

Presentation report

I. Project name: "Waste Oil Recycling Plant, Oltenita Municipality, Calarasi County"

II. Holder

– Company name: SC GREEN OIL AND LUBES SRL

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II. Project description:

– Summary of the project:

The land is located in the private area of Oltenita and it is a concession to the beneficiary of the investment - GREEN OIL AND LUBES SRL in order to build the objective "Waste Oil Recycling Plant".

The waste oil recycling plant will have a processing capacity of 200 tons / day, which implies according to the technological flow presented by the beneficiary an annual processing amount of approximately 66,000 tons of oils. The technology will be cutting edge by combining advanced vacuum distillation technology with high-pressure catalytic hydrotreating of the recovered oil base.

Overall, the plant will lead to environmental protection by processing approximately 66,000t / year of hazardous and toxic residues, producing high quality lubricants.

The investment beneficiary - GREEN OIL AND LUBES SRL - a group of companies that have developed similar investments in other parts of the globe (United Arab Emirates, Saudi Arabia, Malaysia, South Africa) have studied several scenarios of site selection. For this purpose, several countries in central and Eastern Europe have been included in the scenarios studied at the macro-regional level. Considering the macroeconomic stability of Romania in a long-term scenario, as well as the possible evolution in a geopolitical and regional economic context, Romania was preferred to the detriment of other countries.

The consultants of the investor regarding the location of the investment have taken into account several factors, among which the most important are: the available surface and the legal situation of the land, the vehicle access, the railway infrastructure, the existent utilities in the area and possible connection to them regarding the power supply, the natural gas supply, the water and sewerage network existing in the area. Also an important factor was the existing work force in the proximity of the investment, the human resource being essential from this point of view. Following the analysis of several possible locations for the investment, the site was located in the locality of Oltenita. In this respect, a very important factor in choosing this site was the possible connection - in a possible long-term scenario - to the shipping transport infrastructure (both on the Danube river and on the Arges river).

The studied land is located in the southern part of Oltenita, adjacent to two courses of flowing water - the Danube River and the Arges River.

The land proposed for the investment is located outside the built area of the locality, at a distance of over 770 meters from the first dwellings, thus not being of nature to affect the residential area through the presence of the industrial constructions and the current activities.

– Justifying the need for the project:

The beneficiary of the investment - GREEN OIL AND LUBES SRL wants to build a waste oil processing plant with a capacity of 200 tons / day. The development of this economic activity is extremely important also in the context of the obligations assumed by ROMANIA regarding waste management and recycling under the European directives.

At present, there are no installations in Romania - waste oil recycling plants - the same size as the investment proposed by GREEN OIL AND LUBES SRL. In this respect, at present, a very small amount of the used oils are collected for recycling in Romania. As a case study on the economic impact and the environmental impact on waste management - in the case of waste oils, car services will be considered as an example. In this regard, a very small amount of waste oils is recycled by authorized companies. The majority of the resulting waste - waste oils are either discharged into the sewage system or into the watercourses, causing extremely negative environmental impacts, or burned in artisanal installations also having an environmental impact in the context of the emission of pollutants. Given the emergence of an economic operator who will pay for the purchase of waste oil, the car service will be directly interested in joining this economic flow, both economically and from the point of view of the risks assumed so far with regards to waste management.

– Profile and production capacities:

The waste oil recycling plant will have a processing capacity of 200 tons / day, which implies, according to the technological flow presented by the beneficiary, an annual processing quantity of about 66,000 tons of oils. The technology will be cutting edge by combining advanced vacuum distillation technology with high-pressure catalytic hydrotreating of the recovered oil base.

Overall, the plant will lead to environmental protection by processing approximately 66,000t / year of hazardous and toxic waste, producing high quality lubricants.

– Description of the installation and technological flows existing on site:

The investment components are the following:



- Object 1 – Processing plant;
It includes the distillation plant and the hydrotreating unit. Estimated dimensions: 20 x 15 m for each installation.

- Object 2 – Utility platform;
Includes the tanks for storing the raw material (used oil), the intermediate products, and the finished product.

Current no.	Description	No. of Units	Capacity (m³)
1	Raw material tank (used oil)	3	2000

2	Oil base tank	4	1000
3	Diesel tank	1	500
4	Bitumen tank	2	250
5	Used oil tank (future expansion)	1	2000
6	Caustic soda tank	1	50
7	Fuel tank	1	200
8	Oil base tank (future expansion)	2	2000

Object 3 – Loading / unloading platform;

It includes the truck access area for unloading raw materials (used oil) and loading finished products. Standard capacity - 35m³ tankers. Estimated volume - 6312m³ / month (75750m³ / year), maximum traffic - 10 trucks / day.

Object 4 – Hydrogen plant;

It includes the H₂ production plant necessary for the hydrotreating process. The plant is located at a standard safety distance of at least 10m from the processing plant. H₂ is produced from water through hydrolysis. Estimated area 1054m².

Object 5 – Pre-cleaning station;

It includes the hydrocarbon separator that will treat the rainwater collected from the carriageways within the enclosure. Estimated area – 347m².

Object 6 – PSI fire station;

It includes the water supply to the fire-fighting installation, comprising a group of pumps and intangible water reserve. Estimated area – 275m².

Object 7 – Electrical connection (transformer station);

It includes the MT / JT transformation point and the electrical connection of the objective. Estimated area – 1100m².

□ Object 8 – Control room;

It includes the remote control unit of the plant, which will control, with the help of a computer system, all the equipment of the objective. Estimated area – 125m².

□ Object 9 – Laboratory;

It includes the unit of analysis of the raw materials introduced in the factory as well as of the finished products resulting from the production process. Estimated area – 50m².

□ Object 10 – Cooling tower;

It includes the cooling water system running through the installation. Estimated area – 365m².

□ Object 11 – Water house;

It includes the connection to the public water network, pressurization station and general technological water distributor. Estimated area – 6m².

□ Object 12 – Maintenance workshop and chemicals warehouse;

It includes the mechanic workshop required for the maintenance of the factory equipment as well as the storage of chemicals required for operation. Estimated area – 470m².

□ Object 13 – Administration building

It will accommodate the administrative staff of the facility as well as the dressing rooms of the operative personnel and the canteen of the unit. The occupied area is 450m², the building will have 3 levels (height regime GF+2).

□ Object 14 – Internal roads;

Includes all indoor traffic, these will be asphalted roads with a road width of at least 7.00 lm, connections at the intersections will be made with standard

rays for heavy-duty traffic (Lorries). The area occupied by traffic is estimated at approx.1.6ha.

□ Object 15 – Fencing.

It includes the fencing of the entire enclosure with a metal fence with reinforced concrete socket. The total length of the fencing - approx. 1100ml.

From the point of view of installations within the investment, the following installations and equipment will be used:

➤ □ For the technological stream that involves hydrotreating:

	<i>Columns, vessels and reactors</i>
1	<i>Fractionation column</i>
2	<i>MDEA Absorber (amine)</i>
3	<i>MDEA Regenerator (amine)</i>
4	<i>Hydrotreating Feed Expansion vessel</i>
5	<i>Low pressure separator</i>
6	<i>Recirculation compressor expansion vessel</i>
7	<i>High Pressure Separator, cold</i>
8	<i>High Pressure Separator, hot</i>
9	<i>Feed compressor expansion vessel</i>
10	<i>Vacuum pump expansion vessel</i>
11	<i>Water injection vessel</i>
12	<i>Neutralizing injection vessel</i>
13	<i>Corrosion inhibitor injection</i>
14	<i>Atmospheric vessel</i>
15	<i>Thermal transfer oil tank</i>
16	<i>Thermal transfer oil expansion vessel</i>
17	<i>Liquid fuel tank</i>
18	<i>MDEA Absorber Feed Tank</i>

19	<i>Reflux regenerator vessel</i>
20	<i>MDEA vessel</i>
21	<i>Flare Expansion vessel</i>
22	<i>Reactor</i>
23	<i>Reactor</i>
24	<i>Main hydrotreating reactor</i>

	<i>Furnaces</i>
25	<i>Furnace</i>
	<i>Pumps</i>
26	<i>Hydrotreating feed pumps</i>
27	<i>Fractional pumps</i>
28	<i>Re-contacting pumps</i>
29	<i>Heavy fractions dehydration feed pump</i>
30	<i>Lightweight fractions Pumps</i>
31	<i>Vacuum fractionation pumps</i>
32	<i>Feed pumps</i>
33	<i>Water injection pump</i>
34	<i>Neutralizing injection pump</i>
35	<i>Corrosion inhibitor injection pump</i>
36	<i>Vacuum condensing pump</i>
37	<i>Heat Transfer Circulation Pumps</i>
38	<i>Thermal transfer oil filling pump</i>
39	<i>Light amine pumps</i>
40	<i>Amine regenerator reboiler pumps</i>
41	<i>Flare pump</i>
	<i>Compressors</i>
42	<i>Recirculation compressor</i>

43	<i>Hydrogen feed compressor</i>
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	<i>Heat exchangers</i>
44	<i>Feed exchanger</i>
45	<i>Reactor feed heater</i>
46	<i>Fractional feed heater</i>
47	<i>Recirculated gas cooler</i>
48	<i>Finished product cooler</i>
49	<i>Main Reactor Heater</i>
50	<i>Feed vessel beam</i>
51	<i>Light fraction distillation cooler</i>
52	<i>Fractioning Condenser</i>
53	<i>Hydrogen cooler</i>
54	<i>Hydrotreating feed re-heater</i>
55	<i>Feed gas cooler</i>
56	<i>Light amine cooler</i>
57	<i>Reboiler amine</i>
58	<i>Regeneration Condenser</i>
	<i>Filters</i>
59	<i>Hydrotreating feed filters</i>
60	<i>Product filters</i>
61	<i>Heat transfer oil filters</i>
62	<i>Cartridge filter</i>
63	<i>Active carbon filter</i>
64	<i>Mechanical particle filter</i>
65	<i>Flare</i>
	<i>Module complete</i>

66	<i>Amine additive Injection Module</i>
67	<i>Hydrogen production unit</i>

➤ For the technological flow that involves *distillation*:

		<i>Equipment type</i>
	1057-GOAL-P-PFD-1001/01	
1	<i>Feed tanks</i>	<i>Tank</i>
2	<i>caustic soda storage tank</i>	<i>Tank</i>
3	<i>Self-clean Filter</i>	<i>Filter</i>
4	<i>Raw material receiving pump</i>	<i>Pump</i>
5	<i>Raw material transfer pump</i>	<i>Pump</i>
6	<i>caustic soda Injection pumps</i>	<i>Pump</i>
	1057-GOAL-P-PFD-1001/02	
1	<i>Heat Recovery</i>	<i>Heat exchanger</i>
2	<i>Centrifuge</i>	<i>Filter</i>
3	<i>Daily feed Tank</i>	<i>Tank</i>
4	<i>Process feed Pump</i>	<i>Pump</i>
	1057-GOAL-P-PFD-1002	
1	<i>Dehydration preheater</i>	<i>Heat exchanger</i>
2	<i>Dehydration Evaporator</i>	<i>Heat exchanger</i>
3	<i>Water condenser and light fractions</i>	<i>Heat exchanger</i>
4	<i>Dehydrated oil separator</i>	<i>Vessel</i>
5	<i>condensation collection Vessel</i>	<i>Vessel</i>
6	<i>Dehydrated oil transfer pump</i>	<i>Pump</i>
7	<i>water condensation and light fractions Pump</i>	<i>Pump</i>
	1057-GOAL-P-PFD-1003	
1	<i>Liquid fuel preheater</i>	<i>Heat exchanger</i>

2	<i>Liquid fuel evaporator</i>	<i>Heat exchanger</i>
3	<i>Liquid fuel condenser</i>	<i>Heat exchanger</i>
4	<i>Liquid fuel separator</i>	<i>Vessel</i>
5	<i>Liquid Fuel Collector Vessel</i>	<i>Vessel</i>
6	<i>Recirculation and oil transfer Pump</i>	<i>Pump</i>
7	<i>Liquid fuel transfer Pump</i>	<i>Pump</i>
	1057-GOAL-P-PFD-1004	
1	<i>Feed condenser</i>	<i>Heat exchanger</i>
2	<i>Recirculated fluid cooler</i>	<i>Heat exchanger</i>
3	<i>Fuel Separator</i>	<i>Vessel</i>
4	<i>Evacuation Separator</i>	<i>Vessel</i>
5	<i>Fluid transfer Pump</i>	<i>Pump</i>
6	<i>Fluid circulation Pump</i>	<i>Pump</i>
7	<i>Vacuum pump for the dehydrating area</i>	<i>Pump</i>
	1057-GOAL-P-PFD-1005/01	
1	<i>intermediate fractions pre-heater</i>	<i>Heat exchanger</i>
2	<i>Intermediate fractions Evaporator</i>	<i>Heat exchanger</i>
3	<i>intermediate fractions Condenser</i>	<i>Heat exchanger</i>
4	<i>intermediate residue Separator</i>	<i>Vessel</i>
5	<i>intermediate fractions collection Vessel</i>	<i>Vessel</i>
6	<i>Intermediate residue Transfer pump</i>	<i>Pump</i>
7	<i>Intermediate fractions Transfer pump</i>	<i>Pump</i>
	1057-GOAL-P-PFD-1005/02	
1	<i>Feed condenser-2</i>	<i>Heat exchanger</i>
2	<i>Feed condenser-3</i>	<i>Heat exchanger</i>
3	<i>Fluid separator-2</i>	<i>Vessel</i>
4	<i>Fluid separator-3</i>	<i>Vessel</i>
5	<i>Booster for the intermediate fraction recovery zone</i>	<i>Pump</i>
6	<i>Vacuum Pump for the intermediate fraction recovery zone</i>	<i>Pump</i>
7	<i>Fluid transfer pump - 2</i>	<i>Pump</i>

8	<i>Fluid transfer pump - 3</i>	<i>Pump</i>
	1057-GOAL-P-PFD-1006/1	
1	<i>Heavy fractions pre-heater</i>	<i>Heat exchanger</i>
2	<i>Film evaporator-1</i>	<i>Heat exchanger</i>
3	<i>Heavy fractions condenser evaporator</i>	<i>Heat exchanger</i>
4	<i>Heavy fractions collection vessel</i>	<i>Vessel</i>
5	<i>Residue Vessel for film evaporator</i>	<i>Vessel</i>
6	<i>Heavy fractions transfer pump</i>	<i>Pump</i>
7	<i>residue transfer Pump</i>	<i>Pump</i>
	1057-GOAL-P-PFD-1006/2	
1	<i>Feed condenser-4</i>	<i>Heat exchanger</i>
2	<i>Feed condenser-5</i>	<i>Heat exchanger</i>
3	<i>Circulation fluid cooler</i>	<i>Heat exchanger</i>
4	<i>Fluid separator-4</i>	<i>Vessel</i>
5	<i>Fluid separator-5</i>	<i>Vessel</i>
6	<i>Fluid separator-6</i>	<i>Vessel</i>
7	<i>Evacuation Separator</i>	<i>Vessel</i>
8	<i>Booster vid-2</i>	<i>Pump</i>
9	<i>Booster vid-3</i>	<i>Pump</i>
10	<i>Vacuum pump for recovery of heavy fractions</i>	<i>Pump</i>
11	<i>Fluid transfer pump - 4</i>	<i>Pump</i>
12	<i>Fluid transfer pump - 5</i>	<i>Pump</i>
13	<i>Liquid circulating pump</i>	<i>Pump</i>
	1057-GOAL-P-PFD-1007/01	
1	<i>Film evaporator-2</i>	<i>Heat exchanger</i>
2	<i>Heavy fractions condenser evaporator-2</i>	<i>Heat exchanger</i>
3	<i>Heavy fractions collection vessel -2</i>	<i>Vessel</i>
4	<i>Heavy fractions collection vessel -2</i>	<i>Vessel</i>
5	<i>Heavy fractions transfer pump-2</i>	<i>Pump</i>
6	<i>Pump transfer reziduu-2</i>	<i>Pump</i>

