivities. • Describes the employment criteria for the recruitment of professional, semiskilled and unskilled labour. • Prohibits discrimination or harassment of job applicants. <p>Job descriptions will advertise vacancies in local languages in the PACs through accessible media and on the project website.</p> <p>Targets for local recruitment from project-affected communities will be set by the project. These will be designed to meet legal requirements. An employment office will be established in the local area to conduct local recruitment.</p>
ECO05	<p>A public awareness programme to communicate employment and training opportunities will be implemented that includes but is not limited to:</p> <ul style="list-style-type: none"> • The local recruitment strategy. • Criteria for employment. • The number and types of employment opportunities. • The procedure for applying for employment. <p>Information will be disseminated publicly, including via media announcements at regional and national levels and during public meetings in PACs.</p> <p>Care will be taken to reach women and vulnerable groups if necessary through targeted meetings scheduled at times and locations that may increase women's participation</p>
ECO06	<p>A PIIMP will aim to reduce the number of people that arrive into project-affected communities; the PIIMP will also identify requirements for:</p> <ul style="list-style-type: none"> • Monitoring effects of in-migration and demographic change. • Monitoring relations between communities and in-migrants. • Education of project workers and local communities on impacts related to in-migration.
ECO09	<p>Before construction, a benchmarking exercise to gather data associated with average prices for goods will be undertaken in each region/district. This information will be used to identify appropriate prices so that large price disparities between project-procured goods and local goods are avoided.</p>
ECO10	<p>Senior project security personnel will liaise directly with the army and/or security forces to provide information on project construction activities and schedules.</p>
ECO13	<p>The Project will conduct ongoing monitoring and liaise with authorities to review social changes in these PACs:</p> <ul style="list-style-type: none"> • Putini and Chongoleani (Tanzania) • Tanganyika town (Nzega district, Tanga region, Tanzania) <p>Where required additional interventions will be developed to enhance existing interventions (e.g., PIIMP management plan).</p>
ECO15	<p>The project will undertake a benchmarking assessment on the inflation of goods within PACs if construction phases with other third parties with large workforces coincide. The results of benchmarking will be shared with the proponents of the third-party developments as required.</p>
GNL01	<p>The Project will implement a grievance procedure to provide opportunities for PACs to express grievances about project activities. The grievance process will be communicated to and promoted within all PACs; it will be clearly communicated to PACs that complaints related to interactions with public or private security forces will be addressed.</p>

Table E4.2-8 Stakeholder Engagement Plan – Construction Phase

ID	Mitigation Commitment
GNL02	The Project will advise appropriate regulators and lead agencies of the construction schedule
GNL03	The Project will, in collaboration with the government and other third-party developers in the Albertine Graben, participate in the Regional Cumulative Impacts Management (RCIM) initiative proposed by the upstream Tilenga Project.
GNL04	For prospecting and mining licences that are traversed by the pipeline corridor and AGIs, the project will reach agreement with the Ministry of Minerals (MoM) on the way that mining rights will be extinguished in the affected corridor. The project will engage with both the Ministry of Minerals and the Ministry of Lands, Housing and Human Settlements Development on the proposed compensation framework for affected prospecting and mining operations.
GNL05	The Project will ensure that the proponents of the associated facilities are made aware of the construction schedule so that construction activities can be strategically planned to reduce disruption.
GNL07	The Occupational Health, Safety and Security plan and the Community Health, Safety and Security Plan will be developed in line with the Voluntary Principles on Security and Human Rights and other relevant international standards; the plans will address the following: <ul style="list-style-type: none"> • Interaction with fisherfolk. • Agreements and protocols governing interactions between public and private security forces in the MEZ, including agreed standard operating procedures governing the use of force. • Common understanding between public and private security forces that cover the Voluntary Principles. • Consultation with security forces and fisherfolk.
GNL08	The project will consider the issue of double resettlement into its resettlement plan.
GNL09	The Project will engage proponents of the third-party developments and relevant government agencies to consider options for management measures to address significant cumulative impacts. Options could cover: project design, scheduling, construction management or operations management.
GNL10	The project will participate in regional cumulative environmental management initiatives being developed in collaboration with operators of current projects, developers of proposed projects, and led by the government. It is envisaged that initiative management priorities would be defined for implementation by industry participants. Objectives are expected to include: creation of a governance structure; assessment of regional cumulative impacts based on collective baseline data and ESIA's that have been prepared for projects in the region; establishment and monitoring of environmental and social thresholds; collaborative development of cumulative impact management plans and mitigation measures.
GNL11	The Project will ensure that the proponents of the associated facilities are made aware of the construction schedule so that construction activities can be strategically planned to reduce disruption.
GNL12	The project will work with the Mpirani waste facility, the local government and communities on the Chongoleani Peninsula to understand the dispute and conflict context and to co-ordinate management approaches and develop joint mitigation measures.

Table E4.2-8 Stakeholder Engagement Plan – Construction Phase

ID	Mitigation Commitment
HR01	Financial management workshops will be held with workers to raise levels of financial literacy. During the recruitment process and throughout their contract, workers will be advised regularly that the duration of their employment is temporary and that they should maintain their existing livelihoods during this period and prepare through sound financial management for the ultimate termination of their employment.
HR04	A formal structure will be established (e.g. Ethics Committee), which deals with infringement of Human Rights linked to the working environment; a company representative will participate in the Ethics Committee; infringements of the Project labour policy and national regulations will be monitored.
HR08	Stakeholders concerned about child labour will be encouraged to use the grievance mechanism to address project-related child labour concerns.
HR09	The Government will be requested not to use any prison labour for tasks that are, or could be associated with, project activities.
HR13	The Human Resources function will organize periodic town hall-style sessions to provide information and receive labour and working conditions related feedback.
HR16	Community Liaison Officers will hold regular meetings with supply chain workers to address human and labour rights. This includes a focus on harassment including the possibility of demands for sexual favours, or a financial kick-back during the recruitment process.
HR17	The Project will work in partnership with local organizations to address gender bias; female CLOs will be employed to facilitate project employment and to improve the work environment for women. Female CLOs will hold periodic meetings with female employees and community groups to ensure concerns specific to women and children are identified and to solicit suggestions for improvement.
HR20	The Project's commitment to human rights for all stakeholders includes those that self-identify as Indigenous Peoples and the cultural characteristics that form their identity; stakeholder engagement will continue to be completed in a manner that is sensitive to these characteristics and fully documented.
HR21	The Project will consult with appropriate institutions and groups to identify desirable and feasible land use agreements required for the project, in terms of national legislation and IFC Performance Standard 7, with people who self-identify as Indigenous Peoples.
HR22	An awareness campaign targeting schools at sensitive locations within the project AOI will be developed, addressing: <ul style="list-style-type: none"> • Importance of staying in school. • Risks particularly to girls of relationships with transient workers, transactional and commercial sex. • Road safety awareness. • Awareness about their rights. • Project grievance mechanism and their right to use it.
HR24	The Project will develop a campaign focused on providing realistic community expectations with regard to livelihood options and employment opportunities.
HR27	The Project will support Government efforts to clarify disputed land boundaries in the Project area, in particular where it concerns customary right of occupancy of land.
HR38	Project will work in partnership with local organisations to provide support to women seeking employment with the project so that they are better able to express and understand opportunities, benefits and their rights at work.

Table E4.2-8 Stakeholder Engagement Plan – Construction Phase

ID	Mitigation Commitment
INF04	Any planned diversion of utility services, closures of any road or track, or planned traffic diversions will be communicated to local authorities and affected communities at least 72 hours before the works. Information provided to the community will include (as relevant to the diversion) but not be limited to details of the timing and duration of the diversion; the route of traffic diversions; and traffic control measures for road crossings where delays and public safety are key factors.
LIV04	The Project will undertake engagement with pastoralists who are active in the project AOI to build awareness of construction activities and schedule.
LIV05	Grievances arising from the community in relation to maintenance activities at AGIs will be handled in accordance with the project grievance procedure.
LNP04	The Project will continue monitoring of, and liaising with authorities on land speculation. Where required additional interventions will be developed to enhance existing interventions.
LNP06	PACs will be sensitised to recent land speculation and instances of associated violence and informed of actions that can be taken.
MHR01	The Voluntary Principles risk assessment for the MEZ will be updated and completed (prior to construction activity mobilising) in consultation with relevant stakeholders.

E4.2.9 Resettlement Action Plan

The resettlement action plan (RAP) will define the approach for addressing physical and/or economic displacement of Project Affected Persons (PAPs) and will include the mitigation measures listed below.

Table E4.2-9 Resettlement Action Plan – Construction Phase

ID	Mitigation Commitment
BIO37	The need to compensate for trees removed will be determined on a site-by-site basis and will take into account the species removed. Preference will be given to native species representative of adjacent undisturbed areas. No exotic species will be planted unless specifically required by the forestry agency. In areas of plantation forestry, the requirements of the forestry agency will be met (e.g., ratios for compensation planting).
CHSW02	Local people will be consulted on the optimum location of crossing points and pastoralists informed of the access restrictions in advance, advising them to avoid cultivated areas. Crossing points will be provided across open trenches and welded pipes and gaps will be left in soil stacks and pipe strings at strategic locations. Incidents in conflicts between crop farmers and herders in the vicinity of the project footprint will be monitored and support will be provided to local authorities to obtain a resolution in cases of conflict wherever possible.
CHSW27	Spouses will be consulted and present during the land surveys, entitlement briefings and compensation agreements and both spouses will sign the compensation agreements.

Table E4.2-9 Resettlement Action Plan – Construction Phase

ID	Mitigation Commitment
GNL04	For prospecting and mining licences that are traversed by the pipeline corridor and AGIs, the project will reach agreement with the Ministry of Minerals (MoM) on the way that mining rights will be extinguished in the affected corridor. The project will engage with both the Ministry of Minerals and the Ministry of Lands, Housing and Human Settlements Development on the proposed compensation framework for affected prospecting and mining operations.
GNL08	The project will consider the issue of double resettlement into its resettlement plan.
GNL10	The project will work closely with the government and other developers to understand past, current and planned resettlement processes for other developments with potential for cumulative double displacement impacts.
HR21	The Project will consult with appropriate institutions and groups to identify desirable and feasible land use agreements required for the project, in terms of national legislation and IFC Performance Standard 7, with people who self-identify as Indigenous Peoples.
HR26	The Project will deal directly with those having customary rights of occupancy to land; with the compensation process witnessed by appropriate third party to minimize the risk of interference by intermediaries.
HR27	The Project will support Government efforts to clarify disputed land boundaries in the Project area, in particular where it concerns customary right of occupancy of land.
HR37	The Project will use international criteria and considerations (in terms of IFC Performance Standard 7) to inform content of the Resettlement Action Plan with regard to people who self-identify as Indigenous Peoples.
INF07	If project activities affect land-based livelihoods because of interruption to irrigation, drainage or agricultural production, appropriate compensation will be provided in accordance with the RAP.
LIV01	The community health, safety and security plan will include measures to reduce the spread of animal diseases due to increased movement of livestock.
LIV05	Grievances arising from the community in relation to maintenance activities at AGIs will be handled in accordance with the project grievance procedure.
LIV06	Post RAP monitoring of PAPs engaged in gold ASM or high value crop cultivation, particularly female headed households, youth and casual, landless artisanal miners, will be implemented. Additional measures will be developed and implemented where necessary to ensure livelihoods are restored to pre-project levels.
LNP03	A Resettlement Policy Framework (RPF) has been developed in line with national legislation, Good International Industry Practice (GIIP) and IFC Performance Standard 5. The RPF will outline procedures related to compensation for loss of assets and livelihood restoration. A Resettlement Action Plan (RAP) will describe the modalities of identifying Project Affected People (PAP) and the procedures related to compensation for loss of assets and livelihood restoration strategies. Post resettlement monitoring of livelihood restoration measures will be implemented. Additional measures will be developed and implemented where necessary to ensure livelihoods are restored as a minimum to pre-project levels.
LNP04	The Project will continue monitoring of, and liaising with authorities on land speculation. Where required additional interventions will be developed to enhance existing interventions.

Table E4.2-9 Resettlement Action Plan – Construction Phase

ID	Mitigation Commitment
LNP05	An evaluation of the land acquisition process at the MST site will be undertaken and a gap analysis conducted in terms of international standards; measures will be applied to remedy any gaps.
MHR01	The Voluntary Principles risk assessment for the MEZ will be updated and completed (prior to construction activity mobilising) in consultation with relevant stakeholders.

E4.2.10 Labour Management Plan

The labour management plan (LMP) will define the approach to ensure recruitment practices and working conditions comply with legal requirements and project standards. The LMP will include the mitigation measures listed below.

Table E4.2-10 Labour Management Plan – Construction Phase

ID	Mitigation Commitment
BIO05	Hunting, fishing, unauthorised gathering of products (including plants and firewood) and deliberate disturbance or harassment of fauna will be prohibited for project personnel. The Project will restrict the purchase of wildlife related products and crafts by project workers.
BIO39	The Project will prohibit all staff and contractors from the possession, purchase, trade or collection of wildlife or living natural resources that are nationally legally protected, CITES listed, or classed as threatened by the IUCN Red List.
CHSW09	Only trained, certified and physically fit drivers will drive vehicles. Night-time driving will be by exception only.
CHSW14	The Voluntary Principles on Security and Human Rights will be implemented; compliance will be monitored.
CHSW15	Pre-deployment screenings will be described in the LMP and communicated during the recruitment process
CHSW31	A HIV/STD awareness and prevention programme will be put in place at the rest stops used by project drivers to address: <ul style="list-style-type: none"> •awareness and understanding among drivers about the risks of HIV and STDs •the associated health implications •the preventative measures that can be taken •community awareness meetings •counselling and testing services •the distribution of information, leaflets and condoms.
CHSW32	A vaccination plan will be identified to prevent communicable diseases for which vaccinations are available from being transmitted between the national/international and local workforce. This plan will apply to all project workers and visitors.
ECO03	Compliance with project human resources policies and procedures will be a construction contract requirement.

Table E4.2-10 Labour Management Plan – Construction Phase

ID	Mitigation Commitment
ECO04	<p>An approved recruitment procedure will be implemented that:</p> <ul style="list-style-type: none"> • Is transparent and open to all regardless of race, political opinion, colour, creed, sexuality or gender. • Includes a local recruitment strategy. • Considers social and cultural sensitivities. • Describes the employment criteria for the recruitment of professional, semiskilled and unskilled labour. • Prohibits discrimination or harassment of job applicants. <p>Job descriptions will advertise vacancies in local languages in the PACs through accessible media and on the project website.</p> <p>Targets for local recruitment from project-affected communities will be set by the project. These will be designed to meet legal requirements. An employment office will be established in the local area to conduct local recruitment.</p>
ECO05	<p>A public awareness programme to communicate employment and training opportunities will be implemented that includes but is not limited to:</p> <ul style="list-style-type: none"> • The local recruitment strategy. • Criteria for employment. • The number and types of employment opportunities. • The procedure for applying for employment. <p>Information will be disseminated publicly, including via media announcements at regional and national levels and during public meetings in PACs.</p> <p>Care will be taken to reach women and vulnerable groups if necessary through targeted meetings scheduled at times and locations that may increase women's participation</p>
ECO07	<p>A retrenchment plan will be prepared, using the principles in the International Finance Corporation's Good Practice Note No. 4: Managing Retrenchment, 2005, with the aim of reducing the impacts of cessation of employment contracts.</p>
ECO08	<p>Before construction, a benchmarking exercise gathering data associated with average incomes in the private and public sector for each region/district will be undertaken. This information will be used to identify salary levels for the construction workforce so that disparities between project-related salaries and local businesses/public sector salaries are avoided.</p>
HR01	<p>Financial management workshops will be held with workers to raise levels of financial literacy. During the recruitment process and throughout their contract, workers will be advised regularly that the duration of their employment is temporary and that they should maintain their existing livelihoods during this period and prepare through sound financial management for the ultimate termination of their employment.</p>
HR03	<p>The workers' grievance procedure will include the option to log grievances anonymously.</p>
HR04	<p>A formal structure will be established (e.g. Ethics Committee), which deals with infringement of Human Rights linked to the working environment; a company representative will participate in the Ethics Committee; infringements of the Project labour policy and national regulations will be monitored.</p>
HR05	<p>Hiring managers from (sub) contractors will receive training regarding the developer's non-discrimination policies.</p>
HR06	<p>Gender-based hiring criteria will be included in tendering documents, so that it becomes part of the selection criteria for (sub) contractors; contracts will include targets stipulating a minimum number of women as well as staff with disabilities or other vulnerable groups.</p>

Table E4.2-10 Labour Management Plan – Construction Phase

ID	Mitigation Commitment
HR07	As a standard clause in all contracts, no employees shall be hired, directly or indirectly, under the age of 18 years of age. It will be the responsibility of the developer to ensure that no children under the age of 18 are involved in their supply chain. If periodic inspections and audits identify children under the age of 18 being hired by the developer, this will be considered a breach of contract and the child will be removed from the workplace. Their salary may continue to be paid to them for a set period pending the putting in place an alternative solution.
HR09	The Government will be requested not to use any prison labour for tasks that are, or could be associated with, project activities.
HR10	Contracts will not include provisions that may support forced labour; for example, requests of deposit guarantees from employees to have access to safety protection equipment or other materials.
HR11	As part of the work site induction, all staff will be informed on workers' rights.
HR12	The Project will require that all workers in similar jobs work under the same, or similar, working conditions (salary, vacation, insurance etc.)
HR13	The Human Resources function will organize periodic town hall-style sessions to provide information and receive labour and working conditions related feedback.
HR14	All workers will have contracts describing conditions of work and will have the contents explained to them. This includes their legal rights under national law. Contracts will be available in workers' native languages written in easily understandable language. Contracts will state terms of employment and duration and specifically address: <ul style="list-style-type: none"> • salary • working conditions • working hours and overtime • holidays and sick leave • social security and compensation • health insurance • access to remedy. • medical leave • other provisions related to medical care.
HR15	A due diligence evaluation of each (sub) contractor's human rights record related to labour and working conditions will be conducted.
HR17	The Project will work in partnership with local organizations to address gender bias; female CLOs will be employed to facilitate project employment and to improve the work environment for women. Female CLOs will hold periodic meetings with female employees and community groups to ensure concerns specific to women and children are identified and to solicit suggestions for improvement.
HR18	Ensure that benefits for spouses or dependants of employees (such as health insurance or pension schemes) are offered on a non-discriminatory basis.
HR19	The employee Code of Behaviour will include a clause that a sexual relation based on power inequality will lead to instant dismissal of the senior person.
HR25	The OHSSP, LMP and the CHSSP will include strategies for implementing the Voluntary Principles on Security and Human Rights.
HR38	Project will work in partnership with local organisations to provide support to women seeking employment with the project so that they are better able to express and understand opportunities, benefits and their rights at work.

Table E4.2-10 Labour Management Plan – Construction Phase

ID	Mitigation Commitment
HR39	Equal remuneration for jobs of equal value for men and women will be provided.
HR40	An independent labour rights related monitoring and evaluation system will be established, possibly in collaboration with the national regulatory agencies, to ensure that policies are adhered to and national legislation is followed.
WHSW07	Project approved vehicles will be provided to transport camp residents to worksites.
WHSW11	A workers' code of conduct outlining expected worker behaviours will be developed and implemented. This code of conduct will cover the interaction between the national and international workforce and local workforce but also interactions with unemployed PAC members. Compliance with the workers' code of conduct will be a contractual requirement for all contractor, including subcontractors' employees. In the event of non-compliance, workers will be disciplined in accordance with project disciplinary procedures and structures.
WHSW13	Prior to construction, a project workers' grievance procedure will be implemented, which will detail the processes for recording, investigating and, where necessary, implementing corrective actions relating to complaints, including the responsibility of the contractor. The workers' grievance procedure will: <ul style="list-style-type: none"> • be available for use by all workers, including subcontractor workers and workers in the primary supply chain; • be displayed at visible places in all camps and work sites.
WHSW14	Hours worked by all project personnel will be according to their contracts and national regulatory requirements.
WHSW16	PPE appropriate for the task will be provided to all workers.
WHSW20	The labour management plan will include: <ul style="list-style-type: none"> • Compliance with international labour standards, national labour laws and regulations concerning transparency, accountability, anticorruption and human rights; • Recognising workers' right to organise collective bargaining and trade unions; • Providing suitable working conditions, including rest facilities and breaks; • Mechanism of compliance with the ILO Maternity Protection Convention (2000); and • Respecting workers' rights to privacy including data protection requirements.

E4.2.11 Project Induced In-Migration Management Plan

The project induced in-migration management plan (PIIMP) will define the approach to prevent project induced in-migration and manage negative impacts of potential project induced in-migration and will include the mitigation measures listed below.

Table E4.2-11 Project Induced In-Migration Management Plan – Construction Phase

ID	Mitigation Commitment
CHSW33	Construction camps will be designated as having "closed" status to prevent interactions between the workforce and PACs and prevent the spread of communicable disease. Policies will be developed to manage transgressions within the project disciplinary procedures and structures.

Table E4.2-11 Project Induced In-Migration Management Plan – Construction Phase

ID	Mitigation Commitment
ECO06	A PIIMP will aim to reduce the number of people that arrive into project-affected communities; the PIIM will also identify requirements for: <ul style="list-style-type: none"> • Monitoring effects of in-migration and demographic change. • Monitoring relations between communities and in-migrants. • Education of project workers and local communities on impacts related to in-migration.
ECO13	The Project will conduct ongoing monitoring and liaise with authorities to review social changes in these PACs: <ul style="list-style-type: none"> • Putini and Chongoleani (Tanzania) • Tanganyika town (Nzega district, Tanga region, Tanzania) Where required additional interventions will be developed to enhance existing interventions (e.g., PIIM management plan).
HR33	The Project will identify potential PIIM areas of concern and work with local leaders to establish mitigation measures that will include informing PACs of risks and opportunities associated with PIIM.

E4.2.12 Procurement and Supply Chain Management Plan

The procurement and supply chain management plan (PSCMP) will define the approach to supply chain management including environmental, social and quality considerations, maximise the purchase of local goods and services, and will include the mitigation measures listed below.

Table E4.2-12 Procurement and Supply Chain Management Plan – Construction Phase

ID	Mitigation Commitment
BIO39	The Project will prohibit all staff and contractors from the possession, purchase, trade or collection of wildlife or living natural resources that are nationally legally protected, CITES listed, or classed as threatened by the IUCN Red List.
ECO01	A Procurement and Supply Chain Management Plan (PSCMP) will be developed to maximise the purchase of goods and services from within Uganda/Tanzania. This will be contingent on whether local suppliers can offer sufficient quality and reliability and can meet project requirements. PSCMP will include, as appropriate, enterprise development, capacity development and ring-fencing contracts.
ECO02	Project use of third-party quarries and borrow pits will require verification of national regulatory and project standard compliance; where suppliers do not meet project standards an action plan will be implemented to build capacity, so the supplier can meet the project standard in a timely manner.
ECO03	Compliance with project human resources policies and procedures will be a construction contract requirement.
ECO09	Before construction, a benchmarking exercise to gather data associated with average prices for goods will be undertaken in each region/district. This information will be used to identify appropriate prices so that large price disparities between project-procured goods and local goods are avoided.

Table E4.2-12 Procurement and Supply Chain Management Plan – Construction Phase

ID	Mitigation Commitment
HR02	As part of the tendering process, (sub) contractors will be required to include training components in their proposal aimed at increasing local employment as well as improving skills of local staff.
HR05	Hiring managers from (sub) contractors will receive training regarding the developer's non-discrimination policies.
HR06	Gender-based hiring criteria will be included in tendering documents, so that it becomes part of the selection criteria for (sub) contractors; contracts will include targets stipulating a minimum number of women as well as staff with disabilities or other vulnerable groups.
HR07	As a standard clause in all contracts, no employees shall be hired, directly or indirectly, under the age of 18 years of age. It will be the responsibility of the developer to ensure that no children under the age of 18 are involved in their supply chain. If periodic inspections and audits identify children under the age of 18 being hired by the developer, this will be considered a breach of contract and the child will be removed from the workplace. Their salary may continue to be paid to them for a set period pending the putting in place an alternative solution.
HR12	The Project will require that all workers in similar jobs work under the same, or similar, working conditions (salary, vacation, insurance etc.)
HR15	A due diligence evaluation of each (sub) contractor's human rights record related to labour and working conditions will be conducted.
HR18	Ensure that benefits for spouses or dependants of employees (such as health insurance or pension schemes) are offered on a non-discriminatory basis.
HR19	The employee Code of Behaviour will include a clause that a sexual relation based on power inequality will lead to instant dismissal of the senior person.
LNP02	Any new aggregate extraction sites and batching plants sites, including 3rd party sites, will undergo environmental and social evaluation prior to use; and, where possible, new sites will be located as close as possible to the existing road network to reduce the requirement for new access roads.

E4.2.13 Infrastructure and Utilities Management Plan

The infrastructure and utilities management plan (IUMP) will define the approach to monitor use of and/ or accidental damage to infrastructure and utilities and define the process of corrective action and will include the mitigation measures listed below.

Table E4.2-13 Infrastructure and Utilities Management Plan – Construction Phase

ID	Mitigation Commitment
ACO09	The Project will conduct regular inspection of access roads to check for damage caused by project vehicles to repair damage in a timely and efficient manner. Strict load management will be enforced on all project vehicles.
INF01	For major road crossings, crossing techniques that minimize the obstruction of traffic flow will be selected.

Table E4.2-13 Infrastructure and Utilities Management Plan – Construction Phase

ID	Mitigation Commitment
INF02	A preconstruction survey area will be defined where there is potential for vibration effects on dwellings and buildings. The survey (including photographs) will record the external condition of dwellings and buildings before construction, provide baseline evidence in the event of a claim for damage, and will inform pre-entry agreements that will also include repair requirements.
INF03	Potentially affected landowners, land users, communities and other affected stakeholders (e.g. tourism operators) will be consulted if there is likely to be any disruption to the existing infrastructure and utility services. Feedback from communities will inform planning of the works, especially when determining the options for temporary alternatives.
INF04	Any planned diversion of utility services, closures of any road or track, or planned traffic diversions will be communicated to local authorities and affected communities at least 72 hours before the works. Information provided to the community will include (as relevant to the diversion) but not be limited to details of the timing and duration of the diversion; the route of traffic diversions; and traffic control measures for road crossings where delays and public safety are key factors.
INF05	A crossing schedule, including all known roads, telephone and electricity facilities and oil, gas and water pipes, will be maintained. Owners and service operators will be consulted and full agreement gained to cross the infrastructure or utility. Where a third-party utility service will be crossed by the project, a method statement that includes measures to protect the integrity of the utility service will be agreed with the service operator before work can start.
INF06	The Project will notify third-party utility services of any damage and the damage will be repaired promptly in consultation with the service operator or utility owner. A timetable for repair of any damaged infrastructure will be agreed with the service operator or utility owner and communicated to affected communities.
INF07	If project activities affect land-based livelihoods because of interruption to irrigation, drainage or agricultural production, appropriate compensation will be provided in accordance with the RAP.
INF08	Authorities will be notified when oversize heavy loads need to be transported and such loads will be escorted by the project.
INF09	The design of new road sections and upgrades will take account of local conditions to ensure maintenance of good road condition, for example inclusion of drainage ditches.
INF10	A post-construction exit survey will be conducted covering all areas surveyed during preconstruction (and any additional land requirements during construction) to assess the condition of dwellings, roads used including bridges, drainage structures, signage, traffic management and other road infrastructure. Any actions, such as repairs, arising from the exit survey will be closed out on a timely basis to allow a prompt return to the relevant authority, village or landowner.
INF11	Infrastructure and utility services will be identified and protected during construction.
INF12	Where disruption to infrastructure and utilities will occur for more than 12 hours, a risk analysis of impacts on affected settlements will be completed. Where there will be a risk to health or livelihood to settlements or where the disruption is not acceptable to the affected settlements, alternatives will be provided.

Table E4.2-13 Infrastructure and Utilities Management Plan – Construction Phase

ID	Mitigation Commitment
INF13	An initial survey, supported by photographs, will be completed of the condition of roads to be used by the project including but limited to bridges, drainage structures, signage, traffic management and other road infrastructure. The survey will be agreed and signed by the road authority, local authority and any affected landowner. The survey will be made available to the road authority and municipal authorities if requested. The chosen project access routes will be improved as required to provide safe access for the project duration.
INF15	To avoid disruption to Tanzania Railways Limited's (TRL's) existing railroad schedule, a timetable of movement of project-related goods will be agreed with the Government of Tanzania and TRL. Feedback from TRL will be taken into account during planning of schedule for the movement of project-related goods. In the event of unplanned disruptions to the scheduled movement of project-related goods, TRL will be consulted 72 hours in advance. The project will also have monthly meetings with TRL during construction to evaluate progress on the movement of project-related goods and address arising operational matters.
INF16	Where there is potential for congestion on shared transport routes, the project will liaise with third party developers, the police and authorities to identify and implement additional traffic management measures that limit disruption.

E4.2.14 Community Health, Safety and Security Plan

The community health, safety and security plan (CHSSP) will define approach to manage community health, safety and security issues and will include the mitigation measures listed below.

Table E4.2-14 Community Health, Safety and Security Plan – Construction Phase

ID	Mitigation Commitment
ACO08	Blasting will only be used where other excavation methods are considered technically impracticable or uneconomic. Where blasting is undertaken, a Blast Management Plan will be developed to consider the effects of noise, air overpressure and vibration on dwellings, structures and wildlife, and develop appropriate mitigation where required. The Blast Management Plan will be prepared by a competent person and peer reviewed.
BIO06	Appropriate measures will be implemented to prevent fauna or people from entering welded pipe sections or open excavations; there will be fauna ladders placed at suitable intervals in all open excavations. Animals will be removed safely and released into suitable habitat away from the working area.
BIO15	The maximum length of open trench at any one time (per spread) will be defined based on: <ul style="list-style-type: none"> • the habitats present and potential ecological sensitivities (e.g., terrestrial commuting routes for large mammals) • community safety. Gaps will also be left in soil stacks and pipe strings at strategic locations to allow passage of animals where it is considered safe to do so.
CHSW01	A strict project maximum speed limit will be enforced for project vehicles.

Table E4.2-14 Community Health, Safety and Security Plan – Construction Phase

ID	Mitigation Commitment
CHSW02	Local people will be consulted on the optimum location of crossing points and pastoralists informed of the access restrictions in advance, advising them to avoid cultivated areas. Crossing points will be provided across open trenches and welded pipes and gaps will be left in soil stacks and pipe strings at strategic locations. Incidents in conflicts between crop farmers and herders in the vicinity of the project footprint will be monitored and support will be provided to local authorities to obtain a resolution in cases of conflict wherever possible.
CHSW03	Security personnel engaged by the project will receive training on Voluntary Principles (this will include where army and or security forces are engaged by the project); performance will be monitored.
CHSW05	Where a safety risk assessment has identified a potential for construction interfaces to cause traffic accidents, temporary traffic control measures (signage, flagmen, temporary traffic lights, barricades) will be implemented.
CHSW11	Construction barriers will have visible warning signs understandable by local communities. Signage will be in accordance with internationally accepted symbols and/or be well known to local communities.
CHSW12	A risk assessment will be conducted for excavations with consideration to community safety.
CHSW14	The Voluntary Principles on Security and Human Rights will be implemented; compliance will be monitored.
CHSW19	Community awareness programmes will be developed and implemented in project-affected communities to explain: <ul style="list-style-type: none"> • road safety risks and how to increase the safety of pedestrians particularly children • how to ensure their safety during construction • the measures that have been, or will be, implemented to protect their health and safety (e.g., provision of safe access).
CHSW20	Vehicle movements will be restricted to defined access routes and demarcated working areas (unless in the event of an emergency).
CHSW21	Public awareness programmes for stakeholders will include a specific section about the security presence around camps and security protocols which apply.
CHSW23	As part of the CHSSP, community-based awareness programmes in high risk communities will be developed and implemented. The main focus of such programmes will be reducing the risk of increased HIV/AIDS/TB transmission but will also consider awareness raising on malaria control and water, sanitation and Hygiene.
CHSW33	Construction camps will be designated as having “closed” status to prevent interactions between the workforce and PACs and prevent the spread of communicable disease. Policies will be developed to manage transgressions within the project disciplinary procedures and structures.
CHSW34	As part of the CHSSP, a cooperation agreement with the Council Health Management Teams (CHMT) will be reached including periodic meetings to discuss potential health impacts, proposed mitigation measures and longitudinal monitoring of specific key health indicators during construction.
HR25	The OHSSP, LMP and the CHSSP will include strategies for implementing the Voluntary Principles on Security and Human Rights.

Table E4.2-14 Community Health, Safety and Security Plan – Construction Phase

ID	Mitigation Commitment
HR34	An Information Education and Communication (IEC) programme will be developed for workers addressing social conduct and including topics such as: gender-based violence and, drug and alcohol misuse. The IEC programme will explore opportunities to support community initiatives addressing vulnerable groups including gender balance.
HR35	As part of the CHSSP, implement community patrols during the evenings to monitor and minimise night-time activity in project construction areas.
LIV01	The community health, safety and security plan will include measures to reduce the spread of animal diseases due to increased movement of livestock.
LIV03	The CHSSP will describe requirements to be implemented for vehicles passing through areas where animal disease control measures are in place.
MHR01	The Voluntary Principles risk assessment for the MEZ will be updated and completed (prior to construction activity mobilising) in consultation with relevant stakeholders.
SOL05	Local communities will be discouraged from using the right-of-way as an access road during construction through signage, awareness raising and the use of communication materials.

E4.2.15 Occupational Health, Safety and Security Plan

The occupational health, safety and security plan (OHSSP) will define the management of workforce occupational health, safety and security and will include the mitigation measures listed below.

Table E4.2-15 Occupational Health, Safety and Security Plan – Construction Phase

ID	Mitigation Commitment
CHSW04	As part of the OHSSP, a Substance Misuse Management Plan will be developed and implemented, focusing on zero tolerance of drugs and alcohol. Random drugs and alcohol testing of personnel will be conducted, recorded and audited regularly.
CHSW06	A malaria and other vector control management plan will be developed and implemented to ensure adequate control over malaria and other vector-related conditions in camps.
CHSW07	As part of the project OHSSP, a Communicable Disease Management Plan will be developed to manage infectious disease outbreaks in Project facilities and prevention of spread to PACs.
CHSW13	As part of the OHSSP, pipe skid supports will be constructed to a suitable standard to prevent risks to public and worker safety.
CHSW14	The Voluntary Principles on Security and Human Rights will be implemented; compliance will be monitored.
CHSW15	Pre-deployment screenings will be described in the LMP and communicated during the recruitment process
CHSW16	As part of the project OHSSP, vector management on all project sites will be risk based. Corridor controls for landscape maintenance, as well as integrated pest

Table E4.2-15 Occupational Health, Safety and Security Plan – Construction Phase

ID	Mitigation Commitment
	management procedures (environmental, biological and chemical), will be implemented.
CHSW24	As part of OHSSP, Health Design Specifications, adequate drainage and the avoidance of standing water will be considered in camp site selection, construction and operation.
CHSW31	A HIV/STD awareness and prevention programme will be put in place at the rest stops used by project drivers to address: <ul style="list-style-type: none"> •awareness and understanding among drivers about the risks of HIV and STDs •the associated health implications •the preventative measures that can be taken •community awareness meetings •counselling and testing services •the distribution of information, leaflets and condoms.
CHSW32	A vaccination plan will be identified to prevent communicable diseases for which vaccinations are available from being transmitted between the national/international and local workforce. This plan will apply to all project workers and visitors.
CHSW33	Construction camps will be designated as having “closed” status to prevent interactions between the workforce and PACs and prevent the spread of communicable disease. Policies will be developed to manage transgressions within the project disciplinary procedures and structures.
ECO10	Senior project security personnel will liaise directly with the army and/or security forces to provide information on project construction activities and schedules.
GNL07	The Occupational Health, Safety and Security plan and the Community Health, Safety and Security Plan will be developed in line with the Voluntary Principles on Security and Human Rights and other relevant international standards; the plans will address the following: <ul style="list-style-type: none"> • Interaction with fisherfolk. • Agreements and protocols governing interactions between public and private security forces in the MEZ, including agreed standard operating procedures governing the use of force. • Common understanding between public and private security forces that cover the Voluntary Principles. • Consultation with security forces and fisherfolk.
HR23	As part of Camp Management Standards, menus in project facility canteens will be developed in consultation with a dietician to ensure adequate nutrition, cultural acceptability, portion size and diversity that is acceptable to all workers.
HR25	The OHSSP, LMP and the CHSSP will include strategies for implementing the Voluntary Principles on Security and Human Rights.
HR28	As part of the project OHSSP, a job-specific risk assessment (RA) process will be developed to consider: <ul style="list-style-type: none"> • risks associated with project activities; • mitigation measures (PPE, etc.); and • knowledge and understanding of the local workforce. Based on the outcome of the RA process, appropriate management measures will be developed and implemented prior to any activities being undertaken.
HR29	Risks from and mitigation of Worker Fatigue will be specifically addressed in the Occupational Health, Safety and Security Plan and the Transport and Road Safety

Table E4.2-15 Occupational Health, Safety and Security Plan – Construction Phase

ID	Mitigation Commitment
	Management Plan; the latter will stipulate driving hours and night driving will be by exception only.
HR30	Specific classes of hazards will be identified in work areas, including physical, chemical, biological, and radiological hazards and communicated to the workforce.
HR31	As part of the OHSSP, special attention will be paid to the health and safety of pregnant women, disabled employees and other vulnerable workers.
HR32	PPE and safety gear will take into account gender differences and the special needs of pregnant women.
HR36	As part of the project OHSSP, ensure that vector management on all project sites (camps and construction) align with national vector control programmes and strategies.
WHSW01	Provision of food to workers will be planned to cater for workforce requirements and therefore minimise food waste as far as possible.
WHSW02	As part of the project OHSSP, construction camps will be designed and built to meet national requirements and regulations. Measures will be detailed to avoid and reduce impacts associated with the development and occupation of construction camps, including but not limited to: <ul style="list-style-type: none"> • suitable and sufficient welfare facilities will be provided appropriate for both genders • clean and sanitary toilet facilities and showers will be provided appropriate for both genders. • adequate segregation between different areas (e.g. accommodation and hazardous areas) • measures to reduce or remove community disturbance or nuisance from the camps, e.g. preventing litter, dust generation, odours and noise. • include a helicopter landing area and secure fencing around the boundary.
WHSW03	Provide workers with personal protection from prevalent diseases where feasible (e.g., condoms and ITN).
WHSW04	As part of camp management standards, procedures will be developed to maintain the condition of each camp and to ensure camp facilities are kept clean and hygienic.
WHSW05	As part of the OHSSP, a food and water management plan will be developed and implemented to reduce the risk of water- and food-borne disease outbreaks occurring among the workers and the associated risk of transmission to local communities.
WHSW06	As part of the OHSSP Risk Assessment process, the risk to worker health posed by wildlife at each camp and yard will be assessed and appropriate management measures will be developed and implemented.
WHSW08	As part of the OHSSP, a first aid needs assessment will be undertaken for each camp to determine first aider and first aid kit requirements (e.g., qualifications, content of kits, locations).
WHSW09	As part of the OHSSP, a pest control plan will be developed for implementation on construction camps.
WHSW10	As part of Camp Management Standards, pets will be prohibited in construction camps/MCPYs.

Table E4.2-15 Occupational Health, Safety and Security Plan – Construction Phase

ID	Mitigation Commitment
WHSW12	As part of the OHSSP, a risk-based worksite and construction camp training programme will be developed and administered to the workforce, vendor representatives and site visitors; the training programme (including daily toolbox meetings) will be updated in accordance with changes made in scope, incident statistics and/or regulatory requirements. Daily toolbox meetings will be held where health and safety issues will be discussed.
WHSW15	A medical emergency response plan will be developed and implemented to ensure that emergency cases can be dealt with without impacting on district health services.
WHSW18	MCPYs will have health facilities with sufficient capacity and capability to prevent additional pressure being placed on local and district health services.
WHSW19	As part of the OHSSP, basic workplace wellness programs that are culturally and religiously acceptable will be developed and implemented.

E4.2.16 Transport and Road Safety Management Plan

The transport and road safety management plan (TRSMP) will guide project logistics and support community and driver road safety during project related transportation activities and will include the mitigation measures listed below.

Table E4.2-16 Transport and Road Safety Management Plan – Construction Phase

ID	Mitigation Commitment
ACO09	The Project will conduct regular inspection of access roads to check for damage caused by project vehicles to repair damage in a timely and efficient manner. Strict load management will be enforced on all project vehicles.
CHSW01	A strict project maximum speed limit will be enforced for project vehicles.
CHSW05	Where a safety risk assessment has identified a potential for construction interfaces to cause traffic accidents, temporary traffic control measures (signage, flagmen, temporary traffic lights, barricades) will be implemented.
CHSW08	A transport and road safety management plan based on project policies, site-specific traffic risk assessments and safe driving procedures will be developed and implemented.
CHSW09	Only trained, certified and physically fit drivers will drive vehicles. Night-time driving will be by exception only.
CHSW10	Where appropriate, such as built up areas, a banksman will be used for reversing vehicles.
CHSW17	Community liaison officers will encourage PAC Leadership to provide advance warning of local events so that construction activities can be avoided at these times.
CHSW20	Vehicle movements will be restricted to defined access routes and demarcated working areas (unless in the event of an emergency).
CHSW26	Rest areas will be identified to allow drivers to comply with rest stop requirements and maximum daytime driving hours

Table E4.2-16 Transport and Road Safety Management Plan – Construction Phase

ID	Mitigation Commitment
HR29	Risks from and mitigation of Worker Fatigue will be specifically addressed in the Occupational Health, Safety and Security Plan and the Transport and Road Safety Management Plan; the latter will stipulate driving hours and night driving will be by exception only.
INF08	Authorities will be notified when oversize heavy loads need to be transported and such loads will be escorted by the project.
INF14	Preference will be given to transport of pipe and other construction materials by rail to Isaka where feasible.

E4.2.17 Emergency Preparedness and Response Plan

The emergency preparedness and response plan (EPRP) will define the approach to emergency preparedness and response and will include the mitigation measures listed below.

Table E4.2-17 Emergency Preparedness and Response Plan – Construction Phase

ID	Mitigation Commitment
EPR01	A spill response procedure based on Tier 1, 2 and 3 spill responsibilities defined in the Emergency Preparedness and Response Plan will be developed together with other responsible parties, and the necessary equipment and resources will be procured to implement it. The procedure will cover: <ul style="list-style-type: none"> • responses for any unintended or unauthorised release of a potentially hazardous material, identification of locations where spill response equipment and resources will be provided, and procedures for its deployment • contact details for the rapid response team and spill response organisation • notification requirements. • All Tier 1, 2 and 3 spills will be reported in accordance with the project incident reporting system.
EPR03	A schedule of emergency response exercises will be implemented to verify the project's emergency preparedness. A report of each exercise will be written and any areas for improvement identified.
EPR04	In the event of a spillage of hazardous materials the following actions will take place: <ul style="list-style-type: none"> • A trained rapid response team will be mobilised • Spill response personnel and equipment will be provided to contain, cleanup and remediate (Tier 1 spills). A wider range of resources will be utilised to contain, cleanup and remediate Tier 2 and Tier 3 spills.
WHSW15	A medical emergency response plan will be developed and implemented to ensure that emergency cases can be dealt with without impacting on district health services.

