



CONSTRUCTION OF LAVNA COAL TRANSSHIPMENT TERMINAL (MURMANSK REGION, RUSSIAN FEDERATION) ENVIRONMENTAL AND SOCIAL ACTION PLAN

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LIST OF ABBREVIATIONS

BAT	Best Available Techniques
BREF	BAT Reference Document
BSTDB	Black Sea Trade and Development Bank
CTT	Coal Transshipment Terminal
EHS	Environmental, Health and Safety
EPC	Engineering, Procurement, and Construction
ESAP	Environmental and Social Action Plan
ESIA	Environmental and Social Impact Assessment
GIIP	Good International Industry Practice
GOST	State standard
HMS	Hydrometeorological station
IFC	International Financial Corporation
IFIs	International finance institutions
ISO	International Organization for Standardization
LLC	Limited Liability Company
NTS	Non-Technical Summary
OHS	Occupational Health and Safety
OVOS	National Environmental Impact Assessment (Russian abbreviation); abbreviated name
PMOOS	List of Environmental Protection Measures:
PPE	personal protective equipment
RF	Russian Federation
SanPiN	Sanitary Rules and Standards
SEP	Stakeholder Engagement Plan
SER	State Environmental Review
SPZ	Sanitary Protection Zone
SR	State Review
STLC	State Transport Leasing Company
ToR	Terms of Reference
tpa	tonnes per annum
TSS	total suspended solids



Table 1. Environmental and Social Action Plan (ESAP)

	Activity	Non-Compliance / Environmental / Social Risk	Requirement	Responsibilities	Timetable	Targets / Evaluation Criteria
1. Environmental and Social Impact Assessment						
1.1.	Addendum to ESIA Develop Addendum to ESIA that should cover issues missing in the OVOS Report and the Project Design Documentation, including but not limited items below:	The gaps between the national and BSTDB requirements identified in OVOS should be addressed	BSTDB ESP	STLC/ Lavna Commercial Sea Port LLC	Q2, 2019	The Addendum to ESIA developed, identified gaps addressed
1.1.1.	<i>the Social Assessment:</i> the Social Baseline Studies and Social Impact Assessment should be done at least at three levels: Murmansk Region, Kola District and Mezhdurechye Rural Settlement (including Mishukovo Village)	Neither Social Economic Baseline (SEBS) nor Social Impact Assessment (SIA) has been done within OVOS/Project design studies	BSTDB ESP	Lavna Commercial Sea Port LLC	Q2, 2019	The Social Economic Baseline Studies and SIA developed
1.1.2.	<i>The Assessment of the Alternatives:</i> The feasible Project alternatives should be assessed including technical decisions	Only the 'no-go' alternative has been discussed in OVOS; no other alternatives have been considered	GIIP	Lavna Commercial Sea Port LLC	Q2, 2019	The assessment of alternatives including analysis of technological alternatives undertaken.
1.1.3.	<i>Air Pollution:</i> <ul style="list-style-type: none"> Baseline: Conduct the daily measurements of key air pollutant concentrations (sulphur and nitrogen oxides, particulate matter PM10 and PM2,5, carbon oxide, 24-hour averaging) at the boundaries of the coal terminal site and residential areas of the nearest settlements (Mezhdurechye and Mishukovo) and Project sites 	Only one time concentrations of pollutants have been considered in environmental engineering survey that are not comparable with EU standards	GIIP	Lavna Commercial Sea Port LLC	Q2, 2019	Baseline daily concentrations measured