	1057-GOAL-P-PFD-1007/02	
1	<i>Feed condenser-6</i>	<i>Heat exchanger</i>
2	<i>Feed condenser-7</i>	<i>Heat exchanger</i>
3	<i>Circulation fluid cooler-3</i>	<i>Heat exchanger</i>
4	<i>Fluid separator-7</i>	<i>Vessel</i>
5	<i>Fluid separator-8</i>	<i>Vessel</i>
6	<i>Fluid separator-9</i>	<i>Vessel</i>
7	<i>Evacuation separator</i>	<i>Vessel</i>
8	<i>Booster vid-4</i>	<i>Pump</i>
9	<i>Booster vid-5</i>	<i>Pump</i>
10	<i>Vacuum pump for recovery of heavy fractions-2</i>	<i>Pump</i>
11	<i>Fluid transfer pump - 6</i>	<i>Pump</i>
12	<i>Fluid transfer pump - 7</i>	<i>Pump</i>
13	<i>Liquid circulating pump</i>	<i>Pump</i>
	1057-GOAL-P-PFD-1008/01	
1	<i>Film evaporator-3</i>	<i>Heat exchanger</i>
2	<i>Heavy fractions condenser evaporator-3</i>	<i>Heat exchanger</i>
3	<i>Heavy fractions collection vessel -3</i>	<i>Vessel</i>
4	<i>Heavy fractions collection vessel -3</i>	<i>Vessel</i>
5	<i>Heavy fractions transfer pump-3</i>	<i>Pump</i>
6	<i>Pump transfer reziduu-3</i>	<i>Pump</i>
	1057-GOAL-P-PFD-1008/02	
1	<i>Feed condenser-8</i>	<i>Heat exchanger</i>
2	<i>Feed condenser-9</i>	<i>Heat exchanger</i>
3	<i>Circulation fluid cooler-4</i>	<i>Heat exchanger</i>
4	<i>Fluid separator-10</i>	<i>Vessel</i>
5	<i>Fluid separator-11</i>	<i>Vessel</i>
6	<i>Fluid separator-12</i>	<i>Vessel</i>
7	<i>Evacuation separator</i>	<i>Vessel</i>
8	<i>Booster vid-6</i>	<i>Pump</i>

9	<i>Booster vid-7</i>	<i>Pump</i>
10	<i>Vacuum pump for recovery of heavy fractions-3</i>	<i>Pump</i>
11	<i>Fluid transfer pump - 8</i>	<i>Pump</i>
12	<i>Fluid transfer pump - 9</i>	<i>Pump</i>
13	<i>Liquid circulating pump</i>	<i>Pump</i>
	<i>1057-GOAL-P-PFD-1009/01</i>	
1	<i>Film evaporator-4</i>	<i>Heat exchanger</i>
2	<i>Heavy fractions condenser evaporator-4</i>	<i>Heat exchanger</i>
3	<i>Heavy fractions collection vessel -4</i>	<i>Vessel</i>
4	<i>Heavy fractions collection vessel -4</i>	<i>Vessel</i>
5	<i>Heavy fractions transfer pump-4</i>	<i>Pump</i>
6	<i>Pump transfer reziduu-4</i>	<i>Pump</i>
	<i>1057-GOAL-P-PFD-1009/02</i>	
1	<i>Feed condenser-10</i>	<i>Heat exchanger</i>
2	<i>Feed condenser-11</i>	<i>Heat exchanger</i>
3	<i>Circulation fluid cooler-5</i>	<i>Heat exchanger</i>
4	<i>Fluid separator-13</i>	<i>Vessel</i>
5	<i>Fluid separator-14</i>	<i>Vessel</i>
6	<i>Fluid separator-15</i>	<i>Vessel</i>
7	<i>Evacuation separator</i>	<i>Vessel</i>
8	<i>Booster vid-8</i>	<i>Pump</i>
9	<i>Booster vid-9</i>	<i>Pump</i>
10	<i>Vacuum pump for recovery of heavy fractions-4</i>	<i>Pump</i>
11	<i>Fluid transfer pump - 10</i>	<i>Pump</i>
12	<i>Fluid transfer pump - 11</i>	<i>Pump</i>
13	<i>Liquid circulating pump</i>	<i>Pump</i>
	<i>1057-GOAL-P-PFD-1010</i>	
1	<i>Preheater for stripping</i>	<i>Heat exchanger</i>
2	<i>Hydrocarbon separator</i>	<i>Vessels</i>
3	<i>Liquid fuel recovery Vessel</i>	<i>Vessels</i>

4	<i>Wastewater recovery Vessel</i>	<i>Vessels</i>
5	<i>Wastewater stripping Column</i>	<i>Column</i>
6	<i>Liquid fuel transfer Pump</i>	<i>Pump</i>
7	<i>Intermediate waste water transfer Pump</i>	<i>Pump</i>
8	<i>Waste water transfer Pump</i>	<i>Pump</i>
9	<i>Waste water cooler</i>	<i>Heat exchanger</i>

– Description of the production processes of the proposed project, depending on the specificity of the investment, products and by-products obtained, size, and capacity;

In this chapter, the technological process of the installations is explained, and the effluents of each step of the process are described, together with the applied methods.

a. Dehydration

Dehydration is achieved by heating the used oil in a specialized equipment. This process produces 3986 t / y of vapour consisting of a mixture of steam and volatile components. The water is then condensed and sent to the impure chemical water collection system. The volatile components are used as gaseous fuel with reduced calorific value in the furnace of the plant, or burned at flare.

Input: 66.666 t/y used oils

Utilities: heat in the form of recirculated hot oil and cooling water

Products: 62.680 t/y Dehydrated waste oil, 3986 t/y Wastewater

b. Separation of liquid fuel (diesel fuel)

The installation consists of a vacuum evaporator. A quantity of 6680 t / y of fuel will be extracted from the used oil. It will be used in the furnace, but will also feed the hydrotreating facility.

Input: 62.680 t/y dehydrated used oils

Utilities: heat in the form of recirculated hot oil and cooling water

Products: 56.000 t/y film evaporator feed, 6680 t/y liquid fuel

c. Separation of oils

The product at the base of the fuel separator will feed the film evaporators (Falling Film Evaporator & Wiped Film Evaporator). The separation is made under vacuum.

The residue (bitumen) in the film evaporator, 9320 t / y, will be sold as road bitumen.

Input: 56.000 t/y

Utilities: heat in the form of recirculated hot oil and cooling water

Products: 46.680 t/y from the film evaporators, 9320 t/y bitumen

d. Hydrotreating

The oil recovered from film evaporators is treated with hydrogen in this plant to produce a high quality oil base. Oils from evaporators are treated in the presence of a special catalyst at a temperature of 360 ° C and at a pressure of 96 bar. The resulting main product is oils base. The sulphide present in the raw material is extracted as hydrogen sulphide (H₂S). It will be extracted from the hydrogen stream using the amine plant. Part of the recycle hydrogen stream will be burned as fuel in the furnace to keep the light hydrocarbon concentration at the desired level.

Input: 46.680 t/y from the film evaporators, 3624 t/y hydrogen

Utilities: heat in the form of recirculated hot oil and cooling water

Products: 45.624 t/y Hydrotreating oil base, 680 t/y gaze Rich in hydrogen, used as fuel in the technological furnace

e. Final Fractioning

The hydrotreating oil is fractionated in the vacuum distillation column to produce the SN-150 or SN-500 grade oil bases. In the same fractionation column, light fractions are extracted to meet the specifications of SN-150 and SN-500.

f. Hydrogen plant

Hydrogen required for the hydrotreating installation is produced by water electrolysis. The oxygen produced will be sent to the atmosphere.

Input: 4.285 t/y Demineralized water

Utilities: Electricity, cooling water

Products: 360 t/y hydrogen

g. Amine Plant

The hydrogen-rich gas mixture produced in the hydrotreating reactors also contains H₂S. The gas is sent to the amine station for H₂S removal. The hydrogen-rich gas mixture thus filtered is recirculated in the hydrotreating, whereas H₂S is burned in the furnace or facade. The maximum amount of H₂S is of 24 kg/h (192 t/y).

– Raw materials, energy and fuels used, with the way they are secured;

It will run 5 days a week, and the production will be of 60000 t / y of refined oil.

The water used in the technological process will be recirculated and a cooling tower will be used to save it. Periodically, to fill the amount of water lost by evaporation, the cold water supply line will be open. According to the water-canal permits issued by SC Ecoaqua SA Calarasi, a flow of 40 m³ / h can be ensured at a pressure of 2.6-2.8 bar.

The air used in the technological process will be compressed in the plant by means of a compressor system.

The electricity consumption for the operation of the installation will be provided by the existing electric network in the area.

– Connection to existing utility networks in the area;

a. Water supply

The water supply will be made from the public network of Oltenita municipality, network managed by S.C. Ecoaqua S.A.

b. Household wastewater discharge

Waste water together with the waters resulting from the sanitation of the premises and the rinsing of the tanks (from the laboratory) will be discharged via an R1 connection into the public sewerage network belonging to SC ECOAQUA SA CALARASI, OLTENITA Branch.

The wastewaters that will result from the dishwashing (from the canteen) will be passed through a grease separator and then discharged together with waste water and that resulting from sanitizing the facilities into the public sewerage network.

c. Evacuation of rainwater and technological waters resulting from the productive process.

Waste water resulting from gas stripping and dehydration of the oil will be passed through a treatment plant before being discharged into the public sewerage network.

Once a year, the water used to cool the plant will also be evacuated. Before discharging into the public sewerage network, they will be passed through the treatment plant.

The rainwater will be passed through a hydrocarbon separator and discharged into the public sewerage network via the R2 connection.

d. Electrical installations

The electrical installations related to the investment will ensure the power supply, the normal and safety lighting installation, the weak current installation, as well as the protection against accidental contact voltage, and atmospheric overvoltage. Electricity will be ensured by connecting to the existing distribution network in the

area. In this regard we insert the favourable location approval from ENEL DISTRIBUTIE DOBROGEA.

e. Natural Gas supply

The Natural gas will be ensured by connecting to the existing distribution network in the area, a network managed by WIROM GAS SA. In this regard, we insert the opinion obtained from WIROM GAS S.A.:

f. Fire extinguishing systems

For fire extinguishing, self-contained intangible water reserves or, as the case may be, specific extinguishing agents (powders, foam) will be provided. Reserves of extinguishing substances shall be provided in accordance with the regulations in force, in particular P118-2/2013

– Description of site restoration works in the area affected by the execution of the investment;

Ecological rebuilding is the process of recreating or restoring an ecosystem that is undergoing regression and which consists in restoring in the original form the structure and functions it previously had.

The duration of operation is at least 49 years according to the concession contract concluded with Oltenita City Hall, with the possibility of extending.

Upon depletion of the service life, the beneficiary may choose one of the following alternatives:

Rehabilitation of installations by dismantling and replacing used equipment with new and new generation ones;

Disposal of the objective.

The decommissioning works consist of:

- Dismantling the plant;
- Dismantling of reinforced concrete foundations;
- The capitalization of metal or equipment;

- Removal / disposal of all demolition waste;
- Demolition of access roads (if local authorities request it);
- Restoration of the land through fillings and levelling;
- The restoration of the vegetal floor with the existing species in the adjacent areas.

The mentioned works will be subject to a decommissioning project and will be carried out in accordance with the requirements of the competent authorities, based on the observance of the rules in force.

- New access roads or changes to existing ones;

From the point of view of the access to the land subject to the investment, the access will be made through the national road - DN 4 - to the Oltenita port (end of the road), further on Portului Street, about 970 meters (modernized road). The access to the investment will be made from the port street on an unmodernized road of about 200 meters, a road on which the beneficiary of the investment will take all steps to modernize it. In this respect, it is proposed to modernize the road infrastructure - Portului Street and the access road to the property.

At a later stage it will be proposed to modernize the road infrastructure in the direction of the modernization of the 1 Decembrie Blvd. and the street doctor Lucian Poescu as well as of the roads near the property.

- Natural resources used in construction and operation;
- Not applicable, no natural resources are used in construction and operation.

- Construction used methods;

Proposals for the planned works comply with the technical regulations in force. No other design option would have provided additional environmental benefits compared to the chosen variant.

Construction materials will include simple materials, generally used in such works. It is anticipated that traditional building materials and techniques will be used, although the final details depend on the constructor's technologies.

– Relationship with other existing or planned projects;

In the studied area there are programs approved at the local level to which the objective can relate with (PUZ, PUG): PUG Oltenita Municipality approved in 2013, and the project "Arges and Dambovita Arrangement for Navigation and Other Use", beneficiary SC IPTANA SA, is under development on an area of 64.4 ha.

– Details of the alternatives that have been considered;

Alternative "Zero" or "no action"

The "zero" alternative was considered as a benchmark to which the other alternatives are compared with for the different elements of the Project.

The main forms of impact associated with the adoption of the "zero" alternative are:

- The loss of major job opportunities;
- The loss of investments made so far, resulting in the loss of interest of private investors, commercial banks and international financing institutions regarding the future industrial development projects in the region and in Romania;
- Loss of support for the development of a modern plant, compliant with the regulations that is in the field of waste reduction at national level - recycling of used oil);

The most favourable situation for the area would be:

- To have solid economic and job opportunities;
- The environmental and social impacts generated by the activity to be developed and other major economic developments to be minimal;
- To have the capabilities and technical resources needed to remedy the occurrence of pollution.

In order to achieve this (and to prevent the negative socio-economic impact generated by the non-implementation of the project), a viable economic resource is needed, capable of generating job opportunities in significant numbers and sufficient incomes to solve the environmental problems.

The following is a comparison of the environmental impacts corresponding to the "zero" alternative with those of the project implementation.

Alternatives:

The proposed variant leads to the following advantages:

- the existing roads will be modernized;
- new jobs will be created;
- Extension of the catching front and the city's drinking water distribution network
- performing a sewerage system which provides for the routing of domestic wastewater to the treatment plant;
- the power supply network will be developed to ensure a high degree of reliability and good quality operation;
- applying a modern and efficient waste management system;
- introducing new sorting at source and selective collection of recyclable materials systems.

For the plan in question were considered:

- Economic Criteria (respectively the efficiency). The proposed solution presents the best results in terms of costs, lower compared to other variants; similarly, maintenance costs are lower.

Social Criteria (respectively Social Acceptance). Proposals show the best results from the point of view of human factor protection; the positive impact on the inhabitants is significant.

Environmental criteria (respectively environmental sustainability). The proposals have insignificant effects on biodiversity, developed in the Appropriate Assessment Study that was approved by APM Calarasi. It is true that at first sight it is an act of courage to build a waste oil recycling plant in the immediate vicinity of a Natura 2000 site, but environmental monitoring has shown that there are no priority habitats in the area, so no habitats are destroyed, the identified birds are not resident on the site, they have been observed only in passage, and most of the technological processes will be closed circuit. The investment also brings benefits to the environment by creating a facility that will reduce the amount of waste oil used at national level. Through a strict monitoring program there will be no significant or negative effects on the environment.