E4.2.18 Monitoring and Reporting Plan

The monitoring and reporting plan will define the approach to ensure that monitoring, inspections and audits are undertaken in a systematic way in order to monitor the success of the environmental and social mitigation measures as well as

gather data on environmental and social performance, investigation of incidents and non-conformance monitoring results. Monitoring approach for each identified potential impact is described in the ESMP matrix ([Appendix K](#)), complete with monitoring parameter, target criteria and monitoring frequency. The plan will include the mitigation measures listed below.

Table E4.2-18 Monitoring and Reporting Plan – Construction Phase

ID	Mitigation Commitment
GNL14	The Project will monitor and report on project environmental and social performance as required by national legislation and as required by the ESMP.
MBIO12	Monitoring of suspended sediment and sedimentation will be described in the Monitoring and Reporting Plan; results will inform remedial action.

E4.3 Operational Phase

E4.3.1 Biodiversity Management Plan

The biodiversity management plan (BMP) will define the approach to reduce impacts on biodiversity and will include the mitigation measures listed below.

Table E4.3-1 Biodiversity Management Plan – Operational Phase

ID	Mitigation Commitment
BIO01	Preconstruction biodiversity surveys will be undertaken at locations identified in the baseline appendices of the environmental and social impact assessment to record details of habitats and species of conservation importance within the working areas. This information will be used to produce site specific biodiversity management plans that will identify fine-scale route changes (where feasible), mark features for retention and protection, develop biorestore measures including seed collection, translocation and species propagation and provide details of the specific mitigation measures (such as seasonal construction restrictions) to be implemented to reduce impacts on biodiversity during construction.
BIO03	As part of the Biodiversity Management plan a vegetation removal method statement to reduce impacts on biodiversity will be developed. This will include but not be limited to measures such as: <ul style="list-style-type: none"> • directional felling of trees on land inside the right-of-way • avoiding damage to trees outside the right-of-way • identifying areas where strimming, coppicing or other works will be undertaken in advance of clearing.
BIO08	A biodiversity survey strategy will be developed to include timings and methods of surveys to be undertaken, including but not limited to: <ul style="list-style-type: none"> • supplemental preconstruction flora and fauna surveys • supplemental preconstruction biodiversity surveys of pre identified species of conservation concern • a biodiversity assessment of watercourses and wetlands • an assessment of fish spawning habitat at open-cut river crossings where the watercourse crossing is planned to occur during the fish-spawning season and International Union for Conservation of Nature or Red Data Book species are known or likely to occur • preconstruction checks on the right-of-way.

Table E4.3-1 Biodiversity Management Plan – Operational Phase

ID	Mitigation Commitment
BIO32	Lighting of the MST will be designed to reduce spill from MST on surrounding habitat used by bats.
BIO34	Operation phase vegetation management activities will account for species of conservation importance and their habitat requirements for foraging, nesting and/or breeding.
BIO36	<p>A strategy for tree removal and replanting will be developed; the strategy will consider:</p> <ul style="list-style-type: none"> • where trees are to be removed, the species and size/age of trees that will be recorded prior to removal; data to be recorded includes: trunk diameter at chest height, number of each species, species and, location • the number of trees and species to be removed during construction • conservation value of the species to be removed • variety of species to be replanted • provenance of species used for replanting • the region-specific environmental characteristics influencing replanting success. <p>Preconstruction surveys will be referred to when deciding suitable locations for replanting of translocated species or species planted to compensate for those removed during construction.</p>
BIO38	Ways to achieve an increasing trend in vegetation regrowth and diversity of desired species, specifically species composition and, plant species that support forage, refuge and nesting for species of conservation importance, in reinstated areas will be sought, with reference to nearby areas undisturbed by project activities. The re-establishment of vegetation will be monitored following reinstatement until long term re-vegetation targets have been reached.
BIO39	The Project will prohibit all staff and contractors from the possession, purchase, trade or collection of wildlife or living natural resources that are nationally legally protected, CITES listed, or classed as threatened by the IUCN Red List.
ECO11	The guidelines and procedures set out in 'Uganda Wildlife Authority (UWA) Operational Guidelines for Oil and Gas Exploration and Production in Wildlife Protected Areas, January 2014' will be implemented and incorporated within project standard operating procedures.

E4.3.2 Pollution Prevention Plan

The pollution prevention plan (PPP) will define the approach to prevent pollution and will include the mitigation measures listed below.

Table E4.3-2 Pollution Prevention Plan – Operational Phase

ID	Mitigation Commitment
ACO01	Meeting the PES will be the project target.
ACO04	Preference will be given to selecting low noise and vibration emitting equipment for all Project activities.
AIR01	<p>Where Project generated dust may affect sensitive receptors, the following mitigation measures will be considered:</p> <ul style="list-style-type: none"> • dust suppression at work-sites and transport routes • adherence to RoW speed limits supplemented by awareness training • sheeting of fine materials being transported or stored on-site

Table E4.3-2 Pollution Prevention Plan – Operational Phase

ID	Mitigation Commitment
AIR02	To minimise emissions to air, vehicles, machines and equipment will: <ul style="list-style-type: none"> • be appropriate for the task required • have a valid maintenance and inspection certificate or log books • be allocated a unique identifier to be used in a maintenance log • be maintained regularly in accordance with the manufacturer's recommendations to maximise fuel efficiency and help reduce emissions • not be allowed to idle – engines will be switched off when not in use.
AIR03	Vehicles or equipment seen to be emitting excessive black smoke will not be permitted to continue work and will be sent for maintenance.
AIR05	All combustion plant will be designed to meet national regulations and project standards with regards to air quality and emission limits.
BIO32	Lighting of the MST will be designed to reduce spill from MST on surrounding habitat used by bats.
EPR04	In the event of a spillage of hazardous materials the following actions will take place: <ul style="list-style-type: none"> • A trained rapid response team will be mobilised • Spill response personnel and equipment will be provided to contain, cleanup and remediate (Tier 1 spills). A wider range of resources will be utilised to contain, cleanup and remediate Tier 2 and Tier 3 spills.
SOL12	Procedures will be developed, incorporating plans for erosion and sediment control and reinstatement. These will be produced before work begins at areas of fragile, sensitive or thin topsoil, side slopes or narrow ridges and at watercourse crossings. Sediment interception measures will be installed, inspected and maintained to prevent sediment runoff from the right-of-way or construction sites affecting watercourses, wetlands, waterbodies or environmentally sensitive areas. Procedures will include additional precautions to be taken and increased monitoring (minimum twice per week), with the aim of preserving the topsoil for subsequent replacement.
WTR01	The storage of hazardous materials will be restricted to designated hazardous materials storage areas at least 50 m from any wetlands, surface watercourse or seasonal water channel. Such storage locations will be subject to site-specific environmental and social risk assessment that will inform site selection and the adoption of any additional mitigation measures. Storage areas for hazardous materials will be bunded (no drainage valves/holes), have impermeable floor and will be covered to minimise the ingress of rainwater.
WTR02	A refuelling procedure will be developed and implemented which will include but not be limited to: <ul style="list-style-type: none"> • details of mobile and static refuelling areas and equipment (e.g. impermeable drip trays) • regulatory / GIIP constraints of refuelling operations to sensitive environmental receptors • spill prevention measures • training on refuelling procedures.

E4.3.3 Waste Management Plan

The waste management plan (WMP) will define the approach to reduce potential waste related impacts and will include the mitigation measures listed below.

Table E4.3-3 Waste Management Plan – Operational Phase

ID	Mitigation Commitment
SOL02	Environmental and social evaluations will be undertaken to identify suitable offsite disposal sites for waste soil and rock, and appropriate management measures to be implemented. All temporary borrow pits and soil and rock disposal sites will be reinstated, unless instructed otherwise by the regulatory authorities, in accordance with pre-entry agreements with landowner and location-specific reinstatement plans will be prepared and implemented.
WHSW01	Provision of food to workers will be planned to cater for workforce requirements and therefore minimise food waste as far as possible.
WTR08	The grey water stream will be separated from black water (e.g. sewage), treated and either reused (e.g., for toilet flushing, dust suppression) or discharged, in accordance with the environment project standards and national environmental guidance and regulations. All wastewater discharges will comply with permit conditions and the project environmental standards.
WTR17	An industry-recognised manufactured grease trap will be installed at the outlet of the kitchen(s) facilities to prevent greases and fats from entering the grey water streams.
WTR18	Treated sewage effluent which is not reused will be preferentially discharged to land. Before any discharge, the soil permeability will be evaluated, and engineered soakaways will be constructed, where required, to avoid impacts on land, surface water drainage and groundwater.

E4.3.4 Natural Resource Management Plan

The natural resource management plan (NRMP) will define the approach to manage natural resource use and will include the mitigation measures listed below.

Table E4.3-4 Natural Resource Management Plan – Operational Phase

ID	Mitigation Commitment
WTR08	The grey water stream will be separated from black water (e.g. sewage), treated and either reused (e.g., for toilet flushing, dust suppression) or discharged, in accordance with the environment project standards and national environmental guidance and regulations. All wastewater discharges will comply with permit conditions and the project environmental standards.
WTR12	An effective collection and disposal systems for stormwater from all paved/hardstanding areas and buildings will be provided at aboveground installations.
WTR24	As part of the permit application, hydraulic testing and hydrogeological impact assessments will be undertaken to evaluate the potential impact on local groundwater abstraction points. If the assessment indicates potential impacts to local users, alternative borehole locations will be considered and these alternative locations will be subject to the same testing and impact assessment process.

Table E4.3-4 Natural Resource Management Plan – Operational Phase

ID	Mitigation Commitment
WTR28	Groundwater levels will be monitored once every two weeks by the Project at all sites where groundwater abstraction occurs for the project. The location of monitoring well(s) will be determined by a qualified hydrogeologist to ensure that they are installed in the correct formation and at the correct distance between project abstraction boreholes and community water points. If the local water supplies are derogated to the extent that complaints are made by the community as a result of project abstraction, then the Project will provide alternative water supplies at a convenient location for the community that is not or is less influenced by the project's abstraction.

E4.3.5 Soil Management Plan

The soil management plan (SMP) will define the approach to soil management and temporary erosion control and will include the mitigation measures listed below.

Table E4.3-5 Soil Management Plan – Operational Phase

ID	Mitigation Commitment
SOL02	Environmental and social evaluations will be undertaken to identify suitable offsite disposal sites for waste soil and rock, and appropriate management measures to be implemented. All temporary borrow pits and soil and rock disposal sites will be reinstated, unless instructed otherwise by the regulatory authorities, in accordance with pre-entry agreements with landowner and location-specific reinstatement plans will be prepared and implemented.
SOL07	If topsoil is stored for more than six months, the stacks will be monitored for: <ul style="list-style-type: none"> the presence of weeds, which will be controlled in accordance with the weed and pest control programme compaction and erosion – corrective measures will be implemented if either is identified. Reinstatement will be undertaken as early as practicable following completion of construction activities in any ROW section or site.

E4.3.6 Cultural Heritage Management Plan

The cultural heritage management plan (CHMP) will define the approach to the identification, assessment and mitigation of potential impacts on tangible and intangible cultural heritage and will include the mitigation measures listed below.

Table E4.3-6 Cultural Heritage Management Plan – Operational Phase

ID	Mitigation Commitment
CUH06	A CHMP will include details of all cultural heritage features identified before and during construction. The CHMP will inform cultural heritage management measures that may be required during project operation.
CUH07	Collection of cultural heritage artefacts by workers for their own use is prohibited. Any cultural heritage artefacts found by workers will be left in situ and reported to the worksite supervisor or the cultural heritage monitor as required by the chance finds procedure.

E4.3.7 Reinstatement Plan

The reinstatement plan (RP) will define the approach to manage reinstatement incorporating permanent erosion control and bio-restoration, and will include the mitigation measures listed below.

Table E4.3-7 Reinstatement Plan – Operational Phase

ID	Mitigation Commitment
BIO36	<p>A strategy for tree removal and replanting will be developed; the strategy will consider:</p> <ul style="list-style-type: none"> • where trees are to be removed, the species and size/age of trees that will be recorded prior to removal; data to be recorded includes: trunk diameter at chest height, number of each species, species and, location • the number of trees and species to be removed during construction • conservation value of the species to be removed • variety of species to be replanted • provenance of species used for replanting • the region-specific environmental characteristics influencing replanting success. <p>Preconstruction surveys will be referred to when deciding suitable locations for replanting of translocated species or species planted to compensate for those removed during construction.</p>
SOL02	<p>Environmental and social evaluations will be undertaken to identify suitable offsite disposal sites for waste soil and rock, and appropriate management measures to be implemented.</p> <p>All temporary borrow pits and soil and rock disposal sites will be reinstated, unless instructed otherwise by the regulatory authorities, in accordance with pre-entry agreements with landowner and location-specific reinstatement plans will be prepared and implemented.</p>
SOL09	<p>Recontouring should be sympathetic and in keeping with preconstruction profiles, where this is not precluded by risk to integrity of the pipeline or erosion considerations.</p>
SOL16	<p>When the pipeline is operating, regular monthly monitoring and inspections will be undertaken to check that the security and integrity of the pipeline is not compromised by erosion, with weekly monitoring at locations susceptible to erosion.</p>

E4.3.8 Stakeholder Engagement Plan

The stakeholder engagement plan (SEP) will define the approach to maintain a social licence to operate² among project-affected communities (PACs) and will include the mitigation measures listed below.

² A social licence to operate exists when a project has ongoing approval or acceptance within the local community and other stakeholders.

Table E4.3-8 Stakeholder Engagement Plan – Operational Phase

ID	Mitigation Commitment
CHSW21	Public awareness programmes for stakeholders will include a specific section about the security presence around camps and security protocols which apply.
CHSW22	A Stakeholder Engagement Plan will be developed and implemented, identifying how the Project will engage and consult with internal and external stakeholders to keep them informed about project activities, understand and respond to their concerns and report to them on the project's environmental and social performance.
ECO04	<p>An approved recruitment procedure will be implemented that:</p> <ul style="list-style-type: none"> • Is transparent and open to all regardless of race, political opinion, colour, creed, sexuality or gender. • Includes a local recruitment strategy. • Considers social and cultural sensitivities. • Describes the employment criteria for the recruitment of professional, semiskilled and unskilled labour. • Prohibits discrimination or harassment of job applicants. <p>Job descriptions will advertise vacancies in local languages in the PACs through accessible media and on the project website.</p> <p>Targets for local recruitment from project-affected communities will be set by the project. These will be designed to meet legal requirements. An employment office will be established in the local area to conduct local recruitment.</p>
ECO05	<p>A public awareness programme to communicate employment and training opportunities will be implemented that includes but is not limited to:</p> <ul style="list-style-type: none"> • The local recruitment strategy. • Criteria for employment. • The number and types of employment opportunities. • The procedure for applying for employment. <p>Information will be disseminated publicly, including via media announcements at regional and national levels and during public meetings in PACs.</p> <p>Care will be taken to reach women and vulnerable groups if necessary through targeted meetings scheduled at times and locations that may increase women's participation</p>
ECO06	<p>A PIIMP will aim to reduce the number of people that arrive into project-affected communities; the PIIM will also identify requirements for:</p> <ul style="list-style-type: none"> • Monitoring effects of in-migration and demographic change. • Monitoring relations between communities and in-migrants. • Education of project workers and local communities on impacts related to in-migration.
ECO12	The Project will engage with tourism facilities and operators and relevant organisations to communicate information about the project and the management of environmental and social risks.
GNL01	The Project will implement a grievance procedure to provide opportunities for PACs to express grievances about project activities. The grievance process will be communicated to and promoted within all PACs; it will be clearly communicated to PACs that complaints related to interactions with public or private security forces will be addressed.

Table E4.3-8 Stakeholder Engagement Plan – Operational Phase

ID	Mitigation Commitment
HR22	<p>An awareness campaign targeting schools at sensitive locations within the project AOI will be developed, addressing:</p> <ul style="list-style-type: none"> • Importance of staying in school. • Risks particularly to girls of relationships with transient workers, transactional and commercial sex. • Road safety awareness. • Awareness about their rights. • Project grievance mechanism and their right to use it.

E4.3.9 Resettlement Action Plan

The resettlement action plan (RAP) will define the approach for addressing physical and/or economic displacement of Project Affected Persons (PAPs) and will include the mitigation measures listed below.

Table E4.3-9 Resettlement Action Plan – Operational Phase

ID	Mitigation Commitment
INF07	If project activities affect land-based livelihoods because of interruption to irrigation, drainage or agricultural production, appropriate compensation will be provided in accordance with the RAP.
LIV02	A marine livelihoods study, that includes the implications of the marine exclusion zone (MEZ), will be conducted in the AOI. Based on this study, a marine livelihoods restoration plan (LRP) will be developed.
LNP03	<p>A Resettlement Policy Framework (RPF) has been developed in line with national legislation, Good International Industry Practice (GIIP) and IFC Performance Standard 5. The RPF will outline procedures related to compensation for loss of assets and livelihood restoration. A Resettlement Action Plan (RAP) will describe the modalities of identifying Project Affected People (PAP) and the procedures related to compensation for loss of assets and livelihood restoration strategies.</p> <p>Post resettlement monitoring of livelihood restoration measures will be implemented. Additional measures will be developed and implemented where necessary to ensure livelihoods are restored as a minimum to pre-project levels.</p>

E4.3.10 Labour Management Plan

The labour management plan (LMP) will define the approach to ensure recruitment practices and working conditions comply with legal requirements and project standards. The LMP will include the mitigation measures listed below.

Table E4.3-10 Labour Management Plan – Operational Phase

ID	Mitigation Commitment
BIO39	The Project will prohibit all staff and contractors from the possession, purchase, trade or collection of wildlife or living natural resources that are nationally legally protected, CITES listed, or classed as threatened by the IUCN Red List.

Table E4.3-10 Labour Management Plan – Operational Phase

ID	Mitigation Commitment
BIO40	Hunting, consumption, transport and or purchase of bushmeat will be prohibited for project employees and contractors. Workers will be prohibited from collecting shells, timber, firewood, fibres and other plant based resources. Fishing by workers will not be permitted.
CHSW31	A HIV/STD awareness and prevention programme will be put in place at the rest stops used by project drivers to address: <ul style="list-style-type: none"> •awareness and understanding among drivers about the risks of HIV and STDs •the associated health implications •the preventative measures that can be taken •community awareness meetings •counselling and testing services •the distribution of information, leaflets and condoms.
CHSW32	A vaccination plan will be identified to prevent communicable diseases for which vaccinations are available from being transmitted between the national/international and local workforce. This plan will apply to all project workers and visitors.
ECO04	An approved recruitment procedure will be implemented that: <ul style="list-style-type: none"> • Is transparent and open to all regardless of race, political opinion, colour, creed, sexuality or gender. • Includes a local recruitment strategy. • Considers social and cultural sensitivities. • Describes the employment criteria for the recruitment of professional, semiskilled and unskilled labour. • Prohibits discrimination or harassment of job applicants. Job descriptions will advertise vacancies in local languages in the PACs through accessible media and on the project website. Targets for local recruitment from project-affected communities will be set by the project. These will be designed to meet legal requirements. An employment office will be established in the local area to conduct local recruitment.
ECO05	A public awareness programme to communicate employment and training opportunities will be implemented that includes but is not limited to: <ul style="list-style-type: none"> • The local recruitment strategy. • Criteria for employment. • The number and types of employment opportunities. • The procedure for applying for employment. Information will be disseminated publicly, including via media announcements at regional and national levels and during public meetings in PACs. Care will be taken to reach women and vulnerable groups if necessary through targeted meetings scheduled at times and locations that may increase women's participation
HR05	Hiring managers from (sub) contractors will receive training regarding the developer's non-discrimination policies.
HR39	Equal remuneration for jobs of equal value for men and women will be provided.
HR41	The Project will review the project performance regarding the Voluntary Principles on Security and Human Rights and develop an action plan to address performance improvement where necessary; the operational phase Labour Management Plan, Occupational Health, Safety and Security Plan and, the Community Health, Safety and Security Plan will account for any new measures that are required.

Table E4.3-10 Labour Management Plan – Operational Phase

ID	Mitigation Commitment
WHSW11	A workers' code of conduct outlining expected worker behaviours will be developed and implemented. This code of conduct will cover the interaction between the national and international workforce and local workforce but also interactions with unemployed PAC members. Compliance with the workers' code of conduct will be a contractual requirement for all contractor, including subcontractors' employees. In the event of non-compliance, workers will be disciplined in accordance with project disciplinary procedures and structures.
WHSW20	The labour management plan will include: <ul style="list-style-type: none"> • Compliance with international labour standards, national labour laws and regulations concerning transparency, accountability, anticorruption and human rights; • Recognising workers' right to organise collective bargaining and trade unions; • Providing suitable working conditions, including rest facilities and breaks; • Mechanism of compliance with the ILO Maternity Protection Convention (2000); and • Respecting workers' rights to privacy including data protection requirements.

E4.3.11 Project Induced In-Migration Management Plan

The project induced in-migration management plan (PIIMP) will define the approach to prevent project induced in-migration and manage negative impacts of potential project induced in-migration, and will include the mitigation measures listed below.

Table E4.3-11 Project Induced In-Migration Management Plan – Operational Phase

ID	Mitigation Commitment
ECO06	A PIIMP will aim to reduce the number of people that arrive into project-affected communities; the PIIM will also identify requirements for: <ul style="list-style-type: none"> • Monitoring effects of in-migration and demographic change. • Monitoring relations between communities and in-migrants. • Education of project workers and local communities on impacts related to in-migration.

E4.3.12 Procurement and Supply Chain Management Plan

The procurement and supply chain management plan (PSCMP) will define the approach to supply chain management including environmental, social and quality considerations, maximise the purchase of local goods and services, and will include the mitigation measures listed below.

Table E4.3-12 Procurement and Supply Chain Management Plan – Operational Phase

ID	Mitigation Commitment
BIO39	The Project will prohibit all staff and contractors from the possession, purchase, trade or collection of wildlife or living natural resources that are nationally legally protected, CITES listed, or classed as threatened by the IUCN Red List.

Table E4.3-12 Procurement and Supply Chain Management Plan – Operational Phase

ID	Mitigation Commitment
BIO40	Hunting, consumption, transport and or purchase of bushmeat will be prohibited for project employees and contractors. Workers will be prohibited from collecting shells, timber, firewood, fibres and other plant based resources. Fishing by workers will not be permitted.
ECO01	A Procurement and Supply Chain Management Plan (PSCMP) will be developed to maximise the purchase of goods and services from within Uganda/Tanzania. This will be contingent on whether local suppliers can offer sufficient quality and reliability and can meet project requirements. PSCMP will include, as appropriate, enterprise development, capacity development and ring-fencing contracts.
HR02	As part of the tendering process, (sub) contractors will be required to include training components in their proposal aimed at increasing local employment as well as improving skills of local staff.
HR05	Hiring managers from (sub) contractors will receive training regarding the developer's non-discrimination policies.

E4.3.13 Infrastructure and Utilities Management Plan

The infrastructure and utilities management plan (IUMP) will define the approach to monitor use of and/ or accidental damage to infrastructure and utilities and define the process of corrective action and will include the mitigation measures listed below.

Table E4.3-13 Infrastructure and Utilities Management Plan – Operational Phase

ID	Mitigation Commitment
INF07	If project activities affect land-based livelihoods because of interruption to irrigation, drainage or agricultural production, appropriate compensation will be provided in accordance with the RAP.

E4.3.14 Community Health, Safety and Security Plan

The community health, safety and security plan (CHSSP) will define approach to manage community health, safety and security issues and will include the mitigation measures listed below.

Table E4.3-14 Community Health, Safety and Security Plan – Operational Phase

ID	Mitigation Commitment
CHSW01	A strict project maximum speed limit will be enforced for project vehicles.
CHSW03	Security personnel engaged by the project will receive training on Voluntary Principles (this will include where army and or security forces are engaged by the project); performance will be monitored.

Table E4.3-14 Community Health, Safety and Security Plan – Operational Phase

ID	Mitigation Commitment
CHSW21	Public awareness programmes for stakeholders will include a specific section about the security presence around camps and security protocols which apply.
CHSW23	As part of the CHSSP, community-based awareness programmes in high risk communities will be developed and implemented. The main focus of such programmes will be reducing the risk of increased HIV/AIDS/TB transmission but will also consider awareness raising.
HR41	The Project will review the project performance regarding the Voluntary Principles on Security and Human Rights and develop an action plan to address performance improvement where necessary; the operational phase Labour Management Plan, Occupational Health, Safety and Security Plan and, the Community Health, Safety and Security Plan will account for any new measures that are required.

E4.3.15 Occupational Health, Safety and Security Plan

The occupational health, safety and security plan (OHSSP) will define the management of workforce occupational health, safety and security and will include the mitigation measures listed below.

Table E4.3-15 Occupational Health, Safety and Security Plan – Operational Phase

ID	Mitigation Commitment
CHSW07	As part of the project OHSSP, a Communicable Disease Management Plan will be developed to manage infectious disease outbreaks in Project facilities and prevention of spread to PACs.
CHSW24	As part of OHSSP, Health Design Specifications, adequate drainage and the avoidance of standing water will be considered in camp site selection, construction and operation.
CHSW31	A HIV/STD awareness and prevention programme will be put in place at the rest stops used by project drivers to address: <ul style="list-style-type: none"> •awareness and understanding among drivers about the risks of HIV and STDs •the associated health implications •the preventative measures that can be taken •community awareness meetings •counselling and testing services •the distribution of information, leaflets and condoms.
CHSW32	A vaccination plan will be identified to prevent communicable diseases for which vaccinations are available from being transmitted between the national/international and local workforce. This plan will apply to all project workers and visitors.
HR29	Risks from and mitigation of Worker Fatigue will be specifically addressed in the Occupational Health, Safety and Security Plan and the Transport and Road Safety Management Plan; the latter will stipulate driving hours and night driving will be by exception only.
HR41	The Project will review the project performance regarding the Voluntary Principles on Security and Human Rights and develop an action plan to address performance improvement where necessary; the operational phase Labour Management Plan,

Table E4.3-15 Occupational Health, Safety and Security Plan – Operational Phase

ID	Mitigation Commitment
	Occupational Health, Safety and Security Plan and, the Community Health, Safety and Security Plan will account for any new measures that are required.
WHSW01	Provision of food to workers will be planned to cater for workforce requirements and therefore minimise food waste as far as possible.
WHSW12	As part of the OHSSP, a risk-based worksite and construction camp training programme will be developed and administered to the workforce, vendor representatives and site visitors; the training programme (including daily toolbox meetings) will be updated in accordance with changes made in scope, incident statistics and/or regulatory requirements. Daily toolbox meetings will be held where health and safety issues will be discussed.
WHSW19	As part of the OHSSP, basic workplace wellness programs that are culturally and religiously acceptable will be developed and implemented.

E4.3.16 Transport and Road Safety Management Plan

The transport and road safety management plan (TRSMP) will guide project logistics and support community and driver road safety during project related transportation activities and will include the mitigation measures listed below.

Table E4.3-16 Transport and Road Safety Management Plan – Operational Phase

ID	Mitigation Commitment
CHSW01	A strict project maximum speed limit will be enforced for project vehicles.
HR29	Risks from and mitigation of Worker Fatigue will be specifically addressed in the Occupational Health, Safety and Security Plan and the Transport and Road Safety Management Plan; the latter will stipulate driving hours and night driving will be by exception only.

E4.3.17 Emergency Preparedness and Response Plan

The emergency preparedness and response plan (EPRP) will define the approach to emergency preparedness and response and will include the mitigation measures listed below.

Table E4.3-17 Emergency Preparedness and Response Plan – Operational Phase

ID	Mitigation Commitment
EPR01	<p>A spill response procedure based on Tier 1, 2 and 3 spill responsibilities defined in the Emergency Preparedness and Response Plan will be developed together with other responsible parties, and the necessary equipment and resources will be procured to implement it. The procedure will cover:</p> <ul style="list-style-type: none"> • responses for any unintended or unauthorised release of a potentially hazardous material, identification of locations where spill response equipment and resources will be provided, and procedures for its deployment • contact details for the rapid response team and spill response organisation • notification requirements. • All Tier 1, 2 and 3 spills will be reported in accordance with the project incident reporting system.
EPR03	<p>A schedule of emergency response exercises will be implemented to verify the project's emergency preparedness. A report of each exercise will be written and any areas for improvement identified.</p>
EPR04	<p>In the event of a spillage of hazardous materials the following actions will take place:</p> <ul style="list-style-type: none"> • A trained rapid response team will be mobilised • Spill response personnel and equipment will be provided to contain, cleanup and remediate (Tier 1 spills). A wider range of resources will be utilised to contain, cleanup and remediate Tier 2 and Tier 3 spills.

E4.3.18 Monitoring and Reporting Plan

The monitoring and reporting plan will define the approach to ensure that monitoring, inspections and audits are undertaken in a systematic way in order to monitor the success of the environmental and social mitigation measures as well as gather data on environmental and social performance, investigation of incidents and non-conformance monitoring results. Monitoring approach for each identified potential impact is described in the ESMP matrix ([Appendix K](#)), complete with monitoring parameter, target criteria and monitoring frequency. The plan will include the mitigation measures listed below.

Table E4.3-18 Monitoring and Reporting Plan – Operational Phase

ID	Mitigation Commitment
CHSW03	<p>Security personnel engaged by the project will receive training on Voluntary Principles (this will include where army and or security forces are engaged by the project); performance will be monitored.</p>
ECO06	<p>A PIIMP will aim to reduce the number of people that arrive into project-affected communities; the PIIM will also identify requirements for:</p> <ul style="list-style-type: none"> • Monitoring effects of in-migration and demographic change. • Monitoring relations between communities and in-migrants. • Education of project workers and local communities on impacts related to in-migration.
GNL14	<p>The Project will monitor and report on project environmental and social performance as required by national legislation and as required by the ESMP.</p>

Table E4.3-18 Monitoring and Reporting Plan – Operational Phase

ID	Mitigation Commitment
LNP03	A Resettlement Policy Framework (RPF) has been developed in line with national legislation, Good International Industry Practice (GIIP) and IFC Performance Standard 5. The RPF will outline procedures related to compensation for loss of assets and livelihood restoration. A Resettlement Action Plan (RAP) will describe the modalities of identifying Project Affected People (PAP) and the procedures related to compensation for loss of assets and livelihood restoration strategies. Post resettlement monitoring of livelihood restoration measures will be implemented. Additional measures will be developed and implemented where necessary to ensure livelihoods are restored as a minimum to pre-project levels.
SOL16	When the pipeline is operating, regular monthly monitoring and inspections will be undertaken to check that the security and integrity of the pipeline is not compromised by erosion, with weekly monitoring at locations susceptible to erosion.
WTR28	Groundwater levels will be monitored once every two weeks by the Project at all sites where groundwater abstraction occurs for the project. The location of monitoring well(s) will be determined by a qualified hydrogeologist to ensure that they are installed in the correct formation and at the correct distance between project abstraction boreholes and community water points. If the local water supplies are derogated to the extent that complaints are made by the community as a result of project abstraction, then the Project will provide alternative water supplies at a convenient location for the community that is not or is less influenced by the project's abstraction.

E4.4 Mitigation Commitments Register

Table E4.4-1 below summarises project mitigation measures in alphabetical order, together with the corresponding management plans.

Table E4.4-1 Project Mitigation Commitments Register and Relevant Management Plans

ID	Mitigation Commitment	Construction	Operation	Management Plan(s)
ACO01	Meeting the PES will be the project target.	Y		PPP
ACO02	Location specific assessments will be undertaken at sensitive receptors in proximity to project activities occurring between 7 p.m. and 7 a.m. to identify appropriate mitigation where there is potential to cause disturbance from noise and vibration.	Y		PPP

Table E4.4-1 Project Mitigation Commitments Register and Relevant Management Plans

ID	Mitigation Commitment	Construction	Operation	Management Plan(s)
ACO03	A preconstruction record of condition, including a photographic log, will be developed. The validity of any claims of damage resulting from project activities will be assessed against the preconstruction record of condition, repairs will be undertaken or appropriate compensation paid if damage is proven.	Y		PPP, SEP
ACO04	Preference will be given to selecting low noise and vibration emitting equipment for all Project activities.	Y		PPP
ACO05	Activities that generate high levels of noise and vibration will be assessed to determine potential impacts and mitigation will be implemented where appropriate. Notifications of work will be given at least 72 hrs in advance of work to residents / occupants located within: <ul style="list-style-type: none"> • 100 m of RoW prior to trenching • 50 m of RoW prior to lowering and laying of pipe • 50 m of RoW prior to backfilling and compaction • 250 m of any road upgrades and new access roads. 	Y		PPP, SEP
ACO06	Potential noise and vibration impacts will be assessed where piling is to be undertaken close to sensitive receptors. Where possible, alternative techniques or materials will be used to reduce potential impacts, e.g. restrictions on times and duration in any given day that piling activities are undertaken.	Y		PPP
ACO07	Where possible new access roads will be constructed a minimum of 100 m away from sensitive receptors (hospitals, educational facilities or dwellings).	Y		PPP

Table E4.4-1 Project Mitigation Commitments Register and Relevant Management Plans

ID	Mitigation Commitment	Construction	Operation	Management Plan(s)
ACO08	Blasting will only be used where other excavation methods are considered technically impracticable or uneconomic. Where blasting is undertaken, a Blast Management Plan will be developed to consider the effects of noise, air overpressure and vibration on dwellings, structures and wildlife, and develop appropriate mitigation where required. The Blast Management Plan will be prepared by a competent person and peer reviewed.	Y		PPP, SEP, CHSSP
ACO09	The Project will conduct regular inspection of access roads to check for damage caused by project vehicles to repair damage in a timely and efficient manner. Strict load management will be enforced on all project vehicles.	Y		SEP, IUMP, TRSMP
AIR01	Where Project generated dust may affect sensitive receptors, the following mitigation measures will be considered: • dust suppression at work-sites and transport routes • adherence to RoW speed limits supplemented by awareness training • sheeting of fine materials being transported or stored on-site	Y		PPP
AIR02	To minimise emissions to air, vehicles, machines and equipment will: • be appropriate for the task required • have a valid maintenance and inspection certificate or log books • be allocated a unique identifier to be used in a maintenance log • be maintained regularly in accordance with the manufacturer's recommendations to maximise fuel efficiency and help reduce emissions • not be allowed to idle – engines will be switched off when not in use.	Y		PPP
AIR03	Vehicles or equipment seen to be emitting excessive black smoke will not be permitted to continue work and will be sent for maintenance.	Y		PPP

Table E4.4-1 Project Mitigation Commitments Register and Relevant Management Plans

ID	Mitigation Commitment	Construction	Operation	Management Plan(s)
AIR04	The pipe coating facility will be designed to abate process VOC emissions to within the relevant emission limits and or air quality guidelines.	Y		PPP
AIR05	All combustion plant will be designed to meet national regulations and project standards with regards to air quality and emission limits.		Y	PPP
BIO01	Preconstruction biodiversity surveys will be undertaken at locations identified in the baseline appendices of the environmental and social impact assessment to record details of habitats and species of conservation importance within the working areas. This information will be used to produce site specific biodiversity management plans that will identify fine-scale route changes (where feasible), mark features for retention and protection, develop biorestore measures including seed collection, translocation and species propagation and provide details of the specific mitigation measures (such as seasonal construction restrictions) to be implemented to reduce impacts on biodiversity during construction.	Y		BMP
BIO02	Supplementary preconstruction biodiversity baseline surveys will be undertaken in locations identified in the baseline appendices of the environmental and social impact assessment in order to produce a Biodiversity Action Plan to identify further enhancement and conservation measures.	Y		BMP

Table E4.4-1 Project Mitigation Commitments Register and Relevant Management Plans

ID	Mitigation Commitment	Construction	Operation	Management Plan(s)
BIO03	As part of the Biodiversity Management plan a vegetation removal method statement to reduce impacts on biodiversity will be developed. This will include but not be limited to measures such as: <ul style="list-style-type: none"> • directional felling of trees on land inside the right-of-way • avoiding damage to trees outside the right-of-way • identifying areas where strimming, coppicing or other works will be undertaken in advance of clearing. 	Y		BMP
BIO04	Location-specific biodiversity management plans will be developed and implemented allowing for progressive, active habitat restoration (including seed collection, propagation and supplementary planting if required), habitat enhancement measures where applicable and post-restoration monitoring. Locations are identified in the ESIA baseline appendices and include the following habitat types: <ul style="list-style-type: none"> • miombo woodland • Itigi-like thicket • whistling thorn woodland (preferred habitat of the endemic and IUCN Karamoja apalis) • coastal thicket and coastal woodland 	Y		BMP, RP
BIO05	Hunting, fishing, unauthorised gathering of products (including plants and firewood) and deliberate disturbance or harassment of fauna will be prohibited for project personnel. The Project will restrict the purchase of wildlife related products and crafts by project workers.	Y		BMP, LMP
BIO06	Appropriate measures will be implemented to prevent fauna or people from entering welded pipe sections or open excavations; there will be fauna ladders placed at suitable intervals in all open excavations. Animals will be removed safely and released into suitable habitat away from the working area.	Y		BMP, SEP, CHSSP

Table E4.4-1 Project Mitigation Commitments Register and Relevant Management Plans

ID	Mitigation Commitment	Construction	Operation	Management Plan(s)
BIO07	During open-cut watercourse crossing activities, bank and bed material will be segregated, stored away from the active channels, and not be placed where flow or drainage will be obstructed.	Y		BMP, SMP
BIO08	A biodiversity survey strategy will be developed to include timings and methods of surveys to be undertaken, including but not limited to: <ul style="list-style-type: none"> • supplemental preconstruction flora and fauna surveys • supplemental preconstruction biodiversity surveys of pre identified species of conservation concern • a biodiversity assessment of watercourses and wetlands • an assessment of fish spawning habitat at open-cut river crossings where the watercourse crossing is planned to occur during the fish-spawning season and International Union for Conservation of Nature or Red Data Book species are known or likely to occur • preconstruction checks on the right-of-way. 	Y		BMP
BIO09	Before construction starts, a plan will be prepared for translocating fauna and flora in areas identified in the environmental and social impact assessment and preconstruction surveys. The preclearance surveys will be referred to when deciding suitable locations for replanting of translocated species or species planted to compensate for those removed during construction.	Y		BMP
BIO10	A written and photographic record will be kept of translocated species for verification and potential post-construction monitoring. The success of translocation will be monitored during and post-construction for species of conservation importance.	Y		BMP

Table E4.4-1 Project Mitigation Commitments Register and Relevant Management Plans

ID	Mitigation Commitment	Construction	Operation	Management Plan(s)
BIO11	Information on seasonal constraints recorded within the baseline appendices environmental and social impact assessment will be used to identify activities that need to be undertaken at a specific time of year or periods when activities cannot be completed without project approval of a deviation (e.g., during sensitive periods such as breeding and migration of species).	Y		BMP
BIO12	Where a section of the right-of-way is through habitats with high biodiversity value (as identified in the baseline appendices of the environmental and social impact assessment), the area will be reviewed to determine if the working width can be reduced to limit impacts as much as possible.	Y		BMP
BIO13	Open-cut river crossings will be undertaken during the dry season where possible; where not possible site-specific method statements will be developed addressing ecological sensitivities.	Y		BMP
BIO14	As much riparian vegetation as possible will be left in place until immediately before a watercourse crossing needs to be made to maintain stability of the banks. During site preparation, the height of vegetation on the riverbanks will be reduced, but roots will not be disturbed, to dissuade animals from nesting. The vegetation will then be removed when the crossing is made and the area reinstated as quickly as possible.	y		BMP
BIO15	The maximum length of open trench at any one time (per spread) will be defined based on: • the habitats present and potential ecological sensitivities (e.g., terrestrial commuting routes for large mammals) • community safety. Gaps will also be left in soil stacks and pipe strings at strategic locations to allow passage of animals where it is considered safe to do so.	Y		BMP, CHSSP

Table E4.4-1 Project Mitigation Commitments Register and Relevant Management Plans

ID	Mitigation Commitment	Construction	Operation	Management Plan(s)
BIO16	If dams and pumps are used to maintain water flow during the construction of watercourse crossings or abstraction of water from watercourses is required, fish screens will be used on the end of the pump inlet hose. Any fish caught within dammed areas either side of the crossing will be transferred up or downstream as appropriate by suitably experienced personnel.	Y		BMP
BIO17	Where watercourse bank reinforcement is required, the impact on riparian habitats and riparian fauna will be assessed to determine if the reinstatement or reinforcement is sufficient to maintain connectivity along the riparian elements of the watercourse. Mitigation will be installed to maintain habitat connectivity.	Y		BMP, RP
BIO18	All incidences of accidental injury or death of fauna will be recorded, including details of the circumstances, time, species, size and habitat. The report will be reviewed to determine if any action should be taken to prevent further incidents.	Y		BMP
BIO19	Biosecurity measures will be developed and implemented that will include a strategy for weed and pest control and measures to prevent the introduction or spread of alien invasive species on the RoW, work sites and camp facilities. The biosecurity measures will also outline specifics to protect the aquatic environment from alien invasive species.	Y		BMP
BIO21	Species' populations will be monitored pre and post construction. The project will employ adaptive management in response to findings.	Y		BMP
BIO22	Construction activities within 500 m of seasonal wetland habitat will be avoided where feasible when the wetland is wet and is supporting species of conservation importance.	Y		BMP

Table E4.4-1 Project Mitigation Commitments Register and Relevant Management Plans

ID	Mitigation Commitment	Construction	Operation	Management Plan(s)
BIO23	The use of pesticides, rodenticides and other chemicals is prohibited in proximity to raptor habitat.	Y		BMP
BIO24	The total duration of construction disturbance (i.e. the time between initial site clearing and final reinstatement/biorestorement) will be minimised.	Y		BMP
BIO25	Vegetation clearing in suitable nesting habitat for vultures will be undertaken in advance of the dry season (when nesting occurs). A preclearance check for occupied vulture nests will be undertaken in suitable nesting habitat within 500m of the RoW. If any occupied nests are found, avoid construction until the chick has fully fledged or install noise and visual screening to minimise disturbance.	Y		BMP
BIO26	The Project will support the relevant management authority with capacity-building, for example by contributing to additional ranger support or other activities identified in the existing protected area management plan prepared by the relevant management authority.	Y		BMP, SEP
BIO27	All practicable efforts will be taken to retain and protect mature baobab and borassus palm trees within the RoW.	Y		BMP
BIO28	Preclearance checks for bubbling puddle frog will be undertaken within the defined RoW; any discovered individuals will be translocated to nearby ponds outside the RoW.	Y		BMP
BIO29	Layout of HDD working area will be designed to minimise clearing of the coastal thicket and coastal woodland.	Y		BMP
BIO30	MCPY-12 will be fully decommissioned and actively revegetated on completion of construction activities.	Y		BMP, RP
BIO31	MC-13 will be fully decommissioned and actively revegetated on completion of construction activities.	Y		BMP, RP

Table E4.4-1 Project Mitigation Commitments Register and Relevant Management Plans

ID	Mitigation Commitment	Construction	Operation	Management Plan(s)
BIO32	Lighting of the MST will be designed to reduce spill from MST on surrounding habitat used by bats.	Y		BMP, PPP
BIO33	Two small temporary project access tracks on either side of the forested ridge within the Burigi-Biharamulo Game Reserve/Important Bird Area will be decommissioned and fully reinstated on completion of pipeline construction.	Y		BMP, RP
BIO34	Operation phase vegetation management activities will account for species of conservation importance and their habitat requirements for foraging, nesting and/or breeding.		Y	BMP
BIO35	The Project will engage with the Tanzania Forest Services to identify support for the demarcation of the boundary of the North Makere Forest Reserve close to the Coating Facility and inform PACs of relevant land use constraints.	Y		BMP, SEP
BIO36	<p>A strategy for tree removal and replanting will be developed; the strategy will consider:</p> <ul style="list-style-type: none"> • where trees are to be removed, the species and size/age of trees that will be recorded prior to removal; data to be recorded includes: trunk diameter at chest height, number of each species, species and, location • the number of trees and species to be removed during construction • conservation value of the species to be removed • variety of species to be replanted • provenance of species used for replanting • the region-specific environmental characteristics influencing replanting success. <p>Preconstruction surveys will be referred to when deciding suitable locations for replanting of translocated species or species planted to compensate for those removed during construction.</p>	Y		BMP, RP

