



VTT VASILIKO LTD

EUROPEAN DIRECTIVE 2012/18 / EU
OF THE EUROPEAN PARLIAMENT ON THE TREATMENT OF
MAJOR ACCIDENTS RELATED TO DANGEROUS SUBSTANCES

INFORMATION TO THE PUBLIC

DECEMBER 2023

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1. INTRODUCTION

This paper contains all of the information on the safety measures applied at VTT Vasiliko Ltd's oil storage facility to prevent major accidents, as well as the appropriate behaviour of the public in the case of such major accident.

This document was created in accordance with the 2015 Regulations for dealing with the risks of major incidents involving hazardous chemicals (K.D.P 347/2015). This regulation aligns Cypriot legislation with the European Parliament's Directive 2012/18 / EU (SEVESO III).

2. FACILITY LOCATION AND CONTACT DETAILS

Name	VTT VASILIKO LTD
Address	75 Mari, Larnaca 7736, Cyprus
Telephone	24 257500
Facsimile	24 333299
Website	https://www.vtti.com/terminal/vttv-cyprus/

2.1 CONTACT PERSON FOR RELEVANT INFORMATION

Full Name	Constantinos Savvides
Telephone	24257650
Email address	cos@vttv.vtti.com

3. SUBJECTION OF A FACILITY IN THE REGULATORY AND ADMINISTRATIVE PROVISIONS OF IMPLEMENTATION OF THE SEVESO DIRECTIVE

The operator VTT Vasiliko Ltd's oil storage facility is subject to the rules of the 2015 Regulations dealing with the risks of major incidents involving hazardous chemicals (K.D.P 347/2015, European Directive 2012). The amount of fuel stored in the plant qualifies it as a higher-grade facility. In 2019, a "Safety Report in compliance with the 2015 Regulations" was filed to the relevant body, which was reviewed.

4. FACILITY ACTIVITIES

The VTT Vasiliko Ltd oil storage terminal, located in the region of Vasilikos on Cyprus's south coast, is divided into two sections: the onshore facilities, which comprise the main terminal and the facilities in the Lower Area, and the offshore facilities, which include the sea pier (Jetty facility). Figure 1 depicts all of these amenities.

Onshore facilities include 28 fuel storage tanks distributed across six embankments or containment basins, a tanker refuelling station, a pumping station, a vapour recovery unit, fire extinguishing systems, a rainwater collection system, a drainage system, offices, and other storage and ancillary areas.

Offshore facilities include four berths and mooring boats, a fire extinguishing system, an oily water and wastewater collecting network, a pipeline network and connecting pipes, a power substation, and a control centre.

The terminal stores and delivers petroleum goods such as diesel (Gasoil), aviation fuel, low sulphur diesel (ULSD), unleaded gasoline 95 and 98 octane, Ethanol, MTBE (octane booster), and biodiesel (FAME). In the facility, the following procedures are carried out:

- Loading and unloading of tankers
- Transportation of petroleum products from ship to ship
- Transportation of petroleum products from tank to tank
- Mixing products
- Cleaning pipes (evacuation and drainage) via 'pigging' operation
- Loading of petroleum products in tankers



Figure 1. Orientation of VTT Vasiliko Ltd terminal.

5. INFORMATION ON DANGEROUS SUBSTANCES STORED AND TRADED IN THE FACILITY

The table below shows the hazardous substances that are stored and distributed in the facility of VTT Vasiliko Ltd.

Substance	Danger Category
Named Substances	
95/98 Octane gasoline	<ul style="list-style-type: none">- Very flammable- Toxic- Dangerous for the environment
Low Sulphur Oil (ULSD)	<ul style="list-style-type: none">- Flammable- Toxic- Dangerous for the environment
Aviation fuel (JET A1)	<ul style="list-style-type: none">- Flammable- Harmful- Dangerous for the environment
Oil (Gasoil)	<ul style="list-style-type: none">- Flammable- Toxic- Dangerous for the environment
Biodiesel (FAME)	<ul style="list-style-type: none">- Flammable- Toxic- Dangerous for the environment
Ethanol	<ul style="list-style-type: none">- Very flammable
Categories of Dangerous Substances - Category 7b. Very flammable liquids	
MTBE	<ul style="list-style-type: none">- Very flammable liquid

6. HOW TO WARN AND INFORM THE POPULATION

In the case of a catastrophic accident, the VTTV Event Manager will notify the Civil Defence Force, triggering the External Emergency Plan. The employees of the facility, with the aid of the emergency services, will notify the public in such a scenario. Citizens who live, work, dwell temporarily or permanently, or are otherwise in close proximity to the facility will be notified by phone or other accessible means. For example, the media, Civil Defence sirens, and others.

7. PUBLIC BEHAVIOUR IN CASE OF A MAJOR ACCIDENT

The impacted public will be guided on appropriate conduct based on the accident and the circumstances that arise as a result of it. In the case of a catastrophic accident, the general people should cooperate with the appropriate emergency services and follow their orders.