The proposals for the works comply with the technical regulations in force. No other design option would provide additional environmental benefits compared to the chosen variant.

Construction materials will include simple materials, generally used in such works. It is anticipated that traditional building materials and techniques will be used, although the final details depend on the constructor's technologies. The technical solutions proposed later will have to take into account:

- The environmental conditions,
- Type and nature of works,
- The possibility of using local materials,
- The technical, functional utility, and the security of the proposed development,
- Facilities, functional, geological, hydrogeological, hydrological, and institutional characteristics of the area,
- The existing neighbourhoods.

The specifications will recommend to the constructor the use of modern equipment and machines that comply with the technical prescriptions as well as with the current European standards in the field of environmental protection. It will be recommended that where workspaces are limited, manual work should be used in particular to minimize the impact of the works.

– Other activities that may occur as a result of the project (e.g. extraction of aggregates, provision of new water sources, energy supply sources or lines, increase in the number of dwellings, disposal of waste water and waste);

The implementation of the proposed project is of national significance as it will lead to better waste management at national level. Waste oils collected from the country's territory will be redeemed in the proposed plant and will not be managed inappropriately by throwing in nature, burning in non-approved plants.

- Localization of the project:

– Border distance for projects falling under the Convention on Environmental Impact Assessment in a Transboundary Context, adopted at Espoo on February 25, 1991, ratified by Law no.22/2001

In accordance with the provisions of Annex 1, Law 22/2001 on the ratification of the Convention on the Environmental Impact Assessment in a Transboundary Context adopted at ESPOO on February 25, 1991, corroborated with the fact that the proposed investment is in the proximity of the Romania-Bulgaria border, the developed investment falls under the provisions of Article 6 "Integrated Chemical Installations". The distance to the Bulgarian border is 1000 m.

In the PUZ phase of the project the Espoo notification was conceived, and was submitted to the Bulgarian part together with the environmental studies carried out so far.

A brief description of the potential impact, taking into account the following factors:

– The impact on the population, human health, fauna and flora, soil, uses, material assets, water quality and quantity regime, air quality, climate, noise and vibration, landscape and visual environment, historical and cultural heritage and interactions between these elements. Nature of impact (i.e., direct, indirect, secondary, cumulative, short, medium and long term, permanent and temporary, positive and negative impacts);

The plant is located near the site NATURA 2000 ROSPA 0038 Danube - Oltenita and according to Article 28 of GEO 57/2007 on the regime of protected natural areas, conservation of natural habitats, wild flora and fauna with subsequent modifications and completions, the impact of the future investment relative to its location in the protected area must be taken into consideration.

The additional automotive traffic generated by the investment is not likely to cause malfunctions, and in conjunction with the proposed modernization of road infrastructure as previously described, the impact will not be significant in this regard.

The impact on the environment should be treated both in the construction phase and in the operational phase. The areas occupied by the new works will be very small and there are no species of conservative flora in the site, so the impact on this protected area is not significant.

In the case of fauna species identified in the site, there will be an impact by them being disturbed by the noise and vibration levels, the presence of construction equipment and workers, and the level of air pollutant emissions. The impact is manifested in the working front because these species will move to similar habitats near the site without having diminished their number. Moreover, the distribution of these species is not strictly restricted at the site level, which is very small compared to the total area of the site.

The high degree of anthropology existing at the site of the works is also noted.

During the exploitation period the impact on the environment will be determined by the emissions of air pollutants and wastewater discharged from the installation.

The plant will be equipped with a flare for the incineration and dispersion of accidental gaseous emissions, as defined by the IPPC, reference documents for the most advanced technologies in the field of mineral oil refineries.

There is a program to prevent and detect gaseous leaks within the plant.

- The pumps will be equipped with seals that prevent leakage
- The taps will be equipped with seals that prevent leakage
- All safety valves will discharge to the flare system
- The compressors will be equipped with the latest seals that prevent leakage
- The flanges in the hydrotreating system will be RTJ type, so the most secure in terms of losses
- The lightweight products containers will be equipped with breathing valves (instead of air vents)
- Tank valves and non-condensing gases will be sent to the flare

- The chemical impure waters will be stripped to eliminate H₂S, which will then be sent to the flare
- All burners will be of reduced NO_x type

The main effluent is hydrogen sulphide (H₂S), which will be produced in the hydrotreating plant. The quantity will be very low, below 24 Kg / h. It will be absorbed by the amine plant and then sent to the oven burner or the flare. The use of MDEA amines is compatible with BAT.

The heat produced in the hot oil heating furnace (heating environment) will come from 1188 t / y of gas produced in the hydrotreating plant, supplemented with 3212 t / y natural gas.

There will be two sources of air pollution, namely the technological furnace and the flare. The emissions will be those set out below:

NO_x: (0.4kg/h) low NO_x burners (John Zink, ZEECO, or equivalent).

CO: (0.3kg/h) Reduced by using modern burners.

CO₂: (1000kg/h)

SO₂: (35kg/h)

The plant will mainly use demineralized water. The need for steam is very small, mainly for cleaning the equipment at stops. Vacuum pumps need no steam, such as conventional ejectors, thus utilizing the best technology in the field.

The cooling needs will be provided by a recirculated water system cooled in a cooling tower. Thus, any leakage of petroleum products will not affect groundwater, being a closed circuit.

All liquid effluents will be treated at the water treatment plant, which includes hydrocarbon separation, chemical treatment and biological treatment.

The reactors in the hydrotreating section require replacement of the catalyst every 6 months. These catalysts will not contaminate the environment but will be sent to the original supplier for regeneration and recycling.

Overall, the plant will contribute to environmental protection by processing approx. 66,000 t / y of hazardous and toxic waste, producing high-quality lubricants.

Sound pollution: All equipment will be purchased to meet the limits imposed by international standards (EEMUA 140 & 141, OSHA, and IEC 651/225/942)

Due to the fact that on the site there are no protected habitats and the species are very few and were observed only in passage or occasional feeding, the proposed project will not have a significant impact on the natural area of community interest.

– Extension of the impact (geographical area, number of population / habitats / species affected);

The disturbance of species of community interest will be more pronounced during the construction stage through site works. During the exploitation period the species will be disturbed minimally.

It is found that the density in the habitat of the community interest individuals is reduced (density below one individual / km²). These data are also confirmed by the results of the monitoring activity carried out in the area.

Due to the impact generated by the proposed activity there is no possibility of changes in the population density.

– Duration, frequency and reversibility of the impact;

Impact of the construction, operation and decommissioning phase

Construction phase

To build the investment, advanced building technologies will be used. There are no large-scale construction works. Certified quality materials will be used to make the investment.

A minimum of access roads and technological platforms will be designed.

This infrastructure will provide efficient access both in the execution and construction phase, as well as in the operation and maintenance phase for the intervention equipment. These roads will be consolidated, ballasted and flattened, the ground from the digging will be scattered, levelled and grass will be sown.

Phases of construction works to implement the plan

The technological phases for achieving the objectives are summarized in the following:

- Making access roads and technological platforms.
- Realization of concrete platforms through:
 - Removal of the plant layer;
 - Excavations for foundations and removal of excavated material;
 - laying the reinforcements, transportation, and casting of concrete;
 - Restoration of the vegetal carpet and fitting of the plant equipment.
- Site transportation and installation of plant equipment
- The greening works by removing all remaining waste from the construction activity, levelling the land and restoring the vegetal carpet, including at the technological platforms.

After the completion of the works and installation of the plant, during the existence and operation of the proposed plan, the site will be freed from waste and scrap material.

Impact on the protected area

During the construction period, the impact on the protected area has the most important negative components in the implementation phases of the plan, manifested by:

- Removal of the vegetation layer from the road site, technological platforms

- Generating waste material from excavations for foundations as well as household waste produced by workers to be eliminated as generated;
- Possible losses of petroleum products from the operation of construction equipment and means of transport;
- Generating powders due to activities in working fractions and transport of materials depositing on the transport corridor and around the site;
- Sound pollution through the operation of construction equipment, material transport activities and workers.

At the moment there is no cumulative impact that generates impact on the protected site.

Operation phase

The impact is given by:

- Land occupancy of the protected area with access roads and plant specific setting
- Generating noise pollution
- Generation of polluting particles in the air
- Impact on soil and groundwater

To avoid the negative effects of noise and vibration on the health of the population in the area, the night rest time will be respected.

Optimum exhaust systems will also be maintained, which also have an anti-noise function.

If necessary, screens made of soundproofing materials will be used to reduce the level of noise in the site.

The impact during the operating period is indirect and does not accumulate in the studied area with the impact generated by other existing activities due to the isolation and specificity of the activity. The plant will have an almost closed circuit for the resulting pollutant emissions.

□ The decommissioning phase

Upon decommissioning of the projected installation the magnitude of the impact is determined by the measures established through the decommissioning project.

The decommissioning project should include the following works:

- Dismantling of existing plant equipment, removal from site and recovery through specialized units;
- Demolition of concrete platform foundations and disposal of resulting waste;
- Earthworks for the decommissioning of access roads in case the competent authorities request it;
- Levelling works and restoration of the vegetal carpet through habitat-specific species.

During the decommissioning works the impact is indirect, short-term, and not cumulative.

– Measures to avoid, reduce, or ameliorate the significant environmental impact;

The measures to reduce the impact of implementing the plan on the habitat and the species of community interest were established in the plan and the appropriate assessment study. The measures are set for each phase of implementation of the plan.

In order to reduce the impact on the habitats and species affected, adequate planning of the construction works will be made to avoid or reduce the disruption of the species or the destruction of nests and shelters

In the case of construction works requiring the removal of shrub formations or areas covered with grass or vegetation specific to the area, these

will be taken and preserved in conditions similar to those in which they have developed outside the area temporarily affected by them, and upon completion, be replanted in the remaining free areas or outside them, where the habitat is not affected.

Impact mitigation measures established during the design phase

At this phase, the important measures to reduce the impact on protected areas in the area are:

- The sites were chosen on land:
- Free of constructions to avoid demolitions;
- Without much forest vegetation to avoid deforestation as much as possible;
- Without requiring additional decommissioning services, relocation of pipelines, which would require construction work with impact on the habitat.

Other measures established during the design phase to reduce the impact on the protected area:

- Access to the site has to be as direct as possible to reduce the length of inner roads and habitat areas occupied by works;
- Access roads must be straight to occupy lesser areas of land;
- Access roads must have a minimum width and their structure to be able to be easily removed at the demolition / decommissioning phases.

Measures to reduce the impact on habitat and species of community interest for the construction period

They are constructive and organizational measures.

- The site organization / the production base will be located outside the protected area to reduce the impact on the habitat
- The lodging of the workers is done upon organization of the site, it is recommended not to be located inside the protected area;

- The utilities to the work front are ensured without additional work, respectively:
- Water supply is provided from the tank and bottled water;
- Every workstation will be equipped with mobile ecological toilets.
- The work fronts will be marked with reflective strips and strictly delimited to prevent undue expansion in adjacent areas;
- The builder who has the most efficient, quieter and lower-weight machines will be preferred;
- The works for the arrangement of the platforms of the access roads, excavations for the foundations and the arrangement of the technological platforms will be made by taking into account the nesting period, reference breeding period in the cold season when the migratory birds would have left.

At the conclusion of the construction works there are works provided for the restoration of the zonal habitat in the areas temporarily occupied by the works for the implementation of the plan, respectively the technological platforms and on the area determined by the plan.

Measures to reduce the impact during the operating period

- Prohibition of the circulation of unauthorized vehicles on the internal roads, measure needed to protect the habitat and the species of community interest, but also to avoid vandalizing the station.
- Performing professional performance work with immediate removal by capitalizing used parts or equipment.
- Lesser and more controlled interventions to preserve the habitat conservation status and not disturb the species of interest in the area.
- Monitoring the impact on habitat and species in order to stabilize the need for additional measures for habitat conservation and protection.

There is a program to prevent and detect gaseous leaks at the plant.

The pumps will be equipped with seals that prevent leakage.

The taps will be equipped with seals that prevent leakage.

All safety valves will discharge to the flare system.

The compressors will be equipped with the latest seals that prevent leakage.

The flanges in the hydrotreating system will be RTJ type, so the most secure in terms of losses

The light products containers will be equipped with breathing valves (instead of air vents).

Tank valves and non-condensing gases will be sent to the flare.

The chemically impure waters will be stripped to eliminate H₂S, which will then be sent to the flare.

All the burners will be of reduced NO_x type.

The reactors in the hydrotreating section require replacement of the catalyst every 6 months. These catalysts will not contaminate the environment but will be sent to the original supplier for regeneration and recycling.

Measures to reduce habitat upon decommissioning

- Decommissioning, provided after the end of the period of operation, is a very important measure for reducing the impact on the protected area.
- They are made based on a dismantling project that involves dismantling the equipment and elimination by capitalization.
- The foundations will be demolished and finally the inner roads followed by the restoration of the habitat.
- The impact of the decommissioning works will be reduced under the conditions of careful works.

- The transboundary nature of the impact

In accordance with the provisions of Annex 1, Law 22/2001 on the ratification of the Convention on Environmental Impact Assessment in a Transboundary Context adopted at ESPOO on February 25, 1991, corroborated

by the fact that the proposed investment is in the proximity of the Romania-Bulgaria border, the investment falls under the incidence of Article 6 "Integrated chemical installations."

The location of the investment is at a distance of 1000 meters from the border between Romania and Bulgaria.

The only environmental factor to be monitored in a cross-border context is the air, the air pollution. The rest of the environmental factors are not affected because the plant is mainly closed circuit, there are no wastewater spills in the Arges or Danube watercourses and the soil is not affected directly in this case.

A model of pollutant dispersion in the atmosphere at different wind speeds was made. This modelling resulted in the fact that there is no significant cross-border impact under the normal operation of the plant. Reducing the amount of suspended particulate matter can be made by using protective shields (screens) to reduce the wind speed in the area of the objective. Also reducing the amount of pollutants will be made by installing high-performance exhaust systems. The temperature at which it operates and the tightness of equipment using oils do not lead to the formation of volatile organic compounds. Of course, for this phase, we can only speak of a theoretical modelling, concrete results being obtained only during the plant testing phase when it is possible to make analyses bulletins of the environmental factors.

IV. Sources of pollutants and installations for the containment, evacuation, and dispersion of pollutants in the environment

1. Protection of water quality:

The water supply will be made from the public network of SC ECOAQUA SA CALARASI, OLTENITA Branch by means of two connections.

Public water will be used:

- For hygienic-sanitary purposes by the employees of the company

- Technologically (steam preparation, cooling of the installation (recirculating water))
- In the laboratory (the recipients used in the laboratory will be rinsed)
- Sanitation of spaces (sanitary groups and canteen - kitchen)
- For cooking and washing dishes - it is desirable to build a canteen only for the employees of the company
- To insure the PSI fire station - a fire tank is provided in order to supply the hydrants, if necessary.

The plant will mainly use demineralized water. The need for steam is very small, mainly for cleaning the equipment at stops. Vacuum pumps need no steam, such as conventional ejectors, thus utilizing the best technology in the field.

The cooling needs will be ensured by a recirculated cooling system cooled in a cooling tower. Thus, any leakage of petroleum products will not affect the groundwater, being a closed circuit.

On site will result the following categories of wastewater:

- Domestic
- From the sanitation of the spaces
- From washing up
- From the laboratory (From rinsing the recipients)
- From gas stripping
- From oil dehydration

The water to be used in the plant will be passed through a softening / demineralization installation before use.