Table E4.4-1 Project Mitigation Commitments Register and Relevant Management Plans

ID	Mitigation Commitment	Construction	Operation	Management Plan(s)
BIO37	The need to compensate for trees removed will be determined on a site-by-site basis and will take into account the species removed. Preference will be given to native species representative of adjacent undisturbed areas. No exotic species will be planted unless specifically required by the forestry agency. In areas of plantation forestry, the requirements of the forestry agency will be met (e.g., ratios for compensation planting).	Y		BMP, RP, SEP, RAP
BIO38	Ways to achieve an increasing trend in vegetation regrowth and diversity of desired species, specifically species composition and, plant species that support forage, refuge and nesting for species of conservation importance, in reinstated areas will be sought, with reference to nearby areas undisturbed by project activities. The re-establishment of vegetation will be monitored following reinstatement until long term re-vegetation targets have been reached.	Y		BMP
BIO39	The Project will prohibit all staff and contractors from the possession, purchase, trade or collection of wildlife or living natural resources that are nationally legally protected, CITES listed, or classed as threatened by the IUCN Red List.	Y	Y	BMP, LMP, PSCMP
CHSW01	A strict project maximum speed limit will be enforced for project vehicles.	Y	Y	CHSSP, TRSMP

Table E4.4-1 Project Mitigation Commitments Register and Relevant Management Plans

ID	Mitigation Commitment	Construction	Operation	Management Plan(s)
CHSW02	Local people will be consulted on the optimum location of crossing points and pastoralists informed of the access restrictions in advance, advising them to avoid cultivated areas. Crossing points will be provided across open trenches and welded pipes and gaps will be left in soil stacks and pipe strings at strategic locations. Incidents in conflicts between crop farmers and herders in the vicinity of the project footprint will be monitored and support will be provided to local authorities to obtain a resolution in cases of conflict wherever possible.	Y		SEP, RAP, CHSSP
CHSW03	Security personnel engaged by the project will receive training on Voluntary Principles (this will include where army and or security forces are engaged by the project); performance will be monitored.	Y		CHSSP, MRP
CHSW04	As part of the OHSSP, a Substance Misuse Management Plan will be developed and implemented, focusing on zero tolerance of drugs and alcohol. Random drugs and alcohol testing of personnel will be conducted, recorded and audited regularly.	Y		OHSSP
CHSW05	Where a safety risk assessment has identified a potential for construction interfaces to cause traffic accidents, temporary traffic control measures (signage, flagmen, temporary traffic lights, barricades) will be implemented.	Y		CHSSP, TRSMP
CHSW06	A malaria and other vector control management plan will be developed and implemented to ensure adequate control over malaria and other vector-related conditions in camps.	Y		OHSSP
CHSW07	As part of the project OHSSP, a Communicable Disease Management Plan will be developed to manage infectious disease outbreaks in Project facilities and prevention of spread to PACs.	Y		OHSSP

Table E4.4-1 Project Mitigation Commitments Register and Relevant Management Plans

ID	Mitigation Commitment	Construction	Operation	Management Plan(s)
CHSW08	A transport and road safety management plan based on project policies, site-specific traffic risk assessments and safe driving procedures will be developed and implemented.	Y		TRSMMP
CHSW09	Only trained, certified and physically fit drivers will drive vehicles. Night-time driving will be by exception only.	Y		LMP, TRSMMP
CHSW10	Where appropriate, such as built up areas, a banksman will be used for reversing vehicles.	Y		TRSMMP
CHSW11	Construction barriers will have visible warning signs understandable by local communities. Signage will be in accordance with internationally accepted symbols and/or be well known to local communities.	Y		CHSSP
CHSW12	A risk assessment will be conducted for excavations with consideration to community safety.	Y		CHSSP
CHSW13	As part of the OHSSP, pipe skid supports will be constructed to a suitable standard to prevent risks to public and worker safety.	Y		OHSSP
CHSW14	The Voluntary Principles on Security and Human Rights will be implemented; compliance will be monitored.	Y		LMP, CHSSP, OHSSP, MRP
CHSW15	Pre-deployment screenings will be described in the LMP and communicated during the recruitment process	Y		LMP, OHSSP
CHSW16	As part of the project OHSSP, vector management on all project sites will be risk based. Corridor controls for landscape maintenance, as well as integrated pest management procedures (environmental, biological and chemical), will be implemented.	Y		OHSSP
CHSW17	Community liaison officers will encourage PAC Leadership to provide advance warning of local events so that construction activities can be avoided at these times.	Y		SEP, TRSMMP

Table E4.4-1 Project Mitigation Commitments Register and Relevant Management Plans

ID	Mitigation Commitment	Construction	Operation	Management Plan(s)
CHSW18	Regular meetings will be held with PAC representatives, during construction in their area, to update them on construction progress and to receive comments or queries. A community liaison log will be maintained detailing the content of all meetings.	Y		SEP
CHSW19	Community awareness programmes will be developed and implemented in project-affected communities to explain: <ul style="list-style-type: none"> • road safety risks and how to increase the safety of pedestrians particularly children • how to ensure their safety during construction • the measures that have been, or will be, implemented to protect their health and safety (e.g., provision of safe access). 	Y		SEP, CHSSP
CHSW20	Vehicle movements will be restricted to defined access routes and demarcated working areas (unless in the event of an emergency).	Y		BMP, CHSSP, TRSMP
CHSW21	Public awareness programmes for stakeholders will include a specific section about the security presence around camps and security protocols which apply.	Y		SEP, CHSSP
CHSW22	A Stakeholder Engagement Plan will be developed and implemented, identifying how the Project will engage and consult with internal and external stakeholders to keep them informed about project activities, understand and respond to their concerns and report to them on the project's environmental and social performance.	Y		SEP
CHSW23	As part of the CHSSP, community-based awareness programmes in high risk communities will be developed and implemented. The main focus of such programmes will be reducing the risk of increased HIV/AIDS/TB transmission but will also consider awareness raising on malaria control and water, sanitation and Hygiene.	Y	Y	CHSSP
CHSW24	As part of OHSSP, Health Design Specifications, adequate drainage and	Y	Y	OHSSP

Table E4.4-1 Project Mitigation Commitments Register and Relevant Management Plans

ID	Mitigation Commitment	Construction	Operation	Management Plan(s)
	the avoidance of standing water will be considered in camp site selection, construction and operation.			
CHSW25	A monitoring plan will be developed and implemented to ensure that environmental noise exposure levels are periodically monitored and documented. Procedures for corrective measures will be incorporated and implemented in the event of exceedances.	Y		PPP, MRP
CHSW26	Rest areas will be identified to allow drivers to comply with rest stop requirements and maximum daytime driving hours	Y		TRSMF
CHSW27	Spouses will be consulted and present during the land surveys, entitlement briefings and compensation agreements and both spouses will sign the compensation agreements.	Y		SEP, RAP
CHSW28	The project will work closely with local authorities to monitor any emerging tensions between crop farmers and pastoralists related to project impacts.	Y		SEP
CHSW29	The Project will liaise with other third-party developments and relevant government bodies to share information about their worker and community health management strategies, as well as information about worker movements, to ensure that they are commensurate and enable an efficient and coordinated response to any potential disease outbreak.	Y		SEP
CHSW31	A HIV/STD awareness and prevention programme will be put in place at the rest stops used by project drivers to address: <ul style="list-style-type: none"> •awareness and understanding among drivers about the risks of HIV and STDs •the associated health implications •the preventative measures that can be taken •community awareness meetings •counselling and testing services •the distribution of information, leaflets and condoms. 	Y		LMP, OHSSP

Table E4.4-1 Project Mitigation Commitments Register and Relevant Management Plans

ID	Mitigation Commitment	Construction	Operation	Management Plan(s)
CHSW32	A vaccination plan will be identified to prevent communicable diseases for which vaccinations are available from being transmitted between the national/international and local workforce. This plan will apply to all project workers and visitors.	Y		LMP, OHSSP
CHSW33	Construction camps will be designated as having “closed” status to prevent interactions between the workforce and PACs and prevent the spread of communicable disease. Policies will be developed to manage transgressions within the project disciplinary procedures and structures.	Y		PIIMP, CHSSP, OHSSP
CHSW34	As part of the CHSSP, a cooperation agreement with the Council Health Management Teams (CHMT) will be reached including periodic meetings to discuss potential health impacts, proposed mitigation measures and longitudinal monitoring of specific key health indicators during construction.	Y		SEP, CHSSP
CHSW35	Project will engage with relevant stakeholders (authorities and civil society) in order to identify patterns of population in-migration, associated consequences and identify appropriate mitigation measures and interventions.	Y		SEP, PIIMP
CLI01	Electrical equipment of a size that is appropriate for the functions to be performed will be selected with a view to maximising energy efficiency. Electrical equipment will be turned off when not in use.	Y		PPP
CUH01	A preconstruction survey of the RoW will be undertaken to collect data on location, extent and mitigation measures of known and unknown assets (tangible and intangible cultural heritage (TCH and ICH)) and to consult community leaders about ICH sites or practices not yet identified. A report including a GIS file will be prepared that will recommend location-specific actions to be undertaken that could include: <ul style="list-style-type: none"> • Avoidance of a site • Access constraints to reduce 	Y		CHMP, SEP

Table E4.4-1 Project Mitigation Commitments Register and Relevant Management Plans

ID	Mitigation Commitment	Construction	Operation	Management Plan(s)
	<p>disturbance to a site</p> <ul style="list-style-type: none"> • Excavation of a site • a watching brief during vegetation removal or topsoil stripping • requirements to maintain access to cultural heritage assets <p>A schedule of sites and actions to be undertaken will be prepared and included in the cultural heritage management plan (CHMP) and any appropriate licences obtained.</p>			
CUH02	<p>A senior cultural heritage monitor (SCHM) will ensure that the cultural heritage management plan (CHMP) will be implemented, in agreement with relevant government authorities, in advance of construction. The CHMP will include a chance finds procedure. The cultural heritage team will schedule regular meetings and progress reports so that government authorities and appropriate community leaders are kept informed, including:</p> <ul style="list-style-type: none"> • regular report on progress of excavations • a post-excavation assessment report • a research archive • a final publication of results of tangible or intangible heritage investigations as appropriate to the significance of the outcomes. • chance finds reports will be provided to the government authority and relevant stakeholders. <p>The SCHM will be supported by a tangible cultural heritage monitor (TCHM) and an intangible cultural heritage monitor (ICHM) to evaluate the effectiveness of the cultural heritage protection measures and deliver awareness training for all project personnel.</p>	Y		CHMP, SEP
CUH03	<p>A written scheme of investigation (WSI) will be prepared where an intervention is needed and appended to the cultural heritage management plan (CHMP). Until investigation and recording in accordance with the WSI, or avoidance or management activity is signed off by</p>	Y		CHMP, SEP

Table E4.4-1 Project Mitigation Commitments Register and Relevant Management Plans

ID	Mitigation Commitment	Construction	Operation	Management Plan(s)
	government authorities, construction may not proceed in that area.			
CUH04	The senior cultural heritage monitor (SCHM) will prepare the chance finds procedure (CFP); Chance finds will be excavated by suitably qualified and approved archaeologists, in accordance with the CFP and authorised by the relevant government authority.	Y		CHMP, SEP
CUH05	Information on intangible cultural heritage (ICH) collected during the preconstruction survey will be evaluated and integrated into the cultural heritage management plan (CHMP). This will include information on indigenous peoples and vulnerable groups if present.	Y		CHMP
CUH06	A CHMP will include details of all cultural heritage features identified before and during construction. The CHMP will inform cultural heritage management measures that may be required during project operation.	Y	Y	CHMP
CUH07	Collection of cultural heritage artefacts by workers for their own use is prohibited. Any cultural heritage artefacts found by workers will be left in situ and reported to the worksite supervisor or the cultural heritage monitor as required by the chance finds procedure.	Y	Y	CHMP
CUH08	Any decompaction/ripping or other ground disturbance activities required during reinstatement will be planned to avoid any cultural heritage feature that has been preserved in situ.	Y		CHMP, RP
ECO01	A Procurement and Supply Chain Management Plan (PSCMP) will be developed to maximise the purchase of goods and services from within Uganda/Tanzania. This will be contingent on whether local suppliers can offer sufficient quality and reliability and can meet project requirements. PSCMP will include, as appropriate, enterprise development, capacity	Y		PSCMP

Table E4.4-1 Project Mitigation Commitments Register and Relevant Management Plans

ID	Mitigation Commitment	Construction	Operation	Management Plan(s)
	development and ring-fencing contracts.			
ECO02	Project use of third-party quarries and borrow pits will require verification of national regulatory and project standard compliance; where suppliers do not meet project standards an action plan will be implemented to build capacity, so the supplier can meet the project standard in a timely manner.	Y		NRMP, PSCMP
ECO03	Compliance with project human resources policies and procedures will be a construction contract requirement.	Y		LMP, PSCMP
ECO04	An approved recruitment procedure will be implemented that: <ul style="list-style-type: none"> • Is transparent and open to all regardless of race, political opinion, colour, creed, sexuality or gender. • Includes a local recruitment strategy. • Considers social and cultural sensitivities. • Describes the employment criteria for the recruitment of professional, semiskilled and unskilled labour. • Prohibits discrimination or harassment of job applicants. Job descriptions will advertise vacancies in local languages in the PACs through accessible media and on the project website. Targets for local recruitment from project-affected communities will be set by the project. These will be designed to meet legal requirements. An employment office will be established in the local area to conduct local recruitment.	Y		SEP, LMP
ECO05	A public awareness programme to communicate employment and training opportunities will be implemented that includes but is not limited to: <ul style="list-style-type: none"> • The local recruitment strategy. • Criteria for employment. • The number and types of employment opportunities. • The procedure for applying for employment. Information will be disseminated publicly, including via media announcements at regional and	Y		SEP, LMP

Table E4.4-1 Project Mitigation Commitments Register and Relevant Management Plans

ID	Mitigation Commitment	Construction	Operation	Management Plan(s)
	national levels and during public meetings in PACs. Care will be taken to reach women and vulnerable groups if necessary through targeted meetings scheduled at times and locations that may increase women's participation			
ECO06	A PIIMP will aim to reduce the number of people that arrive into project-affected communities; the PIIM will also identify requirements for: <ul style="list-style-type: none"> • Monitoring effects of in-migration and demographic change. • Monitoring relations between communities and in-migrants. • Education of project workers and local communities on impacts related to in-migration. 	Y		SEP, PIIMP, MRP
ECO07	A retrenchment plan will be prepared, using the principles in the International Finance Corporation's Good Practice Note No. 4: Managing Retrenchment, 2005, with the aim of reducing the impacts of cessation of employment contracts.	Y		LMP
ECO08	Before construction, a benchmarking exercise gathering data associated with average incomes in the private and public sector for each region/district will be undertaken. This information will be used to identify salary levels for the construction workforce so that disparities between project-related salaries and local businesses/public sector salaries are avoided.	Y		LMP
ECO09	Before construction, a benchmarking exercise to gather data associated with average prices for goods will be undertaken in each region/district. This information will be used to identify appropriate prices so that large price disparities between project-procured goods and local goods are avoided.	Y		SEP, PSCMP
ECO10	Senior project security personnel will liaise directly with the army and/or security forces to provide information on project construction activities and schedules.	Y		SEP, OHSSP

Table E4.4-1 Project Mitigation Commitments Register and Relevant Management Plans

ID	Mitigation Commitment	Construction	Operation	Management Plan(s)
ECO13	The Project will conduct ongoing monitoring and liaise with authorities to review social changes in these PACs: <ul style="list-style-type: none"> Putini and Chongoleani (Tanzania) Tanganyika town (Nzega district, Tanga region, Tanzania) Where required additional interventions will be developed to enhance existing interventions (e.g., PIIM management plan).	Y		SEP, PIIMP
ECO15	The project will undertake a benchmarking assessment on the inflation of goods within PACs if construction phases with other third parties with large workforces coincide. The results of benchmarking will be shared with the proponents of the third-party developments as required.	Y		SEP
EPR01	A spill response procedure based on Tier 1, 2 and 3 spill responsibilities defined in the Emergency Preparedness and Response Plan will be developed together with other responsible parties, and the necessary equipment and resources will be procured to implement it. The procedure will cover: <ul style="list-style-type: none"> responses for any unintended or unauthorised release of a potentially hazardous material, identification of locations where spill response equipment and resources will be provided, and procedures for its deployment contact details for the rapid response team and spill response organisation notification requirements. All Tier 1, 2 and 3 spills will be reported in accordance with the project incident reporting system. 	Y	Y	EPRP
EPR02	Spill response equipment, such as absorbents and spill kits, will be available at all work site locations and on fuel bowzers and tankers. The spill kits will be inspected regularly to ensure they remain adequate for the needs of the project. The spill kits will be logged, inventoried and maintained.	Y		PPP

Table E4.4-1 Project Mitigation Commitments Register and Relevant Management Plans

ID	Mitigation Commitment	Construction	Operation	Management Plan(s)
EPR03	A schedule of emergency response exercises will be implemented to verify the project's emergency preparedness. A report of each exercise will be written and any areas for improvement identified.	Y	Y	EPRP
EPR04	In the event of a spillage of hazardous materials the following actions will take place: • A trained rapid response team will be mobilised • Spill response personnel and equipment will be provided to contain, cleanup and remediate (Tier 1 spills). A wider range of resources will be utilised to contain, cleanup and remediate Tier 2 and Tier 3 spills.	Y	Y	PPP, EPRP
GNL01	The Project will implement a grievance procedure to provide opportunities for PACs to express grievances about project activities. The grievance process will be communicated to and promoted within all PACs; it will be clearly communicated to PACs that complaints related to interactions with public or private security forces will be addressed.	Y		SEP
GNL02	The Project will advise appropriate regulators and lead agencies of the construction schedule	Y		SEP
GNL03	The Project will, in collaboration with the government and other third-party developers in the Albertine Graben, participate in the Regional Cumulative Impacts Management (RCIM) initiative proposed by the upstream Tilenga Project.	Y		SEP

Table E4.4-1 Project Mitigation Commitments Register and Relevant Management Plans

ID	Mitigation Commitment	Construction	Operation	Management Plan(s)
GNL04	For prospecting and mining licences that are traversed by the pipeline corridor and AGIs, the project will reach agreement with the Ministry of Minerals (MoM) on the way that mining rights will be extinguished in the affected corridor. The project will engage with both the Ministry of Minerals and the Ministry of Lands, Housing and Human Settlements Development on the proposed compensation framework for affected prospecting and mining operations.	Y		SEP, RAP
GNL05	The Project will ensure that the proponents of the associated facilities are made aware of the construction schedule so that construction activities can be strategically planned to reduce disruption.	Y		SEP
GNL07	The Occupational Health, Safety and Security plan and the Community Health, Safety and Security Plan will be developed in line with the Voluntary Principles on Security and Human Rights and other relevant international standards; the plans will address the following: <ul style="list-style-type: none"> • Interaction with fisherfolk. • Agreements and protocols governing interactions between public and private security forces in the MEZ, including agreed standard operating procedures governing the use of force. • Common understanding between public and private security forces that cover the Voluntary Principles. • Consultation with security forces and fisherfolk. 	Y		SEP, CHSSP, OHSSP
GNL08	The project will consider the issue of double resettlement into its resettlement plan.	Y		SEP, RAP

Table E4.4-1 Project Mitigation Commitments Register and Relevant Management Plans

ID	Mitigation Commitment	Construction	Operation	Management Plan(s)
GNL09	The Project will engage proponents of the third party developments and relevant government agencies to consider options for management measures to address significant cumulative impacts. Options could cover: project design, scheduling, construction management or operations management.	Y		SEP
GNL10	The project will participate in regional cumulative environmental management initiatives being developed in collaboration with operators of current projects, developers of proposed projects, and led by the government. It is envisaged that initiative management priorities would be defined for implementation by industry participants. Objectives are expected to include: creation of a governance structure; assessment of regional cumulative impacts based on collective baseline data and ESIA's that have been prepared for projects in the region; establishment and monitoring of environmental and social thresholds; collaborative development of cumulative impact management plans and mitigation measures.	Y		SEP
GNL11	The Project will ensure that the proponents of the associated facilities are made aware of the construction schedule so that construction activities can be strategically planned to reduce disruption.	Y		SEP
GNL12	The project will work with the Mpirani waste facility, the local government and communities on the Chongoleani Peninsula to understand the dispute and conflict context and to co-ordinate management approaches and develop joint mitigation measures.	Y		SEP
GNL14	The Project will monitor and report on project environmental and social performance as required by national legislation and as required by the ESMP.	Y	Y	MRP

Table E4.4-1 Project Mitigation Commitments Register and Relevant Management Plans

ID	Mitigation Commitment	Construction	Operation	Management Plan(s)
HR01	Financial management workshops will be held with workers to raise levels of financial literacy. During the recruitment process and throughout their contract, workers will be advised regularly that the duration of their employment is temporary and that they should maintain their existing livelihoods during this period and prepare through sound financial management for the ultimate termination of their employment.	Y		SEP, LMP
HR02	As part of the tendering process, (sub) contractors will be required to include training components in their proposal aimed at increasing local employment as well as improving skills of local staff.	Y		PSCMP
HR03	The workers' grievance procedure will include the option to log grievances anonymously.	Y		LMP
HR04	A formal structure will be established (e.g. Ethics Committee), which deals with infringement of Human Rights linked to the working environment; a company representative will participate in the Ethics Committee; infringements of the Project labour policy and national regulations will be monitored.	Y		SEP, LMP, MRP
HR05	Hiring managers from (sub) contractors will receive training regarding the developer's non-discrimination policies.	Y		LMP, PSCMP
HR06	Gender-based hiring criteria will be included in tendering documents, so that it becomes part of the selection criteria for (sub) contractors; contracts will include targets stipulating a minimum number of women as well as staff with disabilities or other vulnerable groups.	Y		LMP, PSCMP, MRP

Table E4.4-1 Project Mitigation Commitments Register and Relevant Management Plans

ID	Mitigation Commitment	Construction	Operation	Management Plan(s)
HR07	As a standard clause in all contracts, no employees shall be hired, directly or indirectly, under the age of 18 years of age. It will be the responsibility of the developer to ensure that no children under the age of 18 are involved in their supply chain. If periodic inspections and audits identify children under the age of 18 being hired by the developer, this will be considered a breach of contract and the child will be removed from the workplace. Their salary may continue to be paid to them for a set period pending the putting in place an alternative solution.	Y		LMP, PSCMP
HR08	Stakeholders concerned about child labour will be encouraged to use the grievance mechanism to address project-related child labour concerns.	Y		SEP
HR09	The Government will be requested not to use any prison labour for tasks that are, or could be associated with, project activities.	Y		SEP, LMP
HR10	Contracts will not include provisions that may support forced labour; for example, requests of deposit guarantees from employees to have access to safety protection equipment or other materials.	Y		LMP
HR11	As part of the work site induction, all staff will be informed on workers' rights.	Y		LMP
HR12	The Project will require that all workers in similar jobs work under the same, or similar, working conditions (salary, vacation, insurance etc.)	Y		LMP, PSCMP
HR13	The Human Resources function will organize periodic town hall-style sessions to provide information and receive labour and working conditions related feedback.	Y		SEP, LMP

Table E4.4-1 Project Mitigation Commitments Register and Relevant Management Plans

ID	Mitigation Commitment	Construction	Operation	Management Plan(s)
HR14	All workers will have contracts describing conditions of work and will have the contents explained to them. This includes their legal rights under national law. Contracts will be available in workers' native languages written in easily understandable language. Contracts will state terms of employment and duration and specifically address: <ul style="list-style-type: none"> • salary • working conditions • working hours and overtime • holidays and sick leave • social security and compensation • health insurance • access to remedy. • medical leave • other provisions related to medical care. 	Y		LMP
HR15	A due diligence evaluation of each (sub) contractor's human rights record related to labour and working conditions will be conducted.	Y		LMP, PSCMP
HR16	Community Liaison Officers will hold regular meetings with supply chain workers to address human and labour rights. This includes a focus on harassment including the possibility of demands for sexual favours, or a financial kick-back during the recruitment process.	Y		SEP
HR17	The Project will work in partnership with local organizations to address gender bias; female CLOs will be employed to facilitate project employment and to improve the work environment for women. Female CLOs will hold periodic meetings with female employees and community groups to ensure concerns specific to women and children are identified and to solicit suggestions for improvement.	Y		SEP, LMP
HR18	Ensure that benefits for spouses or dependants of employees (such as health insurance or pension schemes) are offered on a non-discriminatory basis.	Y		LMP, PSCMP

Table E4.4-1 Project Mitigation Commitments Register and Relevant Management Plans

ID	Mitigation Commitment	Construction	Operation	Management Plan(s)
HR19	The employee Code of Behaviour will include a clause that a sexual relation based on power inequality will lead to instant dismissal of the senior person.	Y		LMP, PSCMP
HR20	The Project's commitment to human rights for all stakeholders includes those that self-identify as Indigenous Peoples and the cultural characteristics that form their identity; stakeholder engagement will continue to be completed in a manner that is sensitive to these characteristics and fully documented.	Y		SEP
HR21	The Project will consult with appropriate institutions and groups to identify desirable and feasible land use agreements required for the project, in terms of national legislation and IFC Performance Standard 7, with people who self-identify as Indigenous Peoples.	Y		SEP, RAP
HR22	An awareness campaign targeting schools at sensitive locations within the project AOI will be developed, addressing: <ul style="list-style-type: none"> • Importance of staying in school. • Risks particularly to girls of relationships with transient workers, transactional and commercial sex. • Road safety awareness. • Awareness about their rights. • Project grievance mechanism and their right to use it. 	Y		SEP
HR23	As part of Camp Management Standards, menus in project facility canteens will be developed in consultation with a dietician to ensure adequate nutrition, cultural acceptability, portion size and diversity that is acceptable to all workers.	Y		OHSSP
HR24	The Project will develop a campaign focused on providing realistic community expectations with regard to livelihood options and employment opportunities.	Y		SEP

Table E4.4-1 Project Mitigation Commitments Register and Relevant Management Plans

ID	Mitigation Commitment	Construction	Operation	Management Plan(s)
HR25	The OHSSP, LMP and the CHSSP will include strategies for implementing the Voluntary Principles on Security and Human Rights.	Y		LMP, CHSSP, OHSSP
HR26	The Project will deal directly with those having customary rights of occupancy to land; with the compensation process witnessed by appropriate third party to minimize the risk of interference by intermediaries.	Y		RAP
HR27	The Project will support Government efforts to clarify disputed land boundaries in the Project area, in particular where it concerns customary right of occupancy of land.	Y		SEP, RAP
HR28	As part of the project OHSSP, a job-specific risk assessment (RA) process will be developed to consider: • risks associated with project activities; • mitigation measures (PPE, etc.); and • knowledge and understanding of the local workforce. Based on the outcome of the RA process, appropriate management measures will be developed and implemented prior to any activities being undertaken.	Y		OHSSP
HR29	Risks from and mitigation of Worker Fatigue will be specifically addressed in the Occupational Health, Safety and Security Plan and the Transport and Road Safety Management Plan; the latter will stipulate driving hours and night driving will be by exception only.	Y		OHSSP, TRSMP
HR30	Specific classes of hazards will be identified in work areas, including physical, chemical, biological, and radiological hazards and communicated to the workforce.	Y		OHSSP
HR31	As part of the OHSSP, special attention will be paid to the health and safety of pregnant women, disabled employees and other vulnerable workers.	Y		OHSSP
HR32	PPE and safety gear will take into account gender differences and the special needs of pregnant women.	Y		OHSSP

Table E4.4-1 Project Mitigation Commitments Register and Relevant Management Plans

ID	Mitigation Commitment	Construction	Operation	Management Plan(s)
HR33	The Project will identify potential PIIM areas of concern and work with local leaders to establish mitigation measures that will include informing PACs of risks and opportunities associated with PIIM.	Y		PIIMP
HR34	An Information Education and Communication (IEC) programme will be developed for workers addressing social conduct and including topics such as: gender-based violence and, drug and alcohol misuse. The IEC programme will explore opportunities to support community initiatives addressing vulnerable groups including gender balance.	Y		CHSSP
HR35	As part of the CHSSP, implement community patrols during the evenings to monitor and minimise night-time activity in project construction areas.	Y		CHSSP
HR36	As part of the project OHSSP, ensure that vector management on all project sites (camps and construction) align with national vector control programmes and strategies.	Y		OHSSP
HR37	The Project will use international criteria and considerations (in terms of IFC Performance Standard 7) to inform content of the Resettlement Action Plan with regard to people who self-identify as Indigenous Peoples.	Y		RAP
HR38	Project will work in partnership with local organisations to provide support to women seeking employment with the project so that they are better able to express and understand opportunities, benefits and their rights at work.	Y		SEP, LMP
HR39	Equal remuneration for jobs of equal value for men and women will be provided.	Y	Y	LMP
HR40	An independent labour rights related monitoring and evaluation system will be established, possibly in collaboration with the national regulatory agencies, to ensure that policies are adhered to and national legislation is followed.	Y		LMP

Table E4.4-1 Project Mitigation Commitments Register and Relevant Management Plans

ID	Mitigation Commitment	Construction	Operation	Management Plan(s)
HR41	The Project will review the project performance regarding the Voluntary Principles on Security and Human Rights and develop an action plan to address performance improvement where necessary; the operational phase Labour Management Plan, Occupational Health, Safety and Security Plan and, the Community Health, Safety and Security Plan will account for any new measures that are required.		Y	LMP, CHSSP, OHSSP
INF01	For major road crossings, crossing techniques that minimize the obstruction of traffic flow will be selected.	Y		IUMP
INF02	A preconstruction survey area will be defined where there is potential for vibration effects on dwellings and buildings. The survey (including photographs) will record the external condition of dwellings and buildings before construction, provide baseline evidence in the event of a claim for damage, and will inform pre-entry agreements that will also include repair requirements.	Y		IUMP
INF03	Potentially affected landowners, land users, communities and other affected stakeholders (e.g. tourism operators) will be consulted if there is likely to be any disruption to the existing infrastructure and utility services. Feedback from communities will inform planning of the works, especially when determining the options for temporary alternatives.	Y		IUMP

Table E4.4-1 Project Mitigation Commitments Register and Relevant Management Plans

ID	Mitigation Commitment	Construction	Operation	Management Plan(s)
INF04	Any planned diversion of utility services, closures of any road or track, or planned traffic diversions will be communicated to local authorities and affected communities at least 72 hours before the works. Information provided to the community will include (as relevant to the diversion) but not be limited to details of the timing and duration of the diversion; the route of traffic diversions; and traffic control measures for road crossings where delays and public safety are key factors.	Y		SEP, IUMP
INF05	A crossing schedule, including all known roads, telephone and electricity facilities and oil, gas and water pipes, will be maintained. Owners and service operators will be consulted and full agreement gained to cross the infrastructure or utility. Where a third-party utility service will be crossed by the project, a method statement that includes measures to protect the integrity of the utility service will be agreed with the service operator before work can start.	Y		IUMP
INF06	The Project will notify third-party utility services of any damage and the damage will be repaired promptly in consultation with the service operator or utility owner. A timetable for repair of any damaged infrastructure will be agreed with the service operator or utility owner and communicated to affected communities.	Y		IUMP
INF07	If project activities affect land-based livelihoods because of interruption to irrigation, drainage or agricultural production, appropriate compensation will be provided in accordance with the RAP.	Y		RAP, IUMP
INF08	Authorities will be notified when oversize heavy loads need to be transported and such loads will be escorted by the project.	Y		IUMP, TRSMP

Table E4.4-1 Project Mitigation Commitments Register and Relevant Management Plans

ID	Mitigation Commitment	Construction	Operation	Management Plan(s)
INF09	The design of new road sections and upgrades will take account of local conditions to ensure maintenance of good road condition, for example inclusion of drainage ditches.	Y		IUMP
INF10	A post-construction exit survey will be conducted covering all areas surveyed during preconstruction (and any additional land requirements during construction) to assess the condition of dwellings, roads used including bridges, drainage structures, signage, traffic management and other road infrastructure. Any actions, such as repairs, arising from the exit survey will be closed out on a timely basis to allow a prompt return to the relevant authority, village or landowner.	Y		IUMP
INF11	Infrastructure and utility services will be identified and protected during construction.	Y		IUMP
INF12	Where disruption to infrastructure and utilities will occur for more than 12 hours, a risk analysis of impacts on affected settlements will be completed. Where there will be a risk to health or livelihood to settlements or where the disruption is not acceptable to the affected settlements, alternatives will be provided.	Y		IUMP
INF13	An initial survey, supported by photographs, will be completed of the condition of roads to be used by the project including but limited to bridges, drainage structures, signage, traffic management and other road infrastructure. The survey will be agreed and signed by the road authority, local authority and any affected landowner. The survey will be made available to the road authority and municipal authorities if requested. The chosen project access routes will be improved as required to provide safe access for the project duration.	Y		IUMP
INF14	Preference will be given to transport of pipe and other construction materials by rail to Isaka where feasible.	Y		TRSMP

Table E4.4-1 Project Mitigation Commitments Register and Relevant Management Plans

ID	Mitigation Commitment	Construction	Operation	Management Plan(s)
INF15	To avoid disruption to Tanzania Railways Limited's (TRL's) existing railroad schedule, a timetable of movement of project-related goods will be agreed with the Government of Tanzania and TRL. Feedback from TRL will be taken into account during planning of schedule for the movement of project-related goods. In the event of unplanned disruptions to the scheduled movement of project-related goods, TRL will be consulted 72 hours in advance. The project will also have monthly meetings with TRL during construction to evaluate progress on the movement of project-related goods and address arising operational matters.	Y		IUMP
INF16	Where there is potential for congestion on shared transport routes, the project will liaise with third party developers, the police and authorities to identify and implement additional traffic management measures that limit disruption.	Y		IUMP
LIV01	The community health, safety and security plan will include measures to reduce the spread of animal diseases due to increased movement of livestock.	Y		RAP, CHSSP
LIV02	A marine livelihoods study, that includes the implications of the marine exclusion zone (MEZ), will be conducted in the AOI. Based on this study, a marine livelihoods restoration plan (LRP) will be developed.	Y	Y	RAP
LIV03	The CHSSP will describe requirements to be implemented for vehicles passing through areas where animal disease control measures are in place.	Y		CHSSP
LIV04	The Project will undertake engagement with pastoralists who are active in the project AOI to build awareness of construction activities and schedule.	Y		SEP
LIV05	Grievances arising from the community in relation to maintenance activities at AGIs will be handled in accordance with the project grievance procedure.	Y		SEP, RAP

Table E4.4-1 Project Mitigation Commitments Register and Relevant Management Plans

ID	Mitigation Commitment	Construction	Operation	Management Plan(s)
LIV06	Post RAP monitoring of PAPs engaged in gold ASM or high value crop cultivation, particularly female headed households, youth and casual, landless artisanal miners, will be implemented. Additional measures will be developed and implemented where necessary to ensure livelihoods are restored to pre-project levels.	Y		RAP
LNP01	A preconstruction survey, including photographs, will be undertaken to document the condition of the land including immovable assets, crops and improvements required to the land before construction.	Y		RP
LNP02	Any new aggregate extraction sites and batching plants sites, including 3rd party sites, will undergo environmental and social evaluation prior to use; and, where possible, new sites will be located as close as possible to the existing road network to reduce the requirement for new access roads.	Y		NRMP, PSCMP
LNP03	A Resettlement Policy Framework (RPF) has been developed in line with national legislation, Good International Industry Practice (GIIP) and IFC Performance Standard 5. The RPF will outline procedures related to compensation for loss of assets and livelihood restoration. A Resettlement Action Plan (RAP) will describe the modalities of identifying Project Affected People (PAP) and the procedures related to compensation for loss of assets and livelihood restoration strategies. Post resettlement monitoring of livelihood restoration measures will be implemented. Additional measures will be developed and implemented where necessary to ensure livelihoods are restored as a minimum to pre-project levels.	Y		RAP, MRP
LNP04	The Project will continue monitoring of, and liaising with authorities on land speculation. Where required additional interventions will be developed to enhance existing interventions.	Y		SEP, RAP, MRP

Table E4.4-1 Project Mitigation Commitments Register and Relevant Management Plans

ID	Mitigation Commitment	Construction	Operation	Management Plan(s)
LNP05	An evaluation of the land acquisition process at the MST site will be undertaken and a gap analysis conducted in terms of international standards; measures will be applied to remedy any gaps.	Y		RAP
LNP06	PACs will be sensitised to recent land speculation and instances of associated violence and informed of actions that can be taken.	Y		SEP
LSC01	Measures to keep light pollution to a minimum will be implemented. These include using: <ul style="list-style-type: none"> • modern specification lighting at PRS1 and the MST to reduce light spill to surrounding areas • daylight sensors at PRS1 and the MST where possible to prevent unnecessary lighting during the day • low level, low-impact bollard lighting in the camp accommodation areas at the MST, where possible. 	Y		PPP
LSC02	Materials and colours will be selected to reduce the visual impact of the MST and LOF.	Y		RP
LSC03	Options will be considered for the use of surplus rock from blasting including: <ul style="list-style-type: none"> • crushing and onsite re-use • offsite re-use • offsite disposal • onsite placement. if this is in keeping with the local landscape character. 	Y		WMP
MAIR01	Construction and operational marine vessels will obtain an International Air Pollution Prevention Certificate confirming compliance with both the equipment and operational requirements of MARPOL 73/78 Annex VI.	Y	Y	PPP
MAIR02	Marine construction vessels, and equipment on vessels, will be maintained regularly in accordance with the manufacturer's recommendations to maximise fuel efficiency and help reduce emissions.	Y		PPP

Table E4.4-1 Project Mitigation Commitments Register and Relevant Management Plans

ID	Mitigation Commitment	Construction	Operation	Management Plan(s)
MBIO01	The Biodiversity Action Plan will include marine conservation measures, which will be developed and implemented as required.	Y	Y	BMP
MBIO02	A marine environmental sensitivities report will be developed, including information on legally protected (nationally or internationally recognised) marine areas, marine mammals and turtle activity, and critical areas to avoid. This report will be provided to the construction vessel contractors.	Y	Y	BMP
MBIO03	In selecting working areas, habitats that could be sensitive to construction, for example, coral reefs, seagrass beds and mangroves, will be avoided, or construction techniques to reduce effects on such habitats will be utilised where avoidance is not possible.	Y		BMP
MBIO04	During driven pile installation activities, there will be a gradual ramping up of piling power (soft start) over a minimum of 20 minutes until full operational power is achieved. During this time the MMMP will be implemented. Pile installation at the LOF will be limited to daylight hours in order to improve the application of marine megafauna mitigation measures.	Y		BMP, PPP
MBIO05	A Marine Megafauna Mitigation Protocol (MMMP) will be developed to internationally recognised best practice (e.g. JNCC). This will include the use of both Marine Mammal Observers (MMOs) and Passive Acoustic Monitoring (PAM) within a >500m mitigation zone by suitably qualified, competent and experienced personnel. Data collected relating to pile installation activity and sightings / detection will be recorded and submitted to the company and regulators.	Y		BMP

Table E4.4-1 Project Mitigation Commitments Register and Relevant Management Plans

ID	Mitigation Commitment	Construction	Operation	Management Plan(s)
MBIO06	Construction work on the LOF will be completed in daylight hours as far as possible to reduce lighting requirements. Night lighting of the load-out facility construction site and construction vessels will be directional and kept to the lowest level necessary for safe construction operations, to reduce attraction of marine wildlife.	Y		BMP, PPP
MBIO07	All construction and operational vessels will undertake ballast water exchange in line with the requirements of the 2004 International Convention for the Control and Management of Ships' Ballast Water and Sediments (BWM Convention), where applicable including: • holding on board a ballast water management plan • keeping records of all ballast water operations.	Y	Y	BMP, PPP
MBIO09	Night lighting of the LOF will be defined under a Lighting Management plan (LMP) designed to minimise the amount of excessive light within and outside of the LOF, to reduce attraction of marine wildlife.	Y	Y	PPP, MARINE VMP
MBIO10	All vessels used in construction and operation (including tankers) to adhere to the IMO 2011 Guidelines for the Control and Management of Ships' Biofouling to minimize the transfer of invasive aquatic species.	Y	Y	PPP
MBIO11	Monitoring of marine alien invasive species will be described in the Monitoring and Reporting Plan; results will inform any action that may be required to address potentially introduced AIS.	Y	Y	BMP
MBIO12	Monitoring of suspended sediment and sedimentation will be described in the Monitoring and Reporting Plan; results will inform remedial action.	Y	Y	PPP, MRP
MCHSW01	Marine exclusion zones and associated access routes will be designated and implemented in consultation with the Ports Authority.	Y	Y	SEP, CHSSP, MARINE VMP

Table E4.4-1 Project Mitigation Commitments Register and Relevant Management Plans

ID	Mitigation Commitment	Construction	Operation	Management Plan(s)
MCHSW02	The Ports Authority will be notified of project activities on a daily basis, allowing for effective management of other port users.	Y		SEP, CHSSP, MARINE VMP
MCHSW03	Following construction, the authorities will be informed of the as-built location of the LOF and its exclusion zone, so that it can be included on nautical charts of the area.	Y		SEP, CHSSP
MEPR01	A bridging document will be developed to link marine vessels' shipboard oil pollution emergency plans into the project Pollution Prevention Plan (PPP) and Emergency Preparedness and Response Plan (EPRP). Consultation and liaison with the Tanzania Ports Authority, and other relevant authorities, will be undertaken to optimise the response system.	Y	Y	PPP, EPRP
MEPR02	All marine construction vessels will have an International Oil Pollution Prevention Certificate, maintain an oil record book and have an approved shipboard oil pollution emergency plan in accordance with MARPOL 73/78 Annex I.	Y		PPP
MEPR03	Appropriate spill kits or absorbent materials will be held on board all marine construction vessels. Spill kits will be checked during regular inspections to ensure they remain adequate for the needs of the project.	Y		PPP
MEPR04	A procedure for the loading of oil onto tankers will be developed and implemented; the procedure will address pollution prevention, communications, inventory management, spill assessment and, monitoring of equipment and loading process as a minimum.		Y	PPP, EPRP
MHR01	The Voluntary Principles risk assessment for the MEZ will be updated and completed (prior to construction activity mobilising) in consultation with relevant stakeholders.	Y	Y	SEP, RAP, CHSSP

Table E4.4-1 Project Mitigation Commitments Register and Relevant Management Plans