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	<ul style="list-style-type: none"> Impact assessment: <ul style="list-style-type: none"> – carry out an internationally recognised dispersion modelling (AEROMOD CALPUFF) . – Based on the abovementioned modelling, the health risk assessment (HRA) has to be done 	<ul style="list-style-type: none"> The dispersion modelling has been done using the Russian models, their results are not comparable with the international models No HRA has been done 	GIIP RF legal requirements	Lavna Commercial Sea Port LLC		Internationally recognised dispersion modelling (AEROMOD or CALPUFF) provided. HRA done
1.1.4.	<p><i>Climate change:</i></p> <ul style="list-style-type: none"> Assess the greenhouse gases emissions during the operation phase of the coal terminal During the Project operation phase, prepare annual GHG emission reports 	No assessment of GHG emissions was done	BSTDB ESP, GIIP RF legal requirements	Lavna Commercial Sea Port LLC	Q3, 2019 Operational stage, annually	The assessment of direct and indirect GHG emission sources done and emission reduction recommendations prepared. The annual GHG reporting at the operation stage presented
1.1.5.	<p><i>BAT assessment:</i></p> <p>Assess the design decisions against the BAT recommendations included in BREFs and RF BAT References</p>	The BAT assessment has not been done	BSTDB ESP; GIIP; BREF, 2006: Emissions from Storage Vertical BREFs RF ITS 46-2017	Lavna Commercial Sea Port LLC	Q2, 2019	BAT assessment done Recommendations on BAT introduction developed
1.1.6.	<p><i>Noise and vibration:</i></p> <ul style="list-style-type: none"> Baseline: Conduct the measurements of the levels of the noise and vibration at the boundaries of the nearest residential areas (Mezhdurechye and Mishukovo) in accordance with EU methodics Impact assessment: 	Only one-time measurements of the levels of the noise and vibration have been conducted in environmental engineering survey according to the russian	BSTDB ESP, GIIP	Lavna Commercial Sea Port LLC	Q3, 2019	Baseline levels of the noise and vibration measured in accordance with EU methodologies. Additional measures designed to reduce their environmental impact



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	Reframe the assessment of noise and vibration impacts for the construction phase against the international standards and taking account of drilling and blasting operations; <ul style="list-style-type: none"> Actions: adjust mitigation measures designed to reduce their impact on employees, neighbouring communities, marine and terrestrial biota 	methodologies The results are not fully comparative with the European standards due to the differences in methodologies.				
1.1.7.	<i>Waste management:</i> <ul style="list-style-type: none"> On the basis of the Project information, develop the overall waste management plan for the construction and operation stages meeting GIIP 	The waste management arrangements for the Project at the construction and operation stages of partially meet GIIP.	GIIP RF Regulations	Lavna Commercial Sea Port LLC resources	Q 3 2019	Waste management plan compliant with GIIP requirements.
1.1.8.	<i>Surface water:</i> <ul style="list-style-type: none"> Baseline: Provide information on background water chemistry and pollution levels in the Lavna River Impact assessment: Perform an assessment of the impact of construction and dredging works on the water quality and aquatic biota in the Lavna River. 	Information on background water chemistry and pollution levels in the Lavna River has not been provided No assessment has been done in OVOS	BSTDB ESP, GIIP	Lavna Commercial Sea Port LLC resources	Q 2 2019	Information on background water chemistry and pollution levels in the Lavna River presented The assessment of impact on the Lavna river ecosystems completed. Mitigation measures developed and approved.
	Develop the Water Management Plan	Measures on water resource protection from contamination are not fully implemented	BSTDB ESP, GIIP	Lavna Commercial Sea Port LLC resources	Q 2 2019	Water Management Plan developed
1.1.9.	<i>Ecosystem services:</i> <ul style="list-style-type: none"> Conduct the baseline and impact 	The assessment of ecosystem services in	BSTDB ESP, GIIP	Lavna Commercial Sea Port LLC	Q 3 2019	The ecosystem services assessment developed



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	assessment of ecosystem services	OVOS has not been done		resources		
1.1.10.	<p><i>Visual impacts:</i></p> <ul style="list-style-type: none"> Assess the aesthetic value of landscapes and Project's visual impact Develop mitigation measures for improving the visual amenity of the Project site and adjacent areas 	Assessment of aesthetic value of landscapes and Project's visual impact has not been performed	GIIP	Lavna Commercial Sea Port LLC resources	Q 3 2019	<p>The assessment of visual impacts developed</p> <p>Mitigation measures developed</p>
1.2.	<p>Associated Projects:</p> <ul style="list-style-type: none"> Bottom dredging; Public railroad Vykhodnoy – Lavna: Lavna CTT access railroad 	In the Russian Project design and approval system, the associated projects have been considered separately	BSTDB ESP GIIP	Lavna Commercial Sea Port LLC resources	Q 3 2019	
1.2.1.	<p><i>Bottom dredging works:</i></p> <ul style="list-style-type: none"> review the ToR for EES for Dredging Operations Project and ensure that planned survey is sufficient to meet IFI requirements; As a part of Addendum to ESIA: <ul style="list-style-type: none"> develop the baseline and impact assessment, relevant prevention, mitigation or compensation measures disclose information and provide meaningful consultations 	No national OVOS exists;	BSTDB ESP; GIIP	Lavna Commercial Sea Port LLC resources	<p>ASAP (December, 2018)</p> <p>Q3-4, 2019</p>	The assessment of bottom dredging works developed Measures to prevent, mitigate and compensate these impacts developed.
1.2.2.	<p><i>Vykhodnoy - Lavna Railroad:</i></p> <ul style="list-style-type: none"> Analyze the Project design documentation (including environmental, social, health information); 	The assignments are designed and analyzed separately from the	BSTDB ESP; GIIP	Lavna Commercial Sea Port LLC resources	Q 3 2019	The assessment of Vykhodnoy - Lavna Railroad associated projects accomplished