Waste water together with the waters resulting from the sanitation of the premises and the rinsing of the recipients (from the laboratory) will be discharged via an R1 connection into the public sewerage network of SC ECOAQUA SA CALARASI, OLTENITA Branch.

The wastewaters that will result from the dishwashing (from the canteen) will be passed through a grease separator and then discharged together with household and sanitary facilities into the public sewerage network.

Waste water resulting from gas stripping and dehydration of the oil will be passed through a treatment plant before being discharged into the public sewerage network.

Once a year, the water used to cool the plant will also be evacuated. Before discharging into the public sewerage network, they will be passed through the treatment plant.

All liquid effluents will be treated at the water treatment plant, which includes hydrocarbon separation, chemical treatment and biological treatment.

The rainwater will be passed through a hydrocarbon separator and discharged into the public sewerage network via the R2 connection.

Distance from the first house will be about 1 km.

The site is located in a dam area, about 16.5 m above the water level.

2. Air quality protection:

There will be two sources of air pollution, namely the technological furnace and the flare.

The plant will be equipped with a facade for the incineration and dispersion of accidental gaseous emissions, as defined by the IPPC, reference documents for the most advanced technologies in the field of mineral oil refineries.

The main effluent is hydrogen sulphide (H₂S), which will be produced in the hydrotreating plant. The quantity will be very low, below 24 Kg / h. It will be absorbed by the amine plant and then sent to the furnace burner or the flare. The use of MDEA amines is compatible with BAT.

The heat produced in the hot oil heating furnace (heating environment) will come from 1188 t / y of gas produced in the hydrotreating plant, completed with 3212 t/y natural gas.

The emissions will be those set out below:

- NO_x: (0.4kg/h) burners low NO_x (John Zink, ZEECO, or equivalent).
- CO: (0.3kg/h) Reduced by using modern burners.
- CO₂: (1000kg/h)
- SO₂: (35kg/h)

There is a program to prevent and detect gaseous leaks at the plant.

The pumps will be equipped with seals that prevent leakage

The valves will be equipped with seals that prevent leakage

All safety valves will discharge to the flare system.

The compressors will be equipped with the latest seals that prevent leakage.

The flanges in the hydrotreating plant are of the RTJ type, therefore the most reliable in terms of losses.

The lightweight products containers will be equipped with breathing valves (instead of air vents)

The tank valves and non-condensing gases will be sent to the flare.

The chemically impure waters will be stripped to eliminate H₂S, which will then be sent to the flare.

All burners will be of reduced NO_x type.

The reactors in the hydrotreating section require replacement of the catalyst every 6 months. These catalysts will not contaminate the environment but will be sent to the original supplier for regeneration and recycling.

3. Protection against noise and vibration:

Observing the level of the sound level within the maximum admissible limits at the functional area limit, according to STAS 10009-88.

- Noise level at the limit of the functional area
 - Equivalent noise level $L_{ech} = 65$ dB (A)
 - Value of the noise curve $C_z = 60$ dB
- Noise level inside the functional area
 - Equivalent noise level $L_{ech} = 70$ dB (A)
 - Value of the noise curve $C_z = 65$ dB
 - Avoiding as much as possible collisions, unnecessary blows in operations: mechanical, loading - unloading of raw materials and materials, etc.
 - Organizing the work schedule so that no overlapping of the noise generating operations occurs;
 - All noise generating machines are located in closed spaces and are fixed to the base to reduce noise and vibration.

4. Radiation protection

Sources of pollution

The activity of the company does not involve the production or use of radioactive materials.

Impact on the environment

Not applicable.

Protection measures.

Not necessary.

5. Soil and subsoil protection:

Soil and subsoil pollution occurs due to the removal of the soil layer for the construction site.

Various materials are deposited on the soil that affect its quality due to debris and dust remaining after use.

Another source of soil pollution is the leakage of petroleum products, diluents, primers and paints and other technological waste to which uncontrolled household waste can be added.

Soil protection is achieved by soil recovery and temporary storage for use in the ecological recovery process of the exploited area.

Proper storage of materials on specially arranged surfaces and recovery of unusable residues are also ways to protect soil quality.

Spills of oil products can be avoided by permanent control and operational troubleshooting of occurred defects.

Protection measures

Pre-storage of wastes to be carried out in containers placed in appropriate spaces and sheltered from weather (rain, snow).

The handling and storage of the raw materials should be done according to the legislation in force, in specially arranged areas, thus preventing soil and subsoil pollution.

6. Protection of terrestrial and aquatic ecosystems:

The site studied, according to OM no. 776/2007 is located at a distance of about 7 m from the site of community importance RO SPA 0038 - Danube - Oltenita.

The site ROSPA0038 Danube-Oltenita is located on the Danube between kilometre 451 and kilometre 430, is situated in the southern part of Romania, in the Danube floodplain.

Includes both the Danube section between the settlements of Greaca, Cascioarele, Oltenita, and the agricultural land that is part of the dammed

enclosure Greaca-Argeş-Chirnogi. The geographic coordinates are 26° 29' 4" Eastern longitude and 44° 3' 48" Northern latitude. It covers an area of 5927 hectares. The average altitude of the territory is 15 m. The largest part is in Calaraşi County, only 5% belongs to Giurgiu County.

The purpose of designating the ROSPA0038 Danube-Oltenita Site is to conserve the species of wild birds existing within its perimeter, to maintain / restore the favourable conservation status of bird species of Community interest and their specific habitats.

The special protection for avifauna area RIFPA0038 Danube-Oltenita - hereinafter referred to as ROSPA0038 Danube-Oltenita - is a protected natural area of community interest - special protection area category according to 2009/147 / EC of the European Parliament and of the Council of 2009 on conservation of the wild birds designated by the Government Decision no.1284 / 2007, declaring the special avifauna protection areas as an integral part of the Natura 2000 European ecological network in Romania, modified and supplemented by the Government Decision no. 971/2011.

The location of the proposed project is not included in the area of community interest.

There are no habitats of community interest on the site. The characteristic habitat is arable land and bushy vegetation.

No nests and no other clues have been observed to prove that there are protected nesting species on the field.

7. Protection of human settlements and other public interest objectives:

Economic development of the activity on ecological criteria is required based on a sustainable development plan to ensure the protection of human settlements.

The land proposed for the investment is located outside the built area of the locality, at a distance of over 770 meters from the first dwellings, thus not

being of nature to affect the residential area through the presence of the industrial constructions and the current activities.

8. Waste management generated on site:

The waste resulted during the execution period will come mainly from the plant building processes, being in small quantities considering the fact that the main raw material is represented by the building ballast which is a natural material without environmental impact.

With regard to household waste, they will be made up of paper, polyethylene bags / foils, PET packaging, organic matter (food scraps) resulting from the executive personnel.

Selective waste collection is required by performing the following procedures:

- Arranging the collection places, purchasing and endowing with the necessary logistics (machines, machines, bins of different sizes and colours for all categories of collected waste) and organizing collection in a centralized system from the source.
- Separation of waste
- Standardization of waste collection and transport systems:
- Types of waste containers and their location
- Collection containers
- Transport vehicles.

Their collection will be carried out in specially designed bins. Disposal will be made at the nearest household waste disposal facility, through the care of the contractor, based on a firm contract with the warehouse manager.

From the point of view of the bins, separate ones must be provided for each type of resultant waste. The size of the bins should be 1.100 litres, with

slots and lockable lids to prevent them from being open. Four or five bins of 1,100 litres should provide the necessary for recycling.

Placement of bins should be done carefully, taking into account the easy access to them, both by the people and by the collection vehicles, in any kind of weather. The bins should be placed on a solid platform with a three-sided edging and access to the side of the road so that the collection operators can move the bins to the vehicles and stop the vehicles with their backs next to bins.

Areas where the bins are placed must be kept clean (to ensure that operators collect the litter that has been thrown around them), must be illuminated and covered to avoid rain, for example.

During the operating period, the areas where the bins are placed must be kept clean (to ensure that the operators collect the garbage that has been thrown around them), must be illuminated and covered to avoid the rain, for example. It is necessary to install separate bins for each type of waste: biodegradable (household), paper, plastic, etc.

For easy identification, use the bins marked with the type of waste that can be collected. This way, the staff is notified about how the waste is disposed. The bins must adhere to the color code and be placed on the concrete platform in a landfill site.

The dangerous waste will be provided with special, secure containers, which will be stored separately in a specially designed space. Liquid wastes containing dangerous substances will be collected in cubitainer containers, secured with a sand bed tray under each container to prevent soil pollution by dangerous substances.

All liquid effluents will be treated at the water treatment plant, which includes hydrocarbon separation, chemical treatment and biological treatment.

Reactors in the hydrotreating section require replacement of the catalyst every 6 months. These catalysts will not contaminate the environment but will be sent to the original supplier for regeneration and recycling.

9. Managing toxic and dangerous substances:

Within the company there will be activities that will involve the use of toxic and dangerous substances. All chemicals used will be procured only from authorized suppliers for which a monthly register will be kept.

The holder of the activity will prove to the competent control authorities that it will take all measures, in accordance with Law 59/2016, to prevent major accidents involving dangerous substances.

Compliance with the legal norms regarding the informing of its own personnel on the security measures and actions required in case of a major accident, as well as informing the territorial authorities for civil protection and the territorial public authorities for environmental protection in case of major accident with toxic and dangerous substances according to Law 59 / 2016.

It is also necessary to appoint within the unit a security management officer to follow up and ensure the fulfilment of the obligations stipulated in the Law 59/2016.

The holder of the activity will have the obligation to inform the county environmental protection agencies through the Risk Secretariat (SRAPM), in case the following changes occur:

- Significant increase in quantity or significant change in the nature or physical state of the dangerous substance present, or the occurrence of any change in the processes in which this hazardous substance is used;
- Permanent closure, temporary shutdown, or storage of the facility;
- Changing the activity holder.

V. Provisions for environmental monitoring:

– Equipment and measures to control emissions of pollutants into the environment.

Emissions of particulate matter are highest in the construction phases. Also, dust emissions grow in hot weather and prolonged drought.

Reducing the amount of suspended particulate matter can be done by using protective shields (screens) to reduce the wind speed in the area of the objective and by periodically wetting the work surfaces and the connection surfaces inside the site.

Calculation of the mass flow of exhaust gases from exhaust gases from machinery under peak conditions was done using a combined methodology AP-42 Corinair- Copert.

The results obtained are as follows:

Pollutant	Emissions (g/h)
NOx (ca NO2)	38,5
CO	26,8
COVmm	32,6
Particles	18,4
SOx (as SO2)	2,83

The reduction of the amounts of pollutants from the compression ignition engines equipped with the working and transport equipment are equipped is achieved by adjusting them accordingly.

For machinery that only works on the site it is necessary to check and periodically fine tune the gas supply and exhaust circuits for compliance with the provisions of the law on the air quality conditions in the protected areas.

For dumpers, road tractors and other transport equipment circulating on public roads, the verification and adjustment of exhaust gases is an obligation imposed by the legislation on public road traffic.

Under proper settings, emissions from transport vehicles inside the yard are higher due to idle, very low speed traverses frequently interrupted by different obstacles, reverse driving, and ramping.

For the assessment of the quantities of gas emissions are taken into account specific elements such as the type of engine, the existence or not of the catalytic

converter, the type of fuel used, the size of the ramps, the waiting time, the duration of idling and idling with the engine at high speed.

All of these elements compete with the level of pollutants and require a thorough analysis of the real situation.

Emissions of pollutants into the atmosphere are subject to dispersion phenomena, which occur simultaneously with emissions.

In general, air movement in the surface layer of the soil is characterized by the turbulent transport of air masses.

Interaction of a mass of air with the surface of the earth at some point results in the appearance of three movement components that vary in random and continuous time.

The fluctuation is the engine of the dispersion phenomenon amplified by the turbulence that manifests itself in both the horizontal and the vertical direction.

The pollutant dispersion in the air in the area of maximum influence as well as the qualitative changes occurred or recorded in the air quality were interpreted by mathematical modelling using a Gaussian model.

The model uses as data the following: pollutant emissions - amount of pollutant emitted per unit of time, exhaust height, gas temperature and velocity, and meteorological factors - wind speed, degree of thermal stratification of the atmosphere.

The dispersion of activities in the perimeter of exploitation does not allow the adoption of the solutions for the purification and the collection of gases in the atmosphere, with fixed installations.

Instead, within the objective will be adopted technical and organizational measures, to minimize the pollution of the atmosphere, by proper maintenance of the equipment, their regular inspection and replacement of the ones with major deficiencies.

All transport vehicles and dump trucks will be equipped with Euro 4 engines, which are in line with the international regulations on pollutant emanations in the atmosphere during operation.

Ensuring the operation of the vehicle engines at normal parameters, their rational use (avoiding speed and load overloads) and observing the operating methodology, will lead to maintaining the level of the exhaust gases produced below the allowed limits.

In terms of dust, emissions produced in the atmosphere, through the traffic of vehicles, after the start of operation, they cannot reach high concentrations, harmful to environmental factors.

□ Measures to mitigate the impact during the execution period

Air pollution is due to manoeuvring and transporting construction materials, plus excavation works for the foundation of the pillars; It is recommended to dampen the access roads in dry periods in order to limit the release of dusts.

It is recommended that the machinery and the means of transport be subject to the technical revisions, and the fuel supply to be made in compliance with the conditions for the protection of environmental factors (soil and air). It is most advisable for the transport equipment to get fuel at PECO stations.

The sources of pollution of the atmosphere associated with the activities that will take place in the studied site are free, open sources, having other particularities than the sources related to industrial or similar activities. As a result, there can be no question of installations for catching - purification - discharge into the atmosphere of the contaminated air / waste gases.

The problem of installations for waste gas catching - purification and the retention of the powders appears for the cement concrete preparation plants, which must be carried out in off-site concrete plants.

The installation of catching -purification systems (particle retention) is required for cement silos with bag filters (with vibration-shaking recovery) are provided - efficiency of 99.9%.

In order to reduce particulate emissions from the cement plants, it is recommended to use modern technology installations that are less polluting.

As far as emissions from motor vehicles are concerned, they must comply with the technical conditions laid down in the technical inspections that are carried out periodically throughout the period of use for all vehicles registered in the country. To limit air pollution in the area adjacent to the perimeter of operation due to the operation of internal combustion engines (machines and gravel machines), Euro 4 engines will be purchased and measures will be taken to reduce the wear of these engines, and they will undergo regular repairs.

Harmful gas emissions measurements will be carried out during equipment and machine operation, and the vehicles with major deficiencies will be replaced.

For the winter period, the machine and transport fleets will be equipped with starting electric robots to avoid evacuation of exhaust gases during long or difficult starts. Such installations will also be provided at the work stations.

The equipment and means of transport will be periodically checked for carbon monoxide and exhaust emission levels and will be put into operation only after faults have been rectified.

It is recommended to only use means of transport equipped with Diesel engines that do not produce Pb emissions and very little carbon monoxide.

Fuelling the means of transport will be done only off-site.

Technological processes that produce a lot of dust, such as earthworks, will be reduced during strong winds, or a more intense wetting of surfaces will be performed.

Temporary landfills must be limited to max. 2 m height.

Site roads will be permanently maintained by levelling and spraying with water to reduce dust. In the case of the transport of earth, the routing should be provided as far as possible on the body of the filling so that on the one hand they get a further compaction and on the other hand to reduce the area of dust and exhaust emissions. The transportation of the excavated earth must be carried out in means of transport covered by tarpaulins.

Operating period:

There will be two sources of air pollution, namely the technological furnace and the flare.