ID	Mitigation Commitment	Construction	Operation	Management Plan(s)
MLIV01	The Project will liaise with fishermen and marine users to provide information on the construction exclusion zone and activities, including construction vessel and road transit routes. Activities with the potential to cause disruption (e.g., noise) will be notified at a minimum of 24 hours in advance.	Y		SEP, CHSSP, MARINE VMP
MPHY01	If there is a risk of scour, and scour protection is required, suitable scour protection methods, e.g. rock dumping, will be utilised taking into account the proximity of receptors such as coral reef. Any scour protection material used during construction will not contain chemical contaminants, will be biologically clean (to reduce the risk of introducing invasive species) and will be washed to remove dust that would otherwise potentially wash into the marine environment.	Y	Y	BMP
MPHY02	Cement tank wash waters will not be discharged to sea.	Y		PPP
MPHY03	Dynamically positioned (DP) vessels are the preferred pile installation platform and will be used where conditions allow (i.e. water depths greater than 16 m).	Y		MARINE VMP
MPHY04	A detailed preconstruction survey (e.g., side-scan sonar survey, diver, underwater video for subtidal and walk over for intertidal) will be performed to inform the detailed development and application of other mitigation measures.	Y		BMP
MPHY05	Eco-engineering solutions that are in keeping with the environmental context of the area will be used to enhance environmental heterogeneity. This could include design measures to encourage development of ecosystems already present in the vicinity or specifying scour protection to encourage inhabitation by local reef species.	Y		BMP

Table E4.4-1 Project Mitigation Commitments Register and Relevant Management Plans

ID	Mitigation Commitment	Construction	Operation	Management Plan(s)
MPHY06	Discharge from MST holding pond will be routed to an offshore discharge point at the LOF, discharging the water through a diffuser at 10 m depth to facilitate more rapid dispersion in the marine environment. The discharge will be regularly monitored, and a discharge register maintained.		Y	PPP
MPHY07	The vessel management plan (VMP) will be created after the detailed preconstruction study has been conducted and be informed by other baseline information gathered during the impact assessment. The VMP will cover: anchoring, navigation, refuelling, lighting and vessel movements, and be designed to minimise impacts to marine and onshore VECs where possible.	Y	Y	MARINE VMP
RES01	All excavated materials will be screened and reused where possible to reduce the need for newly quarried aggregates.	Y		WMP, NRMP
RES02	If timber is cleared (e.g., as part of right-of-way clearance), it will be reused for construction activities as far as possible. Release of any and all chemically treated waste timber will be made by on a case-by-case basis.	Y		WMP, NRMP
SOL01	Where required, imported soil will have similar physical characteristics to soil in the area where it will be deposited. Soil will be checked, and analysed if needed, for presence of invasive species and contamination.	Y		SMP
SOL02	Environmental and social evaluations will be undertaken to identify suitable offsite disposal sites for waste soil and rock, and appropriate management measures to be implemented. All temporary borrow pits and soil and rock disposal sites will be reinstated, unless instructed otherwise by the regulatory authorities, in accordance with pre-entry agreements with landowner and location-specific reinstatement plans will be prepared and implemented.	Y		WMP, SMP, RP

Table E4.4-1 Project Mitigation Commitments Register and Relevant Management Plans

ID	Mitigation Commitment	Construction	Operation	Management Plan(s)
SOL03	Where benching is required then the areas will be re-contoured to original profiles. Side casting in areas of steep terrain will be prohibited. The effects of accidental spoil slippage on steep slopes will be mitigated, e.g., by using fences or a geotextile membrane.	Y		SMP
SOL04	Load-bearing/ ground protection materials, such as bog mats and geotextile membranes under temporary haul roads, will be used to support heavy loads in areas of soft ground, including wetland areas.	Y		SMP
SOL05	Local communities will be discouraged from using the right-of-way as an access road during construction through signage, awareness raising and the use of communication materials.	Y		CHSSP
SOL06	Topsoil and subsoil stockpiles will be stored in accordance with the Soil Management Plan, be free draining and include gaps left in strategic locations to allow potential floodwater through.	Y		SMP
SOL07	If topsoil is stored for more than six months, the stacks will be monitored for: <ul style="list-style-type: none"> • the presence of weeds, which will be controlled in accordance with the weed and pest control programme • compaction and erosion – corrective measures will be implemented if either is identified. Reinstatement will be undertaken as early as practicable following completion of construction activities in any ROW section or site.	Y		SMP
SOL08	A preconstruction soil survey will be undertaken of the RoW and MCPY and other construction facilities, based on a representative sample, to: <ul style="list-style-type: none"> • measure the depth of the topsoil layer along the pipeline route to inform requisite stripping depth • identify areas of fragile, sensitive and thin topsoil • identify areas lacking topsoil. 	Y		SMP

Table E4.4-1 Project Mitigation Commitments Register and Relevant Management Plans

ID	Mitigation Commitment	Construction	Operation	Management Plan(s)
SOL09	Recontouring should be sympathetic and in keeping with preconstruction profiles, where this is not precluded by risk to integrity of the pipeline or erosion considerations.	Y		RP
SOL10	Before construction personnel and equipment are demobilised, temporary buildings and equipment, aboveground and belowground infrastructure, utilities, tools and any excess material brought onsite or generated during construction and commissioning will be removed. All off ROW sites impacted upon will be reinstated to meet pre-entry agreements with the landowner and in accordance with location-specific reinstatement method statements or plans to be prepared and implemented. Location-specific closeout reports, including photographs, will be produced to document the condition of temporary sites at handover following reinstatement.	Y		RP
SOL11	Seeds of species that have the potential to outcompete local plant species will not be used in revegetation seed mixes. Where bio restoration is required, local species will be used as far as available.	Y		BMP, RP
SOL12	Procedures will be developed, incorporating plans for erosion and sediment control and reinstatement. These will be produced before work begins at areas of fragile, sensitive or thin topsoil, side slopes or narrow ridges and at watercourse crossings. Sediment interception measures will be installed, inspected and maintained to prevent sediment runoff from the right-of-way or construction sites affecting watercourses, wetlands, waterbodies or environmentally sensitive areas. Procedures will include additional precautions to be taken and increased monitoring (minimum twice per week), with the aim of preserving the topsoil for subsequent replacement.	Y		PPP

Table E4.4-1 Project Mitigation Commitments Register and Relevant Management Plans

ID	Mitigation Commitment	Construction	Operation	Management Plan(s)
SOL13	<p>A preconstruction survey, including photographs, will be undertaken to document the condition of the land on which the RoW, construction and permanent facilities and access roads will be located. The survey will include immovable assets, crops and any remediation required to the land before construction. The survey will:</p> <ul style="list-style-type: none"> • provide baseline evidence in the event of a claim for damage • identify existing contamination such as illegal disposal • inform community engagement with regard to landusers who's access, drainage or irrigation may be temporarily disrupted • inform site reinstatement plans and remediation with respect to disrupted access, drainage or irrigation <p>Through community engagement, remediation / reinstatement plans will be agreed with relevant landusers prior to access onto a site.</p>	Y		RP
SOL14	<p>Areas of surface contamination identified prior to construction within the project footprint will be remediated before or during project construction. Where cleanup of pre-existing contaminated land is required, a remediation proposal will be implemented including but not limited to:</p> <ul style="list-style-type: none"> • remediation techniques • the cleanup standard to be achieved • monitoring and analysis of remediated land to be undertaken • all regulatory and project documentation requirements • appropriate environmental and occupational health and safety protection measures to be adopted. <p>All cleanup and remediation activities will be adequately documented.</p>	Y		PPP, RP

Table E4.4-1 Project Mitigation Commitments Register and Relevant Management Plans

ID	Mitigation Commitment	Construction	Operation	Management Plan(s)
SOL15	Contaminated material storage areas will be provided with containment measures (e.g., bunds, ditches, impermeable base membranes and covers) to prevent runoff and airborne losses.	Y		PPP
SOL16	When the pipeline is operating, regular monthly monitoring and inspections will be undertaken to check that the security and integrity of the pipeline is not compromised by erosion, with weekly monitoring at locations susceptible to erosion.		Y	RP, MRP
SOL17	Trench breakers will be installed in the pipeline trench where downhill flow within the backfilled trench may lead to erosion.	Y		RP
SOL18	New access roads will follow existing tracks, where possible, and will be designed with adequate slope and cross fall drainage to channel runoff safely to off-road soakaways without causing erosion or siltation.	Y		RP
WHSW01	Provision of food to workers will be planned to cater for workforce requirements and therefore minimise food waste as far as possible.	Y		WMP, OHSSP
WHSW02	As part of the project OHSSP, construction camps will be designed and built to meet national requirements and regulations. Measures will be detailed to avoid and reduce impacts associated with the development and occupation of construction camps, including but not limited to: <ul style="list-style-type: none"> • suitable and sufficient welfare facilities will be provided appropriate for both genders • clean and sanitary toilet facilities and showers will be provided appropriate for both genders. • adequate segregation between different areas (e.g. accommodation and hazardous areas) • measures to reduce or remove community disturbance or nuisance from the camps, e.g. preventing litter, dust generation, odours and noise. 	Y		OHSSP

Table E4.4-1 Project Mitigation Commitments Register and Relevant Management Plans

ID	Mitigation Commitment	Construction	Operation	Management Plan(s)
	• include a helicopter landing area and secure fencing around the boundary.			
WHSW03	Provide workers with personal protection from prevalent diseases where feasible (e.g., condoms and ITN).	Y		OHSSP
WHSW04	As part of camp management standards, procedures will be developed to maintain the condition of each camp and to ensure camp facilities are kept clean and hygienic.	Y		OHSSP
WHSW05	As part of the OHSSP, a food and water management plan will be developed and implemented to reduce the risk of water- and food-borne disease outbreaks occurring among the workers and the associated risk of transmission to local communities.	Y		OHSSP
WHSW06	As part of the OHSSP Risk Assessment process, the risk to worker health posed by wildlife at each camp and yard will be assessed and appropriate management measures will be developed and implemented.	Y		OHSSP
WHSW07	Project approved vehicles will be provided to transport camp residents to worksites.	Y		LMP
WHSW08	As part of the OHSSP, a first aid needs assessment will be undertaken for each camp to determine first aider and first aid kit requirements (e.g., qualifications, content of kits, locations).	Y		OHSSP
WHSW09	As part of the OHSSP, a pest control plan will be developed for implementation on construction camps.	Y		OHSSP
WHSW10	As part of Camp Management Standards, pets will be prohibited in construction camps/MCPYs.	Y		OHSSP

Table E4.4-1 Project Mitigation Commitments Register and Relevant Management Plans

ID	Mitigation Commitment	Construction	Operation	Management Plan(s)
WHSW11	A workers' code of conduct outlining expected worker behaviours will be developed and implemented. This code of conduct will cover the interaction between the national and international workforce and local workforce but also interactions with unemployed PAC members. Compliance with the workers' code of conduct will be a contractual requirement for all contractor, including subcontractors' employees. In the event of non-compliance, workers will be disciplined in accordance with project disciplinary procedures and structures.	Y		LMP
WHSW12	As part of the OHSSP, a risk-based worksite and construction camp training programme will be developed and administered to the workforce, vendor representatives and site visitors; the training programme (including daily toolbox meetings) will be updated in accordance with changes made in scope, incident statistics and/or regulatory requirements. Daily toolbox meetings will be held where health and safety issues will be discussed.	Y		OHSSP
WHSW13	Prior to construction, a project workers' grievance procedure will be implemented, which will detail the processes for recording, investigating and, where necessary, implementing corrective actions relating to complaints, including the responsibility of the contractor. The workers' grievance procedure will: • be available for use by all workers, including subcontractor workers and workers in the primary supply chain; • be displayed at visible places in all camps and work sites.	Y		LMP
WHSW14	Hours worked by all project personnel will be according to their contracts and national regulatory requirements.	Y		LMP
WHSW15	A medical emergency response plan will be developed and implemented to ensure that emergency cases can be dealt with without impacting on district health services.	Y		OHSSP, EPRP

Table E4.4-1 Project Mitigation Commitments Register and Relevant Management Plans

ID	Mitigation Commitment	Construction	Operation	Management Plan(s)
WHSW16	PPE appropriate for the task will be provided to all workers.	Y		LMP
WHSW17	Lost time incidences and, type and incidence of malady (sickness, disease, injury) will be monitored.	Y		MRP
WHSW18	MCPYs will have health facilities with sufficient capacity and capability to prevent additional pressure being placed on local and district health services.	Y		OHSSP
WHSW19	As part of the OHSSP, basic workplace wellness programs that are culturally and religiously acceptable will be developed and implemented.	Y		OHSSP
WHSW20	The labour management plan will include: <ul style="list-style-type: none"> • Compliance with international labour standards, national labour laws and regulations concerning transparency, accountability, anticorruption and human rights; • Recognising workers' right to organise collective bargaining and trade unions; • Providing suitable working conditions, including rest facilities and breaks; • Mechanism of compliance with the ILO Maternity Protection Convention (2000); and • Respecting workers' rights to privacy including data protection requirements. 	Y	Y	LMP
WTR01	The storage of hazardous materials will be restricted to designated hazardous materials storage areas at least 50 m from any wetlands, surface watercourse or seasonal water channel. Such storage locations will be subject to site-specific environmental and social risk assessment that will inform site selection and the adoption of any additional mitigation measures. Storage areas for hazardous materials will be bunded (no drainage valves/holes), have impermeable floor and will be covered to minimise the ingress of rainwater.	Y		PPP

Table E4.4-1 Project Mitigation Commitments Register and Relevant Management Plans

ID	Mitigation Commitment	Construction	Operation	Management Plan(s)
WTR02	A refuelling procedure will be developed and implemented which will include but not be limited to: <ul style="list-style-type: none"> • details of mobile and static refuelling areas and equipment (e.g. impermeable drip trays) • regulatory / GIIP constraints of refuelling operations to sensitive environmental receptors • spill prevention measures • training on refuelling procedures. 	Y	y	PPP
WTR03	Site specific erosion risk assessments will be completed by a qualified fluvial geomorphologist or soil scientist as appropriate; the information will be used to prepare a soil management plan and a reinstatement plan prior to construction. Erosion control measures will include but not be limited to: <ul style="list-style-type: none"> • consideration of information from preconstruction surveys • locations where soil compaction may result in increased sediment laden runoff to watercourses and waterbodies • details on construction through soft ground, considering the use of load-bearing materials to support heavy loads in soft ground • measures for working in areas of fragile and sensitive soils • restrictions to the storage of materials on steep slopes • provision for erosion and sediment control at watercourses. 	Y		PPP, SMP, RP
WTR04	Watercourse banks will be stabilised directly after backfilling and subsequently restored to near original conditions. Where this is not possible, site-specific solutions will be proposed with engineering justification and assessment of potential impacts (including habitat connectivity).	Y		BMP, RP

Table E4.4-1 Project Mitigation Commitments Register and Relevant Management Plans

ID	Mitigation Commitment	Construction	Operation	Management Plan(s)
WTR05	Location-specific method statements will be produced for watercourse crossing construction. These method statements will incorporate plans for: <ul style="list-style-type: none"> • erosion control • sediment control • maintaining environmental base flows downstream of water crossings for example by using measures such as pumping, channel diversions and fluming • notifying fisherfolk as appropriate • reinstatement • spill response equipment. 	Y		PPP, RP
WTR06	Where water is abstracted from a surface waterbody, the flow, water level or water volume in the waterbody will be assessed before and during abstraction. Abstraction rates and the frequency of assessment of the water flow, level or volume will be monitored based on permit conditions. During abstraction from surface waters, inlet hoses will be fitted with suitably sized fish screens.	Y		BMP, NRMP
WTR07	As a requirement of the PPP, locations for discharging excavated pipeline trench water will be identified as part of a 'Permit to Pump Procedure' which will be implemented during the construction phase. Appropriate sediment control measures in line with recognised industry best practices will be implemented at each location.	Y		PPP
WTR08	The grey water stream will be separated from black water (e.g. sewage), treated and either reused (e.g., for toilet flushing, dust suppression) or discharged, in accordance with the environment project standards and national environmental guidance and regulations. All wastewater discharges will comply with permit conditions and the project environmental standards.	Y		WMP, NRMP

Table E4.4-1 Project Mitigation Commitments Register and Relevant Management Plans

ID	Mitigation Commitment	Construction	Operation	Management Plan(s)
WTR09	Other than when required for crossings excavations, construction equipment and traffic will normally not enter watercourses. Vehicles and equipment will cross watercourses via appropriately sized temporary culverts and bridging arrangements.	Y		BMP, PPP
WTR10	Bathing or washing clothes, vehicles and equipment by project employees will be prohibited in watercourses.	Y		BMP, PPP
WTR11	Surface water that could be affected by runoff from the pipeline route or worksites will be visually inspected on a regular basis and remedial measures implemented if sediment or contamination arising from project activities are visible.	Y		PPP, RP
WTR12	An effective collection and disposal systems for stormwater from all paved/hardstanding areas and buildings will be provided at aboveground installations.		Y	NRMP
WTR13	Water meters will be installed to measure the quantities of water supplied and wastewater discharged at the camps and detailed records will be kept of quantities of water reused and the purposes for which water is reused as part of the water management plan and the data used for monitoring water usage and project reporting requirements.	Y		NRMP
WTR14	Water conservation initiatives and opportunities to reuse water, e.g., for dust suppression or concrete mixing, will be identified, assessed for impacts on the environment and human health and those deemed suitable will be implemented.	Y		NRMP
WTR15	If temporary damming of a watercourse is required, a preconstruction engineering, social and environmental evaluation will be undertaken to plan the work and so the duration of the flow interruption is limited and to determine the need for pump around to maintain flows.	Y		BMP, NRMP, RP

Table E4.4-1 Project Mitigation Commitments Register and Relevant Management Plans

ID	Mitigation Commitment	Construction	Operation	Management Plan(s)
WTR16	An environmental and social evaluation of potential treated wastewater discharge locations will be undertaken as the basis for the development of measures to mitigate impacts from discharges on surface water ecology, downstream water users or terrestrial ecology. The evaluations will take into account the compliance with project environmental standards and will support applications for discharge permits. All licences and consents will be obtained before planned liquid discharges.	Y		PPP
WTR17	An industry-recognised manufactured grease trap will be installed at the outlet of the kitchen(s) facilities to prevent greases and fats from entering the grey water streams.	Y		WMP
WTR18	Treated sewage effluent which is not reused will be preferentially discharged to land. Before any discharge, the soil permeability will be evaluated, and engineered soakaways will be constructed, where required, to avoid impacts on land, surface water drainage and groundwater.	Y		WMP
WTR19	A contingency plan for wastewater treatment plant maintenance periods or downtime will be developed. This will include, as a minimum, the provision of holding tanks that can be used to retain emergency overflows or discharges that do not meet project environmental standards.	Y		WMP
WTR20	Surface water run-off from construction areas and AGIs will be discharged in accordance with project environmental standards.	Y		PPP
WTR21	All potentially contaminated wastewater, excluding sanitary wastewater, will be routed to an appropriately sized treatment unit capable of achieving consent conditions and project environmental standards.	Y		WMP

Table E4.4-1 Project Mitigation Commitments Register and Relevant Management Plans

ID	Mitigation Commitment	Construction	Operation	Management Plan(s)
WTR22	All licences and consents for hydrostatic test water discharge will be obtained following preparation of a hydrostatic test effluent disposal risk assessment. This will undergo internal technical evaluation before submitting the permit application to the appropriate water resources regulatory authority.	Y		PPP
WTR23	The water quality and sustainability of water abstracted from either new or existing boreholes or surface water will be monitored at suitable frequencies to confirm that supply meets permit conditions and project environmental standards and does not impact adversely on other known users.	Y		NRMP
WTR24	As part of the permit application, hydraulic testing and hydrogeological impact assessments will be undertaken to evaluate the potential impact on local groundwater abstraction points. If the assessment indicates potential impacts to local users, alternative borehole locations will be considered and these alternative locations will be subject to the same testing and impact assessment process.	Y		NRMP
WTR25	No oil-based muds will be used for drilling of groundwater exploration and water supply boreholes.	Y		PPP
WTR26	All groundwater exploration and supply boreholes will be designed by suitably experienced and qualified hydrogeologists to avoid contaminant migration pathways between different aquifers and geological formations.	Y		NRMP
WTR27	The Monitoring and Reporting Plan will detail robust monitoring and inspection requirements to be completed at locations with sensitive groundwater resources; to verify correct implementation of the PPP.	Y		PPP, MRP

Table E4.4-1 Project Mitigation Commitments Register and Relevant Management Plans

ID	Mitigation Commitment	Construction	Operation	Management Plan(s)
WTR28	<p>Groundwater levels will be monitored once every two weeks by the Project at all sites where groundwater abstraction occurs for the project.</p> <p>The location of monitoring well(s) will be determined by a qualified hydrogeologist to ensure that they are installed in the correct formation and at the correct distance between project abstraction boreholes and community water points.</p> <p>If the local water supplies are derogated to the extent that complaints are made by the community as a result of project abstraction, then the Project will provide alternative water supplies at a convenient location for the community that is not or is less influenced by the project's abstraction.</p>	Y		NRMP, MRP
WTR29	<p>A method statement will be prepared for horizontal directional drilling (HDD) operations and storage of HDD waste. This will include but not be limited to:</p> <ul style="list-style-type: none"> • good management practices for HDD drilling muds • use of water-based drilling muds • daily checks of waste containment areas to assure integrity • a contingency plan for cleanup and remediation to be implemented in the event of a break out of HDD mud on land and water • liaison with downstream users in the event of break out in water. 	Y		PPP
WTR30	<p>The Monitoring and Reporting Plan will describe requirements for monitoring community water sources including surface water and groundwater; the monitoring plan will detail monitoring boreholes and monitoring equipment.</p>	Y		MRP


E5 CONTENT TABLES OF MANAGEMENT PLANS

This section shows content tables for the following management plans:

- terrestrial management plans:
 - MP01: Biodiversity Management Plan
 - MP02: Pollution Prevention Plan
 - MP03: Waste Management Plan
 - MP04: Natural Resource Management Plan
 - MP05: Soil Management Plan
 - MP06: Cultural Heritage Management Plan
 - MP07: Reinstatement Plan
 - MP08: Stakeholder Engagement Plan
 - MP09: Resettlement Action Plan
 - MP10: Labour Management Plan
 - MP11: Project Induced In-Migration Management Plan
 - MP12: Procurement and Supply Chain Management Plan
 - MP13: Infrastructure and Utilities Management Plan
 - MP14: Community Health, Safety and Security Plan
 - MP15: Occupational Health, Safety and Security Plan
 - MP16: Transport and Road Safety Management Plan
 - MP18: Emergency Preparedness and Response Plan
 - MP19: Monitoring and Reporting Plan
 - MP20: Decommissioning Plan
- terrestrial management subplans:
 - Chemical Management Plan
 - Horizontal Directional Drilling Management Plan
 - Hydrostatic Testing Management Plan
 - Rock Blasting Management Plan
- marine management plans:
 - MP01 Biodiversity Management Plan
 - MP02: Pollution Prevention Plan
 - MP03: Waste Management Plan
 - MP04: Natural Resource Management Plan
 - MP06: Cultural Heritage Management Plan
 - MP07: Reinstatement Plan
 - MP08: Stakeholder Engagement Plan
 - MP10: Labour Management Plan
 - MP12: Procurement and Supply Chain Management Plan
 - MP13: Infrastructure and Utilities Management Plan
 - MP14: Community Health, Safety and Security Plan

- MP15: Occupational Health, Safety and Security Plan
- MP17: Vessel Management Plan
- MP18: Emergency Preparedness and Response Plan
- MP19: Monitoring and Reporting Plan
- MP20: Decommissioning Plan

Biodiversity Management Plan - Tanzania Terrestrial				Document Number: TZ-MID-60-0120-200306	
				Revision: 00	Status: IFR
				Rev. Date: 20/05/2019	
Doc. Type: PLN	Discipline: HSE	Phase: OV	Class: 1	Page 1 of 3	
			System / Subsystem: NA	Equipment Type: NA	

 <p>EAST AFRICAN CRUDE OIL PIPELINE</p>	<h2 style="color: #0056b3;">EACOP Project</h2>
---	--

This document has been generated by an Electronic Document Management System. When printed it is considered as a “for information only” copy. The controlled copy is the screen version and it is the holder’s responsibility that he/she holds the latest valid version”.

<h2 style="margin: 0;">Biodiversity Management Plan - Tanzania Terrestrial</h2>

00	IFR	18/05/2019	Issued for review	A Huckbody	S McBride P Eyraud	M Marchenko
Rev.	Status	Date	Revision Description	Issued by	Reviewed by	Approved by

Biodiversity Management Plan - Tanzania Terrestrial				Document Number: UT-MID-60-0120-200306	
				Revision: 00	Status: IFR
				Rev. Date: 17/05/2019	
Doc. Type: PLN	Discipline: HSE	Phase: OV	Class: 1	Page 2 of 3	
			System / Subsystem: NA	Equipment Type: NA	

TABLE OF CONTENTS

1 INTRODUCTION.....	3
1.1 Background to the Biodiversity Management Plan	3
1.2 Scope.....	3
1.3 Relationship With Other Project Components.....	5
1.4 Definitions	7
2 POLICY, LEGISLATION AND STANDARDS.....	9
2.1 Introductions.....	9
2.2 IFC Performance Standard (PS) 6.....	10
2.2.1 Introduction.....	10
2.2.2 Criteria for identifying Critical Habitat	11
3 PROJECT DESCRIPTION.....	14
3.1 Overview.....	14
4 BIODIVERSITY BASELINE OVERVIEW.....	16
5 BIODIVERSITY IMPACTS AND MANAGEMENT OVERVIEW.....	18
5.1 Introduction.....	18
5.2 Pre-construction and pre-clearance surveys.....	18
5.3 Biodiversity Action Plan.....	18
5.4 Construction Biodiversity Considerations.....	18
5.5 Mitigation Measures Before and After Construction	18
5.6 Impact Offsetting Arrangements	18
6 IMPLEMENTATION ARRANGEMENTS AND ROLES AND RESPONSIBILITIES	20
6.1 Introduction.....	20
6.2 Biodiversity Baseline.....	20
6.3 COMPANY Key Roles and Responsibilities	20
6.4 CONTRACTOR Key Roles and Responsibilities	21
6.4.1 Introduction.....	21
6.4.2 Development of BAPs.....	21
6.4.3 Staffing	22

Biodiversity Management Plan - Tanzania Terrestrial				Document Number: UT-MID-60-0120-200306	
				Revision: 00	Status: IFR
				Rev. Date: 17/05/2019	
Doc. Type: PLN	Discipline: HSE	Phase: OV	Class: 1	Page 3 of 3	
			System / Subsystem: NA	Equipment Type: NA	

6.4.4	Pre-clearance and vegetation removal.....	22
6.4.5	Bio-restoration planning	22
6.4.6	Fauna protection, hunting and fishing	22
6.4.7	River and stream crossing	23
6.4.8	Alien Invasive Species	23
6.5	Biodiversity Monitoring and Reporting During Construction.....	24
APPENDIX 1	25
1	INTRODUCTION.....	25
1.1	Introduction.....	25
1.2	Background.....	25
2	SPECIES FOUND IN THE STUDY CORRIDOR FROM BOTANY AND HABITAT BASELINE REPORT	26
3	SPECIES FOUND IN THE ROW CORRIDOR FROM FAUNA BASELINE REPORT	28
4	SPECIES FOUND IN THE ROW CORRIDOR FROM AVIFAUNA BASELINE REPORT	31

Pollution Prevention Plan (Tanzania)				Document Number: TZ-MID-60-0120-200308	
				Revision: 00	Status: IFR
				Rev. Date: xx/xx/2019	
Doc. Type: PLN	Discipline: HSE	Phase: OV	Class: 1	Page 1 of 3	
			System / Subsystem: NN	Equipment Type: NN	

 <p>EAST AFRICAN CRUDE OIL PIPELINE</p>	<h2>EACOP Project</h2>
---	------------------------

This document has been generated by an Electronic Document Management System. When printed it is considered as a “for information only” copy. The controlled copy is the screen version and it is the holder’s responsibility that he/she holds the latest valid version”.

<h2>Pollution Prevention Plan (Tanzania)</h2>

00	IFR	xx/xx/2019				
Rev.	Status	Date	Revision Description	Issued by	Reviewed by	Approved by

Pollution Prevention Plan (Tanzania)				Document Number: TZ-MID-60-0120-200308	
				Revision: 00	Status: IFR
				Rev. Date: xx/xx/2019	
Doc. Type: PLN	Discipline: HSE	Phase: OV	Class: 1	Page 2 of 3	
			System / Subsystem: NN	Equipment Type: NN	


TABLE OF CONTENTS

1	INTRODUCTION.....	4
1.1	PURPOSE	4
1.2	OBJECTIVES	4
1.3	PERFORMANCE – BASED APPROACH TO IMPACT MITIGATION	5
1.4	SCOPE	6
1.5	DEFINITIONS	6
1.6	LINKS WITH OTHER PLANS AND PROCEDURES	7
2	POLICY AND LEGISLATIVE REQUIREMENTS.....	8
2.1	INTRODUCTION	8
2.2	POLICY AND PROJECT STANDARDS.....	8
2.3	APPLICABLE LEGISLATION, CODES AND INDIVIDUAL STANDARDS.....	9
2.3.1	National Legislation	9
2.3.2	World Bank/IFC, International Standards and Conventions.....	9
2.3.2.1	ISO 14001:2015 and ISO 45001:2018	10
3	IMPACT AVOIDANCE AND IMPACT MITIGATION.....	10
3.1	INTRODUCTION	10
3.2	POLLUTION PREVENTION PRINCIPLES.....	11
3.2.1	Material/Fuel/Chemical Delivery and Storage Management.....	11
3.2.2	Preventing Pollution of the Land/Ground.....	13
3.2.2.1	Refuelling of Plant and Equipment	13
3.2.2.2	Energy Management and Control of Emissions	14
3.2.2.3	Plant and Equipment Management and Maintenance	14
3.2.2.4	Cement and Wet Concrete	15
3.2.2.5	Drilling/Tunnelling Mud Management	15
3.2.2.6	Contaminated Ground	15
3.2.2.7	Waste Management.....	16
3.2.3	Preventing Pollution to Water.....	16
3.2.3.1	Suspended Solids.....	17
3.2.3.2	Dewatering/Pumping	19
3.2.3.3	Wastewater	20
3.2.3.4	Pipeline Watercourse Crossings	20
3.2.3.5	Planned Maintenance	14
3.2.4	Preventing Pollution of the Air/Disturbance Event Management	21
3.2.4.1	Dust.....	21
3.2.4.2	Energy Management	14
3.2.4.3	Noise and Vibration	22
3.2.4.4	Light	24

Pollution Prevention Plan (Tanzania)				Document Number: TZ-MID-60-0120-200308	
				Revision: 00	Status: IFR
				Rev. Date: xx/xx/2019	
Doc. Type: PLN	Discipline: HSE	Phase: OV	Class: 1	Page 3 of 3	
			System / Subsystem: NN	Equipment Type: NN	

3.2.4.5	Blast Management.....	24
3.2.4.6	Atmospheric Emissions and Controls	25
3.2.4.7	Other Potential Sources of Disturbance/Nuisance Pollution	26
3.2.5	Marine Pollution Prevention Principles	26
3.2.6	Emergency Spill Response Strategies	28
3.2.6.1	Storage and Distribution of Pollution Control Equipment and Materials	28
3.2.6.2	Response Strategies	28
4	TRAINING, AWARENESS AND COMPETENCE.....	29
5	ROLES AND RESPONSIBILITIES	30
5.1	COMPANY	30
5.2	CONTRACTOR	30
6	VERIFICATION AND MONITORING OF CONTRACTOR PERFORMANCE.....	31
6.1	OBJECTIVES	31
6.2	AUDIT AND INSPECTION	31
6.3	KEY PERFORMANCE INDICATORS.....	32
6.4	CONTRACTOR PERFORMANCE.....	32
6.5	CONTRACTOR REPORTING	32
6.6	REVIEW AND IMPROVEMENT.....	32
6.6.1	Protection of Surface Water and Groundwater.....	33
6.6.2	Emissions to Air	36
6.6.2.1	Equipment and Plant Emissions	36
6.6.2.2	Ambient Air	36
6.6.2.3	Controlling Noise and Vibration	37
6.7	RECORD KEEPING	38
	APPENDIX 1: ESIA MITIGATION COMMITMENTS	39

Waste Management Plan (Tanzania)				Document Number: TZ-MID-60-0120-200309	
				Revision: 00	Status: IFR
				Rev. Date: xx/xx/2019	
Doc. Type: PLN	Discipline: HSE	Phase: OV	Class: 1	Page 1 of 3	
			System / Subsystem: NN	Equipment Type: NN	

 <p>EAST AFRICAN CRUDE OIL PIPELINE</p>	<h2>EACOP Project</h2>
---	------------------------

This document has been generated by an Electronic Document Management System. When printed it is considered as a "for information only" copy. The controlled copy is the screen version and it is the holder's responsibility that he/she holds the latest valid version".

<h2>Waste Management Plan (Tanzania)</h2>

00	IFR					
Rev.	Status	Date	Revision Description	Issued by	Reviewed by	Approved by

Waste Management Plan (Tanzania)				Document Number: UT-MID-60-0120-20309	
				Revision: 00	Status: IFR
				Rev. Date: xx/xx/2019	
Doc. Type: PLN	Discipline: HSE	Phase: OV	Class: 1	Page 2 of 3	
			System / Subsystem: NN	Equipment Type: NN	


TABLE OF CONTENTS

1 INTRODUCTION.....	4
1.1 PURPOSE	4
1.2 OBJECTIVES	4
1.3 PERFORMANCE-BASED APPROACH TO IMPACT MITIGATION	5
1.4 SCOPE	5
1.5 DEFINITIONS	6
1.6 LINKS WITH OTHER PLANS AND PROCEDURES	7
2 POLICY AND LEGISLATIVE REQUIREMENTS.....	8
2.1 INTRODUCTION	8
2.2 POLICY AND PROJECT STANDARDS	8
2.3 APPLICABLE LEGISLATION, CODES AND INTERNATIONAL STANDARDS	8
2.3.1 National Legislation	8
2.3.2 World Bank/IFC, International Standards and Conventions.....	9
2.3.2.1 ISO 14001:2015 and ISO 45001:2018	9
3 IMPACT AVOIDANCE AND IMPACT MITIGATION.....	10
3.1 INTRODUCTION	10
3.2 WASTE MANAGEMENT PRINCIPLES.....	14
3.2.1 Waste Management Hierarchy.....	15
3.2.2 Handling Procedures, Management and Documentation	16
3.2.3 Waste Classification.....	17
3.2.3.1 Hazardous Waste	17
3.2.3.2 Non-Hazardous Waste	17
3.2.3.3 Inert Waste.....	19
3.2.3.4 Non-Hazardous Waste from Camp Management and Office.....	19
3.2.3.5 Sewage Waste and Other Wastewaters from Camps and Associated Facilities	20
3.2.3.6 Non-Hazardous Construction Waste	20
3.2.3.7 Hazardous Construction Waste.....	21
3.2.4 Transfer of Waste and Tracking System	23
3.2.4.1 Waste Avoidance, Minimization & Handling	23
3.2.4.2 Vehicular Transport of Waste	25
3.2.4.3 Waste Tracking System	26
3.2.4.4 Waste Transfer Process	26
3.2.4.5 Contractor Treatment Facility Operating Procedures	27
3.2.5 End Use Management	28
3.2.5.1 Incinerators	28
3.2.5.2 Landfills.....	29

Waste Management Plan (Tanzania)				Document Number: UT-MID-60-0120-20309	
				Revision: 00	Status: IFR
				Rev. Date: xx/xx/2019	
Doc. Type: PLN	Discipline: HSE	Phase: OV	Class: 1	Page 3 of 3	
			System / Subsystem: NN	Equipment Type: NN	

3.2.5.3	Wastewater Treatment Plants	31
3.2.5.4	Horizontal Directional Drilling Waste	32
3.2.5.5	Oil Contaminated Soil as Waste	33
3.2.5.6	Trans-boundary Waste Disposal	33
4	TRAINING, AWARENESS AND COMPETENCE.....	33
5	ROLES AND RESPONSIBILITIES	34
5.1	COMPANY	34
5.2	CONTRACTOR	34
6	VERIFICATION AND MONITORING OF CONTRACTOR PERFORMANCE.....	35
6.1	OBJECTIVES	35
6.2	AUDIT AND INSPECTION	36
6.3	KEY PERFORMANCE INDICATORS.....	36
6.4	CONTRACTORS PERFORMANCE	36
6.4.1	Action Tracking System	37
6.5	COMMUNICATIONS	37
6.6	CONTRACTOR REPORTING	37
6.7	REVIEW AND IMPROVEMENT.....	38
6.7.1	Incinerators.....	39
6.7.2	Landfills	40
6.7.3	Wastewater Treatment Plants.....	41
6.8	RECORD KEEPING	42
7	APPENDICES.....	42
8	REFERENCES.....	47

Natural Resources Management Plan (Tanzania)				Document Number: TZ-MID-60-0120-200310	
				Revision: 00	Status: IFR
				Rev. Date: xx/xx/2019	
Doc. Type: PLN	Discipline: HSE	Phase: OV	Class: 1	Page 1 of 3	
			System / Subsystem: NN	Equipment Type: NN	

 <p>EAST AFRICAN CRUDE OIL PIPELINE</p>	<h2 style="color: #0056b3;">EACOP Project</h2>
---	--

This document has been generated by an Electronic Document Management System. When printed it is considered as a “for information only” copy. The controlled copy is the screen version and it is the holder’s responsibility that he/she holds the latest valid version”.

<h2 style="margin: 0;">Natural Resources Management Plan (Tanzania)</h2>
--

00	IFR					
Rev.	Status	Date	Revision Description	Issued by	Reviewed by	Approved by

Natural Resources Management Plan (Tanzania)				Document Number: TZ-MID-60-0120-200310	
				Revision: 00	Status: IFR
				Rev. Date: xx/xx/2019	
Doc. Type: PLN	Discipline: HSE	Phase: OV	Class: 1	Page 2 of 3	
			System / Subsystem: NN	Equipment Type: NN	


TABLE OF CONTENTS

1	INTRODUCTION.....	4
1.1	PURPOSE	4
1.2	OBJECTIVES	4
1.3	PERFORMANCE – BASED APPROACH TO IMPACT MITIGATION	5
1.4	SCOPE	6
1.5	DEFINITIONS	6
1.6	LINKS WITH OTHER PLANS AND PROCEDURES	8
2	POLICY AND LEGISLATIVE REQUIREMENTS.....	8
2.1	INTRODUCTION	8
2.2	POLICY AND PROJECT STANDARDS	9
2.3	APPLICABLE LEGISLATION, CODES AND INTERNATIONAL STANDARDS	9
2.3.1	National Legislation	9
2.3.2	World Bank/IFC, International Standards and Conventions.....	10
2.3.2.1	ISO 14001:2015 and ISO 45001:2018	10
3	IMPACT AVOIDANCE AND IMPACT MITIGATION.....	11
3.1	INTRODUCTION	11
3.1.1	Aggregates Management.....	11
3.1.2	Water Resource Management	12
3.1.2.1	Water Supply	12
3.1.2.2	Water Management and Conservation	13
3.1.2.3	Wastewater Management.....	15
3.1.2.4	Sludge Management.....	16
3.1.2.5	Construction Activities	17
3.1.3	Timber Management.....	19
3.1.4	Energy Efficiency	19
3.1.5	Other Raw Material Management	20
4	TRAINING, AWARENESS AND COMPETENCE.....	21
5	ROLES AND RESPONSIBILITIES.....	21
5.1	COMPANY	21
5.2	CONTRACTOR	22

Natural Resources Management Plan (Tanzania)				Document Number: TZ-MID-60-0120-200310	
				Revision: 00	Status: IFR
				Rev. Date: xx/xx/2019	
Doc. Type: PLN	Discipline: HSE	Phase: OV	Class: 1	Page 3 of 3	
			System / Subsystem: NN	Equipment Type: NN	

6	VERIFICATION AND MONITORING OF CONTRACTOR PERFORMANCE.....	23
6.1	OBJECTIVES	23
6.2	AUDIT AND INSPECTION	23
6.3	KEY PERFORMANCE INDICATORS.....	24
6.4	CONTRACTOR PERFORMANCE.....	24
6.5	CONTRACTOR REPORTING REQUIREMENTS	24
6.6	REVIEW AND IMPROVEMENT.....	25
6.7	RECORD KEEPING	25
7	APPENDICES.....	25
	APPENDIX 1: Esia Mitigation Commitments.....	25
	APPENDIX 2: Hydrostatic Testing Water Management	27

Soil Management Plan (Tanzania)				Document Number: TZ-MID-60-0120-200311	
				Revision: 00	Status: IFR
				Rev. Date: xx/xx/2019	
Doc. Type: PLN	Discipline: HSE	Phase: OV	Class: 1	Page 1 of 3	
			System / Subsystem: NN	Equipment Type: NN	

 <p>EAST AFRICAN CRUDE OIL PIPELINE</p>	<h2>EACOP Project</h2>
---	------------------------

This document has been generated by an Electronic Document Management System. When printed it is considered as a “for information only” copy. The controlled copy is the screen version and it is the holder’s responsibility that he/she holds the latest valid version”.

<h2>Soil Management Plan (Tanzania)</h2>
--

00	IFR					
Rev.	Status	Date	Revision Description	Issued by	Reviewed by	Approved by

Soil Management Plan (Tanzania)				Document Number: TZ-MID-60-0120-200311	
				Revision: 00	Status: IFR
				Rev. Date: xx/xx/2019	
Doc. Type: PLN	Discipline: HSE	Phase: OV	Class: 1	Page 2 of 3	
			System / Subsystem: NN	Equipment Type: NN	

TABLE OF CONTENTS

1 INTRODUCTION.....	4
1.1 PURPOSE	4
1.2 OBJECTIVES	4
1.3 PERFORMANCE – BASED APPROACH TO IMPACT MITIGATION	5
1.4 SCOPE	6
1.5 DEFINITIONS	6
1.6 LINKS WITH OTHER PLANS AND PROCEDURES	7
2 POLICY AND LEGISLATIVE REQUIREMENTS.....	8
2.1 INTRODUCTION	8
2.2 POLICY AND PROJECT STANDARDS	8
2.3 APPLICABLE LEGISLATION, CODES AND INTERNATIONAL STANDARDS	9
2.3.1 National Legislation	9
2.3.2 World Bank/IFC, International Standards and Conventions.....	9
2.3.2.1 ISO 14001:2015 and ISO 45001:2018	10
3 IMPACT AVOIDANCE AND IMPACT MITIGATION.....	10
3.1 INTRODUCTION	10
3.2 PRE CONSTRUCTION REQUIREMENTS	10
3.3 SOIL MANAGEMENT PRINCIPLES	12
3.3.1 Topsoil Stripping and Storage.....	12
3.3.2 Vegetation/Weed Control.....	13
3.3.3 Contaminated Ground/UXO	13
3.3.4 Subsoil Management/Excavation	14
3.3.5 Trench Padding and Backfill	15
3.3.6 Management of Surplus Excavation Soil and Rock.....	15
3.3.7 Removal of Imported Material	16
3.3.8 Landscaping and Re-contouring of Impacted Areas.....	17
3.3.9 Re-spreading of Topsoil.....	18
3.3.10 Temporary Erosion and Sediment Control	18
4 TRAINING, AWARENESS AND COMPETENCE.....	19
5 ROLES AND RESPONSIBILITIES	20
5.1 COMPANY	20

Soil Management Plan (Tanzania)				Document Number: TZ-MID-60-0120-200311	
				Revision: 00	Status: IFR
				Rev. Date: xx/xx/2019	
Doc. Type: PLN	Discipline: HSE	Phase: OV	Class: 1	Page 3 of 3	
			System / Subsystem: NN	Equipment Type: NN	

5.2	CONTRACTOR	20
6	VERIFICATION AND MONITORING OF CONTRACTOR PERFORMANCE.....	21
6.1	OBJECTIVES	21
6.2	AUDIT AND INSPECTION	21
6.3	KEY PERFORMANCE INDICATORS.....	22
6.4	CONTRACTOR PERFORMANCE.....	22
6.5	CONTRACTOR REPORTING	22
6.6	REVIEW AND IMPROVEMENT.....	23
6.7	RECORD KEEPING	23
APPENDIX 1:	ESIA MITIGATION COMMITMENTS.....	24

Cultural Heritage Management Plan (Tanzania)				Document Number: TZ-MID-60-0120-200312	
				Revision: 00	Status: IFR
				Rev. Date: xx/xx/2019	
Doc. Type: PLN	Discipline: HSE	Phase: OV	Class: 1	Page 1 of 3	
			System / Subsystem: NN	Equipment Type: NN	

 <p>EAST AFRICAN CRUDE OIL PIPELINE</p>	<h2 style="color: #0056b3;">EACOP Project</h2>
---	--

This document has been generated by an Electronic Document Management System. When printed it is considered as a “for information only” copy. The controlled copy is the screen version and it is the holder’s responsibility that he/she holds the latest valid version”.