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	<ul style="list-style-type: none"> Consolidate all baseline and impact assessment in the Addendum to ESIA; Provide additional assessments where necessary; Analyze the previous stakeholder engagement experience and key issues raised; within ESIA, provide additional consultations addressing remaining issues. 	<p>Lavna LCC Project; the GIIP principles will consider them as associated projects and consider the environmental and social aspects in a separate section of ESIA.</p> <p>The information available in EIA (OVOS) is very limited /insufficient for the ESIA</p>				
1.2.3.	<p><i>Lavna CTT access railroad:</i></p> <ul style="list-style-type: none"> Analyze the Project design documentation; Consolidate all baseline and impact assessment in the Addendum to ESIA; Provide additional assessments where necessary; Analyze the previous stakeholder engagement experience and key issues raised; within ESIA, provide additional consultations addressing remaining issues. 		BSTDB ESP; GIIP	Lavna Commercial Sea Port LLC resources	Q 3 2019	The assessment of impacts associated with the Vykhodnoy - Lavna Railroad accomplished
1.3.	<p>Stakeholder Engagement: Implement the Project's Stakeholder Engagement Plan (SEP) and maintain it throughout the Project lifetime, including, <i>inter alia</i>, the following actions:</p> <ul style="list-style-type: none"> Conduct ESIA consultations as proposed in the SEP; Plan and implement ongoing stakeholder engagement; 	Limited stakeholder engagement has been organised as a one-time event.	BSTDB ESP requires to develop, implement and maintain SEP	Lavna Commercial Sea Port LLC in cooperation with the Administration of the Mezhdurechie Rural Settlement	Q4, 2019	SEP developed and implemented



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	<ul style="list-style-type: none"> Conduct the SEP implementation monitoring and reporting to interested parties; Revise and update the SEP on an annual basis.					
2. Monitoring						
2.1.	Develop the Environmental Monitoring Program according to RF legal requirements and GIIP principles	No Environmental Monitoring Program has been developed	RF legal requirements, GIIP	Lavna Commercial Sea Port LLC resources	Q1 2019	The Environmental Monitoring Programme developed and approved.
2.2.	Meteorological Parameters: Install an automatic portable weather station at the site to measure meteorological parameters during the construction period (wind direction and speed, temperature, precipitation, humidity, solar insolation etc.)	Experimental meteorological data (wind speed and direction) are important for port operations and dust control	GIIP	Lavna Commercial Sea Port LLC resources (low cost device)	Q1 2019	Portable weather station purchased and installed. A suite of representative weather observation data generated
2.3.	Air Emissions and Dust					
2.3.1.	Carry out the daily average measurements of key pollutants' concentrations at the boundaries of the coal terminal site and the nearest residential areas in Mezhdurechye and Mishukovo villages and industrial site. Measurements must be performed according to internationally recognized methodology at the construction and operation phases	The one-time concentrations of pollutants (20 minutes averaging time) available in EES are not comparable with the EU standards (mainly, 24-hours averaging time)	GIIP	Lavna Commercial Sea Port LLC resources	Two times on the year	Air quality monitoring report characterising air quality at the boundaries of the industrial site and residential area and at the industrial site submitted twice a year
2.3.2.	Develop the Dust Control and Emission Reduction Management Plan	Coal dust pollution is the critical issue; no dust control management plan exists	BSTDB ESP, GIIP	Lavna Commercial Sea Port LLC resources	Q 2 2019	Dust Control and Emission Reduction Management Plan developed and approved
2.4.	Noise and Vibration					