The plant will be equipped with a flare for the incineration and dispersion of accidental gaseous emissions, as defined by the IPPC, reference documents for the most advanced technologies in the field of mineral oil refineries.

The main effluent is hydrogen sulphide (H₂S), which will be produced in the hydrotreating plant. The quantity will be very low, below 24 Kg / h. It will be absorbed by the amine plant and then sent to the oven burner or flare. The use of MDEA amines is compatible with BAT.

The heat produced in the hot oil heating furnace (heating environment) will come from 1188 t / y of gas produced in the hydrotreating system, supplemented with 3212 t / y natural gas.

The emissions will be those set out below:

- NO_x: (0.4kg/h) burners low NO_x (John Zink, ZEECO, or equivalent).
- CO: (0.3kg/h) Reduced by using modern burners.
- CO₂: (1000kg/h)
- SO₂: (35kg/h)

There is a program to prevent and detect gaseous leaks at the plant.

The pumps will be equipped with seals that prevent leakage

The taps will be equipped with seals that prevent leakage

All safety valves will discharge to the flare system

The compressors will be equipped with the latest seals that prevent leakage

The flanges in the hydrotreating system will be RTJ type, so the most secure in terms of losses

Lightweight products containers will be equipped with breathing valves (instead of air vents)

Tank valves and non-condensing gases will be sent to flares

The chemical impure waters will be stripped to remove H₂S, which will then be sent to flare

All burners will be of reduced NO_x type

The reactors in the hydrotreating section require replacement of the catalyst every 6 months. These catalysts will not contaminate the environment but will be sent to the original supplier for regeneration and recycling.

The legal regulations in force do not provide emission standards for ungrounded and free sources. Regarding mobile sources, emission standards for road vehicles are laid down and their observance is the responsibility of the owners of the vehicles that will be involved in the road traffic.

➔ Measures to mitigate the impact during the exploitation period

Reducing the amount of suspended particulate matter can be done by using protective shields (screens) to reduce the wind speed in the area of the objective. Also reducing the amount of pollutants will be done by installing high-performance exhaust systems.

The operating temperature and tightness of equipment using oils do not lead to the formation of volatile organic compounds.

VI. Justification of the project classification, as the case may be, in the provisions of other national legislation transposing the Community legislation (IPPC, SEVESO, VOC, LCP, Water Framework Directive, Air Framework Directive, Waste Framework Directive etc.)

The project is subject to the industrial emissions law 278/2013. In accordance with Annex 1 to Law 278/2013, the refining of used oils is included in Article 5 "Waste management; Point 5.1. Elimination or recovery of hazardous waste with a capacity exceeding 10 tons per day, point j - re-refining or other re-use of oils".

In accordance with the provisions of Annex 1, Law 22/2001 on the ratification of the Convention on Environmental Impact Assessment in a Transboundary Context adopted at ESPOO on February 25, 1991, corroborated by the fact that the proposed investment is in the proximity of the Romania-Bulgaria border, the developed investment falls under Article 6 "Integrated chemical installations." The distance to the Bulgarian border is 1000 m.

VII. Works needed to organize the site:

- Description of the work required for the site organization;

Temporary occupation of the land will be determined by the requirement of arranging the premises of the site or the production facilities (i.e. the offices adjacent to the analysed objectives, a short period of reversibility after the completion of the works and the restoration of the site, the material storage), the access roads for the transport of raw materials.

The Contractor will not be allowed to work beyond the given limits except in exceptional circumstances and with the written approval of the environmental authority.

Facilities for storage of raw materials needed for construction, accommodation of workers, ecological toilets, platform for collecting household waste from workers and those resulting from constructions will be arranged.

- Location of site organization;

The site will be established in the perimeter studied in Oltenita

- Description of the environmental impact of site organization work;

Sources of pollution during site organization are mainly on the soil by occupying surfaces with specific elements and waste disposal. Also atmospheric emissions from the transport of raw materials and the specific elements of the organization

of the site. The impact of the works is temporary and it ceases when the site works are finished.

– Equipment and measures to control emissions of pollutants into the environment.

In the construction phase the impact on the soil environmental factor can be diminished by:

Carrying out the works in a rigorous manner according to the project, observing the succession of construction phases, allowances and all the elements provided by the designer;

Carefully handling, according to the regulations, the substances, materials and fuels used for the works;

Sealing any fuel and fuel storage tank (fuelling is recommended to be done off-site);

Prohibiting repairs to machinery and vehicles operating in derelict areas or other areas where underground drilling may occur for various products that are pollutants;

Washing the machines and vehicles outside the areas destined for this type of activity;

The immediate removal of the soil layer if local pollution has been identified, thus eliminating the possibility of infiltration of substances in the underground and its storage in containers until depolluting;

Achieving an appropriate site organization in terms of facilities and environmental protection;

Providing ecological toilets for site staff and workstations;

Within the site a drainage of the meteoric waters must be provided, which wash a large surface, on which various substances may exist from the eventual losses, in order not to form pits which in time can infiltrate underground, polluting the soil and the groundwater aquifer;

Avoiding the degradation of adjacent areas to existing sites and vegetation, from adjacent perimeters, by stationing equipment, repairing, storing materials, etc.;

Collecting all wastes resulting from the construction activity and, where appropriate, capitalizing on them;

Avoiding fuel losses when stacking construction equipment in tanks or their connecting pipes; In this regard, all used construction and transport equipment will be first checked carefully.

It is also necessary that work platforms, concrete preparation platforms, and other equipment necessary for the construction period be carefully arranged so as not to affect the soil and the underground.

For the construction period funds are provided and the constructor's obligation to achieve all environmental protection measures for the polluting or potentially polluting activities (production bases, material deposits, site organization).

Contracting conditions will have to include specific measures for the management of wastes produced at sites to avoid soil pollution.

Among these are the following:

The use of any toxic substances in the construction process will be done only after obtaining the necessary approvals, depending on their characteristics, including the storage measures.

The storage of flammable or explosive substances shall be done in strict compliance with specific legal requirements.

Manipulation of paints and fuels or other chemical substances, so as to avoid their scattering and spreading on the soil.

Proper transport and storage of construction waste, avoiding losses on the route and choosing the appropriate warehouse.

The constructor also has the obligation to ecologically rebuild the occupied or temporarily affected land.

In the case of accidental spillages of polluting substances, rapid intervention measures will be taken by spreading sand, removing the surface layer of affected soil and evacuating it to hazardous waste landfills.

The monitoring of the construction works will ensure the adoption of the necessary measures for the protection of the environment.

VIII. Site restoration work upon completion of the investment in the event of accidents and / or cessation of activity, to the extent that this information is available:

The ecological reconstruction is the process of recreating or restoring an ecosystem that is undergoing regression and which consists in restoring the structure to its original form and previous functions.

The duration of operation is at least 49 years according to the concession contract concluded with Oltenita City Hall, with the possibility of extending it.

Upon depletion of the service life the beneficiary may choose one of the following alternatives:

Rehabilitation of installations by dismantling and replacing used equipment with new and new generation equipment;

Decommissioning of the objective.

The decommissioning works consist of:

- Dismantling the plant;
- Dismantling of reinforced concrete foundations;
- The capitalization of metal or some of the equipment;
- Removal / disposal of all demolition waste;
- Demolition of access roads (if the local authorities request it);
- Restoration of the land through fillings and levelling;
- The restoration of the vegetal carpet with the existing species in the adjacent areas.

The mentioned works will be subject to a decommissioning project and will be carried out in accordance with the requirements of the competent authorities, based on the observance of the rules in force.

IX. For the projects for which, in the initial evaluation stage, the competent environmental protection authority has decided the necessity of starting the appropriate evaluation procedure, the report will be completed with:

- a) The succinct description of the project and the distance from the protected natural area of community interest
- b) The name and code of the protected natural area of Community interest;
- c) Presence and herds / areas covered by species and habitats of community interest in the project area;
- d) It shall be specified whether the proposed project has or not a direct connection with, or it is unnecessary for the management of the conservation of the protected natural area of Community interest;
- e) The potential impact of the project on the species and habitats in the protected natural area of Community interest will be estimated;
- f) Other information provided in the Methodological Guidelines on Appropriate Assessment.

The site studied, according to OM no. 776/2007 is located in the vicinity of the European ecological network Natura 2000, 7 m from the site of community importance RO SPA 0038 - Danube - Oltenita.

The site ROSPA0038 Danube - Oltenita is situated on the Danube between kilometre 451 and kilometre 430, it is situated in the southern part of Romania, in the Danube floodplain.

Includes both the Danube section between the Greek, Căscioarele and Oltenița settlements, as well as the agricultural land that is part of the dammed enclosure Greaca-Argeș-Chirnovi. The geographical coordinates are 26° 29' 4"

Eastern longitude and 44° 3' 48" Northern latitude. It covers an area of 6022 hectares. The average altitude of the territory is 15 m. The largest part is in Calarasi County, only 5% belongs to the Giurgiu County.

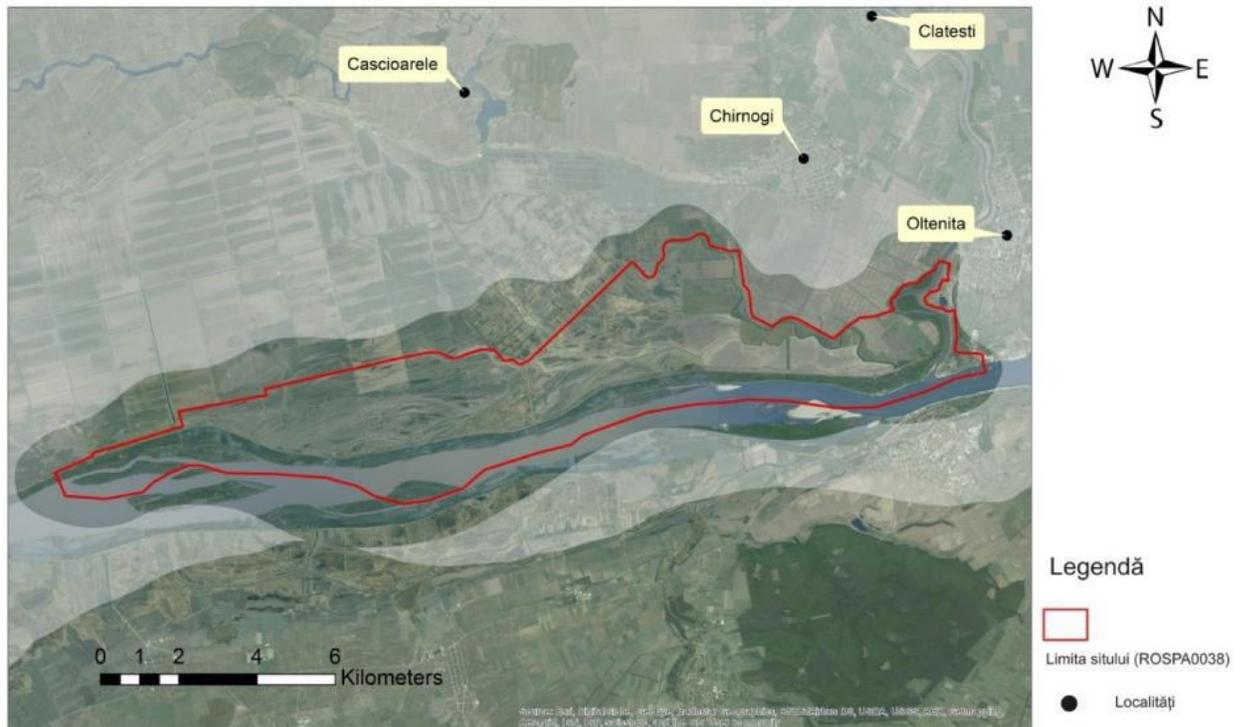
On the eastern side of the site is the town of Oltenita, on the banks of the Arges River, which is included in the site.

The northern area of the site can be accessed from the Chirnogi locality on DN41-Oltenita-Giurgiu-, following local roads to the Danube. Access can also be made on the Danube, upstream of Oltenita. The site is administratively located in Prundu - Giurgiu County, Chirnogi, Oltenita - Calarasi County.

The purpose of designating the ROSPA0038 Danube-Oltenita site is to conserve wild bird species within its perimeter, to maintain / restore the favourable conservation status of bird species of Community interest and their specific habitats.

ROSPA0038 Danube-Oltenița avifauna Special Protection Area - hereinafter referred to as the ROSPA0038 Danube-Oltenița Site - is a protected natural area of Community interest - special protection category area according to Directive 2009/147 / EC of the European Parliament and of the Council of 2009 on Conservation Of the wild birds designated by the Government Decision no.1284 / 2007, declaring the special protection areas of avifauna as an integral part of the European ecological network Natura 2000 in Romania, amended and supplemented by the Government Decision no. 971/2011.

The ROSPA0038 Danube - Oltenita site is in the IV management category, areas for the management of species and habitats.



The ROSPA0038 Danube-Oltenita site partially overlaps with the community interest protection site ROSCI0088 Gura Vedei-Șaica-Slobozia.

Near the ROSPA0038 Danube-Oltenita site are the following areas of special avifaunistic protection: Oltenița-Ulmeni ROSPA0136, Comana ROSPA0022, Ostrovu Lung - Gostinu ROSPA0090, Vedeia Dunăre ROSPA0108, Oltenița –Mostiștea- Chiciu ROSCI0131.

The ROSPA0038 Danube-Oltenita site is part of the continental bioregion.

The ROSPA0038 Danube-Oltenita site contains the following categories of ecosystems:

- a) agricultural ecosystems
- b) water ecosystems
- c) pasture ecosystems
- d) forest ecosystems

All of these ecosystems categories have their role within the Natura 2000 site, providing food, shelter and / or nesting habitat for bird species.

There are no habitats of community interest on the site. The characteristic habitat is anthropic agricultural land type.

No protected species, nor nests have been observed in the development area of the future project. The species observed in the perimeter were observed during feeding or passage.

As a conclusion, the area is not of interest for the bird species for which the site was designated, they do not use it either during the nesting period or in other seasons as it is a predominantly degraded area.

The habitats present in the studied site are included in the Natura 2000 standard form at the conservation stage C - medium or low conservation.

Taking into account the degree of conservation of the habitat type structures and functions, as well as the possibilities of restoration, it can be considered that in the studied area the site has a medium / partially degraded structure.

From the point of view of the Natura 2000 site, the proposed project is not on its area, and no protected nesting species have been identified on the site. Most of the protected species observed following the monitoring of the area were species in the passage. Bird populations are reduced due to the unfavourable conditions of the studied territory characterized by a strong anthropic influence.

During the exploitation period, the impact on the environment will be insignificant as the unit will be closed circuit and no wastewater will be discharged into the natural environment, there will not be any emissions into the atmosphere, which are taken over by the exhaust systems equipped with high performance filters.

The impact of the operational phase on the integrity of the Natura 2000 site is insignificant due to the fact that there is no loss of habitats of conservative interest, no habitat fragmentation, no loss of habitat surfaces used for food, rest and reproduction needs of species Community interest.

The impact of the operational phase on the state of conservation of the species of Community interest for which the Natura 2000 site was declared is insignificant.

The cumulative impact on the conservation status of species of community interest in the Natura 2000 site is insignificant.

The impact of pollutant emissions on the environment and especially on species of community interest is reduced due to the use of state-of-the-art technology through the installation of advanced filters, the re-circulation of technological water, the installation of wastewater pre-treatment plants.

The bird species will be monitored continuously throughout the project and after its completion to track whether there will be changes in population dynamics and numerical evolution.