<h2 style="margin: 0;">Cultural Heritage Management Plan (Tanzania)</h2>
--

00	IFR					
Rev.	Status	Date	Revision Description	Issued by	Reviewed by	Approved by

Cultural Heritage Management Plan (Tanzania)				Document Number: TZ-MID-60-0120-200312	
				Revision: 00	Status: IFR
				Rev. Date: xx/xx/2019	
Doc. Type: PLN	Discipline: HSE	Phase: OV	Class: 1	Page 2 of 3	
			System / Subsystem: NN	Equipment Type: NN	


TABLE OF CONTENTS

1 INTRODUCTION.....	4
1.1 PURPOSE	4
1.2 OBJECTIVES	4
1.3 PERFORMANCE – BASED APPROACH TO IMPACT MITIGATION	5
1.4 SCOPE	6
1.5 DEFINITIONS	6
1.6 LINKS WITH OTHER PLANS AND PROCEDURES	8
2 POLICY AND LEGISLATIVE REQUIREMENTS.....	8
2.1 INTRODUCTION	8
2.2 POLICY AND PROJECT STANDARDS.....	9
2.3 APPLICABLE LEGISLATION, CODES AND INTERNATIONAL STANDARDS	9
2.3.1 National Legislation	9
2.3.2 World Bank/IFC, International Standards and Conventions.....	10
2.3.2.1 ISO 14001:2015 and ISO 45001:2018	10
3 IMPACT AVOIDANCE AND IMPACT MITIGATION.....	11
3.1 INTRODUCTION	11
3.2 APPROACH AND DESCRIPTION OF IMPACT AVOIDANCE AND MITIGATION.....	11
3.2.1 Baseline Survey	11
3.2.2 Chance Find Procedure	11
3.2.3 Community use of Cultural heritage Sites	11
3.2.4 Pre-Construction Survey	12
3.2.5 Avoidance and Minimisation	12
3.2.6 Protection of Known Cultural Heritage Sites	12
3.2.7 Construction Phase Archaeological Monitoring	13
3.2.8 Interface Meetings	14
4 TRAINING, AWARENESS AND COMPETENCE.....	16
5 ROLES AND RESPONSIBILITIES	16
5.1 COMPANY	16
5.2 CONTRACTOR	17

Cultural Heritage Management Plan (Tanzania)				Document Number: TZ-MID-60-0120-200312	
				Revision: 00	Status: IFR
				Rev. Date: xx/xx/2019	
Doc. Type: PLN	Discipline: HSE	Phase: OV	Class: 1	Page 3 of 3	
			System / Subsystem: NN	Equipment Type: NN	

6	VERIFICATION AND MONITORING OF CONTRACTOR PERFORMANCE.....	18
6.1	OBJECTIVES	18
6.2	AUDIT AND INSPECTION	18
6.3	KEY PERFORMANCE INDICATORS.....	19
6.4	CONTRACTOR PERFORMANCE.....	19
6.5	CONTRACTOR REPORTING REQUIREMENTS	20
6.6	REVIEW AND IMPROVEMENT.....	20
6.7	RECORD KEEPING	21
7	APPENDICES.....	22
	APPENDIX 1: ESIA Mitigation Commitments	22

Reinstatement Plan (Tanzania)				Document Number: TZ-MID-60-0120-200313	
				Revision: 00	Status: IFR
				Rev. Date: xx/xx/2019	
Doc. Type: PLN	Discipline: HSE	Phase: OV	Class: 1	Page 1 of 3	
			System / Subsystem: NN	Equipment Type: NN	

 <p>EAST AFRICAN CRUDE OIL PIPELINE</p>	<h2>EACOP Project</h2>
---	------------------------

This document has been generated by an Electronic Document Management System. When printed it is considered as a "for information only" copy. The controlled copy is the screen version and it is the holder's responsibility that he/she holds the latest valid version".

<h2>Reinstatement Plan (Tanzania)</h2>
--

00	IFR					
Rev.	Status	Date	Revision Description	Issued by	Reviewed by	Approved by

Reinstatement Plan (Tanzania)				Document Number: TZ-MID-60-0120-200313	
				Revision: 00	Status: IFR
				Rev. Date: xx/xx/2019	
Doc. Type: PLN	Discipline: HSE	Phase: OV	Class: 1	Page 2 of 3	
			System / Subsystem: NN	Equipment Type: NN	


TABLE OF CONTENTS

1 INTRODUCTION.....	4
1.1 PURPOSE	4
1.2 OBJECTIVES	4
1.3 PERFORMANCE – BASED APPROACH TO IMPACT MITIGATION	5
1.4 SCOPE	6
1.5 DEFINITIONS	6
1.6 LINKS WITH OTHER PLANS AND PROCEDURES	8
2 POLICY AND LEGISLATIVE REQUIREMENTS.....	8
2.1 INTRODUCTION	8
2.2 POLICY AND PROJECT STANDARDS	8
2.3 APPLICABLE LEGISLATION, CODES AND INTERNATIONAL STANDARDS	9
2.3.1 National Legislation	9
2.3.2 World Bank/IFC, International Standards and Conventions.....	9
2.3.2.1 ISO 14001:2015 and ISO 45001:2018	10
3 IMPACT AVOIDANCE AND MITIGATION	10
3.1 INTRODUCTION	10
3.2 PRE-CONSTRUCTION REQUIREMENTS	11
3.3 REINSTATEMENT PRINCIPLES	12
3.3.1 Topsoil Management	12
3.3.2 Vegetation/Weed Control.....	13
3.3.3 Unanticipated Contaminated Ground	13
3.3.4 Subsoil Management/Excavation	14
3.3.5 Trench Padding and Backfill	14
3.3.6 Management of Surplus Excavation Soil and Rock	15
3.3.7 Removal of Imported Material	16
3.3.8 Landscaping and Re-contouring of Impacted Areas.....	16
3.3.9 Re-spreading of Topsoil.....	17
3.3.10 Access Restriction	18
3.4 REINSTATEMENT OF WATERCOURSES	18
3.5 BIO-RESTORATION	19
3.5.1 Pre-Construction Biodiversity Requirements.....	19
3.6 REINSTATEMENT ON LAND OTHER THAN EACOP RoW.....	20

Reinstatement Plan (Tanzania)				Document Number: TZ-MID-60-0120-200313	
				Revision: 00	Status: IFR
				Rev. Date: xx/xx/2019	
Doc. Type: PLN	Discipline: HSE	Phase: OV	Class: 1	Page 3 of 3	
			System / Subsystem: NN	Equipment Type: NN	

3.7 PERMANENT EROSION CONTROL	21
3.7.1 Permanent Erosion Control Performance Criteria Guidance	22
3.7.1.1 Erosion Classes.....	22
3.7.1.2 Permanent Erosion Control Performance Assessment.....	23
3.7.2 Site Specific Erosion Risk Assessment.....	23
3.7.2.1 Risk Assessment Methodology.....	24
3.7.3 Permanent Erosion Control Installation.....	26
4 TRAINING AWARENESS AND COMPETENCE.....	27
5 ROLES AND RESPONSIBILITIES	28
5.1 EACOP.....	28
5.2 CONTRACTOR	28
6 VERIFICATION AND MONITORING OF CONTRACTOR PERFORMANCE.....	29
6.1 OBJECTIVES	29
6.2 MONITORING	29
6.2.1 Permanent Erosion Control Performance Criteria Guidance	30
6.3 KEY PERFORMANCE INDICATORS.....	30
6.4 CONTRACTOR PERFORMANCE.....	30
6.5 CONTRACTOR REPORTING	30
6.6 REVIEW AND IMPROVEMENT.....	31
6.7 RECORD KEEPING	31
APPENDIX 1: ESIA MITIGATION COMMITMENTS.....	32

Stakeholder Engagement Plan (Pre-construction and Construction Phase)				Document Number: TZ-MID-60-0120-200314	
				Revision : 00	Status : IFR
				Rev. Date :	
Doc. Type : PLN	Discipline : HSE	Phase: OV	Class: 1	Page 1 of 3	
			System / Subsystem : NN	Equipment Type : NA	

		EACOP Project
---	--	----------------------

This document has been generated by an Electronic Document Management System. When printed it is considered as a “for information only” copy. The controlled copy is the screen version and it is the holder's responsibility that he/she holds the latest valid version”.

Stakeholder Engagement Plan (Pre-Construction and Construction)
--

00	IFR					
Rev.	Status	Date	Revision Description	Issued by	Reviewed by	Approved by

Stakeholder Engagement Plan (Pre-construction and Construction Phase)				Document Number: TZ-MID-60-0120-200314	
				Revision : 00	Status : IFR
				Rev. Date :	
Doc. Type : PLN	Discipline : HSE	Phase: OV	Class: 1	Page 2 of 3	
			System / Subsystem : NN	Equipment Type : NA	

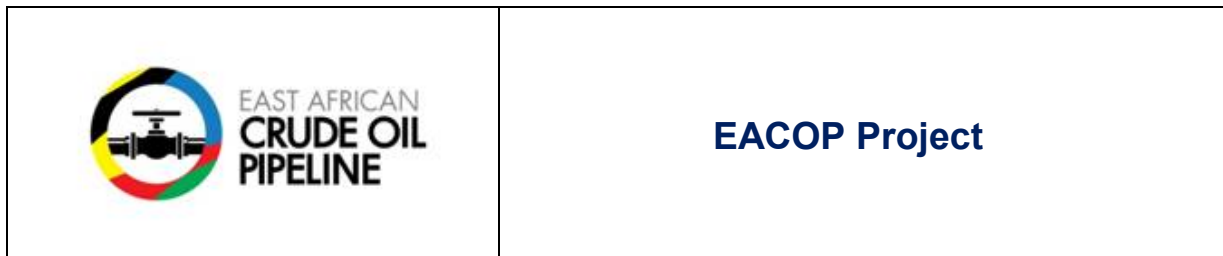
TABLE OF CONTENTS

1 INTRODUCTION	7
2 PROJECT AREA OF INFLUENCE	8
3 OBJECTIVES	9
4 REGULATORY REQUIREMENTS AND STANDARDS FOR STAKEHOLDER ENGAGEMENT	10
4.1 National Legal Requirements.....	10
4.2 International Standards - IFC PS	10
4.3 EACOP Standards.....	11
5 STAKEHOLDER IDENTIFICATION AND MAPPING	12
5.1 Stakeholder Classification	13
5.2 Focus on Key Stakeholders: Communities	14
5.3 Focus on Key Stakeholders: Authorities and Civil society	15
5.4 Stakeholder Mapping.....	21
6 PREVIOUS STAKEHOLDER ENGAGEMENT	23
6.1 EACOP Led Engagement.....	23
6.2 Engagement During Lidar, Geological, Geophysical, Geotechnical Surveys.....	25
6.3 Engagement During the ESIA.....	26
6.4 Engagement During the HRIA	27
6.5 Engagement During Land Acquisition Process	28
7 PLANNED STAKEHOLDER ENGAGEMENT	30
8 ENGAGEMENT APPROACH AND METHODS	31
8.1 Engagement Methods	31
8.2 Relationship Manager & Protocols for Engagement.....	33
8.3 Initiative to Establish Good Community Relations.....	33
8.4 Information Sharing	36
8.2 Community Trainings.....	33
9 GRIEVANCE AND CONCERN MANAGEMENT	39
10 TEAM RESPONSIBILITIES	42
11 REPORTING AND DATA MANAGEMENT.....	46

Stakeholder Engagement Plan (Pre-construction and Construction Phase)				Document Number: TZ-MID-60-0120-200314	
				Revision : 00	Status : IFR
				Rev. Date :	
Doc. Type : PLN	Discipline : HSE	Phase: OV	Class: 1	Page 3 of 3	
			System / Subsystem : NN	Equipment Type : NA	

12 MONITORING AND EVALUATION	47
13 STAKEHOLDER ENGAGEMENT PLAN	49
13.1 Internal Coordination	49
13.2 External Engagement.....	51
14 CONTACT DETAILS FOR STAKEHOLDER ENGAGEMENT	70
APPENDIX 1: NATIONAL ADMINISTRATIVE INSTITUTIONS	71
APPENDIX 2: INDICATIVE LIST OF NGOS	76
APPENDIX 3: INDICATIVE LIST OF MEDIA	79
APPENDIX 4: GRIEVANCE REGISTRATION FORM	80

Resettlement Action Plan (Tanzania)			Document Number: TZ-MID-60-0120-200246	
			Revision: 00	Status: IFR
			Rev. Date: xx/xx/2019	
Doc. Type: PLN	Discipline: HSE	Phase: OV	Class: 1	Page i of 23
			System / Subsystem: NN	Equipment Type: NN



This document has been generated by an Electronic Document Management System. When printed it is considered as a "for information only" copy. The controlled copy is the screen version and it is the holder's responsibility that he/she holds the latest valid version".

Resettlement Action Plan (Tanzania)
--

00	IFR					
Rev.	Status	Date	Revision Description	Issued by	Reviewed by	Approved by

Resettlement Action Plan (Tanzania)			Document Number: TZ-MID-60-0120-200246	
			Revision: 00	Status: IFR
			Rev. Date: xx/xx/2019	
Doc. Type: PLN	Discipline: HSE	Phase: OV	Class: 1	Page ii of 23
			System / Subsystem: NN	Equipment Type: NN

TABLE OF CONTENTS

1	INTRODUCTION	1
1.1	Overview of Resettlement Action Plan	1
1.1.1	Purpose and Scope of RAP	3
1.1.2	Institutional Roles for RAP Preparation	4
1.2	Summary of Priority Area Impacts.....	4
1.3	Content of Plan	6
1.4	Project Developer's Contact Details	7
1.5	Resettlement Planning Team	8
2	PROJECT DESCRIPTION	9
2.1	Overall Project Description	9
2.2	Overview of Priority Areas	14
2.2.1	Location of Priority Areas	14
2.2.2	Priority Area Land Requirements	31
2.2.3	Priority Area Facilities Description.....	31
2.3	Activities to Avoid or Minimize Displacement	37
3	LEGAL AND POLICY CONTEXT	38
3.1	Summary of Tanzanian Regulatory Framework.....	38
3.2	Corporate Environmental and Social Commitments	40
3.3	Host Government Agreement and Inter-Governmental Agreement	41
3.4	International Guidance and Standards.....	42
3.4.1	Equator Principles	42
3.4.2	International Finance Corporation (IFC) Performance Standards (2012).....	42
3.4.3	Human Rights Considerations.....	46
3.5	Gap Analysis between Tanzanian Legislation and Performance Standard 5	47

Resettlement Action Plan (Tanzania)			Document Number: TZ-MID-60-0120-200246	
			Revision: 00	Status: IFR
			Rev. Date: xx/xx/2019	
Doc. Type: PLN	Discipline: HSE	Phase: OV	Class: 1	Page iii of 23
			System / Subsystem: NN	Equipment Type: NN

4	SUMMARY OF RESETTLEMENT PLANNING PRINCIPLES AND PROCESS	53
4.1	Overview of PA RAP Principles	53
4.1.1	Land Access Principles	53
4.1.2	Short-term Land Requirements	53
4.1.3	Long-term Land Requirements.....	54
4.1.4	Reserved Land.....	54
4.2	PA RAP Process	55
4.2.1	Step 1: Resettlement Policy Framework.....	57
4.2.2	Step 2: Detailed Surveys and Valuations	57
4.2.3	Step 3: Submission of Final Valuation Reports	74
4.2.4	Step 4: PA RAP Preparation	76
4.2.5	Step 5: Gazettement of Public Purpose and Conversion to General Land.....	78
4.2.6	Step 6: Compensation Agreements.....	78
4.2.7	Step 7: Payment of Compensation, Relocation and Implementation of Livelihood Restoration and Assistance Programs	80
4.2.8	Step 8: Granting of Rights of Occupancy TPDC.....	82
4.2.9	Step 9: Lease of Land provided to the Project.....	82
4.3	Identification of Vulnerable Persons and Groups.....	82
4.3.1	Gender of PAP and Head of Household.....	83
4.3.2	Age of Household Head	84
4.3.3	Source of Household Income	85
4.3.4	People with mental and / or physical disabilities and lack of mobility.....	85
4.3.5	Identification of Potentially Vulnerable Households	86
4.3.6	Vulnerable Ethnic Groups in the Priority Areas – Identification and Approach.....	87
5	SUMMARY OF AFFECTED PEOPLE AND ASSETS	92

Resettlement Action Plan (Tanzania)			Document Number: TZ-MID-60-0120-200246	
			Revision: 00	Status: IFR
			Rev. Date: xx/xx/2019	
Doc. Type: PLN	Discipline: HSE	Phase: OV	Class: 1	Page iv of 23
			System / Subsystem: NN	Equipment Type: NN

5.1 Kagera Region: MCPY-05 and MCPY-06.....	94
5.1.1 MCPY-05: Missenyi District.....	94
5.1.2 MCPY-06: Muleba District.....	102
5.2 Geita Region: MCPY-07 and MCPY-08.....	109
5.2.1 MCPY-07: Chato District	110
5.2.2 MCPY-08: Bukombe District.....	116
5.3 Tabora Region: MCPY-09, CY-KP701, MCPY-10	124
5.3.1 MCPY-09 and CY-KP701: Nzega District.....	124
5.3.2 MCPY-10: Igunga District.....	137
5.4 Singida Region: MCPY-11	144
5.4.1 MCPY-11: Singida Rural District	144
5.5 Dodoma Region: MCPY-12	151
5.5.1 MCPY-12: Kondoa District	151
5.6 Manyara Region: MC-13 and PY-13	157
5.6.1 MC-13.....	162
5.6.2 PY-13.....	165
5.7 Tanga Region: MCPY-14, MCPY-15 and MCPY-16.....	170
5.7.1 MCPY-14: Kilindi District	170
5.7.2 MCPY-15: Handeni District	176
5.7.3 MCPY-16: Muheza District.....	185
6 ELIGIBILITY, ENTITLEMENTS AND COMPENSATION OPTIONS	194
6.1 Entitlement Framework	194
6.2 Part I: Tanzanian Legislation.....	210
6.2.1 Land.....	210
6.2.2 Buildings	211

Resettlement Action Plan (Tanzania)			Document Number: TZ-MID-60-0120-200246	
			Revision: 00	Status: IFR
			Rev. Date: xx/xx/2019	
Doc. Type: PLN	Discipline: HSE	Phase: OV	Class: 1	Page v of 23
			System / Subsystem: NN	Equipment Type: NN

6.2.3 Crops and Economic Trees.....	211
6.2.4 Disturbance Allowance.....	212
6.2.5 Accommodation Allowance	213
6.2.6 Transport Costs	213
6.2.7 Loss of Profit.....	213
6.2.8 Other Compensable Assets - Graves.....	213
6.3 Part II: Additional Entitlements for International Financing Standards Requirements	214
6.3.1 Inflation Adjustment for 2012 Crop / Tree Rates.....	214
6.3.2 Disturbance Allowance.....	214
6.3.3 Orphaned Land	214
6.3.4 Land and Assets in Road Reserves	215
6.3.5 Livelihood Restoration Entitlement	216
6.3.6 Entitlements to Vulnerable Persons	216
6.3.7 Compensation Options.....	217
6.4 Part III: Replacement Housing	220
6.4.1 Approach to Replacement Housing Strategy and Design.....	220
6.4.2 Existing Homesteads and Dwellings within PAs	220
6.4.3 Building Materials Analysis – Factors Influencing Choice	227
6.4.1 Concept Design	230
6.5 Part IV Replacement House Designs	237
6.5.1 House Type A	238
6.5.2 House Type B	239
6.5.3 House Type C	240
6.5.4 House Type D	241

Resettlement Action Plan (Tanzania)			Document Number: TZ-MID-60-0120-200246	
			Revision: 00	Status: IFR
			Rev. Date: xx/xx/2019	
Doc. Type: PLN	Discipline: HSE	Phase: OV	Class: 1	Page vi of 23
			System / Subsystem: NN	Equipment Type: NN

6.5.5 House Type E	242
6.5.6 House Type F	243
6.5.7 Ablution / Latrine Designs	244
6.5.8 Kitchen Shelter Designs.....	247
6.6 Part V: Replacement Land.....	250
6.6.1 Overview of Required Replacement Land	250
6.6.2 Available Replacement Land.....	251
6.7 Part VI: Public Infrastructure.....	255
7 LIVELIHOOD RESTORATION FRAMEWORK	256
7.1 Introduction.....	256
7.1.1 Key Principles Underpinning the LRP	257
7.2 Overview of Regional Trends and Contrasts	258
7.2.1 Climate	258
7.2.2 Livelihood Strategies.....	258
7.2.3 Cultural Characteristics	260
7.3 Livelihood Activities and Project Impacts.....	261
7.3.1 Main Livelihood Activities and Vulnerabilities	261
7.3.2 Assessment of Livelihood Impacts	267
7.3.3 Eligibility for Livelihood Restoration Support	270
7.4 Current Livelihood Improvement Programs.....	273
7.4.1 Government Programs Identified	275
7.4.2 Effectiveness of Existing Programs – PA Site Areas	277
7.5 Livelihood Restoration Plan (LRP)	280
7.5.1 Livelihood Restoration Themes.....	281
7.5.2 Livelihood Restoration Activities and Program Options	282

Resettlement Action Plan (Tanzania)			Document Number: TZ-MID-60-0120-200246	
			Revision: 00	Status: IFR
			Rev. Date: xx/xx/2019	
Doc. Type: PLN	Discipline: HSE	Phase: OV	Class: 1	Page vii of 23
			System / Subsystem: NN	Equipment Type: NN

7.6 Overview of Possible Partners for Implementation	291
7.6.1 NGOs and CBOs	291
7.6.2 Process to Appoint Service Providers	293
7.7 Transitional Support Plan.....	294
7.7.1 Transitional Support to Economically Displaced PAPs	294
8 VULNERABLE PEOPLES PLAN.....	305
8.1 Vulnerability Assessment of Women.....	308
8.1.1 Female-Headed Households on the PAs	308
8.2 Vulnerability Assessment of Elderly Households	310
8.3 Households inclusive of Disabled Family Members.....	311
8.4 Livelihoods Strategies for Vulnerable Households	311
8.5 Summary of Potentially Vulnerable Households	314
8.6 Engagement Processes for Vulnerable Groups	317
8.6.1 Engaging with Women	317
8.6.2 Other Vulnerable Minority and / or Ethnic Groups	318
8.7 Implementation Support for Vulnerable Groups.....	319
8.8 Implementation and Responsibilities	319
9 CONSULTATION AND DISCLOSURE	321
9.1 Engagement Principles and Objectives	322
9.2 Stakeholder Identification	323
9.2.1 Affected Stakeholders	323
9.2.2 Other Interested Stakeholders	324
9.2.3 International Financial Institutions	324
9.3 Project Engagement Structures.....	325
9.3.1 Project Land and Resettlement Engagement Teams	325

Resettlement Action Plan (Tanzania)			Document Number: TZ-MID-60-0120-200246	
			Revision: 00	Status: IFR
			Rev. Date: xx/xx/2019	
Doc. Type: PLN	Discipline: HSE	Phase: OV	Class: 1	Page viii of 23
			System / Subsystem: NN	Equipment Type: NN

9.3.2 Land and Resettlement Working Group	327
9.4 Engagement Methods	327
9.4.1 Language of Engagement.....	327
9.4.2 Community Engagement Materials	327
9.4.3 Engagement Methods	328
9.5 Engaging Specific Stakeholder Groups	331
9.5.1 Engaging Women.....	331
9.5.2 Other Vulnerable Minority and / or Ethnic Groups	331
9.6 Consultation during the Resettlement Planning Phase	332
9.6.1 LARWG Meeting	332
9.6.2 Government Entities and Regional Meetings	332
9.6.3 Engagement at District, Ward and Village Levels.....	333
9.6.4 Resettlement Policy Framework (RPF) and RAP Disclosure Meetings	335
9.7 Overview of Consultation: RAP Implementation Phase	335
9.8 Grievances and Grievance Mechanism	337
9.8.1 Overview of the EACOP Grievance Management Procedure.....	337
9.8.2 Summary of Grievances.....	339
9.8.3 Ongoing Resettlement-related Grievance Management.....	340
10 IMPLEMENTATION FRAMEWORK	341
10.1 Institutional Arrangements for Implementation.....	341
10.2 Budget and Implementation Schedule	342
10.2.1	Budget
Estimate.....	342
10.2.2	RAP / LRP Program for Implementation
Phase	344

Resettlement Action Plan (Tanzania)				Document Number: TZ-MID-60-0120-200246	
				Revision: 00	Status: IFR
				Rev. Date: xx/xx/2019	
Doc. Type: PLN	Discipline: HSE	Phase: OV	Class: 1	Page ix of 23	
			System / Subsystem: NN	Equipment Type: NN	

10.3 Monitoring and Evaluation Procedure.....347

10.3.1 Monitoring and Evaluation Framework347

Resettlement Action Plan (Tanzania)				Document Number: TZ-MID-60-0120-200246	
				Revision: 00	Status: IFR
				Rev. Date: xx/xx/2019	
Doc. Type: PLN	Discipline: HSE	Phase: OV	Class: 1	Page x of 23	
			System / Subsystem: NN	Equipment Type: NN	

LIST OF TABLES

Resettlement Action Plan (Tanzania)			Document Number: TZ-MID-60-0120-200246	
			Revision: 00	Status: IFR
			Rev. Date: xx/xx/2019	
Doc. Type: PLN	Discipline: HSE	Phase: OV	Class: 1	Page xi of 23
			System / Subsystem: NN	Equipment Type: NN

Table 1-1: Estimated Project Land Requirements	2
Table 1-2: Summary of PA Displacement Impacts.....	6
Table 1-3: Project Developer's Contact Details	8
Table 2-1: Overview of Priority Areas	16
Table 2-2: Summary of Land Access Requirements for Priority Areas.....	31
Table 3-1: Project Partners' Commitments to Social Responsibility.....	40
Table 3-2: Comparison of Relevant Tanzanian Legislation and IFC PS5	48
Table 4-1: Site Selection Criteria.....	59
Table 4-2: Assessment of Priority Areas to Minimize Impacts	60
Table 4-3: PA Survey Teams	63
Table 4-4: Summary of PA Survey Team Training Topics.....	63
Table 4-5: Summary of Cut-off Dates, Community Sensitization and RAP Fieldwork Activities for PAs.....	66
Table 4-6: Dates of Validation Meetings and Valuation Date	73
Table 4-7: Dates of Disclosure Meetings.....	74
Table 4-8: Dates of Submission of Valuation Reports.....	75
Table 4-9: Site Visits to Identify Potential Replacement Land	77
Table 5-1: Priority Area Displacement Impacts.....	93
Table 5-2: Area (acres) under Crops at MCPY-05	102
Table 5-3: MCPY-05 (Potentially) Vulnerable PAPs	102
Table 5-4: Summary of Area Planted to Crops Recorded at MCPY-06.....	109
Table 5-5: MCPY-06 (Potentially) Vulnerable PAPs	109
Table 5-6: Summary of Crop Areas Recorded at MCPY-07	116
Table 5-7: MCPY-07 (Potentially) Vulnerable PAPs	116
Table 5-8: Summary of Crops Areas Recorded at MCPY-08	123

Resettlement Action Plan (Tanzania)			Document Number: TZ-MID-60-0120-200246	
			Revision: 00	Status: IFR
			Rev. Date: xx/xx/2019	
Doc. Type: PLN	Discipline: HSE	Phase: OV	Class: 1	Page xii of 23
			System / Subsystem: NN	Equipment Type: NN

Table 5-9: MCPY-08 (Potentially) Vulnerable PAPs	124
Table 5-10: Summary of Crops (Stems and Acres) Recorded at MCPY-09	132
Table 5-11: MCPY-09 (Potentially) Vulnerable PAPs	132
Table 5-12: Summary of Crops (Acres) at CY-KP701	136
Table 5-13: CY-KP701 (Potentially) Vulnerable PAPs	137
Table 5-14: MCPY-10 (Potentially) Vulnerable PAPs	144
Table 5-15: Summary of Crop Recorded at MCPY-11 (Stems and Acres)	150
Table 5-16: MCPY-11 (Potentially) Vulnerable PAPs	151
Table 5-17: Summary of Crops Recorded at MCPY-12 (Stems and Acres)	157
Table 5-18: MCPY-12 (Potentially) Vulnerable PAPs	157
Table 5-19: Summary of Trees Recorded at MC-13	165
Table 5-20: Summary of Crops Recorded at MC-13	165
Table 5-21: Summary of Trees Recorded at PY-13	168
Table 5-22: Summary of Crops Recorded at PY-13 (per acre)	169
Table 5-23: PY-13 (Potentially) Vulnerable PAPs	170
Table 5-24: Summary of Trees Recorded at MCPY-14	175
Table 5-25: Summary of Crops Recorded at MCPY-14 (quantity and per acre)	175
Table 5-26: MCPY-14 (Potentially) Vulnerable PAPs	176
Table 5-27: Summary of Crops Recorded at MCPY-15 (per acre)	185
Table 5-28: MCPY-15 (Potentially) Vulnerable PAPs	185
Table 5-29: Summary of Crops Recorded at MCPY-16 (per acre)	192
Table 5-30: MCPY-16 (Potentially) Vulnerable PAPs	193
Table 6-1: Entitlements Framework – Priority Areas	195
Table 6-2: Overview of PAP's Entitlements Across the Priority Areas	204
Table 6-3: Land Rates	210

Resettlement Action Plan (Tanzania)			Document Number: TZ-MID-60-0120-200246	
			Revision: 00	Status: IFR
			Rev. Date: xx/xx/2019	
Doc. Type: PLN	Discipline: HSE	Phase: OV	Class: 1	Page xiii of 23
			System / Subsystem: NN	Equipment Type: NN

Table 6-4: Compensation Rates for Structures.....	211
Table 6-5: Computation of Average Interest Rate.....	212
Table 6-6: Inflation Rates (2013 – 2018).....	214
Table 6-7: Principles Applied to Land and Assets Overlapping with Regional Road Reserves	216
Table 6-8: Livelihood Restoration Support Criteria	216
Table 6-9: Existing Dwellings and Structures within PAs	224
Table 6-10: Building Material Availability	230
Table 6-11: Standards for Residential Areas - Detached house and Maisonettes.....	235
Table 6-12: Summary of Replacement Land and Housing Requirements	251
Table 6-13: Comparison of Required and Available Replacement Land and Housing	254
Table 6-14: Summary of Community Facilities and Public Infrastructure Affected by Priority Area	255
Table 7-1: Livelihoods Zones associated with the Early Works Priority Areas	262
Table 7-2: Summary of Livelihood Activities Across the PA Sites.....	265
Table 7-3: Other Issues which impact on Livelihoods	269
Table 7-4: Livelihood Restoration Support Criteria.....	270
Table 7-5: Overview of Livelihood Restoration Eligibility Criteria as Applied to Priority Areas	272
Table 7-6: Summary Table - NGOs, CBOs, and Livelihood Improvement Programs ..	273
Table 7-7: TASAF Livelihood Programs – PA Site Areas	276
Table 7-8: Summary of Livelihood changes.....	277
Table 7-9: Comments and Recommendations.....	278
Table 7-10: Livelihood Restoration Framework	281
Table 7-11: Livelihood Restoration Options.....	282

Resettlement Action Plan (Tanzania)			Document Number: TZ-MID-60-0120-200246	
			Revision: 00	Status: IFR
			Rev. Date: xx/xx/2019	
Doc. Type: PLN	Discipline: HSE	Phase: OV	Class: 1	Page xiv of 23
			System / Subsystem: NN	Equipment Type: NN

Table 7-12: Livelihood Restoration Activity 1 (LRA1).....	283
Table 7-13: Livelihood Restoration Activity 2 (LRA2).....	284
Table 7-14: Livelihood Restoration Activity 3 (LRA3).....	285
Table 7-15: Livelihood Restoration Activity 4 (LRA4).....	286
Table 7-16: Livelihood Restoration Activity 5 (LRA5).....	287
Table 7-17: Livelihood Restoration Activity 6 (LRA6).....	288
Table 7-18: Livelihood Restoration Activity 7 (LRA7).....	289
Table 7-19: Livelihood Restoration Activity 8 (LRA8).....	290
Table 7-20: Potential Organizations for Livelihood Restoration Partnerships	291
Table 7-21: Other International NGOs Active in Tanzania.....	292
Table 7-22: Steps and Timeframes for Selecting and Appointing Implementing Partners	293
Table 7-23: Transitional Support Entitlements	294
Table 8-1: Female Headed Households identified across the PAs	309
Table 8-2: Elderly Headed Households identified across the PAs	310
Table 8-3: Households identified across the PAPs with <2,5 acres of land remaining.....	313
Table 8-4: Total Number of Potentially Vulnerable Households Identified in the PA sites.....	315
Table 9-1: Summary of Project Affected Stakeholders and Resettlement Impacts	323
Table 9-2: Key Consultation and Engagement Requirements with IFI Standards.....	325
Table 9-3: Summary of RAP Engagement Methods and Information Dissemination Tools	329
Table 9-4: Stakeholder Engagement Execution Plan for RAP Implementation	337
Table 10-1: Roles and Responsibilities for the PA RAP Implementation Phase	341
Table 10-2: Summary of RAP Implementation Budget Components.....	342

Resettlement Action Plan (Tanzania)				Document Number: TZ-MID-60-0120-200246	
				Revision: 00	Status: IFR
				Rev. Date: xx/xx/2019	
Doc. Type: PLN	Discipline: HSE	Phase: OV	Class: 1	Page xv of 23	
			System / Subsystem: NN	Equipment Type: NN	

Table 10-3: High-level Timetable for RAP Planning for Priority Areas	345
Table 10-4: High-level Timetable for RAP Implementation for Priority Areas	346
Table 10-5: Monitoring Matrix	352
Table 10-6: Stakeholder Engagement as Part of Monitoring and Evaluation during Resettlement Implementation	357

Resettlement Action Plan (Tanzania)				Document Number: TZ-MID-60-0120-200246	
				Revision: 00	Status: IFR
				Rev. Date: xx/xx/2019	
Doc. Type: PLN	Discipline: HSE	Phase: OV	Class: 1	Page xvi of 23	
			System / Subsystem: NN	Equipment Type: NN	

LIST OF FIGURES

Resettlement Action Plan (Tanzania)			Document Number: TZ-MID-60-0120-200246	
			Revision: 00	Status: IFR
			Rev. Date: xx/xx/2019	
Doc. Type: PLN	Discipline: HSE	Phase: OV	Class: 1	Page xvii of 23
			System / Subsystem: NN	Equipment Type: NN

Figure 2-1: The EACOP Pipeline Route	11
Figure 2-2: Location of Priority Areas along the Pipeline Corridor	15
Figure 2-3: MCPY-05 Local Setting	17
Figure 2-4: MCPY-06 Local Setting	18
Figure 2-5: MCPY-07 Local Setting	19
Figure 2-6: MCPY-08 Local Setting	20
Figure 2-7: MCPY-09 Local Setting	21
Figure 2-8: CY-KP701 Local Setting	22
Figure 2-9: MCPY-10 Local Setting	23
Figure 2-10: MCPY-11 Local Setting	24
Figure 2-11: MCPY-12 Local Setting	25
Figure 2-12: MC-13 Local Setting	26
Figure 2-13: PY-13 Local Setting	27
Figure 2-14: MCPY-14 Local Setting	28
Figure 2-15: MCPY-15 Local Setting	29
Figure 2-16: MCPY-16 Local Setting	30
Figure 2-17: Typical Insulated Coated Pipeline Cross-Section.....	32
Figure 2-18: Typical Coating Yard Layout.....	33
Figure 2-19: MCPY Layout.....	35
Figure 2-20: Example of a Typical Construction Camp with (Temporary Office and Accommodation Facilities)	36
Figure 2-21: Example of a Typical Pipe Storage Yard	36
Figure 4-1: Land Acquisition Process	56
Figure 4-2: Change to the Access Road to MCPY-15 to Minimize Displacement	62
Figure 4-3: Age Distribution of Household Heads	84

Resettlement Action Plan (Tanzania)			Document Number: TZ-MID-60-0120-200246	
			Revision: 00	Status: IFR
			Rev. Date: xx/xx/2019	
Doc. Type: PLN	Discipline: HSE	Phase: OV	Class: 1	Page xviii of 23
			System / Subsystem: NN	Equipment Type: NN

Figure 5-1: Layout of MCPY-05	96
Figure 5-2: View of MCPY-05.....	97
Figure 5-3: Banana trees on MCPY-05.....	97
Figure 5-4: Displacement Impacts MCPY-05.....	100
Figure 5-5: Summary of Trees Recorded at MCPY-05.....	101
Figure 5-6: Summary of Crop Stems Recorded at MCPY-05.....	101
Figure 5-7: Layout of MCPY-06	104
Figure 5-8: View of MCPY-06.....	105
Figure 5-9: Displacement Impacts MCPY-06	107
Figure 5-10: Summary of Trees Recorded at MCPY-06	108
Figure 5-11: Summary of Crops Stems Recorded at MCPY-06.....	108
Figure 5-12: Layout of MCPY-07	111
Figure 5-13: Displacement Impacts MCPY-07	114
Figure 5-14: Summary of Trees Recorded at MCPY-07	115
Figure 5-15: Summary of Crop Stems Recorded at MCPY-07.....	115
Figure 5-16: Layout of MCPY-08	118
Figure 5-17: View of MCPY-08.....	119
Figure 5-18: Displacement Impacts MCPY-08	121
Figure 5-19: Summary of Trees Recorded at MCPY-08	122
Figure 5-20: Summary of Crops Stems Recorded at MCPY-08.....	123
Figure 5-21: Layout of CY-KP701	126
Figure 5-22: Layout of MCPY-09	127
Figure 5-23: View of CY-KP701	128
Figure 5-24: Hand pump at primary school in Sojo Village.....	129
Figure 5-25: Displacement Impacts: MCPY-09.....	130

Resettlement Action Plan (Tanzania)			Document Number: TZ-MID-60-0120-200246	
			Revision: 00	Status: IFR
			Rev. Date: xx/xx/2019	
Doc. Type: PLN	Discipline: HSE	Phase: OV	Class: 1	Page xix of 23
			System / Subsystem: NN	Equipment Type: NN

Figure 5-26: Summary of Trees Recorded at MCPY-09	131
Figure 5-27: Displacement Impacts CY-KP701	134
Figure 5-28: Summary of Trees Recorded at CY-KP701.....	135
Figure 5-29: Summary of Crop Stems Recorded at CY-KP701	136
Figure 5-30: Layout of MCPY-10	138
Figure 5-31: Layout of MCPY-10 Construction Access to Pipeline Corridor	139
Figure 5-32: View of MCPY-10	140
Figure 5-33: View of MCPY-10	142
Figure 5-34: Summary of Crop Areas Recorded at MCPY-10 (per acre).....	143
Figure 5-35: Layout of MCPY-11	145
Figure 5-36: View of MCPY-11	146
Figure 5-37: Homestead on MCPY-11	146
Figure 5-38: Displacement Impacts MCPY-11	148
Figure 5-39: Summary of Trees Recorded at MCPY-11	150
Figure 5-40: View of MCPY-12	152
Figure 5-41: Layout of MCPY-12	153
Figure 5-42: Displacement Impacts MCPY-12	155
Figure 5-43: Summary of Trees Recorded at MCPY-12	156
Figure 5-44: Layout of MC-13	159
Figure 5-45: View of MC-13.....	160
Figure 5-46: View of PY-13	160
Figure 5-47: Layout of PY-13	161
Figure 5-48: Displacement Impacts MC 13.....	164
Figure 5-49: Displacement Impacts PY-13	168
Figure 5-50: Summary of Crop Stems Recorded at PY-13 (quantity)	169

Resettlement Action Plan (Tanzania)			Document Number: TZ-MID-60-0120-200246	
			Revision: 00	Status: IFR
			Rev. Date: xx/xx/2019	
Doc. Type: PLN	Discipline: HSE	Phase: OV	Class: 1	Page xx of 23
			System / Subsystem: NN	Equipment Type: NN

Figure 5-51: Layout of MCPY-14	171
Figure 5-52: Gravel road between Gitu village and MCPY-14	172
Figure 5-53: View of MCPY-14	172
Figure 5-54: Displacement Impacts MCPY-14	174
Figure 5-55: Summary of Crop Stems Recorded at MCPY-14.....	175
Figure 5-56: View of MCPY-15	177
Figure 5-57: Layout of MCPY-15	178
Figure 5-58: Layout MCPY-15 Proposed Construction Access Route (Map 1).....	179
Figure 5-59: Layout MCPY-15 Proposed Construction Access Route (Map 2).....	180
Figure 5-60: Watercourse crossed by the proposed access route.....	182
Figure 5-61: Displacement Impacts MCPY-15	183
Figure 5-62: Summary of Trees Recorded at MCPY-15	184
Figure 5-63: Summary of Crop Stems Recorded at MCPY-15	184
Figure 5-64: Layout of MCPY-16	187
Figure 5-65: View of MCPY-16	188
Figure 5-66: Market outside Muheza Town Center	190
Figure 5-67: Displacement Impacts MCPY 16	191
Figure 5-68: Summary of Trees Recorded at MCPY-16	192
Figure 5-69: Summary of Crops Stems Recorded at MCPY-16.....	192
Figure 6-1: Example of a typical traditional house (mud, pole and thatch)	221
Figure 6-2: Example of a typical traditional house (mud, brick and thatch tembe).....	221
Figure 6-3: Example of a modern house (burnt brick and corrugated iron sheeting).....	222
Figure 6-4: Examples of dwellings from MCPY 5 and MCPY 6	222
Figure 6-5: Examples of dwellings from MCPY 8 and MCPY 9	223

Resettlement Action Plan (Tanzania)			Document Number: TZ-MID-60-0120-200246	
			Revision: 00	Status: IFR
			Rev. Date: xx/xx/2019	
Doc. Type: PLN	Discipline: HSE	Phase: OV	Class: 1	Page xxi of 23
			System / Subsystem: NN	Equipment Type: NN

Figure 6-6: Examples of dwellings from CP KP 701 and MCPY 11	223
Figure 6-7: An upgraded wattle and daub traditional dwelling	226
Figure 6-8: Example of open outdoor kitchen area	227
Figure 6-9: Example of a typical ablution screen and a toilet pit.....	227
Figure 6-10: Local building materials available from suppliers.....	228
Figure 6-11: Steel work yard of artisan (fundi) manufacturing mild steel frame windows and burglar bars.....	229
Figure 6-12: Production of burnt bricks (left) and cement blocks (right).....	229
Figure 6-13: The local roof vernacular of North Tanzania.....	231
Figure 6-14: House Type A (3D Schematic, Floor Plan and Elevations)	238
Figure 6-15: House Type B (3D Schematic, Floor Plan and Elevations)	239
Figure 6-16: House Type C – 3 Dimensional Schematic, Floor Plan and Elevation	240
Figure 6-17: House Type D - 3 Dimensional Schematic, Floor Plan and Elevation	241
Figure 6-18: House Type E - 3 Dimensional Schematic, Floor Plan and Elevation	242
Figure 6-19: House Type F- 3 Dimensional Schematic, Floor Plan and Elevation.....	243
Figure 6-20: VIP Latrine Type A – 3D Schematic, Floor Plan and Elevations	245
Figure 6-21: VIP Latrine Type B (two rooms) – 3D Schematic, Floor Plan and Elevations.....	246
Figure 6-22: Open Kitchen Shelter Type A – 3D Schematic, Floor Plan, Elevations ...	248
Figure 6-23: Open Kitchen Shelter Type B - 3D Schematic, Floor Plan, Elevations....	249
Figure 6-24: Possible replacement land requirements.....	250
Figure 7-1: Livelihood Zones- Tanzania	265
Figure 7-2: Impacts categorised using DFID Sustainable Livelihood Framework.....	267
Figure 7-3 Livelihood Zone MCPY-05	298
Figure 7-4 : Livelihood Zone MCPY-06	298

Resettlement Action Plan (Tanzania)			Document Number: TZ-MID-60-0120-200246	
			Revision: 00	Status: IFR
			Rev. Date: xx/xx/2019	
Doc. Type: PLN	Discipline: HSE	Phase: OV	Class: 1	Page xxii of 23
			System / Subsystem: NN	Equipment Type: NN

Figure 7-5: Livelihood Zone MCPY-07	299
Figure 7-6: Livelihood Zone MCPY-08	299
Figure 7-7: Livelihood Zone MCPY-09	300
Figure 7-8: Livelihood Zone CY-KP701.....	300
Figure 7-9: Livelihood Zone MCPY-10	301
Figure 7-10: Livelihood Zone MCPY-11	301
Figure 7-11: Livelihood Zone MCPY-12	302
Figure 7-12: Livelihood Zone MC-13.....	302
Figure 7-13: Livelihood Zone PY-13.....	303
Figure 7-14: Livelihood Zone MCPY-14	303
Figure 7-15: Livelihood Zone MCPY-15	304
Figure 7-16: Livelihood Zone MCPY-16	304
Figure 9-1: Grievance Management Flowchart	339

Resettlement Action Plan (Tanzania)			Document Number: TZ-MID-60-0120-200246	
			Revision: 00	Status: IFR
			Rev. Date: xx/xx/2019	
Doc. Type: PLN	Discipline: HSE	Phase: OV	Class: 1	Page xxiii of 23
			System / Subsystem: NN	Equipment Type: NN

LIST OF APPENDICES

Appendix A: Assessment of Priority Area Layouts

Appendix B: Survey Questionnaire

Appendix C: Compensation Rates

Appendix D: Consultation and Disclosure

Labour Management Plan (Tanzania)				Document Number: TZ-MID-60-0120-200328	
				Revision: 00	Status: IFR
				Rev. Date: xx/xx/2019	
Doc. Type: PLN	Discipline: HSE	Phase: OV	Class: 1	Page 1 of 3	
			System / Subsystem: NN	Equipment Type: NN	

 <p>EAST AFRICAN CRUDE OIL PIPELINE</p>	<h2>EACOP Project</h2>
---	------------------------

This document has been generated by an Electronic Document Management System. When printed it is considered as a “for information only” copy. The controlled copy is the screen version and it is the holder’s responsibility that he/she holds the latest valid version”.