8. INSPECTION SCHEDULE

The competent authority should develop frequent inspection plans for all facilities, including the frequency of site inspections, in line with Article 20 (4) of Directive 2012/18 / EU. The most recent inspection of the facility was on 7/9/2021.¹

9. FURTHER INFORMATION

Without prejudice to Article 22 of 2012/18 / EU, both the firm and the implementing authority, which is the Department of Labour Inspection, may seek further information on the application of this Directive at the VTT Vasiliko Ltd terminal.

10. GENERAL INFORMATION ABOUT THE NATURE OF MAJOR ACCIDENT RISKS

A major accident, according to K.D.P Regulation 347/2015, is defined as an event, such as a large leak, fire, or explosion, caused by uncontrolled developments in the operation of any facility that falls within the scope of the 2015 Regulations, that causes serious risks, immediate or distant, to human health or the environment, inside or outside the facility, and associated with one or more hazardous substances.

The following are the accident scenarios that have been investigated and for which preventive measures have been implemented in the context of compliance with the aforementioned Regulation:

1. Tank fires
2. Pool Fires of liquid fuels inside and outside the holding basins (embankments) of the tanks after direct or delayed ignition of a fuel lake created by a leak of liquid in a tank or in a pipeline (fittings or supply),
3. Flash Fire or UVCE after delayed ignition of a cloud created by the evaporation of a gasoline pond inside or outside embankments;
4. Jet Fire after direct ignition of volatile fuel leakage under pressure from a hole or rupture of the supply line, and
5. Dispersion of SO₂ cloud after burning ponds of products with relatively high sulphur concentration.

10.1 POTENTIAL CONSEQUENCES IN CASE OF A MAJOR ACCIDENT ¹

The consequences of the worst-case major accident scenarios are included in the Safety Report, and the impact zones are depicted on maps of suitable scale for each of them.

The following are some of the potential consequences on human health and the environment that might occur in the case of a major accident, such as those described above:

- The effects of thermal radiation release, which might lead to death from burns
- The explosion's impact, especially the production of a shock wave and the ejection of particles and debris, which might result in harm or death.

¹[http://www.mlsi.gov.cy/mlsi/dli/dliup.nsf/All/D06046C1272FB786C2257DDB0043A518/\\$file/Programma_epitheoriseon_Monades%20SEVESO2021.pdf](http://www.mlsi.gov.cy/mlsi/dli/dliup.nsf/All/D06046C1272FB786C2257DDB0043A518/$file/Programma_epitheoriseon_Monades%20SEVESO2021.pdf)

- The effects of harmful sulphur dioxide dispersion in the event of a fire, which might cause respiratory difficulties and even death.

10.2 PREVENTIVE MEASURES TO AVOID A MAJOR ACCIDENT

A HAZOP analysis has been completed within the context of the Safety Report, which explains in detail the probable hazards, the existing safety systems, and the methods of prevention, control, and effect reduction in the event of a severe disaster.

To summarize, the preventative actions to avert a big accident are as follows:

- The design and equipment of the installation follow international safety standards.
- There are automatic systems that control the operation of the installation. In the event of any deviation from normal operation then the automatic emergency systems intervene to stop it.
- A program of preventive maintenance and control inspections is implemented.
- The equipment and electrical installations are of explosion-proof type.
- Strict non-smoking rules apply.
- There are protection systems against short circuits, lightning or static electricity.
- It is forbidden to use tools that produce sparks without a hot work permit.
- The staff is properly and adequately trained in the prevention and management of a major accident.
- A Safety Management System (SMS) is applied.
- Fire detection and gas detection systems and alarm activation have been installed.
- The installation has adequate fire extinguishing systems.
- The facility is guarded and access is controlled on a 24-hour basis.
- The staff working in the facility is well trained.

11. ARRANGEMENTS AND COOPERATIONS WITH EMERGENCY SERVICES IN CASE OF A MAJOR ACCIDENT

It has been established that VTT Vasiliko Ltd is required to make the appropriate measures on site, particularly in collaboration with emergency services, to cope with severe incidents and minimize their consequences.

The internal Emergency Response Plan for the facility specifies the agreed-upon method for alerting authorities in the case of a serious disaster. The Limassol Fire Station of Agios Nikolaos, EMAK-Kofinou and the Medical Services Coordination Centre as well as the Zygi Police Station are all participating in the information process.

12. EXTERNAL EMERGENCY PLAN

The company has developed an internal Emergency Response Plan, which outlines the steps to take in the event of a significant accident within the facility's limits. Furthermore, in line with Regulation 52A of the (General) Civil Defence Regulations of 1997 to 2006, the Civil Defence has created an External Emergency Plan.

Civil Defence can offer more information about the External Emergency Plan.²

13. FACILITY LOCATED NEAR THE TERRITORY OF ANOTHER MEMBER STATE

According to the Facilitied Nations Economic Commission for Europe Convention on the Transboundary Impact of Industrial Accidents, the VTT Vasiliko Ltd facility is not located near the territory of another state, and a significant accident cannot have a cross-border impact.

² <http://www.moi.gov.cy/moi/cd/cd.nsf/home/home?OpenForm>