X. Clarifications on the environmental impact of the project requested by the Ministry of Environment and Water of the Republic of Bulgaria:

1. Proof of compliance with all the requirements of Directive 2010/75 / EU on industrial emissions in particular - emissions from waste incineration to prevent a potential negative impact such as emissions and odours:

Emissions data from combustion gases:

The hydrotreating includes two sources of exhaust fumes, namely the boiler and the flame.

Emissions from the boiler:

Composition of combustion gasses:

Co₂ = 21,2 kmol/h, 7,62% vol, 932 kg/h

H₂O = 49,2 kmol/h, 17,70% vol, 885 kg/h

N₂ = 197,9 kmol/h, 71,23% vol, 5542 kg/h

SO₂ = 1,2 kmol/h, 0,45% vol, 80 kg/h

O₂ = 8,3 kmol/h, 3% vol, 267 kg/h

Total = 277,9 kmol, 100% vol, 7,706 kg/h

The H₂S concentration in the burning gases is 16 mg / Nm³, which is below the permissible limit. The chimney is located on the top of the boiler and the exhaust is at 31 m. The burning gas velocity is 8,2 m / s.

Emissions from combustion flame:

Under normal operating conditions:

Co₂ = 0,273 kmol/h, 8,28% vol, 12 kg/h

H₂O = 0,564 kmol/h, 17,10% vol, 10,1 kg/h

N₂ = 2,361 kmol/h, 71,62% vol, 66,1 kg/h

SO₂ = 0 kmol/h, 0 % vol, 0 kg/h

O₂ = 0,099 kmol/h, 3% vol, 3,2 kg/h

Total = 3,296 kmol, 100% vol, 91,4 kg/h

Under emergency conditions:

Co₂ = 111,955 kmol/h, 4,81% vol, 4926 kg/h

H₂O = 527,331 kmol/h, 22,65 % vol, 9492 kg/h

N₂ = 1607,326 kmol/h, 69,05% vol, 45005 kg/h

SO₂ = 11,274 kmol/h, 0,48 % vol, 722 kg/h

O₂ = 69,832 kmol/h, 3% vol, 2235 kg/h

Total = 2327,718 kmol, 100% vol, 62379 kg/h

The flare height is of 28 m, and the exit speed during maximum heat release is 120 m / s. Heat radiation intensity in the perimeter about 15 m around the flare base is 1.7 kW / m², which includes solar radiation in that location in July. This thermal radiation is safe for the permanent human presence.

Burning gases from the boiler are within the permissible limits for SO₂, NO_x and other parameters, therefore no treatment is required for them.

As for the generation and control of the smell:

The hydrotreating unit has the following characteristics in terms of emissions to the environment:

- There is no open exhaust directly into the atmosphere. All vapours effluents are sent to the fuel system or the burners. In case of trouble, they are temporarily switched to the flare system.
- All safety valve outlets that can release anything other than water or steam are connected to the flare system
- The only liquid effluent is the contaminated water. Removed vapours are sent to an incinerator

Therefore, normally odours are not expected, except in the case of leakages and abnormal situations. To avoid odour emissions, the following rules must be observed:

- Carefully and frequently check for small leaks from potential leak points. It is very important that after the maintenance has been interrupted, the pressure is raised and leakage checked at approximately 10 bar intervals. Under normal operating conditions, a small leak always contains hydrogen sulphide, easily detected due to odour, before it becomes dangerous. The unit is equipped with H₂S detectors at certain points, which will alert if a leak occurs.
 - During a failure emergency, minimize the vapours flare-shifting time. If the power does not resume after an hour, lower the temperature, then follow the unit shutdown procedure and lock out the outputs to the flare
 - The waste water installation shall be provided by a suitable supplier and designed to avoid open surfaces which are a source of odour emissions.
2. Modelling and presenting the results for the intended transfer of pollutants to the ambient air in the territory of the Republic of Bulgaria during the construction and operation of the installation in the most inappropriate weather conditions and specifying the necessary and applicable implementing measures that should be implemented to ensure the air quality standards will not be exceeded in the territory of the nearest town on the territory of Bulgaria - Tutrakan.

Pollutant dispersion in the air

Determination of the concentration fields of the pollutants in the atmosphere was performed with the CLIMATOLOGICAL model based on the Gaussian solution of the diffusion equation.

Model input data:

- Characteristics of pollutant emissions:
 - The amount of pollutant emitted into the atmosphere in the time unit
 - The temperature of the exhaust gases
 - Gas exhaust speed
- Physical parameters of the sources:
 - Height
 - Diameter or emission area
 - Meteorological parameters - in the form of frequency function $\Phi(k, l, m)$ of the triplet wind direction, wind speed class, and stability class, established on long data streams (multi-year), ambient temperature
- Calculation grid:
 - The coordinates of the sources in relation to the established origin of the grid
 - Calculation step
 - Grid size (maximum distance to which calculations are made)

The model allows the average concentration of the pollutant to be calculated at any point at certain distances from the source / sources, taking into account the contribution of all the sources. As a result, it is possible to calculate the concentrations around an area around the source. For this purpose, the area of interest is delineated, and on its surface a grid, of a regular square, is set, whose nodes are the receptors.

The number of nodes and the pitch of the grid are chosen according to the source's characteristics, the area of interest, and the issues to be answered. The grid will have an origin and a coordinate system with the Ox axis to the east and the Oy axis to the north, according to which the coordinates of the sources and the nodes are established.

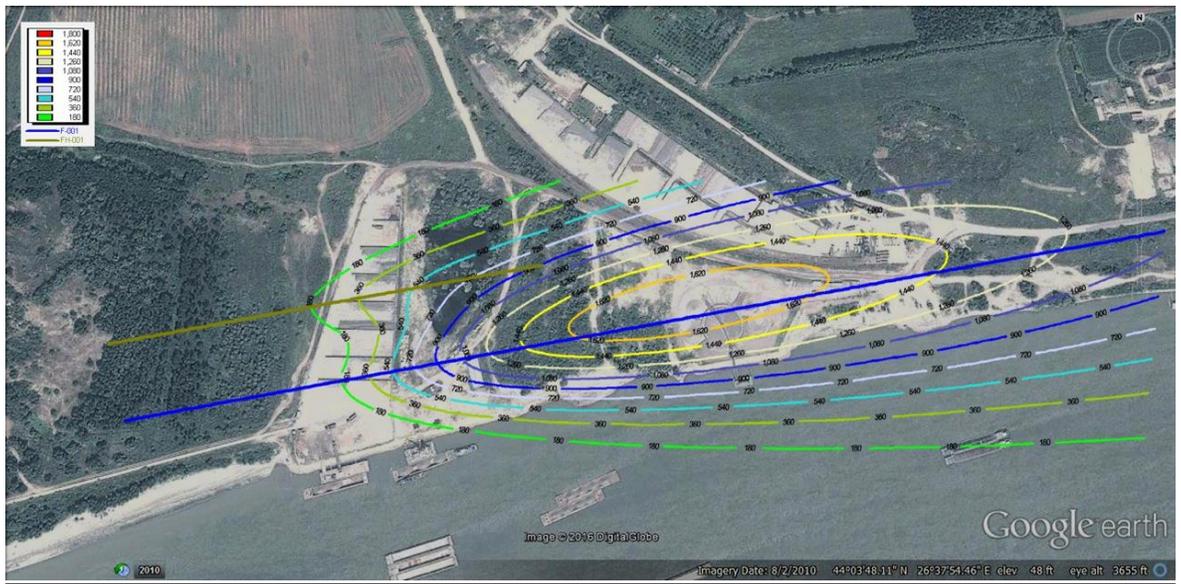
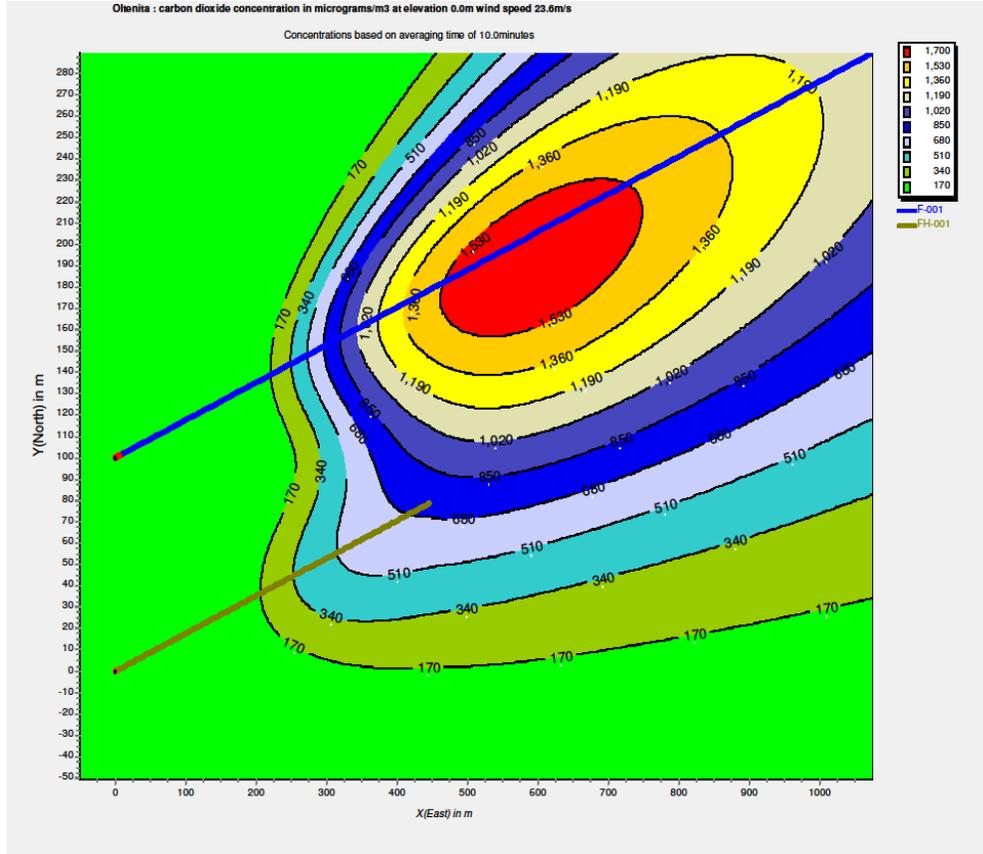
Model **output data** (outputs):

- The maximum values of short-term mediated concentrations (30 minutes)
- Annual CMA overrun frequencies for 30 minutes (%)
- Average annual concentrations.

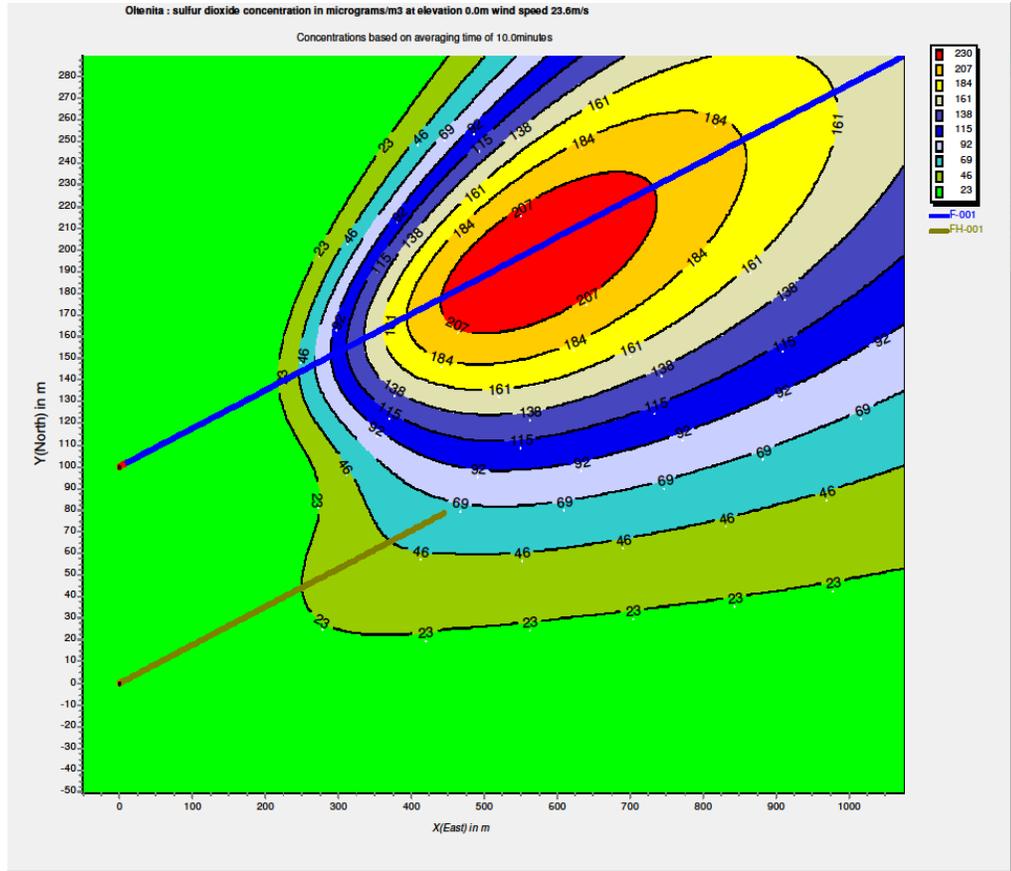
Depending on the functioning of the sources, changes in the functional parameters thereto, the model can be adapted in order to obtain the mediation of the concentrations for other time intervals (month, season).

The results of the concentrations of pollutants can be obtained as iso-concentration curves (equal concentration) of pollutants and curves of equal frequency of CMA overrun for 30 minutes, superimposed over the map of the studied area.

The selection of the values of the iso-concentration curves represented on the map is done so that the impact on atmospheric pollution is very well documented: drawing the iso-line of a value equal to CMA (if reached) or other guide values, drawing iso-lines passing through protected areas (houses, schools, hospitals, natural or architectural monuments, etc.).