<h2>Labour Management Plan (Tanzania)</h2>
--

00	IFR					
Rev.	Status	Date	Revision Description	Issued by	Reviewed by	Approved by

Labour Management Plan (Tanzania)				Document Number: TZ-MID-60-0120-200328	
				Revision: 00	Status: IFR
				Rev. Date: xx/xx/2019	
Doc. Type: PLN	Discipline: HSE	Phase: OV	Class: 1	Page 2 of 3	
			System / Subsystem: NN	Equipment Type: NN	


TABLE OF CONTENTS

1	INTRODUCTION.....	4
1.1	PURPOSE	4
1.2	OBJECTIVES	4
1.3	PERFORMANCE – BASED APPROACH TO IMPACT MITIGATION	5
1.4	SCOPE	6
1.5	DEFINITIONS	6
1.6	LINKS WITH OTHER PLANS AND PROCEDURES	8
2	POLICY AND LEGISLATIVE REQUIREMENTS.....	8
2.1	INTRODUCTION	8
2.2	POLICY AND PROJECT STANDARDS.....	9
2.3	APPLICABLE LEGISLATION, CODES AND INTERNATIONAL STANDARDS	9
2.3.1	National Legislation	9
2.3.2	World Bank/IFC, International Standards and Conventions	10
3	IMPACT AVOIDANCE AND IMPACT MITIGATION.....	11
3.1	INTRODUCTION	11
3.2	APPROACH AND DESCRIPTION OF IMPACT AVOIDANCE AND MITIGATION.....	11
3.2.1	Employment Strategy	11
3.2.2	Labour Contracts and Recruitment Process	11
3.2.3	Worker's Rights and Working Conditions.....	12
3.2.4	Worker's Conduct.....	12
3.2.5	Worker's Rights to Trade Union Representations.....	12
3.2.6	Worker's Rights to Privacy	12
3.2.7	Worker's Grievance Procedure	13
3.2.8	Training and Skill Development Program.....	13
3.2.9	Training Assessment and Delivery	13
3.2.10	Training Facilities	14
3.2.11	Local Content and Capacity Development.....	12
3.2.12	H3SE Training	15
3.2.13	Management of Subcontractors	15
4	TRAINING, AWARENESS AND COMPETENCE.....	15
5	ROLES AND RESPONSIBILITIES	16

Labour Management Plan (Tanzania)				Document Number: TZ-MID-60-0120-200328	
				Revision: 00	Status: IFR
				Rev. Date: xx/xx/2019	
Doc. Type: PLN	Discipline: HSE	Phase: OV	Class: 1	Page 3 of 3	
			System / Subsystem: NN	Equipment Type: NN	

5.1	COMPANY	16
5.2	CONTRACTOR	17
6	VERIFICATION AND MONITORING OF CONTRACTOR PERFORMANCE.....	18
6.1	OBJECTIVES	18
6.2	AUDIT AND INSPECTION	18
6.3	KEY PERFORMANCE INDICATORS.....	19
6.4	CONTRACTOR PERFORMANCE.....	19
6.5	CONTRACTOR REPORTING REQUIREMENTS	20
6.6	REVIEW AND IMPROVEMENT.....	20
6.7	RECORD KEEPING	21
7	APPENDICES.....	22
	APPENDIX 1: ESIA Mitigation Commitments	22

Project Induced In-Migration Management Plan (Tanzania)				Document Number:	
				TZ-MID-60-0120-200329	
				Revision: 00	Status: IFR
				Rev. Date: xx/xx/2019	
Doc. Type: PLN	Discipline: HSE	Phase: OV	Class: 1	Page 1 of 3	
			System / Subsystem: NN	Equipment Type: NN	

 <p>EAST AFRICAN CRUDE OIL PIPELINE</p>	<h2 style="color: #0056b3;">EACOP Project</h2>
---	--

This document has been generated by an Electronic Document Management System. When printed it is considered as a “for information only” copy. The controlled copy is the screen version and it is the holder’s responsibility that he/she holds the latest valid version”.

<h3>Project Induced In-Migration Management Plan (Tanzania)</h3>
--

00	IFR					
Rev.	Status	Date	Revision Description	Issued by	Reviewed by	Approved by

Project Induced In-Migration Management Plan (Tanzania)				Document Number: TZ-MID-60-0120-20032	
				Revision: 00	Status: IFR
				Rev. Date: xx/xx/2019	
Doc. Type: PLN	Discipline: HSE	Phase: OV	Class: 1	Page 2 of 3	
			System / Subsystem: NN	Equipment Type: NN	


TABLE OF CONTENTS

1	INTRODUCTION.....	4
1.1	PURPOSE	4
1.2	OBJECTIVES	4
1.3	PERFORMANCE – BASED APPROACH TO IMPACT MITIGATION	5
1.4	SCOPE	6
1.5	DEFINITIONS	6
1.6	LINKS WITH OTHER PLANS AND PROCEDURES	8
2	POLICY AND LEGISLATIVE REQUIREMENTS.....	8
2.1	INTRODUCTION	8
2.2	POLICY AND PROJECT STANDARDS	9
2.3	APPLICABLE LEGISLATION, CODES AND INTERNATIONAL STANDARDS	9
2.3.1	National Legislation	9
2.3.2	World Bank/IFC, International Standards and Conventions.....	10
3	IMPACT AVOIDANCE AND IMPACT MITIGATION.....	11
3.1	INTRODUCTION	11
3.2	APPROACH AND DESCRIPTION OF IMPACT AVOIDANCE AND MITIGATION.....	11
3.2.1	Potential PIIM Impacts	11
3.2.2	Summary of Impact Management	11
3.2.3	Management During Construction Phase.....	13
3.2.4	Management During Operations Phase	13
3.2.5	Management During Decommissioning and Closure	14
4	TRAINING, AWARENESS AND COMPETENCE.....	15
5	ROLES AND RESPONSIBILITIES	16
5.1	COMPANY	16
5.2	CONTRACTOR	17
6	VERIFICATION AND MONITORING OF CONTRACTOR PERFORMANCE.....	18
6.1	OBJECTIVES	18
6.2	AUDIT AND INSPECTION	18

Project Induced In-Migration Management Plan (Tanzania)				Document Number: TZ-MID-60-0120-20032	
				Revision: 00	Status: IFR
				Rev. Date: xx/xx/2019	
Doc. Type: PLN	Discipline: HSE	Phase: OV	Class: 1	Page 3 of 3	
			System / Subsystem: NN	Equipment Type: NN	

6.3	KEY PERFORMANCE INDICATORS.....	19
6.4	CONTRACTOR PERFORMANCE.....	19
6.5	CONTRACTOR REPORTING REQUIREMENTS	20
6.6	REVIEW AND IMPROVEMENT.....	20
6.7	RECORD KEEPING	21
7	APPENDICES.....	22
	APPENDIX 1: ESIA Mitigation Commitments	22

Procurement and Supply Chain Management Plan (Tanzania)				Document Number: TZ-MID-60-0120-200330	
				Revision: 00	Status: IFR
				Rev. Date: xx/xx/2019	
Doc. Type: PLN	Discipline: HSE	Phase: OV	Class: 1	Page 1 of 3	
				System / Subsystem: NN	Equipment Type: NN

 <p>EAST AFRICAN CRUDE OIL PIPELINE</p>	<h2 style="color: #0056b3;">EACOP Project</h2>
---	--

This document has been generated by an Electronic Document Management System. When printed it is considered as a “for information only” copy. The controlled copy is the screen version and it is the holder’s responsibility that he/she holds the latest valid version”.

<h3>Procurement and Supply Chain Management Plan (Tanzania)</h3>
--

00	IFR					
Rev.	Status	Date	Revision Description	Issued by	Reviewed by	Approved by

Procurement and Supply Chain Management Plan (Tanzania)				Document Number: TZ-MID-60-0120-200330	
				Revision: 00	Status: IFR
				Rev. Date: xx/xx/2019	
Doc. Type: PLN	Discipline: HSE	Phase: OV	Class: 1	Page 2 of 3	
			System / Subsystem: NN	Equipment Type: NN	


TABLE OF CONTENTS

1	INTRODUCTION.....	4
1.1	PURPOSE	4
1.2	OBJECTIVES	4
1.3	PERFORMANCE – BASED APPROACH TO IMPACT MITIGATION	5
1.4	SCOPE	6
1.5	DEFINITIONS	6
1.6	LINKS WITH OTHER PLANS AND PROCEDURES	8
2	POLICY AND LEGISLATIVE REQUIREMENTS.....	8
2.1	INTRODUCTION	8
2.2	POLICY AND PROJECT STANDARDS.....	9
2.3	APPLICABLE LEGISLATION, CODES AND INTERNATIONAL STANDARDS	9
2.3.1	National Legislation	9
2.3.2	World Bank/IFC, International Standards and Conventions.....	10
3	IMPACT AVOIDANCE AND IMPACT MITIGATION.....	11
3.1	INTRODUCTION	11
3.2	APPROACH TO LOCAL PROCUREMENT AND SUPPLY.....	11
3.2.1	Procurement and Supply Standards	11
3.2.2	Promotion of Opportunities for Local Sourcing	11
3.2.3	Ring-fencing Contract	11
3.2.4	Third Party Vendors of Services, Materials and Products	11
3.2.5	Capacity Building of Local Suppliers to Meet Contracting Requirements	11
3.2.6	Communicating with Communities on Project Requirements for Goods and Services.....	11
3.2.7	Third Party Aggregates Extraction and Batching Facilities	11
3.2.8	Addressing Shortages to Communities Due to Project Demand	12
3.2.9	Workers Rights Compliance.....	12
3.2.10	Capacity Development.....	12
3.2.11	Minimising Procurement of Hazardous Materials	12
3.2.12	Promotion and Adoption of Good Environmental and Social Practices by Suppliers	13
4	PURCHASE OF GOODS AND SERVICES.....	14
4.1	Procurement & Supply Standards	14

Procurement and Supply Chain Management Plan (Tanzania)				Document Number: TZ-MID-60-0120-200330	
				Revision: 00	Status: IFR
				Rev. Date: xx/xx/2019	
Doc. Type: PLN	Discipline: HSE	Phase: OV	Class: 1	Page 3 of 3	
			System / Subsystem: NN	Equipment Type: NN	

4.2	Estimate of Local Goods and Services	15
4.3	Manintenance of Local Supplies and Services Databases	15
4.4	The Selection Process.....	16
4.5	Greivance Mechanisms	16
5	TRAINING, AWARENESS AND COMPETENCE.....	17
6	ROLES AND RESPONSIBILITIES.....	18
6.1	COMPANY	18
6.2	CONTRACTOR	19
7	VERIFICATION AND MONITORING OF CONTRACTOR PERFORMANCE.....	20
7.1	OBJECTIVES	20
7.2	AUDIT AND INSPECTION	20
7.3	KEY PERFORMANCE INDICATORS.....	21
7.4	CONTRACTOR PERFORMANCE.....	21
7.5	CONTRACTOR REPORTING REQUIREMENTS	22
7.6	REVIEW AND IMPROVEMENT.....	22
7.7	RECORD KEEPING	23
8	APPENDICES	24
	APPENDIX 1: ESIA Mitigation Commitments	24

Infrastructure and Utilities Management Plan (Tanzania)				Document Number: TZ-MID-60-0120-200331	
				Revision: 00	Status: IFR
				Rev. Date: xx/xx/2019	
Doc. Type: PLN	Discipline: HSE	Phase: OV	Class: 1	Page 1 of 3	
			System / Subsystem: NN	Equipment Type: NN	

 <p>EAST AFRICAN CRUDE OIL PIPELINE</p>	<h2 style="color: #0056b3;">EACOP Project</h2>
---	--

This document has been generated by an Electronic Document Management System. When printed it is considered as a “for information only” copy. The controlled copy is the screen version and it is the holder’s responsibility that he/she holds the latest valid version”.

<h2 style="margin: 0;">Infrastructure and Utilities Management Plan (Tanzania)</h2>

00	IFR					
Rev.	Status	Date	Revision Description	Issued by	Reviewed by	Approved by

Infrastructure and Utilities Management Plan (Tanzania)				Document Number: TZ-MID-60-0120-200331	
				Revision: 00	Status: IFR
				Rev. Date: xx/xx/2019	
Doc. Type: PLN	Discipline: HSE	Phase: OV	Class: 1	Page 2 of 3	
			System / Subsystem: NN	Equipment Type: NN	


TABLE OF CONTENTS

1	INTRODUCTION.....	4
1.1	PURPOSE	4
1.2	OBJECTIVES	4
1.3	PERFORMANCE – BASED APPROACH TO IMPACT MITIGATION	5
1.4	SCOPE	6
1.5	DEFINITIONS	6
1.6	LINKS WITH OTHER PLANS AND PROCEDURES	8
2	POLICY AND LEGISLATIVE REQUIREMENTS.....	8
2.1	INTRODUCTION	8
2.2	POLICY AND PROJECT STANDARDS.....	9
2.3	APPLICABLE LEGISLATION, CODES AND INTERNATIONAL STANDARDS	9
2.3.1	National Legislation	9
2.3.2	World Bank/IFC, International Standards and Conventions.....	10
3	IMPACT AVOIDANCE AND IMPACT MITIGATION.....	11
3.1	INTRODUCTION	11
3.2	APPROACH AND DESCRIPTION OF IMPACT AVOIDANCE AND MITIGATION.....	11
3.2.1	Community and Regulatory Authority Liason	11
3.2.2	Crossing Schedule and Planning	11
3.2.3	Utilities and Services Integrity	12
3.2.4	Use of Public Roads and Associated Infrastructure	13
3.2.5	Crossing of Road and Railway Infrastructure	14
3.2.6	Irrigation and Drainage Systems Integrity	15
3.2.7	Management of Road Crossings.....	16
3.2.8	Flood Management.....	16
3.2.9	Buildings and Structures	17
3.2.10	Reinstatement of Infrastructure and Utilities to Pre-Construction Condition	17
3.2.11	Provision of Compensation to Affected Private Property	18
4	TRAINING, AWARENESS AND COMPETENCE.....	18
5	ROLES AND RESPONSIBILITIES	19
5.1	COMPANY	19

Infrastructure and Utilities Management Plan (Tanzania)				Document Number: TZ-MID-60-0120-200331	
				Revision: 00	Status: IFR
				Rev. Date: xx/xx/2019	
Doc. Type: PLN	Discipline: HSE	Phase: OV	Class: 1	Page 3 of 3	
			System / Subsystem: NN	Equipment Type: NN	

5.2	CONTRACTOR	20
6	VERIFICATION AND MONITORING OF CONTRACTOR PERFORMANCE.....	21
6.1	OBJECTIVES	21
6.2	AUDIT AND INSPECTION	21
6.3	KEY PERFORMANCE INDICATORS.....	22
6.4	CONTRACTOR PERFORMANCE.....	22
6.5	CONTRACTOR REPORTING REQUIREMENTS	23
6.6	REVIEW AND IMPROVEMENT.....	23
6.7	RECORD KEEPING	24
7	APPENDICES.....	25
	APPENDIX 1: ESIA Mitigation Commitments	25

Community Health, Safety and Security Management Plan (Tanzania)				Document Number: TZ-MID-60-0120-200332	
				Revision: 00	Status: IFR
				Rev. Date: xx/xx/2019	
Doc. Type: PLN	Discipline: HSE	Phase: OV	Class: 1	Page 1 of 3	
			System / Subsystem: NN	Equipment Type: NN	

 <p>EAST AFRICAN CRUDE OIL PIPELINE</p>	<h2 style="color: #0056b3;">EACOP Project</h2>
---	--

This document has been generated by an Electronic Document Management System. When printed it is considered as a “for information only” copy. The controlled copy is the screen version and it is the holder’s responsibility that he/she holds the latest valid version”.

<h3>Community Health, Safety and Security Management Plan (Tanzania)</h3>

00	IFR					
Rev.	Status	Date	Revision Description	Issued by	Reviewed by	Approved by

Community Health, Safety and Security Management Plan (Tanzania)				Document Number: TZ-MID-60-0120-200332	
				Revision: 00	Status: IFR
				Rev. Date: xx/xx/2019	
Doc. Type: PLN	Discipline: HSE	Phase: OV	Class: 1	Page 2 of 3	
			System / Subsystem: NN	Equipment Type: NN	


TABLE OF CONTENTS

1	INTRODUCTION.....	4
1.1	PURPOSE	4
1.2	OBJECTIVES	4
1.3	PERFORMANCE – BASED APPROACH TO IMPACT MITIGATION	5
1.4	SCOPE	6
1.5	DEFINITIONS	6
1.6	LINKS WITH OTHER PLANS AND PROCEDURES	8
2	POLICY AND LEGISLATIVE REQUIREMENTS.....	8
2.1	INTRODUCTION	8
2.2	POLICY AND PROJECT STANDARDS	9
2.3	APPLICABLE LEGISLATION, CODES AND INTERNATIONAL STANDARDS	9
2.3.1	National Legislation	9
2.3.2	World Bank/IFC, International Standards and Conventions.....	10
3	IMPACT AVOIDANCE AND IMPACT MITIGATION.....	11
3.1	INTRODUCTION	11
3.2	APPROACH AND DESCRIPTION OF IMPACT AVOIDANCE AND MITIGATION.....	11
3.2.1	Safety of Local Residents	11
3.2.2	Traffic and Transport Management.....	13
3.2.3	Trench and Excavation Hazard Management	14
3.2.4	Construction Machinery and Community Safety.....	14
3.2.5	Hazardous Waste Management.....	15
3.2.6	Drug and Alcohol Abuse Prevention Programme	15
3.2.7	Communicable Diseases	16
3.2.8	Community Security.....	16
3.2.9	Project Induced In-migration Mitigation	16
4	TRAINING, AWARENESS AND COMPETENCE.....	17
5	ROLES AND RESPONSIBILITIES.....	17
5.1	COMPANY	18
5.2	CONTRACTOR	19

Community Health, Safety and Security Management Plan (Tanzania)				Document Number: TZ-MID-60-0120-200332	
				Revision: 00	Status: IFR
				Rev. Date: xx/xx/2019	
Doc. Type: PLN	Discipline: HSE	Phase: OV	Class: 1	Page 3 of 3	
			System / Subsystem: NN	Equipment Type: NN	

6	VERIFICATION AND MONITORING OF CONTRACTOR PERFORMANCE.....	20
6.1	OBJECTIVES	20
6.2	AUDIT AND INSPECTION	20
6.3	KEY PERFORMANCE INDICATORS.....	21
6.4	CONTRACTOR PERFORMANCE.....	21
6.5	CONTRACTOR REPORTING REQUIREMENTS	22
6.6	REVIEW AND IMPROVEMENT.....	22
6.7	RECORD KEEPING	23
7	APPENDICES.....	24
	APPENDIX 1: ESIA Mitigation Commitments	24

Occupational Health, Safety and Security Management Plan (Tanzania)				Document Number:	
				TZ-MID-60-0120-200333	
				Revision: 00	Status: IFR
Rev. Date: xx/xx/2019					
Doc. Type: PLN	Discipline: HSE	Phase: OV	Class: 1	Page 1 of 3	
				System / Subsystem: NN	Equipment Type: NN

 <p>EAST AFRICAN CRUDE OIL PIPELINE</p>	<h2 style="color: #0056b3;">EACOP Project</h2>
---	--

This document has been generated by an Electronic Document Management System. When printed it is considered as a “for information only” copy. The controlled copy is the screen version and it is the holder’s responsibility that he/she holds the latest valid version”.

<h3>Occupational Health, Safety and Security Management Plan (Tanzania)</h3>
--

00	IFR					
Rev.	Status	Date	Revision Description	Issued by	Reviewed by	Approved by

Occupational Health, Safety and Security Management Plan (Tanzania)				Document Number: TZ-MID-60-0120-200333	
				Revision: 00	Status: IFR
				Rev. Date: xx/xx/2019	
Doc. Type: PLN	Discipline: HSE	Phase: OV	Class: 1	Page 2 of 3	
			System / Subsystem: NN	Equipment Type: NN	


TABLE OF CONTENTS

1	INTRODUCTION.....	4
1.1	PURPOSE	4
1.2	OBJECTIVES	4
1.3	PERFORMANCE – BASED APPROACH TO IMPACT MITIGATION	5
1.4	SCOPE	6
1.5	DEFINITIONS	6
1.6	LINKS WITH OTHER PLANS AND PROCEDURES	8
2	POLICY AND LEGISLATIVE REQUIREMENTS.....	8
2.1	INTRODUCTION	8
2.2	POLICY AND PROJECT STANDARDS	9
2.3	APPLICABLE LEGISLATION, CODES AND INTERNATIONAL STANDARDS	9
2.3.1	National Legislation	9
2.3.2	World Bank/IFC, International Standards and Conventions.....	10
3	IMPACT AVOIDANCE AND IMPACT MITIGATION.....	11
3.1	INTRODUCTION	11
3.2	APPROACH AND DESCRIPTION OF IMPACT AVOIDANCE AND MITIGATION.....	11
3.2.1	Risk Assessment and Management.....	11
3.2.2	Communication and Documentation	15
3.2.3	Health, Safety and Security Standards for Worksite and Facilities	16
3.2.4	Golden Rules for Safety.....	23
3.2.5	Commissioning Safety	27
3.2.6	Camp Workforce Health and Wellbeing	27
3.2.7	Drug and Alcohol Policy.....	27
3.2.8	Camp Facilities i.e. Health Clinic and Water Supply.....	27
3.2.9	Fitness for Work Procedure	27
3.2.10	Pest Control and Management	27
3.2.11	Procedure on UXO During Construction	27
3.2.12	Contract Management	30
4	TRAINING, AWARENESS AND COMPETENCE.....	31
5	ROLES AND RESPONSIBILITIES.....	32

Occupational Health, Safety and Security Management Plan (Tanzania)				Document Number: TZ-MID-60-0120-200333	
				Revision: 00	Status: IFR
				Rev. Date: xx/xx/2019	
Doc. Type: PLN	Discipline: HSE	Phase: OV	Class: 1	Page 3 of 3	
			System / Subsystem: NN	Equipment Type: NN	

5.1	COMPANY	32
5.2	CONTRACTOR	33
6	VERIFICATION AND MONITORING OF CONTRACTOR PERFORMANCE.....	34
6.1	OBJECTIVES	34
6.2	AUDIT AND INSPECTION	34
6.3	KEY PERFORMANCE INDICATORS.....	35
6.4	CONTRACTOR PERFORMANCE.....	35
6.5	CONTRACTOR REPORTING REQUIREMENTS	36
6.6	REVIEW AND IMPROVEMENT.....	36
6.7	RECORD KEEPING	37
7	APPENDICES.....	38
	APPENDIX 1: ESIA Mitigation Commitments	38

TRANSPORT & ROAD SAFETY MANAGEMENT PLAN – TANZANIA				Document Number: TZ-MID-60-0120-200334	
				Revision : 00	Status : AFU
				Rev. Date : 14/05/2019	
Doc. Type : SPE	Discipline : PJM	Phase: DE	Class: 1	Page 1 of 6	
CONTRACTOR Reference:			System / Subsystem : 00	Equipment Type : NA	

	EACOP Project	
---	----------------------	--

This document has been generated by an Electronic Document Management System. When printed it is considered as a “for information only” copy. The controlled copy is the screen version and it is the holder's responsibility that he/she holds the latest valid version”.

TRANSPORT & ROAD SAFETY MANAGEMENT PLAN - TANZANIA

00	AFU	14/05/2019	Approved for Use	F. CLIN	P. EYRAUD	M. MARCHENKO
Rev.	Status	Date	Revision Description	Issued by	Reviewed by	Approved by

TRANSPORT & ROAD SAFETY MANAGEMENT PLAN – TANZANIA				Document Number: TZ-MID-60-0120-200334	
				Revision : 00	Status : AFU
				Rev. Date : 14/05/2019	
Doc. Type : SPE	Discipline : PJM	Phase: DE	Class: 1	Page 2 of 6	
CONTRACTOR Reference:			System / Subsystem : 00	Equipment Type : NA	

TABLE OF CONTENTS

1 INTRODUCTION	6
1.1 Purpose	6
1.2 Exclusions	6
1.3 Reference Documents.....	6
2 PROJECT DESCRIPTION AND DEFINITIONS	6
3 SCOPE & OBJECTIVES.....	7
3.1 Scope	7
3.2 Objectives	7
4 PROJECT REQUIREMENTS.....	7
4.1 National Legislation & Regulations	7
4.1.1 Specifications for Driving Inside National Parks.....	8
4.2 ESIA Commitments	8
4.3 Applicable International Codes, Standards, Guidelines	8
4.3.1 IFC Standards	8
4.3.2 Applicable International Codes, Standards, Guidelines	9
5 ROLES & RESPONSIBILITIES	9
5.1 COMPANY	9
5.2 CONTRACTOR.....	9
6 RISK ASSESSMENT & CONTROL	10
6.1 Risk Profile.....	10
6.2 Land Transport Risk Assessment	11
6.3 Pre - Journey Risk Assessments	11
6.4 Activity Specific Risk Assessments.....	12
7 VEHICLE MANAGEMENT	12
7.1 Vehicle Selection Hierarchy.....	12
7.2 Vehicle Related Requirements	12
7.2.1 General Requirements	12
7.2.2 Approval for Use & Site Access Requirements	13
7.2.3 Vehicle Safety Specifications.....	13

TRANSPORT & ROAD SAFETY MANAGEMENT PLAN – TANZANIA				Document Number: TZ-MID-60-0120-200334	
				Revision : 00	Status : AFU
				Rev. Date : 14/05/2019	
Doc. Type : SPE	Discipline : PJM	Phase: DE	Class: 1	Page 3 of 6	
CONTRACTOR Reference:			System / Subsystem : 00	Equipment Type : NA	

7.2.3.1	General Vehicle Safety Specifications	13
7.2.3.2	Light Vehicle Specifications	14
7.2.3.3	Heavy Goods Vehicle Specifications	15
7.2.3.4	Bus / Coach Specifications	15
7.2.3.5	Emergency Vehicle Specifications	16
7.2.3.6	Earthworks Equipment Specifications	16
7.3	Load Restraints / Cargo	16
7.4	Vehicle Maintenance	17
7.5	Prohibited Equipment and Vehicles	17
7.6	In Vehicle Monitoring System (IVMS)	17
7.6.1	IVMS Minimum Requirements	18
7.6.2	Driving Parameters	18
7.6.3	IVMS Reports	19
7.6.4	IVMS Event Detection Settings	19
7.7	Vehicle Insurance	20
8	DRIVER MANAGEMENT	20
8.1	Key Safety Behaviours	20
8.2	Driver Competency	21
8.2.1	Licenses Validity	21
8.2.2	Drivers Screening Process	22
8.2.3	Medical Requirements	22
8.2.4	Driver Training & Awareness	22
8.2.4.1	Driver Site Induction	22
8.2.4.2	Hazard Perception Training	23
8.2.4.3	Defensive Driver Training	23
8.2.4.4	Off Road / 4WD Training	23
8.2.4.5	Activity Specific Training	23
8.2.4.6	Refresher Training	24
8.2.4.7	Awareness Campaigns	24
8.2.5	Assessment Process	24
8.2.5.1	General Project Drivers	24
8.2.5.2	Project Drivers	24
8.3	Fitness to Drive	25
8.3.1	Fatigue Management	25
8.4	Driver Responsibilities	26
8.4.1	Vehicle Pre-Start Checks	27
8.5	Expatriate Drivers	27
8.6	Vehicle / Animal Interactions	27
8.7	Towing	27
9	JOURNEY MANAGEMENT	28

TRANSPORT & ROAD SAFETY MANAGEMENT PLAN – TANZANIA				Document Number: TZ-MID-60-0120-200334	
				Revision : 00	Status : AFU
				Rev. Date : 14/05/2019	
Doc. Type : SPE	Discipline : PJM	Phase: DE	Class: 1	Page 4 of 6	
CONTRACTOR Reference:			System / Subsystem : 00		Equipment Type : NA

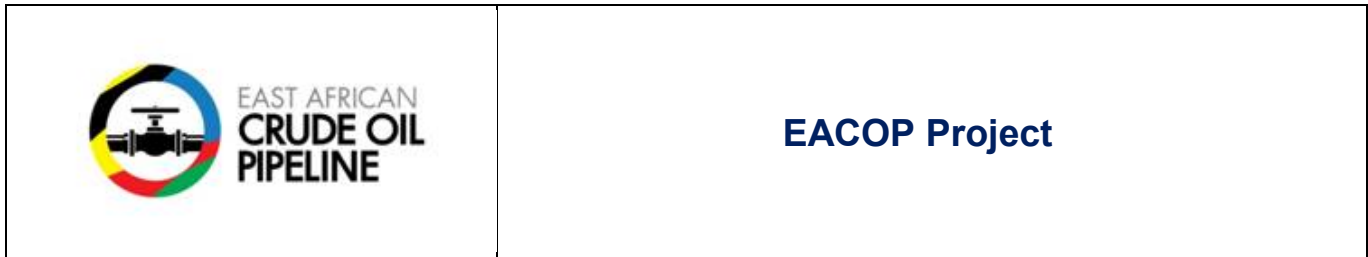
9.1 Journey Management Planning.....	28
9.2 Driving Restrictions and Duty Hours	28
9.2.1 Night Driving.....	29
9.2.1.1 Night Driving Exemptions	29
9.3 Speed	30
9.4 Access Route Selection & Management.....	30
9.5 Management of Road Crossings	31
9.6 Transport of Dangerous / Hazardous Goods.....	31
9.7 Oversize Load Management	31
9.8 Convoys & Scheduling of Traffic Movements	32
9.9 Community Liaison and Community Safety	32
9.9.1 Safety Awareness for Communities.....	32
10 SITE ACCESS & RIGHT OF WAY (ROW) MANAGEMENT.....	33
10.1 Road / ROW Design & Requirements.....	33
10.2 General Site Safety Requirements	33
10.2.1 Signage & Delineation	34
10.2.2 Speed Limits & Control.....	34
10.2.3 Parking Requirements	34
10.2.4 Access Control	35
10.3 Driving on Steep Slope	35
10.3.1 Planning the Work	35
10.3.2 Risk assessment	36
10.3.3 Managing the work	36
10.4 Changes to Traffic Conditions & Controls.....	36
10.4.1 Road Works / Temporary Road Closures	36
10.4.2 Power Lines	37
10.4.3 Wet Weather & Slippery Conditions.....	37
10.5 Dust Management.....	37
10.6 Traffic Control Measures	37
10.7 Breakdown & Recovery.....	37
11 INCIDENT MANAGEMENT.....	38
12 VERIFICATION & MONITORING	38
12.1 Objectives	38
12.2 Key Performance Indicators (KPIs).....	38
12.3 Verification of Performance	39

TRANSPORT & ROAD SAFETY MANAGEMENT PLAN – TANZANIA				Document Number: TZ-MID-60-0120-200334	
				Revision : 00	Status : AFU
				Rev. Date : 14/05/2019	
Doc. Type : SPE	Discipline : PJM	Phase: DE	Class: 1	Page 5 of 6	
CONTRACTOR Reference:			System / Subsystem : 00	Equipment Type : NA	

12.3.1	Inspections	39
12.3.1.1	Vehicle Inspections	39
12.3.1.2	Access Road Inspections	39
12.3.2	Audits	39
12.4	Action Tracking	40
13	REPORTING	40
Appendix 1	ESIA MITIGATION Commitments	41
Appendix 2	Vehicle Inspection Sticker	44
Appendix 3	EarthWorks Equipment Specifications	45
Appendix 4	LIGHT Vehicle Pre-Start Checks (example).....	49
Figure 1 – WHO Tanzania Road Safety Data 2018		11
Figure 2 –NCAP Injury Diagram for Each Star Rating		14
Table 1: Tanzania Road & Traffic Related Legislation		8
Table 2: Tanzania Road & Traffic Related Regulations		9
Table 3: IVMS Event Detection Settings		20
Table 4: Driving Duty Hours		30
Table 5: Maximum Driving Speeds		31
Table 6: Key Performance Indicators		39

TRANSPORT & ROAD SAFETY MANAGEMENT PLAN – TANZANIA				<i>Document Number:</i> TZ-MID-60-0120-200334	
				<i>Revision :</i> 00	<i>Status :</i> AFU
				<i>Rev. Date :</i> 14/05/2019	
<i>Doc. Type :</i> SPE	<i>Discipline :</i> PJM	<i>Phase:</i> DE	<i>Class:</i> 1	<i>Page 6 of 6</i>	
CONTRACTOR Reference:			<i>System / Subsystem :</i> 00		<i>Equipment Type :</i> NA

Emergency Preparedness and Response Plan (Tanzania)				Document Number: TZ-MID-60-0120-200335	
				Revision: 00	Status: IFR
				Rev. Date: xx/xx/2019	
Doc. Type: PLN	Discipline: HSE	Phase: OV	Class: 1	Page 1 of 3	
			System / Subsystem: NN	Equipment Type: NN	



This document has been generated by an Electronic Document Management System. When printed it is considered as a “for information only” copy. The controlled copy is the screen version and it is the holder’s responsibility that he/she holds the latest valid version”.

<h3>Emergency Preparedness and Response Plan (Tanzania)</h3>
--

00	IFR					
Rev.	Status	Date	Revision Description	Issued by	Reviewed by	Approved by

Emergency Preparedness and Response Plan (Tanzania)				Document Number: TZ-MID-60-0120-200335	
				Revision: 00	Status: IFR
				Rev. Date: xx/xx/2019	
Doc. Type: PLN	Discipline: HSE	Phase: OV	Class: 1	Page 2 of 3	
			System / Subsystem: NN	Equipment Type: NN	


TABLE OF CONTENTS

1	INTRODUCTION.....	4
1.1	PURPOSE	4
1.2	OBJECTIVES	4
1.3	PERFORMANCE – BASED APPROACH TO IMPACT MITIGATION	5
1.4	SCOPE	6
1.5	DEFINITIONS	6
1.6	LINKS WITH OTHER PLANS AND PROCEDURES	8
2	POLICY AND LEGISLATIVE REQUIREMENTS.....	8
2.1	INTRODUCTION	8
2.2	POLICY AND PROJECT STANDARDS	9
2.3	APPLICABLE LEGISLATION, CODES AND INTERNATIONAL STANDARDS	9
2.3.1	National Legislation	9
2.3.2	World Bank/IFC, International Standards and Conventions.....	10
3	IMPACT AVOIDANCE AND IMPACT MITIGATION.....	11
3.1	INTRODUCTION	11
3.2	APPROACH AND DESCRIPTION OF IMPACT AVOIDANCE AND MITIGATION.....	11
3.2.1	Definition of an Emergency	11
3.2.2	Emergency Risk Analysis	14
3.2.3	Emergency Reponse Planning.....	12
3.2.4	Emergency Preparedness	13
3.2.5	Emergency Response.....	14
3.2.6	Emergency Response Equipment.....	14
3.2.7	Incident Management	14
3.2.8	Emergency Reponse Excercises	15
3.2.9	Tiered Response Procedure	16
4	TRAINING, AWARENESS AND COMPETENCE.....	18
5	ROLES AND RESPONSIBILITIES.....	19
5.1	COMPANY	19
5.2	CONTRACTOR	20

Emergency Preparedness and Response Plan (Tanzania)				Document Number: TZ-MID-60-0120-200335	
				Revision: 00	Status: IFR
				Rev. Date: xx/xx/2019	
Doc. Type: PLN	Discipline: HSE	Phase: OV	Class: 1	Page 3 of 3	
			System / Subsystem: NN	Equipment Type: NN	

6	VERIFICATION AND MONITORING OF CONTRACTOR PERFORMANCE.....	21
6.1	OBJECTIVES	21
6.2	AUDIT AND INSPECTION	21
6.3	KEY PERFORMANCE INDICATORS.....	22
6.4	CONTRACTOR PERFORMANCE.....	22
6.5	CONTRACTOR REPORTING REQUIREMENTS	23
6.6	REVIEW AND IMPROVEMENT.....	23
6.7	RECORD KEEPING	24
7	APPENDICES.....	25
	APPENDIX 1: ESIA Mitigation Commitments	25

Monitoring and Reporting Plan (Tanzania)				Document Number: TZ-MID-60-0120-200257	
				Revision: 00	Status: IFR
				Rev. Date: xx/xx/2019	
Doc. Type: PLN	Discipline: HSE	Phase: OV	Class: 1	Page 1 of 3	
			System / Subsystem: NN	Equipment Type: NN	

 <p>EAST AFRICAN CRUDE OIL PIPELINE</p>	<h2 style="color: #0056b3;">EACOP Project</h2>
---	--

This document has been generated by an Electronic Document Management System. When printed it is considered as a “for information only” copy. The controlled copy is the screen version and it is the holder’s responsibility that he/she holds the latest valid version”.

<h2 style="margin: 0;">Monitoring and Reporting Plan (Tanzania)</h2>
--

00	IFR					
Rev.	Status	Date	Revision Description	Issued by	Reviewed by	Approved by

Monitoring and Reporting Plan (Tanzania)				Document Number: TZ-MID-60-0120-200257	
				Revision: 00	Status: IFR
				Rev. Date: xx/xx/2019	
Doc. Type: PLN	Discipline: HSE	Phase: OV	Class: 1	Page 2 of 3	
			System / Subsystem: NN	Equipment Type: NN	


TABLE OF CONTENTS

1	INTRODUCTION.....	4
1.1	PURPOSE	4
1.2	OBJECTIVES	4
1.3	PERFORMANCE – BASED APPROACH TO IMPACT MITIGATION	5
1.4	SCOPE	6
1.5	DEFINITIONS	6
1.6	LINKS WITH OTHER PLANS AND PROCEDURES	8
2	POLICY AND LEGISLATIVE REQUIREMENTS.....	8
2.1	INTRODUCTION	8
2.2	POLICY AND PROJECT STANDARDS.....	9
2.3	APPLICABLE LEGISLATION, CODES AND INTERNATIONAL STANDARDS	9
2.3.1	National Legislation	9
2.3.2	World Bank/IFC, International Standards and Conventions.....	10
3	IMPACT AVOIDANCE AND IMPACT MITIGATION.....	11
3.1	INTRODUCTION	11
3.2	APPROACH AND DESCRIPTION OF MITIGATION AND MANAGEMENT CONTROLS.....	11
3.2.1	Health, Safety, Security, Environmental & Social Monitoring.....	11
3.2.2	Environmental and Social Inspections and Audits Programs	11
3.2.3	Health, Safety, Security, Environmental & Social Inspections and Audits.....	12
3.2.4	Nonconformance and Corrective Action Procedure	13
3.2.5	Action Tracking System	14
3.2.6	Key Performance Indicators (KPIs).....	15
3.2.7	Reporting Health, Safety, Security, Environmental & Social Performance.....	16
3.2.8	Non-compliance Management	16
3.2.9	Data Management	16
3.2.10	Implementation of Mitigation Measures	16
3.2.11	Internal and External Notification	16
3.2.12	Investigation of Nonconformances and Incidents	16
4	TRAINING, AWARENESS AND COMPETENCE.....	18
5	ROLES AND RESPONSIBILITIES.....	19

Monitoring and Reporting Plan (Tanzania)				Document Number: TZ-MID-60-0120-200257	
				Revision: 00	Status: IFR
				Rev. Date: xx/xx/2019	
Doc. Type: PLN	Discipline: HSE	Phase: OV	Class: 1	Page 3 of 3	
			System / Subsystem: NN	Equipment Type: NN	

5.1	COMPANY	19
5.2	CONTRACTOR	20
6	VERIFICATION AND MONITORING OF CONTRACTOR PERFORMANCE.....	21
6.1	OBJECTIVES	21
6.2	AUDIT AND INSPECTION	21
6.3	KEY PERFORMANCE INDICATORS.....	22
6.4	CONTRACTOR PERFORMANCE.....	22
6.5	CONTRACTOR REPORTING REQUIREMENTS	23
6.6	REVIEW AND IMPROVEMENT.....	23
6.7	RECORD KEEPING	24
7	APPENDICES.....	25
	APPENDIX 1: ESIA Mitigation Commitments	25

Decommissioning Plan (Tanzania)				Document Number: TZ-MID-60-0120-200xxx	
				Revision: 00	Status: IFR
				Rev. Date: xx/xx/2019	
Doc. Type: PLN	Discipline: HSE	Phase: OV	Class: 1	Page 1 of 3	
			System / Subsystem: NN	Equipment Type: NN	

 <p>EAST AFRICAN CRUDE OIL PIPELINE</p>	<h2>EACOP Project</h2>
---	------------------------

This document has been generated by an Electronic Document Management System. When printed it is considered as a “for information only” copy. The controlled copy is the screen version and it is the holder’s responsibility that he/she holds the latest valid version”.

