



Information on planned safety measures and methods of action in the event of an accident on the territory of Ellatzite Explosives Plant at the Mine Complex of Ellatzite-Med AD regarding the provisions of the Directive on the control of major-accident hazards involving dangerous substances (published in the SG No 5 / January 19 2016, amended in SG No 62 / August 5 2022

1. The name or the trade name of the operator

"Ellatzite-Med" AD, 2086 Mirkovo village, Mirkovo municipality, Sofia region

2. Name and complete address of the undertaking/facility

Ellatzite Explosives Plant, Mine Complex of Ellatzite-Med AD, 2180 Etropole

3. Number and date of an up-to-date notification for classification of the undertaking/facility submitted under art. 103, par. 2 or 5 of the EPA; decision number under art. 106, par. 4 of the EPA for undertaking/facility with low-risk potential (UFLRP); decision number under art. 116, par. 1 or Art. 116g, par. 4 of the EPA (decision number under art. 99, par. 2 of the EPA) for undertaking/facility with high-risk potential (UFHRP)

The Explosives Plant at the Mine Complex of Ellatzite-Med AD is classified as an undertaking/facility with high-risk potential. The classification was validated by the MOEW with the letter ref. № 26-00-313/17.02.2016, our ref. № 633/25.02.2016

The safety report of the Explosives Plant at the Mine Complex of Ellatzite-Med AD is approved by Decision № 174-A1/2017 of the Director of the Executive Environmental Agency.

4. Brief description of the activity or the planned activities in the undertaking/facility

Ellatzite-Med AD is a private joint-stock company, whose primary business is mining and beneficiation of copper porphyry and gold-bearing ores.

Ellatzite Explosives Plant is an integrated facility within the Mine Complex of Ellatzite-Med AD. The main purpose of the facility is the production of emulsion and packaged explosives for the needs of the complex and external customers.

Two types of explosives are produced:

1) Emulsion explosives - a water-oil emulsion of a solution of ammonium nitrate or a solution of ammonium and sodium nitrate, sensitized by glass microspheres. The produced emulsion explosives are trademarks under the names "Elacit 1100", "Elacit 3400", "Elacit 710", "Elacit 720", "Heavy ANFO 501E".

2) Ammonium nitrate explosives - a mixture of granular ammonium nitrate and diesel fuel. The produced explosive substance is "ANFO E".

Since September 2007, Ellatzite Explosives Plant maintains a certificate with the safety requirements for the manufactured product. The control is carried out by an accredited organization that issued the product certificate.

The products manufactured by the Ellatzite Explosives Plant have the European CE safety mark with identification number 1877 and can be sold within the EU. About 10,000 tons of explosives are produced annually.





5. General information on the hazardous substances present at the undertaking/facility as listed in Appendix 3 of the EPA, which contains a common name, or in the case of a hazardous substance/hazardous substances from Part 1 of Appendix 3 of the EPA - generic name and hazard classification of the hazardous substances from Appendix 3 of the EPA, which are present in the enterprise and can cause a major accident, and a description of their main hazardous properties

The names and hazard categories of the dangerous substances from Appendix No. 3 of the EPA, which are present in the facility are presented in the table below.

№	Chemical Name:	Hazard categories under Regulation (EC) № 1272/2008 on classification, labelling and packaging of substances and mixtures (CLP) (OB, L 353/1 from 31.12.2008)
1.	Ammonium nitrate	Oxidising solid, category 3 (H 272)
2.	Porous ammonium nitrate	Oxidising solid, category 3 (H 272)
3.	Sodium nitrate	Oxidising solid, category 3 (H 272)
4.	Packaged explosive substances (Elacit 710,720)	Explosives, Division 1.1 Oxidising solid, category 3 (H 272)
5.	Emulsion mixtures (Elacit 1100,3400)	Oxidising substance category 2 (H 272) Explosives, Division 1.5
6.	ANFO E	Oxidising solid, category 2 (H 272) Explosives, Division 1.5
7.	Trinitrotoluene	Explosives, Division 1.1 Acute toxicity, category 3, Toxic to aquatic organisms, category 2 (H411)
8.	Diesel fuel	Flammable liquid, category 3 (H226) Toxic to aquatic organisms, category 2 (H411)
9.	Electric detonator	Explosives, Division 1.1
10.	Non-electrical detonator "Exel"	Explosives, Division 1.1
11.	Packaging containing residues of dangerous substances	Oxidising solid, category 3 (H 272)