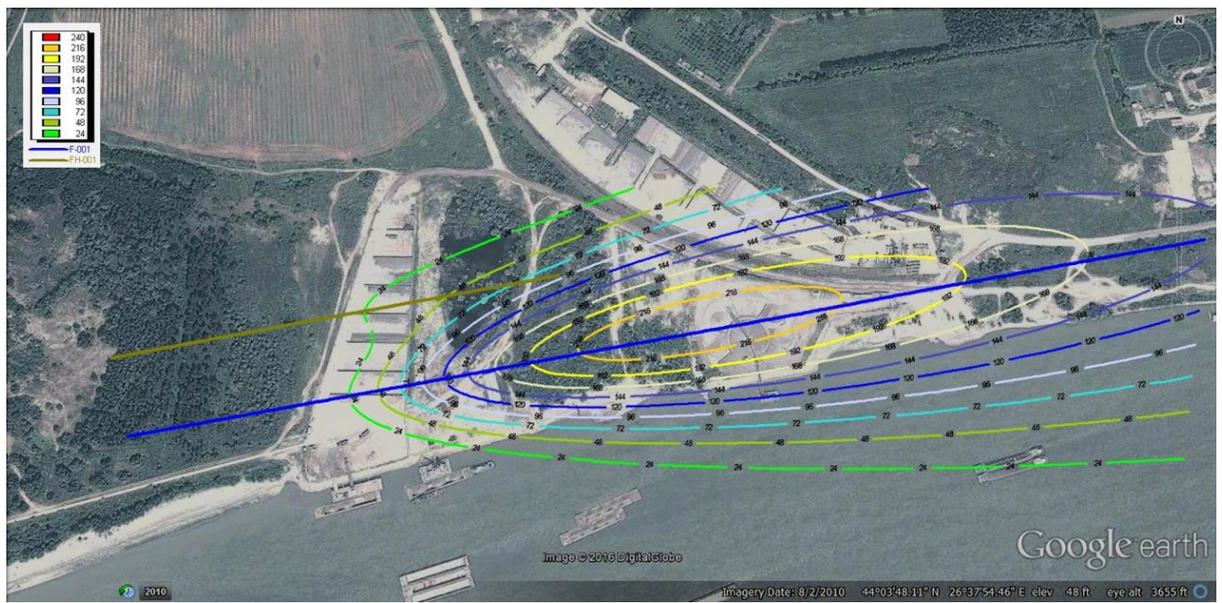


CO dispersion at wind speed of 23,6 m/s

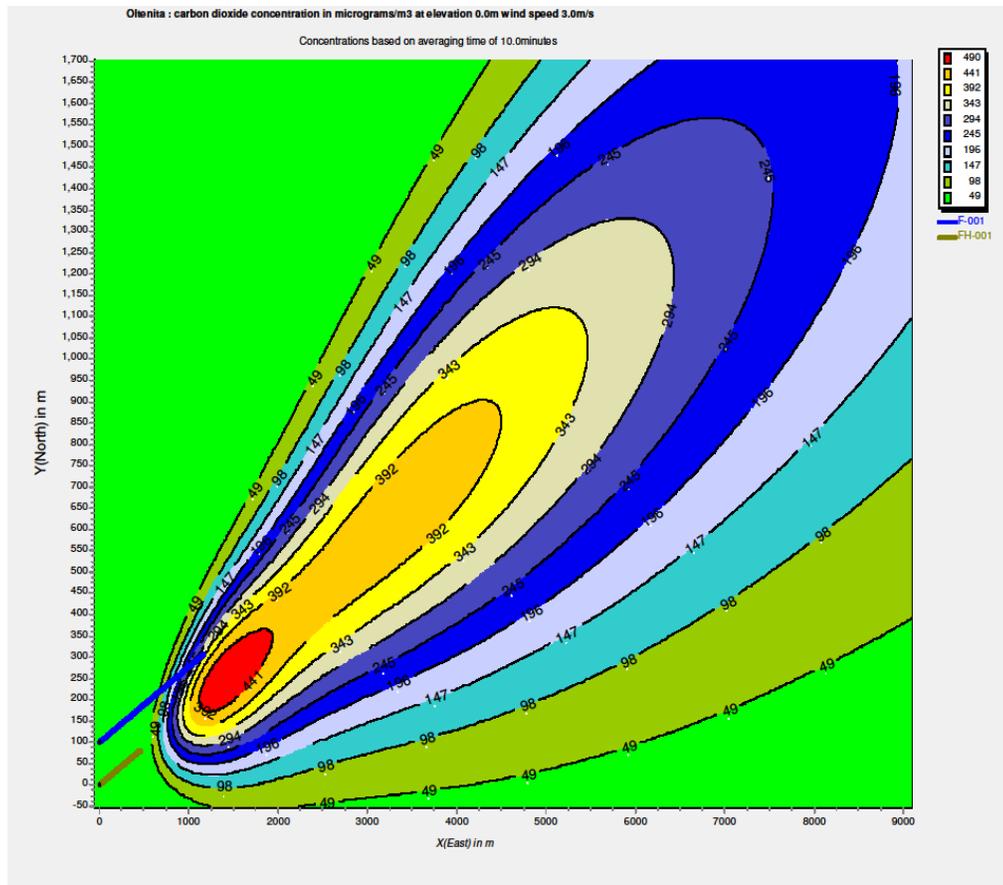


FLARETOT

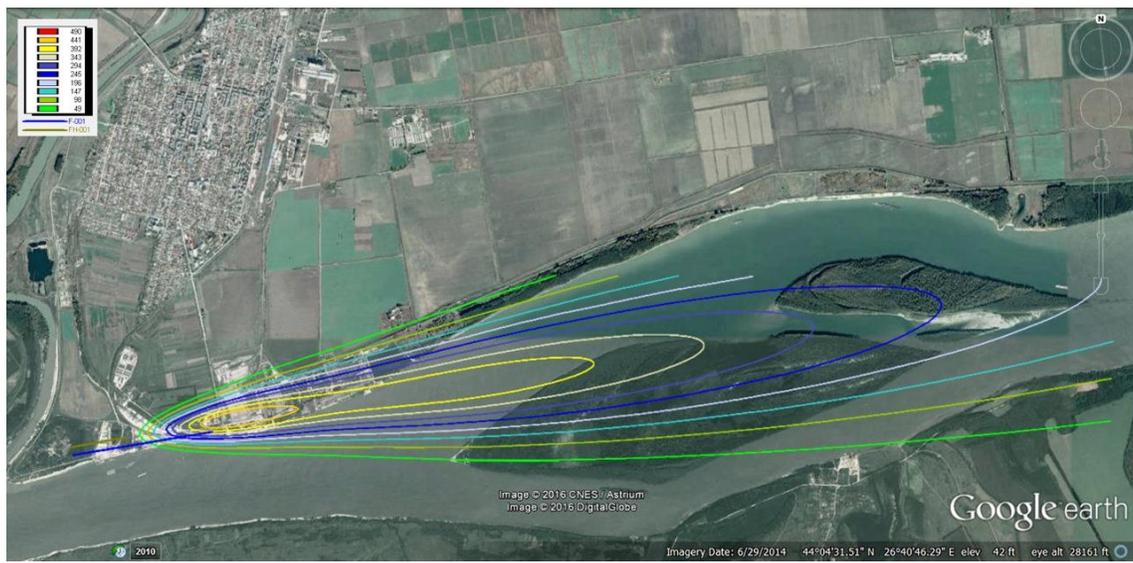
BEST DATA BASIS		
Flare	F-001	FH-001
Power (kg/h)	5000	447
mol. wt.	7.57	17.89
NMW (kg/kg)	33683	34469
Temperature Inlet (°C)	80.0	15.0
Flameout(Oy/Flared)(F)	F	F
Steam Injection	yes	no
Steam Flow (kg/h)	1500	
Steam Temperature (°C)	200.0	
Steam Pressure (bara)	5.0	
Excess air frac	1.75	16.70
F-factor	0.138	0.193
ENVIRONMENTAL CONDITIONS		
Atmospheric pressure	1.013bara	
Ambient temperature	11.38°C	
Wind speed	23.6m/s at 10.0m	
Wind direction	350 (° Meteorological wind direction)	
METEOROLOGICAL CONDITIONS		
Location type	Urban	
Pasquill stability class	F: Slightly Unstable	



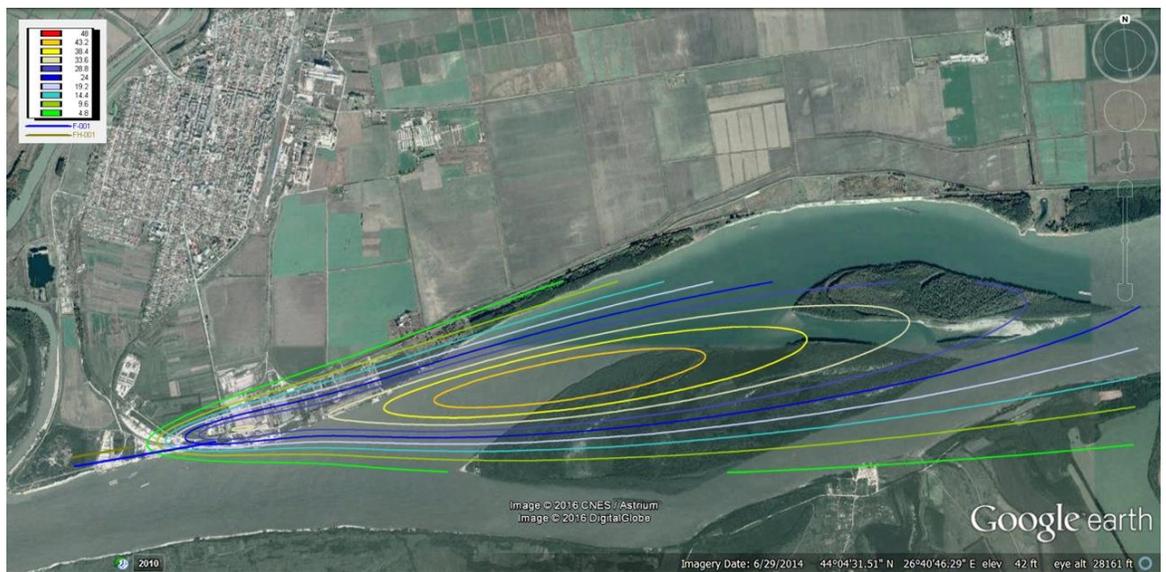
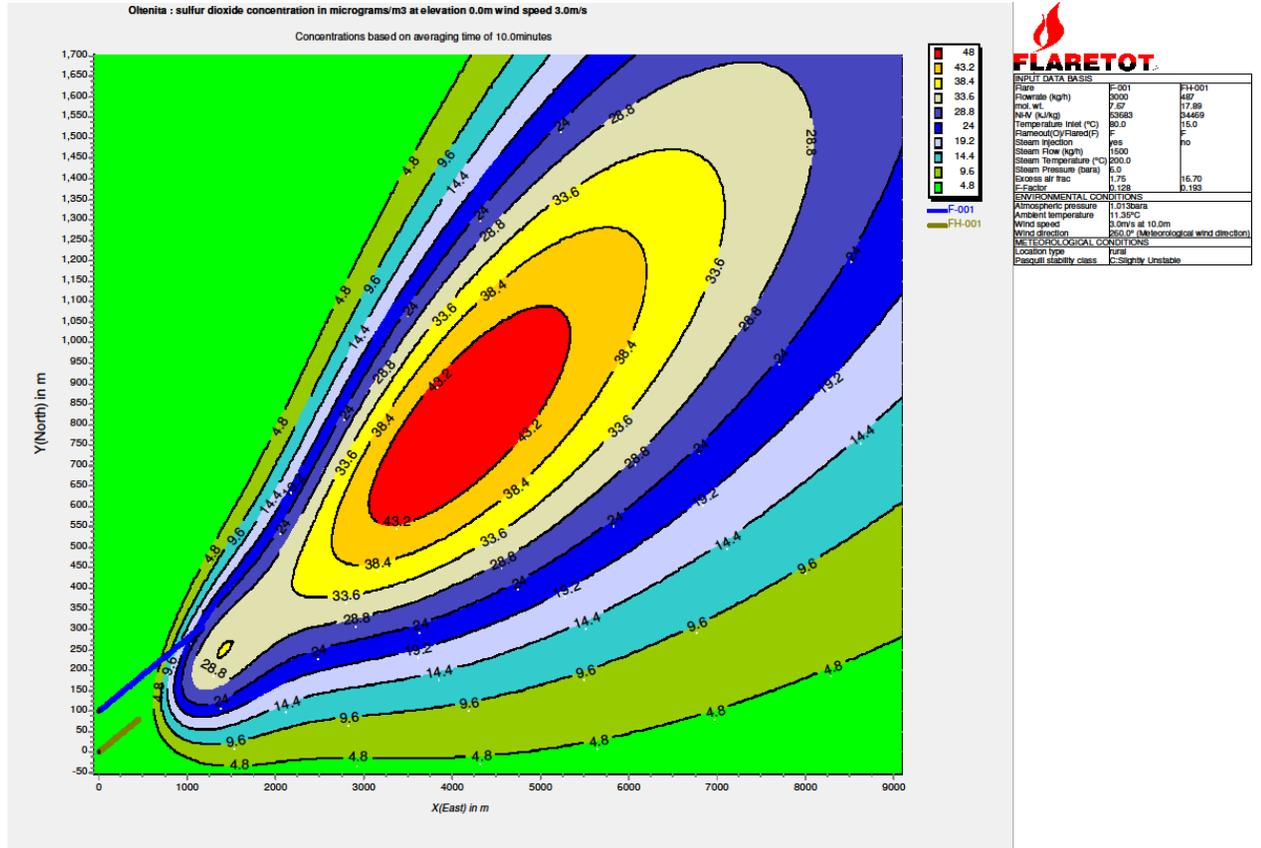
SO2 dispersion at wind speed of 23,6 m/s



FURTHER DATA BASIS	
Flare	F-001
Flowrate (kg/h)	344.001
mol wt.	44.01
NE-W (kJ/kg)	17.89
Temperature Inlet (°C)	344.69
F	16.0
Flameout(O)/Flared(F)	F
Steam injection	yes
Steam flow (kg/h)	no
Steam temperature (°C)	1500
Steam Pressure (bara)	200.0
Excess air frac	1.75
F-factor	0.129
ENVIRONMENTAL CONDITIONS	
Atmospheric pressure	1.013bara
Ambient temperature	11.30°C
Wind speed	3.0m/s at 10.0m
Wind direction	250.0° (Meteorological wind direction)
METEOROLOGICAL CONDITIONS	
Location type	rural
Precipit. stability class	F - slightly Unstable



CO dispersion at wind speed of 3 m/s



SO2 dispersion at wind speed of 3 m/s

The above results represent the situation of maximum impact on atmosphere quality.

3. With regard to waters:

- Information on location of water spills from urban sewers and if they will be treated before discharge

A drainage system of oil contaminated water is designed to safely remove effluents from water spills, contaminated water discharges from storage tanks, and floor washing of the processing installations, and various plant areas in a collection facility. Such a system is intended for the collection and transport of non-hazardous and non-flammable effluents from storage tanks and processing units to avoid fire hazards.

In the case of rain in the tank supply area, it is expected that the rainwater can first be contaminated with oil in the area of the tank dam. This contaminated rainwater must be directed to the contaminated water drainage system and the treated rainwater must be discharged into pluvial water spills.

The contaminated water spills from the water outlet nozzles in the waste oil storage tanks must be directed to the contaminated water system. This water is collected in the wastewater basin.

Contaminated water from floor washing of processing plants and various plant areas must be redirected to the wastewater basin.

Contaminated water is pumped into the treatment plant, where the oil is separated from the water. The oil is collected in the recovered oil tank and the treated water is collected in the treated water collection pond.

- To provide measures related to potential groundwater contamination
Methods of remediation of contaminated aquifers are still in a developmental phase, determined by the large number of parameters that

influence the processes involved in pollutant behavior in the underground environment.

From the managerial point of view, the measures that can be applied for decontamination of aquifers are limited:

- Measures to limit the growth of the polluted area;
- Measures to restore the underground polluted area;
- Self-remedy, not taking action, relying on self-preservation of the underground environment.

In-situ remediation methods:

- Isolation of the polluted area by waterproof screens with walls embedded in the impermeable rock layer; Hydraulic isolation (extraction wells and possibly injection);
- Reactive barriers in the form of waterproof screens with purge gates; reactive permeable screens;
- Pumping and surface treatment of polluted water;
- Thermal methods of steam injection treatment; Hot air injection; Electric heating; Radio waves etc.
- Underground vapour recovery systems for the recovery of volatile and semi-volatile organic compounds;
- Air bubbles, injection of air in order to determine the drive of chemical pollutants and their transport to the surface;
- In-situ chemical treatment methods are based in particular on oxidation / reduction of underground petroleum products by injection of chemical agents appropriate to the nature of the pollutant and transformation of the pollutant in non-toxic forms; A second chemical method causes the underground environment to be washed, reducing the water-pollutant interfacial tensions, increasing the solubility of pollutants and reducing their viscosity, thus favouring the recovery of pollutants through wells or drainage traps;

- The methods of accelerating / stimulating in-situ bioremediation processes use the application of a groundwater pumping system for its recycling and the introduction into the polluted area with water of the Oxygen and nutrients, bio-ventilation.
- pumping contaminated water to the surface and then treating it by chemical, physical or biological methods;
- In situ treatment of the polluted area;
- the physical limitation of the extent of the polluted area.