<h2>Decommissioning Plan (Tanzania)</h2>
--

00	IFR					
Rev.	Status	Date	Revision Description	Issued by	Reviewed by	Approved by

Decommissioning Plan (Tanzania)				Document Number: TZ-MID-60-0120-200xxx	
				Revision: 00	Status: IFR
				Rev. Date: xx/xx/2019	
Doc. Type: PLN	Discipline: HSE	Phase: OV	Class: 1	Page 2 of 3	
			System / Subsystem: NN	Equipment Type: NN	


TABLE OF CONTENTS

1	INTRODUCTION.....	4
1.1	PURPOSE	4
1.2	OBJECTIVES	4
1.3	PERFORMANCE – BASED APPROACH TO IMPACT MITIGATION	5
1.4	SCOPE	6
1.5	DEFINITIONS	6
1.6	LINKS WITH OTHER PLANS AND PROCEDURES	8
2	POLICY AND LEGISLATIVE REQUIREMENTS.....	8
2.1	INTRODUCTION	8
2.2	POLICY AND PROJECT STANDARDS	9
2.3	APPLICABLE LEGISLATION, CODES AND INTERNATIONAL STANDARDS	9
2.3.1	National Legislation	9
2.3.2	World Bank/IFC, International Standards and Conventions.....	10
3	IMPACT AVOIDANCE AND IMPACT MITIGATION.....	11
3.1	INTRODUCTION	11
3.2	MANAGEMENT OF DECOMMISSIONING, DEMOLITION AND ABANDONMENT.....	11
3.2.1	Scope of Decommissioning, Demolition and Abandonment Works	11
3.2.2	Preliminary Decommissioning	12
3.2.3	Final Decommissioning, Demolition and Abandonment	13
3.2.3.1	Hub Facilities, AGIs, Laydown Areas and Camps.....	13
3.2.3.2	Marine Storage Terminal and Load out Facility.....	13
3.2.3.3	Pipeline and Block Valve Decommissioning.....	14
3.2.3.4	Electrical and Communication Lines	14
3.2.3.5	Roads and Access Track.....	15
3.2.3.6	Borrow Pits.....	15
3.2.4	Action Tracking System	15
3.2.5	Key Performance Indicators (KPIs).....	16
3.2.5	Environmental and Social Evaluation	16
3.2.6	Reporting Health, Safety, Security, Environmental & Social Performance.....	16
3.2.7	Internal and External Notification	17
3.2.8	Investigation of Nonconformances and Incidents	17
3.2.5	Decommissioning Monitoring	17

Decommissioning Plan (Tanzania)				Document Number: TZ-MID-60-0120-200xxx	
				Revision: 00	Status: IFR
				Rev. Date: xx/xx/2019	
Doc. Type: PLN	Discipline: HSE	Phase: OV	Class: 1	Page 3 of 3	
			System / Subsystem: NN	Equipment Type: NN	

3.2.5	Approval Process for Decommissioning.....	17
4	TRAINING, AWARENESS AND COMPETENCE.....	18
5	ROLES AND RESPONSIBILITIES	19
5.1	COMPANY	19
5.2	CONTRACTOR	20
6	VERIFICATION AND MONITORING OF CONTRACTOR PERFORMANCE.....	21
6.1	OBJECTIVES	21
6.2	AUDIT AND INSPECTION	21
6.3	KEY PERFORMANCE INDICATORS.....	22
6.4	CONTRACTOR PERFORMANCE.....	22
6.5	CONTRACTOR REPORTING REQUIREMENTS	23
6.6	REVIEW AND IMPROVEMENT.....	23
6.7	RECORD KEEPING	24
7	APPENDICES.....	25
	APPENDIX 1: ESIA Mitigation Commitments	25

Chemical Management Plan (Tanzania)				Document Number: TZ-MID-60-0120-200xxx	
				Revision: 00	Status: IFR
				Rev. Date: xx/xx/2019	
Doc. Type: PLN	Discipline: HSE	Phase: OV	Class: 1	Page 1 of 3	
			System / Subsystem: NN		Equipment Type: NN

 <p>EAST AFRICAN CRUDE OIL PIPELINE</p>	<h2 style="color: #0056b3;">EACOP Project</h2>
---	--

This document has been generated by an Electronic Document Management System. When printed it is considered as a “for information only” copy. The controlled copy is the screen version and it is the holder’s responsibility that he/she holds the latest valid version”.

<h2>Chemical Management Plan (Tanzania)</h2>
--

00	IFR					
Rev.	Status	Date	Revision Description	Issued by	Reviewed by	Approved by

Chemical Management Plan (Tanzania)				Document Number: TZ-MID-60-0120-200xxx	
				Revision: 00	Status: IFR
				Rev. Date: xx/xx/2019	
Doc. Type: PLN	Discipline: HSE	Phase: OV	Class: 1	Page 2 of 3	
			System / Subsystem: NN	Equipment Type: NN	

TABLE OF CONTENTS

1	INTRODUCTION.....	4
1.1	PURPOSE	4
1.2	OBJECTIVES	4
1.3	PERFORMANCE – BASED APPROACH TO IMPACT MITIGATION	5
1.4	SCOPE	6
1.5	DEFINITIONS	6
1.6	LINKS WITH OTHER PLANS AND PROCEDURES	8
2	POLICY AND LEGISLATIVE REQUIREMENTS.....	8
2.1	INTRODUCTION	8
2.2	POLICY AND PROJECT STANDARDS	9
2.3	APPLICABLE LEGISLATION, CODES AND INTERNATIONAL STANDARDS	9
2.3.1	National Legislation	9
2.3.2	World Bank/IFC, International Standards and Conventions.....	10
2.3.2.1	ISO 14001:2015 and ISO 45001:2018	10
3	IMPACT AVOIDANCE AND IMPACT MITIGATION.....	11
3.1	INTRODUCTION	11
3.2	APPROACH AND DESCRIPTION OF IMPACT AVOIDANCE AND MITIGATION.....	12
3.3	CONTROL OF CHEMICAL HAZARDS	12
3.4	CHEMICAL SELECTION.....	13
3.4.1	List of Prohibited Substances.....	14
3.5	HAZARDOUS CHEMICAL ASSESSMENT	15
3.6	IDENTIFICATION AND INVENTORY OF CHEMICALS	16
3.7	CHEMICAL STORAGE	16
3.7.1	Segregation of Chemicals	19
3.8	HAZARD COMMUNICATIONS	19
3.9	HANDLING AND TRANSPORTATION	19
3.10	HAZARDOUS CHEMICAL WASTE MANAGEMENT	20
3.11	CHEMICAL SPILLS PREVENTION MEASURES.....	21
3.12	SPILL RESPONSE.....	21

Chemical Management Plan (Tanzania)				Document Number: TZ-MID-60-0120-200xxx	
				Revision: 00	Status: IFR
				Rev. Date: xx/xx/2019	
Doc. Type: PLN	Discipline: HSE	Phase: OV	Class: 1	Page 3 of 3	
			System / Subsystem: NN	Equipment Type: NN	

3.13	SAFETY PRECAUTIONS AND PPE REQUIREMENTS.....	21
3.14	FIRST AID FACILITIES.....	22
4	TRAINING, AWARENESS AND COMPETENCE.....	22
5	ROLES AND RESPONSIBILITIES.....	23
5.1	COMPANY	23
5.2	CONTRACTOR	24
6	VERIFICATION AND MONITORING OF CONTRACTOR PERFORMANCE.....	25
6.1	OBJECTIVES.....	25
6.2	AUDIT AND INSPECTION	25
6.3	KEY PERFORMANCE INDICATORS.....	26
6.4	CONTRACTOR PERFORMANCE.....	26
6.5	CONTRACTOR REPORTING REQUIREMENTS	26
6.6	REVIEW AND IMPROVEMENT.....	27
6.7	RECORD KEEPING	27
7	APPENDICES.....	28
	APPENDIX 1: ESIA Mitigation Commitments	28
	APPENDIX 2: Hazardous Chemical Inventory Form.....	29
	APPENDIX 3: Chemical Compatability Guidelines	30
	APPENDIX 4: Inspection Checklist for Hazardous Chemical Storage.....	31
	APPENDIX 5: Hazardous Chemical Transfer Form.....	32
	APPENDIX 6: Explosive Material Handling Procedure	33

Horizontal Directional Drilling Management Plan (Tanzania)				Document Number:	
				TZ-MID-60-0120-200XXX	
				Revision: 00	Status: IFR
				Rev. Date: xx/xx/2019	
Doc. Type: PLN	Discipline: HSE	Phase: OV	Class: 1	Page 1 of 4	
			System / Subsystem: NN	Equipment Type: NN	



This document has been generated by an Electronic Document Management System. When printed it is considered as a "for information only" copy. The controlled copy is the screen version and it is the holder's responsibility that he/she holds the latest valid version".

<h3>Horizontal Directional Drilling (HDD) Management Plan (Tanzania)</h3>

00	IFR					
Rev.	Status	Date	Revision Description	Issued by	Reviewed by	Approved by

Horizontal Directional Drilling Management Plan (Tanzania)				Document Number: UT-MID-60-0120-200XXX	
				Revision: 00	Status: IFR
				Rev. Date: xx/xx/2019	
Doc. Type: PLN	Discipline: HSE	Phase: OV	Class: 1	Page 2 of 4	
			System / Subsystem: NN	Equipment Type: NN	

TABLE OF CONTENTS

1 INTRODUCTION.....	5
1.1 PURPOSE	5
1.2 OBJECTIVES	5
1.3 PERFORMANCE – BASED APPROACH TO IMPACT MITIGATION	6
1.4 SCOPE	6
1.5 DEFINITIONS	7
1.6 LINKS WITH OTHER PLANS AND PROCEDURES	8
2 POLICY AND LEGISLATIVE REQUIREMENTS.....	8
2.1 INTRODUCTION	8
2.2 POLICY AND PROJECT STANDARDS	9
2.3 APPLICABLE LEGISLATION, CODES AND INTERNATIONAL STANDARDS	9
2.3.1 National Legislation	9
2.3.2 World Bank/IFC, International Standards and Conventions.....	10
2.3.2.1 ISO 14001:2015 and ISO 45001:2018	10
3 IMPACT AVOIDANCE AND IMPACT MITIGATION.....	10
3.1 INTRODUCTION	10
3.2 HORIZONTAL DIRECTIONAL DRILLING.....	11
3.2.1 Horizontal Directional Drilling Stages	11
3.2.1.1 Stage 1; Information	11
3.2.1.2 Stage 2; Pilot Bore.....	12
3.2.1.3 Stage 3; Reaming	12
3.2.1.4 Stage 4; Pipe insertion/Pullback	13
3.2.2 Why Choose Horizontal Directional Drilling?	13
3.2.3 Protection of Underground Facilities	14
3.2.4 Plans and Procedures.....	14
3.2.4.1 Prior to Award of Contract	14
3.2.4.2 Prior to Commencement of Work	14
3.2.5 Right of Way, Workspace and Access	16
3.2.6 Environmental.....	16
3.2.6.1 Work Space	16
3.2.6.2 Water Supply	16
3.2.6.3 Hydrotest Water Discharge.....	16
3.2.6.4 Sanitation Facilities	16
3.2.6.5 Refueling and Equipment Maintenance.....	17
3.2.6.6 Bentonite.....	17
3.2.7 Safety	18


Horizontal Directional Drilling Management Plan (Tanzania)				Document Number: UT-MID-60-0120-200XXX	
				Revision: 00	Status: IFR
				Rev. Date: xx/xx/2019	
Doc. Type: PLN	Discipline: HSE	Phase: OV	Class: 1	Page 3 of 4	
			System / Subsystem: NN	Equipment Type: NN	

3.2.7.1	Entry Side	18
3.2.7.2	Exit Side Including Pipe Stringing Area	18
3.2.8	Drilling Requirements.....	18
3.2.8.1	General	18
3.2.8.2	Preliminary Trenching Requirements	19
3.2.8.3	Drilling Fluids	19
3.2.8.4	Inadvertent Returns	19
3.2.8.5	Drilling Water	20
3.2.8.6	Instrumentation and Survey.....	20
3.2.8.7	Pilot Hole Drill Tolerances	21
3.2.8.8	Pilot Hole Final Location	21
3.2.8.9	Reaming.....	22
3.2.8.10	Lost or Stuck Tools	22
3.2.8.11	Minimum Curve Radius	22
3.2.8.12	Hole Rejection and Abandonment.....	22
3.2.8.13	Pipe Fabrication	23
3.2.9	Pipe Installations and Pullback Operations	23
3.2.9.1	Welding.....	23
3.2.9.2	Weld Coating and Coating Repairs	23
3.2.9.3	Pre-reaming	23
3.2.9.4	Pullback	23
3.2.9.5	Pulling Loads	23
3.2.9.6	Pull Section Support	24
3.2.9.7	Torsional Stress.....	24
3.2.9.8	External Collapse Pressure	24
3.2.9.9	Buoyance Modification.....	24
3.2.9.10	Hydrostatic Testing	24
3.2.9.11	Caliper Pig/Sizing Plate	24
3.2.10	Drilling Fluid/ Drilling Cutting Management	24
3.2.10.1	Drilling Fluid/Mud Disposal	25
3.2.10.2	Proposed Drilling Mud Processing Methods.....	25
3.2.10.3	Proposed Final Disposal of HDD Residuals	25
3.2.11	Mobilisation and De-mobilisation	26
3.2.12	Constructional Final Report.....	26
3.2.13	Backfill and Site Restoration	26
3.2.14	End Use Management	27
4	TRAINING, AWARENESS AND COMPETENCE.....	27
5	ROLES AND RESPONSIBILITIES	27
5.1	COMPANY	27
5.2	CONTRACTOR	28
6	VERIFICATION AND MONITORING OF CONTRACTOR PERFORMANCE.....	29
6.1	OBJECTIVES	29

Horizontal Directional Drilling Management Plan (Tanzania)				Document Number: UT-MID-60-0120-200XXX	
				Revision: 00	Status: IFR
				Rev. Date: xx/xx/2019	
Doc. Type: PLN	Discipline: HSE	Phase: OV	Class: 1	Page 4 of 4	
			System / Subsystem: NN	Equipment Type: NN	

6.2	AUDIT AND INSPECTION	30
6.3	KEY PERFORMANCE INDICATORS.....	30
6.4	CONTRACTORS PERFORMANCE	30
6.4.1	Action Tracking System	30
6.5	COMMUNICATIONS	31
6.6	CONTRACTOR REPORTING	31
6.7	REVIEW AND IMPROVEMENT.....	31
6.8	RECORD KEEPING	31
7	APPENDICES.....	32
8	REFERENCES.....	32

Hydrostatic Testing Management Plan (Tanzania)				Document Number: TZ-MID-60-0120-200xxx	
				Revision: 00	Status: IFR
				Rev. Date: xx/xx/2019	
Doc. Type: PLN	Discipline: HSE	Phase: OV	Class: 1	Page 1 of 3	
			System / Subsystem: NN	Equipment Type: NN	

 <p>EAST AFRICAN CRUDE OIL PIPELINE</p>	<h2 style="color: #0056b3;">EACOP Project</h2>
---	--

This document has been generated by an Electronic Document Management System. When printed it is considered as a “for information only” copy. The controlled copy is the screen version and it is the holder’s responsibility that he/she holds the latest valid version”.

<h2>Hydrostatic Testing Management Plan (Tanzania)</h2>

00	IFR					
Rev.	Status	Date	Revision Description	Issued by	Reviewed by	Approved by

Hydrostatic Testing Management Plan (Tanzania)				Document Number: TZ-MID-60-0120-200xxx	
				Revision: 00	Status: IFR
				Rev. Date: xx/xx/2019	
Doc. Type: PLN	Discipline: HSE	Phase: OV	Class: 1	Page 2 of 3	
			System / Subsystem: NN	Equipment Type: NN	


TABLE OF CONTENTS

1	INTRODUCTION.....	4
1.1	PURPOSE	4
1.2	OBJECTIVES	4
1.3	PERFORMANCE – BASED APPROACH TO IMPACT MITIGATION	5
1.4	SCOPE	6
1.5	DEFINITIONS	6
1.6	LINKS WITH OTHER PLANS AND PROCEDURES	8
2	POLICY AND LEGISLATIVE REQUIREMENTS.....	8
2.1	INTRODUCTION	8
2.2	POLICY AND PROJECT STANDARDS.....	9
2.3	APPLICABLE LEGISLATION, CODES AND INTERNATIONAL STANDARDS	9
2.3.1	National Legislation	9
2.3.2	World Bank/IFC, International Standards and Conventions.....	10
3	PERMITRY REQUIREMENTS.....	11
3.1	Water Abstraction Permit.....	11
3.2	Hydrostatic Testing Effluent Discharge Permits	11
4	HYDROSTATIC TEST PROCEDURE	12
4.1	GENERAL	12
4.2	NOTIFICATIONS.....	12
4.3	TEST SEGMENTS.....	13
4.4	PIPING AND STORAGE TANKS TO BE TESTED.....	13
4.5	ABSTRACTION OF TEST WATER.....	13
4.6	TEST SEQUENCE.....	14
4.7	TEST PRESSURE AND DURATION.....	14
4.8	TEST ISOLATION	15
4.9	ELEVATION PROFILES.....	20
4.10	DISPOSAL OF TEST WATER.....	20

Hydrostatic Testing Management Plan (Tanzania)				Document Number: TZ-MID-60-0120-200xxx	
				Revision: 00	Status: IFR
				Rev. Date: xx/xx/2019	
Doc. Type: PLN	Discipline: HSE	Phase: OV	Class: 1	Page 3 of 3	
			System / Subsystem: NN	Equipment Type: NN	

5	TEST PROCEDURE OUTLINE	21
5.1	INSTRUMENT CALIBRATION REQUIREMENTS	21
5.2	TEST INSTRUMENT SETUP	22
5.3	PRESSURE MEASUREMENTS	24
5.4	TEMPERATURE MEASUREMENTS	25
5.5	PROCEDURE FOR STRENGTH/LEAK TESTING	25
6	IMPACT MITIGATION AND CONTINGENCY MEASURES	27
6.1	IMPACT PREVENTION	27
6.2	EMERGENCY RESPONSE	27
6.3	LEAKS	27
6.4	TEST FAILURES.....	27
6.5	SAFETY PRECAUTIONS.....	28
7	TRAINING, AWARENESS AND COMPETENCE.....	28
8	ROLES AND RESPONSIBILITIES	29
7.1	COMPANY	29
7.2	CONTRACTOR	30
9	VERIFICATION AND MONITORING OF CONTRACTOR PERFORMANCE.....	31
9.1	OBJECTIVES	31
9.2	AUDIT AND INSPECTION	31
9.3	KEY PERFORMANCE INDICATORS.....	32
9.4	CONTRACTOR PERFORMANCE.....	32
9.5	CONTRACTOR REPORTING REQUIREMENTS	32
8.6	REVIEW AND IMPROVEMENT.....	33
9.7	RECORD KEEPING	33
10	APPENDICES	34
	APPENDIX 1: ESIA Mitigation Commitments	34
	APPENDIX 2: Water Abstraction Water Quality Standards	35
	APPENDIX 3: Water Discharge Water Quality Standards.....	36

Rock Blasting Management Plan (Tanzania)				Document Number: TZ-MID-60-0120-200360	
				Revision: 00	Status: IFR
				Rev. Date: xx/xx/2019	
Doc. Type: PLN	Discipline: HSE	Phase: OV	Class: 1	Page 1 of 3	
			System / Subsystem: NN	Equipment Type: NN	

 <p>EAST AFRICAN CRUDE OIL PIPELINE</p>	<h2 style="color: #0056b3;">EACOP Project</h2>
---	--

This document has been generated by an Electronic Document Management System. When printed it is considered as a “for information only” copy. The controlled copy is the screen version and it is the holder’s responsibility that he/she holds the latest valid version”.

<h2 style="margin: 0;">Rock Blasting Management Plan (Tanzania)</h2>
--

00	IFR					
Rev.	Status	Date	Revision Description	Issued by	Reviewed by	Approved by

Rock Blasting Management Plan (Tanzania)				Document Number: TZ-MID-60-0120-200360	
				Revision: 00	Status: IFR
				Rev. Date: xx/xx/2019	
Doc. Type: PLN	Discipline: HSE	Phase: OV	Class: 1	Page 2 of 3	
			System / Subsystem: NN	Equipment Type: NN	


TABLE OF CONTENTS

1 INTRODUCTION.....	4
1.1 PURPOSE	4
1.2 OBJECTIVES	4
1.3 PERFORMANCE – BASED APPROACH TO IMPACT MITIGATION	5
1.4 SCOPE	6
1.5 DEFINITIONS	6
1.6 LINKS WITH OTHER PLANS AND PROCEDURES	7
2 POLICY AND LEGISLATIVE REQUIREMENTS.....	8
2.1 INTRODUCTION	8
2.2 POLICY AND PROJECT STANDARDS	8
2.3 APPLICABLE LEGISLATION, CODES AND INTERNATIONAL STANDARDS	8
2.3.1 National Legislation	8
2.3.2 World Bank/IFC, International Standards and Conventions.....	9
2.3.2.1 ISO 14001:2015 and ISO 45001:2018	9
3 IMPACT AVOIDANCE AND MITIGATION	9
3.1 INTRODUCTION	9
3.2 PRE-ROCK BLASTING REQUIREMENTS	10
3.2.1 Assessment and mitigation of noise, air overpressure and vibration	12
3.3 ROCK BLASTING PRINCIPLES	11
3.3.1 Description of the Activity.....	12
3.3.2 Blast Specification	12
3.3.3 Preparation for Firing	14
3.3.4 Making Up the Primer	14
3.3.5 Charging and Stemming	14
3.3.6 Miss-Fire Rules.....	14
3.4 TRANSPORTATION AND STORAGE OF EXPLOSIVES	15
3.5 MANAGEMENT OF SURPLUS ROCK.....	15
4 TRAINING AWARENESS AND COMPETENCE.....	16
5 ROLES AND RESPONSIBILITIES	17
5.1 EACOP.....	17

Rock Blasting Management Plan (Tanzania)				Document Number: TZ-MID-60-0120-200360	
				Revision: 00	Status: IFR
				Rev. Date: xx/xx/2019	
Doc. Type: PLN	Discipline: HSE	Phase: OV	Class: 1	Page 3 of 3	
			System / Subsystem: NN	Equipment Type: NN	

5.2	CONTRACTOR	17
6	VERIFICATION AND MONITORING OF CONTRACTOR PERFORMANCE.....	18
6.1	OBJECTIVES	18
6.2	MONITORING	18
6.3	KEY PERFORMANCE INDICATORS.....	19
6.4	CONTRACTOR PERFORMANCE.....	19
6.5	CONTRACTOR REPORTING	19
6.6	REVIEW AND IMPROVEMENT.....	20
6.7	RECORD KEEPING	20
APPENDIX 1:	ESIA MITIGATION COMMITMENTS.....	21

Biodiversity Management Plan - Tanzania Marine				Document Number: TZ-MID-60-0120-200307	
				Revision: 00	Status: IFR
				Rev. Date: 20/05/2019	
Doc. Type: PLN	Discipline: HSE	Phase: OV	Class: 1	Page 0 of 3	
			System / Subsystem: NA	Equipment Type: NA	

 <p>EAST AFRICAN CRUDE OIL PIPELINE</p>	<h2 style="color: #0056b3;">EACOP Project</h2>
---	--

This document has been generated by an Electronic Document Management System. When printed it is considered as a “for information only” copy. The controlled copy is the screen version and it is the holder’s responsibility that he/she holds the latest valid version”.

<h2 style="margin: 0;">Biodiversity Management Plan - Tanzania Marine</h2>
--

00	IFR	18/05/2019	Issued for review	A Huckbody	S McBride P Eyraud	M Marchenko
Rev.	Status	Date	Revision Description	Issued by	Reviewed by	Approved by

Biodiversity Management Plan - Tanzania Marine				Document Number: UT-MID-60-0120-200307	
				Revision: 00	Status: IFR
				Rev. Date: 17/05/2019	
Doc. Type: PLN	Discipline: HSE	Phase: OV	Class: 1	Page 1 of 3	
			System / Subsystem: NA	Equipment Type: NA	

TABLE OF CONTENTS

1 INTRODUCTION.....	3
1.1 Background to the Marine Biodiversity Management Plan.....	3
1.2 Scope.....	3
1.3 Relationship With Other Project Components.....	5
1.4 Definitions	7
2 POLICY, LEGISLATION AND STANDARDS.....	9
2.1 Introductions.....	9
2.2 IFC Performance Standard (PS) 6.....	10
2.2.1 Introduction.....	10
2.2.2 Criteria for identifying Critical Habitat	11
3 PROJECT DESCRIPTION.....	14
3.1 Overview.....	14
4 BIODIVERSITY BASELINE OVERVIEW.....	16
5 MARINE BIODIVERSITY IMPACTS AND MANAGEMENT OVERVIEW	18
5.1 Introduction.....	18
5.2 Marine Pre-construction and Pre-clearance Surveys.....	18
5.3 Marine Biodiversity Action Plan.....	18
5.4 Marine Construction Biodiversity Considerations	18
5.5 Mitigation Measures Before and After Construction	18
5.6 Impact Offsetting Arrangements	18
6 IMPLEMENTATION ARRANGEMENTS AND ROLES AND RESPONSIBILITIES	20
6.1 Introduction.....	20
6.2 Marine Biodiversity Baseline	20
6.3 COMPANY Key Roles and Responsibilities	20
6.4 CONTRACTOR Key Roles and Responsibilities	21
6.4.1 Introduction.....	21
6.4.2 Development of BAPs.....	21
6.4.3 Staffing	22

Biodiversity Management Plan - Tanzania Marine				Document Number: UT-MID-60-0120-200307	
				Revision: 00	Status: IFR
				Rev. Date: 17/05/2019	
Doc. Type: PLN	Discipline: HSE	Phase: OV	Class: 1	Page 2 of 3	
			System / Subsystem: NA	Equipment Type: NA	

6.4.4	Marine Pre-clearance and Vegetation Removal	22
6.4.5	Marine Bio-restoration Planning	22
6.4.6	Marine Fauna (including avifauna) Protection and Fishing	22
6.4.7	Marine Flora Protection.....	23
6.4.8	Alien Invasive Species Mitigation	23
6.5	Biodiversity Monitoring and Reporting During Construction.....	24
APPENDIX 1	25
1	INTRODUCTION.....	25
1.1	Introduction.....	25
1.2	Background.....	25
2	FLORAL AND FAUNA SPECIES FOUND IN THE PROJECT'S MARINE AREA OF INFLUENCE FROM BASELINE REPORT	26
3	FLORAL AND FAUNA SPECIES FOUND IN THE MARINE ROW CORRIDOR FROM BASELINE REPORT.....	30
4	FLORAL AND FAUNA SPECIES OF CONSERVATION IMPORTANCE FOUND IN THE MARINE AOI FROM BASELINE REPORT.....	31
APPENDIX 2: ESIA Mitigation Commitments.....		33

Marine Pollution Prevention Plan (Tanzania)				Document Number: TZ-MID-60-0120-200308	
				Revision: 00	Status: IFR
				Rev. Date: xx/xx/2019	
Doc. Type: PLN	Discipline: HSE	Phase: OV	Class: 1	Page 1 of 3	
			System / Subsystem: NN	Equipment Type: NN	

 <p>EAST AFRICAN CRUDE OIL PIPELINE</p>	<h2>EACOP Project</h2>
---	------------------------

This document has been generated by an Electronic Document Management System. When printed it is considered as a “for information only” copy. The controlled copy is the screen version and it is the holder’s responsibility that he/she holds the latest valid version”.

<h2>Marine Pollution Prevention Plan (Tanzania)</h2>
--

00	IFR	xx/xx/2019				
Rev.	Status	Date	Revision Description	Issued by	Reviewed by	Approved by

Marine Pollution Prevention Plan (Tanzania)				Document Number: TZ-MID-60-0120-200308	
				Revision: 00	Status: IFR
				Rev. Date: xx/xx/2019	
Doc. Type: PLN	Discipline: HSE	Phase: OV	Class: 1	Page 2 of 3	
			System / Subsystem: NN	Equipment Type: NN	


TABLE OF CONTENTS

1 INTRODUCTION.....	4
1.1 PURPOSE	4
1.2 OBJECTIVES	4
1.3 PERFORMANCE – BASED APPROACH TO IMPACT MITIGATION	5
1.4 SCOPE	6
1.5 DEFINITIONS	6
1.6 LINKS WITH OTHER PLANS AND PROCEDURES	7
2 POLICY AND LEGISLATIVE REQUIREMENTS.....	8
2.1 INTRODUCTION	8
2.2 POLICY AND PROJECT STANDARDS.....	8
2.3 APPLICABLE LEGISLATION, CODES AND INDIVIDUAL STANDARDS.....	9
2.3.1 National Legislation	9
2.3.2 World Bank/IFC, International Standards and Conventions.....	9
2.3.2.1 ISO 14001:2015 and ISO 45001:2018	10
2.3.2.2 MARPOL Convention	
3 IMPACT AVOIDANCE AND IMPACT MITIGATION.....	10
3.1 INTRODUCTION	10
3.2 POLLUTION PREVENTION PRINCIPLES.....	11
3.2.1 Material/Fuel/Chemical Delivery and Storage Management.....	11
3.2.2 Preventing Pollution of Marine Water.....	16
3.2.2.1 Refuelling of Plant and Equipment	13
3.2.2.2 Plant and Equipment Management and Maintenance	14
3.2.2.3 Cement and Wet Concrete	15
3.2.2.4 Drilling Mud Management.....	15
3.2.2.5 Contaminated Sediments	15
3.2.2.6 Waste Management.....	16
3.2.2.7 Suspended Sediment and Sedimentation	17
3.2.2.8 Pumping.....	19
3.2.2.9 Vessel Ballast Water, Bilge Water and Wastewater.....	20
3.2.4 Preventing Pollution of the Air/Disturbance Event Management	21
3.2.4.1 Noise and Vibration – Above and Underwater	22
3.2.4.2 Light	24
3.2.4.3 Atmospheric Emissions	25
3.2.4.4 Other Potential Sources of Disturbance/Nuisance Pollution	26
3.2.5 Emergency Spill Response Strategies	28
3.2.5.1 Storage and Distribution of Pollution Control Equipment and Materials	28
3.2.5.2 Response Strategies	28

Marine Pollution Prevention Plan (Tanzania)				Document Number: TZ-MID-60-0120-200308	
				Revision: 00	Status: IFR
				Rev. Date: xx/xx/2019	
Doc. Type: PLN	Discipline: HSE	Phase: OV	Class: 1	Page 3 of 3	
			System / Subsystem: NN	Equipment Type: NN	

4	TRAINING, AWARENESS AND COMPETENCE.....	29
5	ROLES AND RESPONSIBILITIES.....	30
5.1	COMPANY	30
5.2	CONTRACTOR	30
6	VERIFICATION AND MONITORING OF CONTRACTOR PERFORMANCE.....	31
6.1	OBJECTIVES	31
6.2	AUDIT AND INSPECTION	31
6.3	KEY PERFORMANCE INDICATORS.....	32
6.4	CONTRACTOR PERFORMANCE.....	32
6.5	CONTRACTOR REPORTING	32
6.6	REVIEW AND IMPROVEMENT.....	32
6.6.1	Protection of Marine Water	33
6.6.2	Emissions to Air	36
6.6.2.1	Controlling Above and Underwater Noise and Vibration	37
6.7	RECORD KEEPING	38
	APPENDIX 1: ESIA MITIGATION COMMITMENTS	39

Marine Waste Management Plan (Tanzania)				Document Number: TZ-MID-60-0120-200309	
				Revision: 00	Status: IFR
				Rev. Date: xx/xx/2019	
Doc. Type: PLN	Discipline: HSE	Phase: OV	Class: 1	Page 1 of 3	
			System / Subsystem: NN	Equipment Type: NN	

 <div style="display: inline-block; vertical-align: middle;"> <p>EAST AFRICAN CRUDE OIL PIPELINE</p> </div>	<h2>EACOP Project</h2>
---	------------------------

This document has been generated by an Electronic Document Management System. When printed it is considered as a “for information only” copy. The controlled copy is the screen version and it is the holder’s responsibility that he/she holds the latest valid version”.

<h2>Marine Waste Management Plan (Tanzania)</h2>
--

00	IFR					
Rev.	Status	Date	Revision Description	Issued by	Reviewed by	Approved by

Marine Waste Management Plan (Tanzania)				Document Number: UT-MID-60-0120-20309	
				Revision: 00	Status: IFR
				Rev. Date: xx/xx/2019	
Doc. Type: PLN	Discipline: HSE	Phase: OV	Class: 1	Page 2 of 3	
			System / Subsystem: NN	Equipment Type: NN	


TABLE OF CONTENTS

1	INTRODUCTION.....	4
1.1	PURPOSE	4
1.2	OBJECTIVES	4
1.3	PERFORMANCE – BASED APPROACH TO IMPACT MITIGATION	5
1.4	SCOPE	5
1.5	DEFINITIONS	6
1.6	LINKS WITH OTHER PLANS AND PROCEDURES	7
2	POLICY AND LEGISLATIVE REQUIREMENTS.....	8
2.1	INTRODUCTION	8
2.2	POLICY AND PROJECT STANDARDS	8
2.3	APPLICABLE LEGISLATION, CODES AND INTERNATIONAL STANDARDS	8
2.3.1	National Legislation	8
2.3.2	World Bank/IFC, International Standards and Conventions.....	9
2.3.2.1	ISO 14001:2015 and ISO 45001:2018	9
2.3.2.2	MARPOL Convention	
3	IMPACT AVOIDANCE AND IMPACT MITIGATION.....	10
3.1	INTRODUCTION	10
3.2	WASTE MANAGEMENT PRINCIPLES.....	14
3.2.1	Waste Management Hierarchy.....	15
3.2.2	Handling Procedures, Management and Documentation	16
3.2.3	Waste Classification.....	17
3.2.3.1	Hazardous Waste	17
3.2.3.2	Non-Hazardous Waste	17
3.2.3.3	Inert Waste.....	19
3.2.3.4	Non-Hazardous Waste from Vessels	19
3.2.3.5	Sewage Waste and Other Wastewaters from Vessels.....	20
3.2.3.6	Non-Hazardous Construction Waste	20
3.2.3.7	Hazardous Construction Waste.....	21
3.2.4	Transfer of Waste and Tracking System	23
3.2.4.1	Waste Avoidance, Minimization & Handling	23
3.2.4.2	Vessel Transport of Waste	25
3.2.4.3	Waste Tracking System	26
3.2.4.4	Waste Transfer Process	26
3.2.4.5	Contractor Treatment Facility Operating Procedures	27
3.2.5	End Use Management (Offshore, Onboard and Onshore)	28
3.2.5.1	Incinerators	28

Marine Waste Management Plan (Tanzania)				Document Number: UT-MID-60-0120-20309	
				Revision: 00	Status: IFR
				Rev. Date: xx/xx/2019	
Doc. Type: PLN	Discipline: HSE	Phase: OV	Class: 1	Page 3 of 3	
			System / Subsystem: NN	Equipment Type: NN	

3.2.5.2	Landfills.....	29
3.2.5.3	Wastewater Treatment Plants	31
3.2.5.4		
3.2.5.5	Oil Contaminated Sediment as Waste.....	33
3.2.5.6	Trans-boundary Waste Disposal	33
4	TRAINING, AWARENESS AND COMPETENCE.....	33
5	ROLES AND RESPONSIBILITIES	34
5.1	COMPANY	34
5.2	CONTRACTOR	34
6	VERIFICATION AND MONITORING OF CONTRACTOR PERFORMANCE.....	35
6.1	OBJECTIVES	35
6.2	AUDIT AND INSPECTION	36
6.3	KEY PERFORMANCE INDICATORS.....	36
6.4	CONTRACTORS PERFORMANCE	36
6.4.1	Action Tracking System	37
6.5	COMMUNICATIONS	37
6.6	CONTRACTOR REPORTING	37
6.7	REVIEW AND IMPROVEMENT.....	38
6.8	RECORD KEEPING	42
7	APPENDICES.....	42
8	REFERENCES.....	47

Natural Resources Management Plan for Marine Construction (Tanzania)				Document Number: TZ-MID-60-0120-200310	
				Revision: 00	Status: IFR
				Rev. Date: xx/xx/2019	
Doc. Type: PLN	Discipline: HSE	Phase: OV	Class: 1	Page 1 of 3	
				System / Subsystem: NN	Equipment Type: NN

 <p>EAST AFRICAN CRUDE OIL PIPELINE</p>	<h2 style="color: #0056b3;">EACOP Project</h2>
---	--

This document has been generated by an Electronic Document Management System. When printed it is considered as a “for information only” copy. The controlled copy is the screen version and it is the holder’s responsibility that he/she holds the latest valid version”.

<h3>Natural Resources Management Plan for Marine Construction (Tanzania)</h3>

00	IFR					
Rev.	Status	Date	Revision Description	Issued by	Reviewed by	Approved by

Natural Resources Management Plan for Marine Construction (Tanzania)				Document Number: TZ-MID-60-0120-200310	
				Revision: 00	Status: IFR
				Rev. Date: xx/xx/2019	
Doc. Type: PLN	Discipline: HSE	Phase: OV	Class: 1	Page 2 of 3	
			System / Subsystem: NN	Equipment Type: NN	

TABLE OF CONTENTS

1	INTRODUCTION.....	4
1.1	PURPOSE	4
1.2	OBJECTIVES	4
1.3	PERFORMANCE – BASED APPROACH TO IMPACT MITIGATION	5
1.4	SCOPE	6
1.5	DEFINITIONS	6
1.6	LINKS WITH OTHER PLANS AND PROCEDURES	8
2	POLICY AND LEGISLATIVE REQUIREMENTS.....	8
2.1	INTRODUCTION	8
2.2	POLICY AND PROJECT STANDARDS	9
2.3	APPLICABLE LEGISLATION, CODES AND INTERNATIONAL STANDARDS	9
2.3.1	National Legislation	9
2.3.2	World Bank/IFC, International Standards and Conventions.....	10
2.3.2.1	ISO 14001:2015 and ISO 45001:2018	10
3	IMPACT AVOIDANCE AND IMPACT MITIGATION.....	11
3.1	INTRODUCTION	11
3.1.1	Aggregates Management.....	11
3.1.2	Water Resource Management	12
3.1.2.1	Water Supply	12
3.1.2.2	Water Management and Conservation	13
3.1.2.3	Wastewater Management.....	15
3.1.2.4	Sludge Management.....	16
3.1.2.5	Construction Activities	17
3.1.3	Other Raw Material Management	20
4	TRAINING, AWARENESS AND COMPETENCE.....	21
5	ROLES AND RESPONSIBILITIES	21
5.1	COMPANY	21
5.2	CONTRACTOR	22
6	VERIFICATION AND MONITORING OF CONTRACTOR PERFORMANCE.....	23
6.1	OBJECTIVES	23

Natural Resources Management Plan for Marine Construction (Tanzania)				Document Number: TZ-MID-60-0120-200310	
				Revision: 00	Status: IFR
				Rev. Date: xx/xx/2019	
Doc. Type: PLN	Discipline: HSE	Phase: OV	Class: 1	Page 3 of 3	
			System / Subsystem: NN	Equipment Type: NN	

6.2	AUDIT AND INSPECTION	23
6.3	KEY PERFORMANCE INDICATORS.....	24
6.4	CONTRACTOR PERFORMANCE.....	24
6.5	CONTRACTOR REPORTING REQUIREMENTS	24
6.6	REVIEW AND IMPROVEMENT.....	25
6.7	RECORD KEEPING	25
7	APPENDICES	25
	APPENDIX 1: ESIA Mitigation Commitments	25

Marine Cultural Heritage Management Plan (Tanzania)				Document Number: TZ-MID-60-0120-200312	
				Revision: 00	Status: IFR
				Rev. Date: xx/xx/2019	
Doc. Type: PLN	Discipline: HSE	Phase: OV	Class: 1	Page 1 of 3	
			System / Subsystem: NN	Equipment Type: NN	

 <p>EAST AFRICAN CRUDE OIL PIPELINE</p>	<h2 style="color: #0056b3;">EACOP Project</h2>
---	--

This document has been generated by an Electronic Document Management System. When printed it is considered as a “for information only” copy. The controlled copy is the screen version and it is the holder’s responsibility that he/she holds the latest valid version”.

<h3>Marine Cultural Heritage Management Plan (Tanzania)</h3>
--

00	IFR					
Rev.	Status	Date	Revision Description	Issued by	Reviewed by	Approved by

Marine Cultural Heritage Management Plan (Tanzania)				Document Number: TZ-MID-60-0120-200312	
				Revision: 00	Status: IFR
				Rev. Date: xx/xx/2019	
Doc. Type: PLN	Discipline: HSE	Phase: OV	Class: 1	Page 2 of 3	
			System / Subsystem: NN	Equipment Type: NN	


TABLE OF CONTENTS

1 INTRODUCTION.....	4
1.1 PURPOSE	4
1.2 OBJECTIVES	4
1.3 PERFORMANCE – BASED APPROACH TO IMPACT MITIGATION	5
1.4 SCOPE	6
1.5 DEFINITIONS	6
1.6 LINKS WITH OTHER PLANS AND PROCEDURES	8
2 POLICY AND LEGISLATIVE REQUIREMENTS.....	8
2.1 INTRODUCTION	8
2.2 POLICY AND PROJECT STANDARDS.....	9
2.3 APPLICABLE LEGISLATION, CODES AND INTERNATIONAL STANDARDS	9
2.3.1 National Legislation	9
2.3.2 World Bank/IFC, International Standards and Conventions.....	10
2.3.2.1 ISO 14001:2015 and ISO 45001:2018	10
3 IMPACT AVOIDANCE AND IMPACT MITIGATION.....	11
3.1 INTRODUCTION	11
3.2 APPROACH AND DESCRIPTION OF IMPACT AVOIDANCE AND MITIGATION.....	11
3.2.1 Baseline Survey	11
3.2.2 Chance Finds Procedure	14
3.2.3 Interface Meetings	15
4 TRAINING, AWARENESS AND COMPETENCE.....	16
5 ROLES AND RESPONSIBILITIES	16
5.1 COMPANY	16
5.2 CONTRACTOR	17
6 VERIFICATION AND MONITORING OF CONTRACTOR PERFORMANCE.....	18
6.1 OBJECTIVES	18
6.2 AUDIT AND INSPECTION	18
6.3 KEY PERFORMANCE INDICATORS.....	19

Marine Cultural Heritage Management Plan (Tanzania)				Document Number: TZ-MID-60-0120-200312	
				Revision: 00	Status: IFR
				Rev. Date: xx/xx/2019	
Doc. Type: PLN	Discipline: HSE	Phase: OV	Class: 1	Page 3 of 3	
			System / Subsystem: NN	Equipment Type: NN	

6.4	CONTRACTOR PERFORMANCE.....	19
6.5	CONTRACTOR REPORTING REQUIREMENTS	20
6.6	REVIEW AND IMPROVEMENT.....	20
6.7	RECORD KEEPING	21
7	APPENDICES.....	22
	APPENDIX 1: ESIA Mitigation Commitments	22

Marine Reinstatement Plan (Tanzania)				Document Number: TZ-MID-60-0120-200313	
				Revision: 00	Status: IFR
				Rev. Date: xx/xx/2019	
Doc. Type: PLN	Discipline: HSE	Phase: OV	Class: 1	Page 1 of 3	
			System / Subsystem: NN	Equipment Type: NN	

 <p>EAST AFRICAN CRUDE OIL PIPELINE</p>	<h2 style="color: #0056b3;">EACOP Project</h2>
---	--

This document has been generated by an Electronic Document Management System. When printed it is considered as a "for information only" copy. The controlled copy is the screen version and it is the holder's responsibility that he/she holds the latest valid version".

