**Black Sea Terminal LLC**

**Kulevi Oil and Oil Products Sea Terminal**

**Introduction:** Kulevi Oil Terminal for transfer of oil and oil products was launched into exploitation in 2007. Its construction started in 2001 as per project of JSC Sibneftetransproekt. Administratively the enterprise is located in Khobi Region of Georgia. The administrative center of the region – the town of Khobi is located at the distance of 20 km. The distance to the nearest railway station is 9 km, to the seaport – 12 km, to the village Kulevi – 0.4 km, to the city of Poti – 10 km. The oil terminal is located in the strand between the rivers Khobi, Tsiva and sea area. From the southwest between the sea and the enterprise border lies the accumulative sand dump, from the northwest at the distance of 50 m far from the border runs the river Tsiva behind which on the right bank is located the village Kulevi. Southeastwards at the distance of 9 km is located the railway station. Northwestwards the oil terminal in the mouth of river Khobi is located the complex of berthing structures for loading oil and oil products to tankers.

The sea terminal for transfer of oil and oil products is intended for intake of oil and oil products from railway tank cars, their intermediate storage and loading of sea vessels with them.

**Tank farms:** 28 storage tanks - 407000 thou m3.

**Berths:** 2 – Berth No: 1 – for vessels with DWT 100000 tons

Berth No:2 – For vessels with DWT 40000 tons

Berth No:3 – Port fleet

**Railway trestles:**

* Railway trestle № 1 - Crude oil and light hydrocarbon products
* Railway trestle № 2 - Light hydrocarbon products
* Railway trestle № 3 – Heavy oil products
* Railway trestle № 4 - Heavy oil products
* Railway trestle № 5 - Heavy oil products

**Truck Filling Station:** truck filling station (gasoline/gasoil) for simultaneous loading of 2 trucks

**Pump Stations:** For pumping of oil products from tank cars to tank farms the following pump stations are foreseen:

* Pump station No20- For discharge of diesel fuel and low-viscosity oil from tank cars and loading of diesel fuel to tankers;
* Pump station No19- For discharge of fuel oil and high-viscosity oil requiring heating within discharge from tank cars;
* Pump station No21 - For loading of fuel oil and crude oil to tankers and circulation heating.
* Pump station No90 - For discharge of methanol, naphtha, para-xylene, ULSD from railway tank cars.
* Pump station No96 – For discharge of bitumen form railroad tank cars and transshipment to tankers via bitumen storage tanks.
* Pump station No96-1 – for discharge of light oil product

**Boiler rooms:** For the purpose of generation of seam for process needs, terminal is equipped with 3 units of steam generator boiler rooms:

* Boiler room No32 with 2 units of steam boiler, 8 MW each, total capacity: 16 MW
* Boiler room No33 with 2 units of steam boiler, 10.7 MW each, total capacity: 21.4 MW
* Boiler room No33a with 1 unit of steam boiler, 10.7 MW
* Thermal oil boiler room No33b (for bitumen facility) with 2 units of oil boilers, 1.75 MW each, total capacity: 3.5 MW
* Boiler room No29.1 (for administrative building): 93 kW
* Boiler room for Hotel building.

### Firefighting system: System includes:

* *Fire Fighting Pump House No24 with:*

1. A group of water supply pumps for cooling reservoirs, firefighting of the berth by using water, demand on firefighting from hydrants- 4 pumps (DN600) with electric motor (3 operating, 1 standby);
2. A group of water supply pumps for firefighting outside buildings of the terminal.

-2 pumps (1 operating, 1 standby);

1. A group of foaming agent solution supply pumps for firefighting at oil products reservoir, berth, service pump houses -4 pumps (3 operating, 1 standby);
2. A group of pump-feeders for foaming agent supply - 4 pumps (3 operating, 1 standby);
3. Circulating pump -1 unit;
4. Down-pump for recharge of water supply reservoirs from a river -1 unit;
5. Drain pump -1 unit
6. Foaming agent supply is in three tanks with capacity of 20m3 each.

* *Fire Water Supply Reservoirs:* Two steel vertical reservoirs with actual capacity of 3000m3 each are designed to ensure water supply for combating fire in the terminal and the berth (3 rated fires).

#### Utility and drinking water supply system

The source of supply of the sea terminal with utility and drinking water is artesian wells with water discharge 8-10 l/sec.

Water is supplied to the site of water supply facilities (pump station No37, water purification skid No320 of the terminal by the flowline Ду 100 mm.

The complex of utility and drinking water supply includes:

* Utility and drinking water reservoirs of capacity 250 m3 each (2 pcs);
* Absorbing filters (2 pcs);
* Water tower of capacity 25 m3 and height of post 18 m;
* Water pump stations No37;
* Water purification skid No37-1.

Potable water to terminal is also supplied via urban water system, from where potable water is distributed to terminal buildings.

#### Treatment facilities of industrial and rainwater sewage

The project foresees the treatment facilities which include:

* Ponds-rainwater settlements with capacity 2х 1000m3;
* Sludge tanks of rainwater sewage 2х1000m3;
* Treatment facilities of rainwater sewage manufactured by INSTEB (the city of Kursk) with capacity 80m3/hr, 1920 m3/day;
* Oil collector with capacity 25m3;
* Hydrocyclones for dewatering of sediments from sludge tanks;
* Pond of treated water with capacity 2000m3;
* Sludge collector of rainwater sewage with capacity 200m3;
* Scattering outlet in the river Tsiva.