Ex-situ remedies

These methods are based on the excavation of polluted soil, the pumping of contaminated water and their transport (contaminated soil and water) to a location where the known treatment / purification methods will be applied, or will be finally stored. These methods provide a 100% decontamination safety, but incur high costs and special difficulties; they are usually taken into account only in the case of severe pollution where the cost is insignificant compared to the importance of the resources to be protected.

The entire refinery is arranged on a concrete platform, therefore the risk of contamination of groundwater is minimal. As long as periodic inspections are carried out at all wastewater treatment plants and wastewater pipelines, groundwater cannot be contaminated.

- Planned measures related to the possible diffuse pollution of Danube waters by depositing atmospheric pollutants from the plant
- Diffuse pollution sources are a key component in the surface water pollution process. Their impact on water quality is increasing, being directly related to the reduction of polluted loads directly discharged from industrial and communal point sources. Quantification of pollution from

diffuse sources of pollution is difficult. Since pollution loads from diffuse pollution sources cannot be measured, various methods of calculation or estimation of this component are used for surface water pollution.

Existing methods of evaluation of diffuse sources are:

- Methods of calculating the balance of pollutants;
- Additional methods based on standard calculations using database information as well as existing models specifying the load of pollutants in an area in the hydro graphic basin.

As measures to prevent diffuse pollution of Danube waters, it is necessary to install some efficient filters to the exhaust systems in order to retain as much as possible from the pollutants in the atmospheric emissions.

Another measure is to establish an air quality monitoring program out of the installation, quantified by analysis bulletins.

- To provide measures to prevent, mitigate or compensate for the negative environmental consequences, especially water-related, due to accidents
The classic method uses dynamic floating dams (air inflatable cords), dynamic or filtrating, that surround the oil stain. From the airplane or on the launch ramps oil-absorbing substances re thrown over the oil, substances that agglomerate the hydrocarbons allowing them to be collected.

- To provide for measures related to Danube water rise immediately after the winter period of the year

The area where the tanks are located will be provided with a defense dam that allows for safe pick-up of accidental spills without being discharged outside.

It is also proposed to remove land from the floodplain area by lifting the waste oil processing plant and storage tanks on the platform so as to exceed the 1% flood rate measured for the studied area.

- Domestic and industrial waste water should be treated / purified so as to ensure that it does not have a negative impact on:
 - The public sewerage system in which wastewater is discharged
The waste water quality indicators evacuated from the refinery must be included in the parameters NTPA002 / 2002 regarding the conditions for evacuation of waste water in the sewerage networks of the localities.

 - Achieving the environmental objectives for the potentially affected water bodies and water protection areas provided for in the PMDHD 2016-2021 on Romania's territory
The environmental objectives of the Water Framework Directive are one of the central elements of this European regulation, aiming at long-term protection, sustainable use and management of waters.
The Water Framework Directive establishes, as mentioned in the National Management Plan approved by G. D. no. 859/2016, in the environmental objectives, including essentially the following elements:
 - For surface water bodies: achieving good environmental status and good chemical status, respectively good ecological potential and good chemical status for heavily modified and artificial water bodies;
 - For groundwater bodies: achieving good chemical status and good quantitative status;
 - Progressive reduction of pollution with priority substances and cessation or gradual elimination of emissions, discharges, and losses of priority hazardous substances in surface waters by implementing the necessary measures;

- "Preventing or limiting" the discharge of pollutants into groundwater by implementing measures;
- Reversing the trends of significant and sustainable growth of concentrations of pollutants in groundwater;
- Non-deterioration of surface and underground water (Article 4.1.(a)(i), Article 4.1.(b)(i) of Water Framework Directive);
- For the protected areas: reaching the objectives set by specific legislation.

If one or more objectives are applied to a body of water, the most serious objective for that body will be selected (Article 4.2. of Water Framework Directive).

- If necessary, steps must be taken to treat rainwater at the factory
The plant will install a hydrocarbon separator for the treatment of pluvial waters contaminated with petroleum products.

- If necessary, planning in the SEA report of the measures included in the Flood Risk Management Plan 2016-2020 on the territory of Romania for the relevant regions with a potentially significant flood risk as part of the measures envisaged for protection against natural disasters and environmental incidents
The measures included in the Flood Risk Management Plan will be followed:
 - o Support for Achieving and Maintaining Good Environmental Status (SEB) /Good environmental potential (PEB) according to the WATER FRAMEWORK DIRECTIVE Indicator: number of water bodies at risk not to reach a "Good ecological status" or "good ecological potential" as a result of hydrotreating pressures (in relation to the Flood risk management measures);
 - o Minimizing flood risk on protected areas for water catching for human consumption

Indicator: The number of water catching (intended for drinking) subject to flood risk;

o Minimizing flood risk on potentially polluting objectives

Indicator: number of areas covered by the Directive IPPC – IED (96/61/CE), Waste Water Directive (92/271/CEE) and the Seveso II Directive (96/82/CE) under the risk of flooding.

4. Measures set out in the Danube River Basin Management Plan for the period 2016-2020 to be taken into account during the implementation and operation of the enterprise

Measure code	Measure	Actions to implement the measure	Action code
PM_2	Protection of chemical status of groundwater from pollution and damage	2. Prohibition of activities leading to the discharge of dangerous substances into deep waters	PM_2_2
GD_1	Prevention of the release of priority substances into deep waters	2. Prohibition or restriction of activities that increase the risk of direct or indirect discharge of priority and hazardous	GD_1_2

		substances or other pollutants into groundwater, including groundwater exposure to the surface by extraction of sediments and soils covering the body of water	
PI_2	Ensuring adequate treatment of industrial wastewater	1. Prohibition of putting into operation of wastewater industries and prohibition of carrying out activities without the necessary treatment facilities in accordance with the legal requirements established, except where such facilities are not necessary	PI_2_1
UW_2	Ensure the collection and	3. Prohibition on the inclusion of	UW_2_3

	treatment of urban wastewater from settlements	new users eliminating waste in the sewer systems of settlements, urban formations where their collection and treatment cannot be provided	
DP_2	Reducing diffuse pollution from industrial activities	8. Prohibition of washing and maintenance of vehicles and transport equipment in floodplains and in the neighbouring areas of the basins	DP_2_8

5. As regards the Danube River Flood Risk Management Plan for the period 2016-2020, it should be borne in mind that for the Danube region there is a designated area with a potentially significant flood risk with the code BG1_APSFR_DU_001, the Danube, having a length of 472 km, covering settlements along the water from the village of Novo Selo to the town of Silistra. As regards the measures foreseen in the Plan, there are no prohibitions and restrictions for the investment proposal for which the Zonal Urban Plan is elaborated.

The area of code BG1_APSFR_DU_001 is defined as high risk based on floods of 2005 and 2006 corresponding to floods with a 1% share in the Eastern Bulgarian-Romanian section.

A joint international plan for Bulgaria and Romania has been agreed and accepted with the competent authorities

The large waters of the Danube can lead to the rise of the Iskar River and the Vit River downstream and create a risk for the surrounding landscape. This happened in 2005.

Dams have been built in this area, currently in good condition.

According to the RISC Annual Report 2015, the critical areas of the protection dams are:

- Iskar - The compromised stability of the left and right dams in Bulgaria
- Vit - The compromised stability of the left dam of the bulk soil in the country of the village.
- The Danube floods the shore.

If the installation is to be built on a platform that is above the flood rate, there will be no major hazards in case of floods.

6. Calculation of the expected noise levels and their spatial distribution, including on the territory of Bulgaria, and their comparison with the Bulgarian limit values in accordance with Ordinance no. 6

According to Ordinance no. 6 the noise level in industrial areas is 70 dB. In Romania the limit is 65 dB. At the site's limit, the unit will comply with the legal provisions in the field.

7. A more detailed description of potential sources of contamination in the region that could generate a cumulative effect, particularly with regard to air pollution and the assessment of the cumulative impact expected.

There are no sources of contamination in the area that could generate a cumulative effect.

8. Based on the above, to identify risk factors; Depending on the territorial sphere of environmental impact, if necessary, to determine the number of potentially affected populations and territories and areas and / or health protection objectives within the territory of Tutrakan and its surroundings; To determine the extent of health risk and to propose measures to prevent it.

As a result of air pollution dispersion, it was found that the health of the population of Tutrakan and its surroundings will not be affected.

The measures for health protection will be the following:

Compliance with the provisions of Order 119/2014 on the observance of the Public Health and Public Health Standards regarding the living environment of the population.

Implementing measures to reduce air pollution, noise and vibration levels and prevent and combat emergency situations.

Continuous monitoring of air quality and stopping the activities in cases with probability of exceeding limit values.

Economic objectives that, due to their nature, can pollute the atmosphere, are located in industrial areas.

The industrial area will be set so that the pollutants do not exceed the maximum allowed concentration in the ambient air of the protected territories.

The operation of installations is conditional upon the monitoring of emissions of waste gases into the atmosphere.

9. Identification of possible disasters and emergency situations, and the relevant measures that should be taken to prevent them and to eliminate their consequences.

The possible disasters that may arise in the refinery's operation are the following:

- Explosion Hazard
- Cracking hazard for the storage tanks
- Flooding hazard

The activity holder has the obligation:

- To take all necessary measures to prevent the occurrence of major accidents and to limit their consequences for the health of the population and the quality of the environment;
- To inform the competent public authorities if there is a change in a facility, storage unit, nature or quantity of hazardous substances on-site at that time that could have significant effects on the major-accident hazards;
- To provide its own personnel and persons who may be affected in the event of a major accident caused by the objective, information on the security measures in operation and the actions required for the intervention.
- To immediately inform the territorial public authorities for civil protection and environmental protection in the event of a major accident

The facility must establish a contingency plan for accidental pollution.

In accordance with the accidental pollution control plan to combat accidental pollution, are established:

- List of critical points in the unit where accidental pollution may occur;
- Potential pollutant sheet;
- Program of measures and works to prevent accidental pollution;
- Composition of the team set up to solve the internal emergency situations with the responsibilities of the drivers;
- Composition of accidental pollution control teams;
- List of facilities and materials needed to stop accidental pollution;

□ Procedure for recording information on the occurrence of accidental pollution events;

□ Warning procedure in case of accidental pollution.

The plan will be revised annually and updated as appropriate.

The plan must be at the disposal of the verification and control bodies at any time within the unit.

Operating deficiencies that may have significant effects on the environment must be recorded in written form. Such written records, which must be made available to the responsible authorities, must be made clear:

- Type, timing and duration of the fault,
- The amount of harmful substances released (if necessary, an assessment is required),
- The consequences of the malfunction both inside and outside the objective,
- All measures initiated.

Defects whose effects can propagate over the entire area of the objective or which poses health or life threats must be notified

- Immediately to the Emergency Inspectorate
- Urgently to the authority responsible for environmental protection.

With regard to the danger of flooding the land, the unit will elevate on the platform the refinery installation and the storage tank so as to exceed the flood elevation.

10. On the basis of the information provided on the type and quantities of hazardous substances, it cannot be concluded whether the waste oil plant is classified in the Zonal Urban Plan as an enterprise with low or high risk potential. It should be noted that the Convention on Industrial Transboundary Effects of Industrial Accidents (TEIA) applies only to units classified as having high risk potential.

You should provide information if the installation falls within the scope of Directive 2012/18 / EU on the control of major-accident hazards involving dangerous substances (SEVESO III Directive). If the waste oil plant is classified as potentially high risk, you must provide the information according to Annex III of the TEIA.

The maximum quantities of hazardous substances that may be stored on site as well as the maximum quantities expected to be used annually are shown in Table no. 1.

This table includes information on the physical state of the hazardous substances to be used as well as the way of storage / handling and the specific requirements for the storage of substances until use in the technological process.

A register of stored hazardous substances will be kept on site and the Accidental Prevention and Control Plan will be implemented in accordance with national legislation.

The amounts of chemicals declared by the beneficiary have been assessed taking into account their own Safety Data Sheets for each product in accordance with the provisions of Law no. 59/2016, Annex 1, Part I and Part II, highlighting the maximum possible quantities to be present for each component.

Under these conditions, the relevant amounts of chemicals from the existing storages on the site, determine the framing of the location of the site under the provisions of Law no. 59/2016 at the lower limit.

In Table no. 1 - Chemicals used in the production process (according to the provisions of Law No. 59/2016, Annex 1) are presented all the hazardous chemicals present on site and their amount according to the Note to Annex 1.

Table no. 1: Chemicals used in the production process (according to the provisions of Law No. 59/2016, Annex 1)

Current no.	Name of the product / hazardous substances stored	CA s no.	Classification (67/548/CEE /99/45/EC)	Classification (1272/2008/CE)	Storage place	Storage capacity (t)	Physical state	Storage / manipulation manner	Storage conditions	Relevant Quantities (as per Law 59/2016)		
										Inferior level (m)	Superior level (M)	qx/Qx
1	Used Lube Oil	705 14- 12- 4	R66, R45, R52, R53	H227, H304, H350, H336, H315, H412	metallic storage tank	5849	liquid	tank	4 tanks metallic, capacity 1 x 107 mc and 3 x 1914 m ³	2500	25000	2,33
2	Diesel/ Light Oil	647 41- 77- 1	Unclassified	H304	metallic storage tank	718	liquid	tank	Metal tank with double walls, over-ground 1 x 473 mc and 1 x 245 mc	2500	25000	0,28
3	Middle Distillate	647 42- 54- 7	Unclassified	Not available	Metallic condensed storage tank	1864	liquid	tank	two tanks metallic over-ground 1 x 930 mc and 1 x 934 mc	-	-	0
4	Heavy Distillate	647 41- 76- 0	Unclassified	Not available	Metallic condensed storage tank	1879	liquid	tank	two tanks metallic over-ground 1 x 945 mc and 1 x 934 mc	-	-	0

Current no.	Name of the product / hazardous substances stored	CAS no.	Classification (67/548/CEE/99/45/EC)	Classification (1272/2008/CE)	Storage place	Storage capacity (t)	Physical state	Storage / manipulation manner	Storage conditions	Relevant Quantities (as per Law 59/2016)		
										Inferior level (m)	Superior level (M)	qx/Qx
									me and 1 x 934 me			
5	Heavy Lubricating	8052-42-4	Unclassified	Not available	Tank	488	solid	tank	2 tanks x 244 me	-	-	0
6	Caustic Soda	1310-73-2	H314	R35	Anti-corrosion Tank	65.89	solid	tank	1 x 54.89 me and 1 x 11 me	50	200	1.31
												3.92

The unit is subject to Law no. 59/2016 at the lower limit of the relevant specific quantities but following the calculation at the upper limit results a quantity of 0.58 which is less than 1, therefore the objective does not fall under the incidence of the law at the upper limit, the objective being at low risk.

Subsemnata, Ene Roxana Mihaela, traducător autorizat, cu autorizația nr. 37969/2015, eliberată de Ministerul Justiției, certific exactitatea prezentei traduceri: "Presentation report, Project name: "Waste Oil Recycling Plant, Oltenita Municipality, Calarasi County" cu textul documentului în limba română, în format electronic, care mi-a fost prezentat.

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Ene Roxana Mihaela
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