<h2 style="margin: 0;">Marine Reinstatement Plan (Tanzania)</h2>
--

00	IFR					
Rev.	Status	Date	Revision Description	Issued by	Reviewed by	Approved by

Marine Reinstatement Plan (Tanzania)				Document Number: TZ-MID-60-0120-200313	
				Revision: 00	Status: IFR
				Rev. Date: xx/xx/2019	
Doc. Type: PLN	Discipline: HSE	Phase: OV	Class: 1	Page 2 of 3	
			System / Subsystem: NN	Equipment Type: NN	


TABLE OF CONTENTS

1 INTRODUCTION.....	4
1.1 PURPOSE	4
1.2 OBJECTIVES	4
1.3 PERFORMANCE – BASED APPROACH TO IMPACT MITIGATION	5
1.4 SCOPE	6
1.5 DEFINITIONS	6
1.6 LINKS WITH OTHER PLANS AND PROCEDURES	8
2 POLICY AND LEGISLATIVE REQUIREMENTS.....	8
2.1 INTRODUCTION	8
2.2 POLICY AND PROJECT STANDARDS	8
2.3 APPLICABLE LEGISLATION, CODES AND INTERNATIONAL STANDARDS	9
2.3.1 National Legislation	9
2.3.2 World Bank/IFC, International Standards and Conventions.....	9
2.3.2.1 ISO 14001:2015 and ISO 45001:2018	10
3 IMPACT AVOIDANCE AND MITIGATION	10
3.1 INTRODUCTION	10
3.2 PRE-CONSTRUCTION REQUIREMENTS	11
3.3 REINSTATEMENT PRINCIPLES	12
3.3.1 Unanticipated Contaminated Sediments	13
3.3.2 Removal of Imported Material and Reinstatement of Onshore Laydown Area	16
3.3.3 Scour Protection	18
3.4 BIO-RESTORATION	19
3.4.1 Pre-Construction Biodiversity Requirements.....	19
3.4.2 Exit Surveys Upon Construction Completion.....	19
3.5 PERMANENT SCOUR CONTROL	21
3.5.1 Permanent Scour Control Installation.....	26
4 TRAINING AWARENESS AND COMPETENCE.....	27
5 ROLES AND RESPONSIBILITIES	28
5.1 EACOP	28
5.2 CONTRACTOR	28

Marine Reinstatement Plan (Tanzania)				Document Number: TZ-MID-60-0120-200313	
				Revision: 00	Status: IFR
				Rev. Date: xx/xx/2019	
Doc. Type: PLN	Discipline: HSE	Phase: OV	Class: 1	Page 3 of 3	
			System / Subsystem: NN	Equipment Type: NN	

6	VERIFICATION AND MONITORING OF CONTRACTOR PERFORMANCE.....	29
6.1	OBJECTIVES	29
6.2	MONITORING	29
6.3	KEY PERFORMANCE INDICATORS.....	30
6.4	CONTRACTOR PERFORMANCE.....	30
6.5	CONTRACTOR REPORTING	30
6.6	REVIEW AND IMPROVEMENT.....	31
6.7	RECORD KEEPING	31
APPENDIX 1:	ESIA MITIGATION COMMITMENTS.....	32

Marine Stakeholder Engagement Plan (Pre-construction and Construction Phase)				Document Number: TZ-MID-60-0120-200314	
				Revision : 00	Status : IFR
				Rev. Date :	
Doc. Type : PLN	Discipline : HSE	Phase: OV	Class: 1	Page 1 of 3	
			System / Subsystem : NN	Equipment Type : NA	

		EACOP Project
---	--	----------------------

This document has been generated by an Electronic Document Management System. When printed it is considered as a “for information only” copy. The controlled copy is the screen version and it is the holder’s responsibility that he/she holds the latest valid version”.

Marine Stakeholder Engagement Plan (Pre-Construction and Construction)

00	IFR					
Rev.	Status	Date	Revision Description	Issued by	Reviewed by	Approved by

Marine Stakeholder Engagement Plan (Pre-construction and Construction Phase)				Document Number: TZ-MID-60-0120-200314	
				Revision : 00	Status : IFR
				Rev. Date :	
Doc. Type : PLN	Discipline : HSE	Phase: OV	Class: 1	Page 2 of 3	
			System / Subsystem : NN	Equipment Type : NA	

TABLE OF CONTENTS

1 INTRODUCTION	7
2 PROJECT AREA OF INFLUENCE	8
3 OBJECTIVES	9
4 REGULATORY REQUIREMENTS AND STANDARDS FOR STAKEHOLDER ENGAGEMENT	10
4.1 NATIONAL LEGAL REQUIREMENTS	10
4.2 INTERNATIONAL STANDARDS - IFC PS.....	10
4.3 EACOP STANDARDS	11
5 STAKEHOLDER IDENTIFICATION AND MAPPING	12
5.1 STAKEHOLDER CLASSIFICATION.....	13
5.2 FOCUS ON KEY STAKEHOLDERS: COMMUNITIES.....	14
5.3 FOCUS ON KEY STAKEHOLDERS: AUTHORITIES AND CIVIL SOCIETY	15
5.4 STAKEHOLDER MAPPING.....	21
6 PREVIOUS STAKEHOLDER ENGAGEMENT	23
6.1 EACOP LED ENGAGEMENT	23
6.3 ENGAGEMENT DURING THE ESIA.....	26
7 PLANNED STAKEHOLDER ENGAGEMENT	30
8 ENGAGEMENT APPROACH AND METHODS	31
8.1 ENGAGEMENT METHODS	31
8.2 RELATIONSHIP MANAGER & PROTOCOLS FOR ENGAGEMENT	33
8.3 COMMUNITY RELATIONS AND TRAINING	33
8.4 DISCLOSURE OF INFORMATION AND SUPPORT MATERIAL	36
9 GRIEVANCE AND CONCERN MANAGEMENT	39
10 TEAM RESPONSIBILITIES	42
11 REPORTING AND DATA MANAGEMENT.....	46
12 MONITORING AND EVALUATION	47
13 STAKEHOLDER ENGAGEMENT PLAN	49
13.1 INTERNAL COORDINATION.....	49
13.2 EXTERNAL ENGAGEMENT	51

Marine Stakeholder Engagement Plan (Pre-construction and Construction Phase)				Document Number: TZ-MID-60-0120-200314	
				<i>Revision</i> : 00	<i>Status</i> : IFR
				<i>Rev. Date</i> :	
Doc. Type : PLN	Discipline : HSE	Phase: OV	Class: 1	<i>Page 3 of 3</i>	
			System / Subsystem : NN	Equipment Type : NA	

14 CONTACT DETAILS FOR STAKEHOLDER ENGAGEMENT	70
APPENDIX 1: NATIONAL ADMINISTRATIVE INSTITUTIONS	71
APPENDIX 2: INDICATIVE LIST OF NGOS	76
APPENDIX 3: INDICATIVE LIST OF MEDIA	79
APPENDIX 4: GRIEVANCE REGISTRATION FORM	80

Marine Labour Management Plan (Tanzania)				Document Number: TZ-MID-60-0120-200328	
				Revision: 00	Status: IFR
				Rev. Date: xx/xx/2019	
Doc. Type: PLN	Discipline: HSE	Phase: OV	Class: 1	Page 1 of 3	
			System / Subsystem: NN	Equipment Type: NN	

 <p>EAST AFRICAN CRUDE OIL PIPELINE</p>	<h2 style="color: #0056b3;">EACOP Project</h2>
---	--

This document has been generated by an Electronic Document Management System. When printed it is considered as a “for information only” copy. The controlled copy is the screen version and it is the holder’s responsibility that he/she holds the latest valid version”.

<h2 style="margin: 0;">Marine Labour Management Plan (Tanzania)</h2>
--

00	IFR					
Rev.	Status	Date	Revision Description	Issued by	Reviewed by	Approved by

Marine Labour Management Plan (Tanzania)				Document Number: TZ-MID-60-0120-200328	
				Revision: 00	Status: IFR
				Rev. Date: xx/xx/2019	
Doc. Type: PLN	Discipline: HSE	Phase: OV	Class: 1	Page 2 of 3	
			System / Subsystem: NN	Equipment Type: NN	


TABLE OF CONTENTS

1	INTRODUCTION.....	4
1.1	PURPOSE	4
1.2	OBJECTIVES	4
1.3	PERFORMANCE – BASED APPROACH TO IMPACT MITIGATION	5
1.4	SCOPE	6
1.5	DEFINITIONS	6
1.6	LINKS WITH OTHER PLANS AND PROCEDURES	8
2	POLICY AND LEGISLATIVE REQUIREMENTS.....	8
2.1	INTRODUCTION	8
2.2	POLICY AND PROJECT STANDARDS.....	9
2.3	APPLICABLE LEGISLATION, CODES AND INTERNATIONAL STANDARDS	9
2.3.1	National Legislation	9
2.3.2	World Bank/IFC, International Standards and Conventions	10
3	IMPACT AVOIDANCE AND IMPACT MITIGATION.....	11
3.1	INTRODUCTION	11
3.2	APPROACH AND DESCRIPTION OF IMPACT AVOIDANCE AND MITIGATION.....	11
3.2.1	Employment Strategy	11
3.2.2	Local Content	11
3.2.3	Labour Contracts	11
3.2.3	Worker's Rights and Rights to Trade Unions	12
3.2.4	Worker's Conduct and Disciplinary Procedure.....	12
3.2.5	Worker's Grievance Procedure	13
3.2.6	Workers Skill Development Training	13
3.2.7	Training Assessment and Delivery	13
3.2.8	Training Facilities	14
3.2.9	H3SE Training	15
3.2.10	Management of Subcontractors	15
4	TRAINING, AWARENESS AND COMPETENCE.....	15
5	ROLES AND RESPONSIBILITIES.....	16
5.1	COMPANY	16

Marine Labour Management Plan (Tanzania)				Document Number: TZ-MID-60-0120-200328	
				Revision: 00	Status: IFR
				Rev. Date: xx/xx/2019	
Doc. Type: PLN	Discipline: HSE	Phase: OV	Class: 1	Page 3 of 3	
			System / Subsystem: NN	Equipment Type: NN	

5.2	CONTRACTOR	17
6	VERIFICATION AND MONITORING OF CONTRACTOR PERFORMANCE.....	18
6.1	OBJECTIVES	18
6.2	AUDIT AND INSPECTION	18
6.3	KEY PERFORMANCE INDICATORS.....	19
6.4	CONTRACTOR PERFORMANCE.....	19
6.5	CONTRACTOR REPORTING REQUIREMENTS	20
6.6	REVIEW AND IMPROVEMENT.....	20
6.7	RECORD KEEPING	21
7	APPENDICES.....	22
	APPENDIX 1: ESIA Mitigation Commitments	22

Marine Procurement and Supply Chain Management Plan (Tanzania)				Document Number: TZ-MID-60-0120-200330	
				Revision: 00	Status: IFR
				Rev. Date: xx/xx/2019	
Doc. Type: PLN	Discipline: HSE	Phase: OV	Class: 1	Page 1 of 3	
			System / Subsystem: NN	Equipment Type: NN	

 <p>EAST AFRICAN CRUDE OIL PIPELINE</p>	<h2 style="color: #0056b3;">EACOP Project</h2>
---	--

This document has been generated by an Electronic Document Management System. When printed it is considered as a “for information only” copy. The controlled copy is the screen version and it is the holder’s responsibility that he/she holds the latest valid version”.

<h3>Marine Procurement and Supply Chain Management Plan (Tanzania)</h3>

00	IFR					
Rev.	Status	Date	Revision Description	Issued by	Reviewed by	Approved by

Marine Procurement and Supply Chain Management Plan (Tanzania)				Document Number: TZ-MID-60-0120-200330	
				Revision: 00	Status: IFR
				Rev. Date: xx/xx/2019	
Doc. Type: PLN	Discipline: HSE	Phase: OV	Class: 1	Page 2 of 3	
			System / Subsystem: NN	Equipment Type: NN	

TABLE OF CONTENTS

1	INTRODUCTION.....	4
1.1	PURPOSE	4
1.2	OBJECTIVES	4
1.3	PERFORMANCE – BASED APPROACH TO IMPACT MITIGATION	5
1.4	SCOPE	6
1.5	DEFINITIONS	6
1.6	LINKS WITH OTHER PLANS AND PROCEDURES	8
2	POLICY AND LEGISLATIVE REQUIREMENTS.....	8
2.1	INTRODUCTION	8
2.2	POLICY AND PROJECT STANDARDS.....	9
2.3	APPLICABLE LEGISLATION, CODES AND INTERNATIONAL STANDARDS	9
2.3.1	National Legislation	9
2.3.2	World Bank/IFC, International Standards and Conventions.....	10
3	IMPACT AVOIDANCE AND IMPACT MITIGATION.....	11
3.1	INTRODUCTION	11
3.2	APPROACH TO LOCAL PROCUREMENT AND SUPPLY.....	11
3.2.1	Promotion of Opportunities for Local Sourcing	11
3.2.2	Capacity Building of Local Suppliers to Meet Contracting Requirements	11
3.2.3	Communicating with Communities on Project Requirements for Goods and Services.....	11
3.2.4	Third Party Aggregate Extraction and Batching Facilities.....	11
3.2.5	Addressing Shortages to Communities Due to Project Demand	12
3.2.6	Capacity Building to the Local Content	11
3.2.7	Minimising Procurement of Hazardous Materials	12
3.2.8	Promotion and Adoption of Good Environmental and Social Practices by Suppliers	13
4	PURCHASE OF GOODS AND SERVICES.....	14
4.1	PROCUREMENT & SUPPLY STANDARDS	14
4.2	ESTIMATE OF LOCAL GOODS AND SERVICES	15
4.3	MAINTENANCE OF LOCAL SUPPLIES AND SERVICES DATABASES	15
4.4	THE SELECTION PROCESS.....	16
4.5	GREIVANCE MECHANISMS	16

Marine Procurement and Supply Chain Management Plan (Tanzania)				Document Number: TZ-MID-60-0120-200330	
				Revision: 00	Status: IFR
				Rev. Date: xx/xx/2019	
Doc. Type: PLN	Discipline: HSE	Phase: OV	Class: 1	Page 3 of 3	
			System / Subsystem: NN	Equipment Type: NN	

5	TRAINING, AWARENESS AND COMPETENCE.....	17
6	ROLES AND RESPONSIBILITIES.....	18
6.1	COMPANY	18
6.2	CONTRACTOR	19
7	VERIFICATION AND MONITORING OF CONTRACTOR PERFORMANCE.....	20
7.1	OBJECTIVES	20
7.2	AUDIT AND INSPECTION	20
7.3	KEY PERFORMANCE INDICATORS.....	21
7.4	CONTRACTOR PERFORMANCE.....	21
7.5	CONTRACTOR REPORTING REQUIREMENTS	22
7.6	REVIEW AND IMPROVEMENT.....	22
7.7	RECORD KEEPING	23
8	APPENDICES	24
	APPENDIX 1: ESIA Mitigation Commitments	24

Marine Infrastructure and Utilities Management Plan (Tanzania)				Document Number: TZ-MID-60-0120-200331	
				Revision: 00	Status: IFR
				Rev. Date: xx/xx/2019	
Doc. Type: PLN	Discipline: HSE	Phase: OV	Class: 1	Page 1 of 3	
			System / Subsystem: NN	Equipment Type: NN	

 <p>EAST AFRICAN CRUDE OIL PIPELINE</p>	<h2 style="color: #0056b3;">EACOP Project</h2>
---	--

This document has been generated by an Electronic Document Management System. When printed it is considered as a “for information only” copy. The controlled copy is the screen version and it is the holder’s responsibility that he/she holds the latest valid version”.

<h3>Marine Infrastructure and Utilities Management Plan (Tanzania)</h3>

00	IFR					
Rev.	Status	Date	Revision Description	Issued by	Reviewed by	Approved by

Marine Infrastructure and Utilities Management Plan (Tanzania)				Document Number: TZ-MID-60-0120-200331	
				Revision: 00	Status: IFR
				Rev. Date: xx/xx/2019	
Doc. Type: PLN	Discipline: HSE	Phase: OV	Class: 1	Page 2 of 3	
			System / Subsystem: NN	Equipment Type: NN	

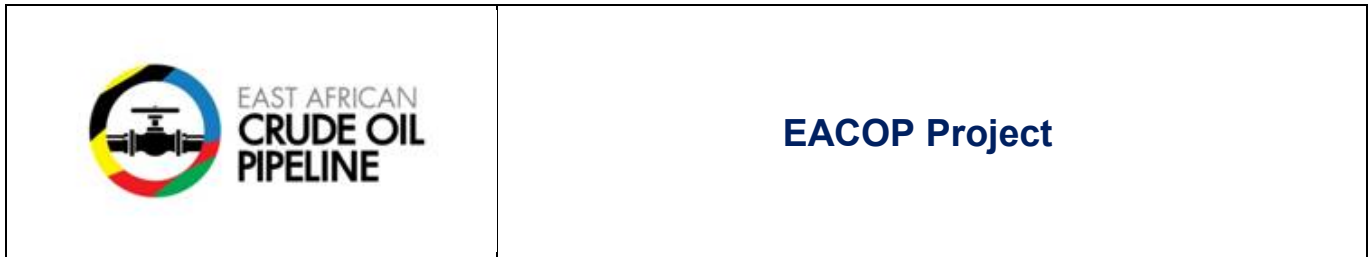
TABLE OF CONTENTS

1	INTRODUCTION.....	4
1.1	PURPOSE	4
1.2	OBJECTIVES	4
1.3	PERFORMANCE – BASED APPROACH TO IMPACT MITIGATION	5
1.4	SCOPE	6
1.5	DEFINITIONS	6
1.6	LINKS WITH OTHER PLANS AND PROCEDURES	8
2	POLICY AND LEGISLATIVE REQUIREMENTS.....	8
2.1	INTRODUCTION	8
2.2	POLICY AND PROJECT STANDARDS	9
2.3	APPLICABLE LEGISLATION, CODES AND INTERNATIONAL STANDARDS	9
2.3.1	National Legislation	9
2.3.2	World Bank/IFC, International Standards and Conventions.....	10
3	IMPACT AVOIDANCE AND IMPACT MITIGATION.....	11
3.1	INTRODUCTION	11
3.2	APPROACH AND DESCRIPTION OF IMPACT AVOIDANCE AND MITIGATION.....	11
3.2.1	Community and Regulatory Authority Liaison	11
3.2.2	Subsea Infrastructure, Utilities and Services Integrity	12
3.2.3	Reinstatement of Infrastructure, Utilities and Services to Pre-Construction Condition.....	17
3.2.4	Provision of Compensation	18
4	TRAINING, AWARENESS AND COMPETENCE.....	18
5	ROLES AND RESPONSIBILITIES.....	19
5.1	COMPANY	19
5.2	CONTRACTOR	20
6	VERIFICATION AND MONITORING OF CONTRACTOR PERFORMANCE.....	21
6.1	OBJECTIVES	21
6.2	AUDIT AND INSPECTION	21
6.3	KEY PERFORMANCE INDICATORS.....	22

Marine Infrastructure and Utilities Management Plan (Tanzania)				Document Number: TZ-MID-60-0120-200331	
				Revision: 00	Status: IFR
				Rev. Date: xx/xx/2019	
Doc. Type: PLN	Discipline: HSE	Phase: OV	Class: 1	Page 3 of 3	
			System / Subsystem: NN	Equipment Type: NN	

6.4	CONTRACTOR PERFORMANCE.....	22
6.5	CONTRACTOR REPORTING REQUIREMENTS	23
6.6	REVIEW AND IMPROVEMENT.....	23
6.7	RECORD KEEPING	24
7	APPENDICES.....	25
	APPENDIX 1: ESIA Mitigation Commitments	25

Community Health, Safety and Security Management Plan for Marine Activities (Tanzania)				Document Number: TZ-MID-60-0120-200332	
				Revision: 00	Status: IFR
				Rev. Date: xx/xx/2019	
Doc. Type: PLN	Discipline: HSE	Phase: OV	Class: 1	Page 1 of 3	
			System / Subsystem: NN	Equipment Type: NN	



This document has been generated by an Electronic Document Management System. When printed it is considered as a “for information only” copy. The controlled copy is the screen version and it is the holder’s responsibility that he/she holds the latest valid version”.

Community Health, Safety and Security Management Plan for Marine Activities (Tanzania)

00	IFR					
Rev.	Status	Date	Revision Description	Issued by	Reviewed by	Approved by

Community Health, Safety and Security Management Plan for Marine Activities (Tanzania)				Document Number: TZ-MID-60-0120-200332	
				Revision: 00	Status: IFR
				Rev. Date: xx/xx/2019	
Doc. Type: PLN	Discipline: HSE	Phase: OV	Class: 1	Page 2 of 3	
			System / Subsystem: NN	Equipment Type: NN	


TABLE OF CONTENTS

1	INTRODUCTION.....	4
1.1	PURPOSE	4
1.2	OBJECTIVES	4
1.3	PERFORMANCE – BASED APPROACH TO IMPACT MITIGATION	5
1.4	SCOPE	6
1.5	DEFINITIONS	6
1.6	LINKS WITH OTHER PLANS AND PROCEDURES	8
2	POLICY AND LEGISLATIVE REQUIREMENTS.....	8
2.1	INTRODUCTION	8
2.2	POLICY AND PROJECT STANDARDS.....	9
2.3	APPLICABLE LEGISLATION, CODES AND INTERNATIONAL STANDARDS	9
2.3.1	National Legislation	9
2.3.2	World Bank/IFC, International Standards and Conventions.....	10
3	IMPACT AVOIDANCE AND IMPACT MITIGATION.....	11
3.1	INTRODUCTION	11
3.2	APPROACH AND DESCRIPTION OF IMPACT AVOIDANCE AND MITIGATION.....	11
3.2.1	Safety of Local Residents and Tanga Bay Users	11
3.2.2	Safety Awareness Programs to Local Residents.....	11
3.2.3	Marine Traffic Management	13
3.2.4	Management of the Marine Exclusion Zone	14
3.2.5	Vessels.....	14
3.2.6	Hazardous Waste Management.....	15
3.2.7	Communicable Diseases	16
3.2.8	Community Security.....	16
3.2.8	Project Induced In-migration Mitigation	16
4	TRAINING, AWARENESS AND COMPETENCE.....	17
5	ROLES AND RESPONSIBILITIES.....	17
5.1	COMPANY	18
5.2	CONTRACTOR	19

Community Health, Safety and Security Management Plan for Marine Activities (Tanzania)				Document Number: TZ-MID-60-0120-200332	
				Revision: 00	Status: IFR
				Rev. Date: xx/xx/2019	
Doc. Type: PLN	Discipline: HSE	Phase: OV	Class: 1	Page 3 of 3	
			System / Subsystem: NN	Equipment Type: NN	

6	VERIFICATION AND MONITORING OF CONTRACTOR PERFORMANCE.....	20
6.1	OBJECTIVES	20
6.2	AUDIT AND INSPECTION	20
6.3	KEY PERFORMANCE INDICATORS.....	21
6.4	CONTRACTOR PERFORMANCE.....	21
6.5	CONTRACTOR REPORTING REQUIREMENTS	22
6.6	REVIEW AND IMPROVEMENT.....	22
6.7	RECORD KEEPING	23
7	APPENDICES.....	24
	APPENDIX 1: ESIA Mitigation Commitments	24

Marine Occupational Health, Safety and Security Management Plan (Tanzania)				Document Number: TZ-MID-60-0120-200333	
				Revision: 00	Status: IFR
				Rev. Date: xx/xx/2019	
Doc. Type: PLN	Discipline: HSE	Phase: OV	Class: 1	Page 1 of 3	
			System / Subsystem: NN	Equipment Type: NN	

	<h2>EACOP Project</h2>
---	------------------------

This document has been generated by an Electronic Document Management System. When printed it is considered as a "for information only" copy. The controlled copy is the screen version and it is the holder's responsibility that he/she holds the latest valid version".

<h3>Marine Occupational Health, Safety and Security Management Plan (Tanzania)</h3>

00	IFR					
Rev.	Status	Date	Revision Description	Issued by	Reviewed by	Approved by

Marine Occupational Health, Safety and Security Management Plan (Tanzania)				Document Number: TZ-MID-60-0120-200333	
				Revision: 00	Status: IFR
				Rev. Date: xx/xx/2019	
Doc. Type: PLN	Discipline: HSE	Phase: OV	Class: 1	Page 2 of 3	
			System / Subsystem: NN	Equipment Type: NN	


TABLE OF CONTENTS

1	INTRODUCTION.....	4
1.1	PURPOSE	4
1.2	OBJECTIVES	4
1.3	PERFORMANCE – BASED APPROACH TO IMPACT MITIGATION	5
1.4	SCOPE	6
1.5	DEFINITIONS	6
1.6	LINKS WITH OTHER PLANS AND PROCEDURES	8
2	POLICY AND LEGISLATIVE REQUIREMENTS.....	8
2.1	INTRODUCTION	8
2.2	POLICY AND PROJECT STANDARDS.....	9
2.3	APPLICABLE LEGISLATION, CODES AND INTERNATIONAL STANDARDS	9
2.3.1	National Legislation	9
2.3.2	World Bank/IFC, International Standards and Conventions.....	10
3	IMPACT AVOIDANCE AND IMPACT MITIGATION.....	11
3.1	INTRODUCTION	11
3.2	APPROACH AND DESCRIPTION OF IMPACT AVOIDANCE AND MITIGATION.....	11
3.2.1	Risk Assessment and Management.....	11
3.2.2	Workforce Health and Wellbeing.....	11
3.2.3	Drug and Alcohol Policy	11
3.2.4	Communication and Documentation	15
3.2.5	Health, Safety and Security Standards for Vessels	16
3.2.6	Shipboard Facilities for the Workfoce.....	16
3.2.7	Communicable Diseases.....	16
3.2.8	Golden Rules for Safety	23
3.2.9	Procedure When Encountered UXO	23
3.2.10	Commissioning Safety.....	27
3.2.11	Contract Management.....	30
4	TRAINING, AWARENESS AND COMPETENCE.....	31
5	ROLES AND RESPONSIBILITIES.....	32
5.1	COMPANY	32

Marine Occupational Health, Safety and Security Management Plan (Tanzania)				Document Number: TZ-MID-60-0120-200333	
				Revision: 00	Status: IFR
				Rev. Date: xx/xx/2019	
Doc. Type: PLN	Discipline: HSE	Phase: OV	Class: 1	Page 3 of 3	
			System / Subsystem: NN	Equipment Type: NN	

5.2	CONTRACTOR	33
6	VERIFICATION AND MONITORING OF CONTRACTOR PERFORMANCE.....	34
6.1	OBJECTIVES	34
6.2	AUDIT AND INSPECTION	34
6.3	KEY PERFORMANCE INDICATORS.....	35
6.4	CONTRACTOR PERFORMANCE.....	35
6.5	CONTRACTOR REPORTING REQUIREMENTS	36
6.6	REVIEW AND IMPROVEMENT.....	36
6.7	RECORD KEEPING	37
7	APPENDICES.....	38
	APPENDIX 1: ESIA Mitigation Commitments	38

Vessel Management Plan (Tanzania)				Document Number: TZ-MID-60-0120-200254	
				Revision: 00	Status: IFR
				Rev. Date: xx/xx/2019	
Doc. Type: PLN	Discipline: HSE	Phase: OV	Class: 1	Page 1 of 3	
			System / Subsystem: NN	Equipment Type: NN	

 <p>EAST AFRICAN CRUDE OIL PIPELINE</p>	<h2>EACOP Project</h2>
---	------------------------

This document has been generated by an Electronic Document Management System. When printed it is considered as a “for information only” copy. The controlled copy is the screen version and it is the holder’s responsibility that he/she holds the latest valid version”.

<h2>Vessel Management Plan (Tanzania)</h2>
--

00	IFR					
Rev.	Status	Date	Revision Description	Issued by	Reviewed by	Approved by

Vessel Management Plan (Tanzania)				Document Number: TZ-MID-60-0120-200254	
				Revision: 00	Status: IFR
				Rev. Date: xx/xx/2019	
Doc. Type: PLN	Discipline: HSE	Phase: OV	Class: 1	Page 2 of 3	
			System / Subsystem: NN	Equipment Type: NN	


TABLE OF CONTENTS

1	INTRODUCTION.....	4
1.1	PURPOSE	4
1.2	OBJECTIVES	4
1.3	PERFORMANCE – BASED APPROACH TO IMPACT MITIGATION	5
1.4	SCOPE	6
1.5	DEFINITIONS	6
1.6	LINKS WITH OTHER PLANS AND PROCEDURES	8
2	POLICY AND LEGISLATIVE REQUIREMENTS.....	8
2.1	INTRODUCTION	8
2.2	POLICY AND PROJECT STANDARDS.....	9
2.3	APPLICABLE LEGISLATION, CODES AND INTERNATIONAL STANDARDS	9
2.3.1	National Legislation	9
2.3.2	World Bank/IFC, International Standards and Conventions.....	10
3	IMPACT AVOIDANCE AND IMPACT MITIGATION.....	11
3.1	INTRODUCTION	11
3.2	APPROACH AND DESCRIPTION OF MITIGATION AND MANAGEMENT CONTROLS.....	11
3.2.1	Overview of Main Construction, Construction Support and Ancilliary Vessels.....	11
3.2.2	Marine Coordination Centre and Operations Base.....	12
3.2.3	Definition of Project Navigation Lanes	12
3.2.4	Notification to Mariners and Signage of Hazards	12
3.2.5	Scheduling of Vessel Movements	12
3.2.6	Environmental Sensitivities Relevant to Vessel Management	13
3.2.6.1	Introduction	13
3.2.6.2	Marine Mammals	13
3.2.6.3	Ornithology.....	13
3.2.6.4	Proximity of Indicative Transit Routes to key Environmental Sensitivites	14
3.2.7	Vessel Anchoring and Lighting Mitigation Measures	14
3.2.8	Signage of Hazards	14
3.2.9	Boat Strike Mitigation Measures	15
3.2.10	Vessel Pollution Prevention and Mitigation	16
3.2.11	Marine Pests from Ballast Water Mitigation.....	16
3.2.12	Underwater Noise Mitigation Measures	16

Vessel Management Plan (Tanzania)				Document Number: TZ-MID-60-0120-200254	
				Revision: 00	Status: IFR
				Rev. Date: xx/xx/2019	
Doc. Type: PLN	Discipline: HSE	Phase: OV	Class: 1	Page 3 of 3	
			System / Subsystem: NN	Equipment Type: NN	

4	TRAINING, AWARENESS AND COMPETENCE.....	17
5	ROLES AND RESPONSIBILITIES.....	18
5.1	COMPANY	18
5.2	CONTRACTOR	19
6	VERIFICATION AND MONITORING OF CONTRACTOR PERFORMANCE.....	20
6.1	OBJECTIVES	20
6.2	AUDIT AND INSPECTION	20
6.3	KEY PERFORMANCE INDICATORS.....	21
6.4	CONTRACTOR PERFORMANCE.....	21
6.5	CONTRACTOR REPORTING REQUIREMENTS	22
6.6	REVIEW AND IMPROVEMENT.....	22
6.7	RECORD KEEPING	23
7	APPENDICES.....	24
	APPENDIX 1: ESIA Mitigation Commitments	24

Marine Emergency Preparedness and Response Plan (Tanzania)				Document Number: TZ-MID-60-0120-200335	
				Revision: 00	Status: IFR
				Rev. Date: xx/xx/2019	
Doc. Type: PLN	Discipline: HSE	Phase: OV	Class: 1	Page 1 of 3	
			System / Subsystem: NN	Equipment Type: NN	

 <p>EAST AFRICAN CRUDE OIL PIPELINE</p>	<h2 style="color: #0056b3;">EACOP Project</h2>
---	--

This document has been generated by an Electronic Document Management System. When printed it is considered as a “for information only” copy. The controlled copy is the screen version and it is the holder’s responsibility that he/she holds the latest valid version”.

<h3>Marine Emergency Preparedness and Response Plan (Tanzania)</h3>

00	IFR					
Rev.	Status	Date	Revision Description	Issued by	Reviewed by	Approved by

Marine Emergency Preparedness and Response Plan (Tanzania)				Document Number: TZ-MID-60-0120-200335	
				Revision: 00	Status: IFR
				Rev. Date: xx/xx/2019	
Doc. Type: PLN	Discipline: HSE	Phase: OV	Class: 1	Page 2 of 3	
			System / Subsystem: NN	Equipment Type: NN	

TABLE OF CONTENTS

1 INTRODUCTION.....	4
1.1 PURPOSE	4
1.2 OBJECTIVES	4
1.3 PERFORMANCE – BASED APPROACH TO IMPACT MITIGATION	5
1.4 SCOPE	6
1.5 DEFINITIONS	6
1.6 LINKS WITH OTHER PLANS AND PROCEDURES	8
2 POLICY AND LEGISLATIVE REQUIREMENTS.....	8
2.1 INTRODUCTION	8
2.2 POLICY AND PROJECT STANDARDS.....	9
2.3 APPLICABLE LEGISLATION, CODES AND INTERNATIONAL STANDARDS	9
2.3.1 National Legislation	9
2.3.2 World Bank/IFC, International Standards and Conventions.....	10
2.3.2.1 MARPOL Convention	
3 IMPACT AVOIDANCE AND IMPACT MITIGATION.....	11
3.1 INTRODUCTION	11
3.2 APPROACH AND DESCRIPTION OF IMPACT AVOIDANCE AND MITIGATION.....	11
3.2.1 Definition of an Emergency	11
3.2.2 Hazard Identification During Emergency	11
3.2.3 Emergency Reponse Planning.....	12
3.2.4 Emergency Preparedness	13
3.2.5 Emergency Response.....	14
3.2.6 Emergency Response Equipment.....	14
3.2.7 Emergency Reponse Excercises	15
3.2.8 Incident and Accident Management.....	15
3.2.9 Incident Investigation and Close Out Procedure	15
3.2.10 Tiered Response Procedure	16
4 TRAINING, AWARENESS AND COMPETENCE.....	18
5 ROLES AND RESPONSIBILITIES	19
5.1 COMPANY	19

Marine Emergency Preparedness and Response Plan (Tanzania)				Document Number: TZ-MID-60-0120-200335	
				Revision: 00	Status: IFR
				Rev. Date: xx/xx/2019	
Doc. Type: PLN	Discipline: HSE	Phase: OV	Class: 1	Page 3 of 3	
			System / Subsystem: NN	Equipment Type: NN	

5.2	CONTRACTOR	20
6	VERIFICATION AND MONITORING OF CONTRACTOR PERFORMANCE.....	21
6.1	OBJECTIVES	21
6.2	AUDIT AND INSPECTION	21
6.3	KEY PERFORMANCE INDICATORS.....	22
6.4	CONTRACTOR PERFORMANCE.....	22
6.5	CONTRACTOR REPORTING REQUIREMENTS	23
6.6	REVIEW AND IMPROVEMENT.....	23
6.7	RECORD KEEPING	24
7	APPENDICES.....	25
	APPENDIX 1: ESIA Mitigation Commitments	25

Marine Monitoring and Reporting Plan (Tanzania)				Document Number: TZ-MID-60-0120-200257	
				Revision: 00	Status: IFR
				Rev. Date: xx/xx/2019	
Doc. Type: PLN	Discipline: HSE	Phase: OV	Class: 1	Page 1 of 3	
			System / Subsystem: NN	Equipment Type: NN	

 <p>EAST AFRICAN CRUDE OIL PIPELINE</p>	<h2 style="color: #0056b3;">EACOP Project</h2>
---	--

This document has been generated by an Electronic Document Management System. When printed it is considered as a “for information only” copy. The controlled copy is the screen version and it is the holder’s responsibility that he/she holds the latest valid version”.

<h2 style="margin: 0;">Marine Monitoring and Reporting Plan (Tanzania)</h2>

00	IFR					
Rev.	Status	Date	Revision Description	Issued by	Reviewed by	Approved by

Marine Monitoring and Reporting Plan (Tanzania)				Document Number: TZ-MID-60-0120-200257	
				Revision: 00	Status: IFR
				Rev. Date: xx/xx/2019	
Doc. Type: PLN	Discipline: HSE	Phase: OV	Class: 1	Page 2 of 3	
			System / Subsystem: NN	Equipment Type: NN	


TABLE OF CONTENTS

1 INTRODUCTION.....	4
1.1 PURPOSE	4
1.2 OBJECTIVES	4
1.3 PERFORMANCE – BASED APPROACH TO IMPACT MITIGATION	5
1.4 SCOPE	6
1.5 DEFINITIONS	6
1.6 LINKS WITH OTHER PLANS AND PROCEDURES	8
2 POLICY AND LEGISLATIVE REQUIREMENTS.....	8
2.1 INTRODUCTION	8
2.2 POLICY AND PROJECT STANDARDS.....	9
2.3 APPLICABLE LEGISLATION, CODES AND INTERNATIONAL STANDARDS	9
2.3.1 National Legislation	9
2.3.2 World Bank/IFC, International Standards and Conventions.....	10
3 IMPACT AVOIDANCE AND IMPACT MITIGATION.....	11
3.1 INTRODUCTION	11
3.2 APPROACH AND DESCRIPTION OF MITIGATION AND MANAGEMENT CONTROLS.....	11
3.2.1 Health, Safety, Security, Environmental & Social Monitoring.....	11
3.2.2 Health, Safety, Security, Environmental & Social Inspections and Audits.....	12
3.2.3 Nonconformance and Corrective Action Procedure	13
3.2.4 Action Tracking System	14
3.2.5 Key Performance Indicators (KPIs).....	15
3.2.6 Reporting Health, Safety, Security, Environmental & Social Performance.....	16
3.2.7 Data for Social and Environmental Performance.....	16
3.2.8 Monitoring Results Tracking System.....	16
3.2.9 Internal and External Notification	16
3.2.10 Investigation of Nonconformances and Incidents	16
4 TRAINING, AWARENESS AND COMPETENCE.....	18
5 ROLES AND RESPONSIBILITIES	19
5.1 COMPANY	19

Marine Monitoring and Reporting Plan (Tanzania)				Document Number: TZ-MID-60-0120-200257	
				Revision: 00	Status: IFR
				Rev. Date: xx/xx/2019	
Doc. Type: PLN	Discipline: HSE	Phase: OV	Class: 1	Page 3 of 3	
			System / Subsystem: NN	Equipment Type: NN	

5.2	CONTRACTOR	20
6	VERIFICATION AND MONITORING OF CONTRACTOR PERFORMANCE.....	21
6.1	OBJECTIVES	21
6.2	AUDIT AND INSPECTION	21
6.3	KEY PERFORMANCE INDICATORS.....	22
6.4	CONTRACTOR PERFORMANCE.....	22
6.5	CONTRACTOR REPORTING REQUIREMENTS	23
6.6	REVIEW AND IMPROVEMENT.....	23
6.7	RECORD KEEPING	24
7	APPENDICES.....	25
	APPENDIX 1: ESIA Mitigation Commitments	25

Marine Decommissioning Plan (Tanzania)				Document Number: TZ-MID-60-0120-200xxx	
				Revision: 00	Status: IFR
				Rev. Date: xx/xx/2019	
Doc. Type: PLN	Discipline: HSE	Phase: OV	Class: 1	Page 1 of 3	
			System / Subsystem: NN		Equipment Type: NN

 <p>EAST AFRICAN CRUDE OIL PIPELINE</p>	<h2 style="color: #0056b3;">EACOP Project</h2>
---	--

This document has been generated by an Electronic Document Management System. When printed it is considered as a “for information only” copy. The controlled copy is the screen version and it is the holder’s responsibility that he/she holds the latest valid version”.

<h2 style="margin: 0;">Marine Decommissioning Plan (Tanzania)</h2>
--

00	IFR					
Rev.	Status	Date	Revision Description	Issued by	Reviewed by	Approved by

Marine Decommissioning Plan (Tanzania)				Document Number: TZ-MID-60-0120-200xxx	
				Revision: 00	Status: IFR
				Rev. Date: xx/xx/2019	
Doc. Type: PLN	Discipline: HSE	Phase: OV	Class: 1	Page 2 of 3	
			System / Subsystem: NN	Equipment Type: NN	

TABLE OF CONTENTS

1	INTRODUCTION.....	4
1.1	PURPOSE	4
1.2	OBJECTIVES	4
1.3	PERFORMANCE – BASED APPROACH TO IMPACT MITIGATION	5
1.4	SCOPE	6
1.5	DEFINITIONS	6
1.6	LINKS WITH OTHER PLANS AND PROCEDURES	8
2	POLICY AND LEGISLATIVE REQUIREMENTS.....	8
2.1	INTRODUCTION	8
2.2	POLICY AND PROJECT STANDARDS	9
2.3	APPLICABLE LEGISLATION, CODES AND INTERNATIONAL STANDARDS	9
2.3.1	National Legislation	9
2.3.2	World Bank/IFC, International Standards and Conventions.....	10
3	IMPACT AVOIDANCE AND IMPACT MITIGATION.....	11
3.1	INTRODUCTION	11
3.2	MANAGEMENT OF DECOMMISSIONING, DEMOLITION AND ABANDONMENT.....	11
3.2.1	Scope of Decommissioning, Demolition and Abandonment Works	11
3.2.2	Defining Schedule for Decommissioning	11
3.2.3	Preliminary Decommissioning	12
3.2.4	Final Decommissioning, Demolition and Abandonment	13
3.2.4.1	Load out Facility and Related Marine Infrastructure	13
3.2.5	Action Tracking System	15
3.2.6	Key Performance Indicators (KPIs)	16
3.2.7	Reporting Health, Safety, Security, Environmental & Social Performance.....	16
3.2.8	Internal and External Notification	17
3.2.9	Investigation of Nonconformances and Incidents	17
3.2.10	Approval Process for Decommissioning.....	17
4	TRAINING, AWARENESS AND COMPETENCE.....	18
5	ROLES AND RESPONSIBILITIES	19
5.1	COMPANY	19

Marine Decommissioning Plan (Tanzania)				Document Number: TZ-MID-60-0120-200xxx	
				Revision: 00	Status: IFR
				Rev. Date: xx/xx/2019	
Doc. Type: PLN	Discipline: HSE	Phase: OV	Class: 1	Page 3 of 3	
			System / Subsystem: NN	Equipment Type: NN	

5.2	CONTRACTOR	20
6	VERIFICATION AND MONITORING OF CONTRACTOR PERFORMANCE.....	21
6.1	OBJECTIVES	21
6.2	AUDIT AND INSPECTION	21
6.3	KEY PERFORMANCE INDICATORS.....	22
6.4	CONTRACTOR PERFORMANCE.....	22
6.5	CONTRACTOR REPORTING REQUIREMENTS	23
6.6	REVIEW AND IMPROVEMENT.....	23
6.7	RECORD KEEPING	24
7	APPENDICES.....	25
	APPENDIX 1: ESIA Mitigation Commitments	25