	Activity	Non-Compliance / Environmental / Social Risk	Requirement	Responsibilities	Timetable	Targets / Evaluation Criteria
2.4.1.	Carry out the instrumental measurements of noise and vibration at construction and operation stages in accordance with the EU methodologies (two times per year)	Monitor noise and vibration levels at the Terminal site.	GIIP	Lavna Commercial Sea Port LLC resources	Two times on the year	The noise and vibration monitoring report provided twice a year.
3. Environmental and Social Management						
3.1.	Appoint a Top-level EHS manager reporting to the General Director;	EHS responsibilities are not addressed at all Project levels (STLC, Lavna Commercial Sea Port LLC, EPC Contractor and all sub-contractors)	RF legislative requirements, GIIP	The STLC	Q2, 2019	A Top-level EHS manager appointed at STLC
3.2.	Appoint the EHS Manager(s) at Lavna Commercial Sea Port LLC;		GIIP	Lavna Commercial Sea Port LLC	Q1, 2019	The EHS manager appointed at Lavna Commercial Sea Port LLC
3.3.	Address EHS responsibilities at the construction site		GIIP	Lavna Commercial Sea Port LLC	Q1, 2019	The EHS manager(s) appointed at EPC Contractor and all sub-contractors
3.4.	Develop and implement a modern EHS structure and management system for the Project, including the roles and responsibilities of STLC, Lavna Commercial Sea Port LLC and EPC contractor for the construction stage;	Management of Project's EHS risks at the construction stage	BSTDB ESP, GIIP	STLC/ Lavna Commercial Sea Port LLC	Q2 2019	Clear management structure, distribution of responsibilities and risk management
3.5.	Develop and implement a modern and efficient EHS management system for the Terminal Operator (Lavna Commercial Sea Port LLC)	Management of EHS risks at the Project operational stage	BSTDB ESP, GIIP	The EPC contractor under the control of the Lavna Commercial Sea Port LLC	2020	EHS structure developed
4. Labour and Working Conditions, Occupational Health and Safety						
4.1.	Labour and Working Conditions					
4.1.1.	Develop an open Hiring Policy	Maximize the local	BSTDB ESP,	Lavna Commercial	Q1, 2019	Hiring Policy developed



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	outlining the employment principles (for the construction and operation stages)	employment	GIIP	Sea Port LLC		and implemented
4.1.2.	Develop the workers accommodation plan for the Construction stage	Accommodation of the construction workers must meet GIIP	GIIP	Lavna Commercial Sea Port LLC	Q1, 2019	Workers accommodation plan developed and followed
4.2.	Occupational health and safety					
4.2.1.	Identify and assess occupational hazards and risks related to the proposed facilities during the operation stage	No hazards and risks have been identified/managed	GIIP, RF legislation requirements	Lavna Commercial Sea Port LLC	Before the operation stage	Occupational health hazards and risks assessed
4.2.2.	Develop an OHS Management Plan for the construction and operational stages	OHS Management Plans are not present	GIIP	Lavna Commercial Sea Port LLC		OHS Management Plan for the construction and operational stages developed and implemented
4.2.3.	Ensure the proper security of the construction site, EHS briefings of workers and visitors, PPE use, and compliance with other applicable EHS requirements.	The existing security arrangements at the construction site do not provide adequate protection against occasional visitors, EHS briefings for visitors are not provided; PPE use by workers and visitors is insufficient. The EHS issues are managed by the construction contractors without any control from STLC/ Lavna Commercial Sea	GIIP, RF legislation requirements	STLC, Lavna Commercial Sea Port LLC, EPC contractor	Q1 2019	Effective control of access to the construction site; compliance with EHS requirements by workers and visitors



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		Port LLC. The Special assessment of working conditions (required by RF legislation) has not been conducted				
4.2.4.	Develop and support the EHS culture as a core value throughout the Project life cycle	The level of EHS culture is not sufficient/does not meet applicable requirements	RF legislation requirements; GIIP	STLC, Lavna Commercial Sea Port LLC, EPC contractor	During the Project life cycle	Continual improvement of EHS culture (specific targets and monitoring criteria to be established; achievements to be reported)