6. General information related to the nature of major-accident hazards, including their potential impacts on the population and the environment

The occurrence of major accidents at the site of Ellatzite Explosives Plant is possible under the individual or simultaneous (combined) influence of the following factors:

- Human mistake;
- Technical problem with the equipment;
- Side reaction during the production process;
- External natural or man-made impacts;
- Unauthorized interference by third parties;
- Inadequate design, technology or work practice.

Behind each of these conditions for the occurrence of a major accident are several reasons of an organizational, managerial and technical nature.

A system for identification, assessment and risk management of major accidents has been introduced at Ellatzite Explosives Plant. The main stages correspond to:

- Gathering preliminary information related to hazard identification, assessment and risk management;
- Identification of the activities and processes in the factory that are a source of risk;
- Identification of major-accident scenarios and their probability;
- Assessment of the severity of the consequences and resulting affected elements;
- Assessment of risk acceptability, residual risk rating and identification of additional risk control measures.

The determination of the extent and severity of the outcomes of identified major-accident hazards was carried out using the rapid risk assessment methodology available on the website of the Ministry of Environment and Water for the ammonium nitrate and explosives major-accident scenarios. From the obtained results, it can be concluded that the adverse outcomes of a possible major accident will not have a significant impact on elements outside the territory of the Explosives Plant due to its geographical location and distance from other sites.

7. General information on methods of warning and informing the affected public in the event of a major accident (indicating the information on appropriate behaviour in the event of a major accident or indicating the source where this information can be accessed electronically)

The developed emergency plan of Ellatzite Explosives Plant contains an action plan for emergency warning in case of natural disaster, accident and fire.

There is an integrated automated local system for issuing an emergency alert on the territory of the Explosives Plant, connected to the Regional Control Unit in Sofia, an integral part of the National Early Warning and Notification System.

The information to be provided to the competent authorities in the event of an accident includes:

- the circumstances for the occurrence of the accident;
- the available data, allowing to assess the consequences of the accident for human health and the environment;
- the undertaken measures immediately after the accident, including:



- measures to prevent the recurrence of an accident;
- measures for restriction of the consequences of the accident.

Given the nature of possible major accidents and the location of the facility, additional workforce and equipment for rescue operations and remedial works outside the facility are not required.

On the company's website, the affected public can find published information about the planned safety measures, behaviour and actions in the event of an accident on the territory of Ellatzite Explosives plant in the Mine Complex of Ellatzite-Med AD.

8. Information on the recommended actions and behaviour of the affected public in the event of a major accident

As stated, the adverse outcomes of a possible major accident will not have a significant impact on elements outside the territory of the Explosives Plant due to its geographical location and distance from other sites.

There is an integrated automated local system for issuing emergency alerts on the territory of the Explosives Plant, connected to the Regional Control Unit in Sofia, an integral part of the National Early Warning and Notification System.

Given the nature of possible major accidents and the location of the facility, additional workforce and equipment for rescue operations and remedial works outside the facility are not required.

9. Additional information on security measures and behaviour in the event of a major accident, including a link to the public register under Art. 111, Par. 1, it. 6 of the EPA

The measures and means to limit the consequences of major accidents are described in detail in the emergency plan of Ellatzite Explosives Plant, part of the Safety Report.

10. Contact of the person, providing the information, and date:

Eng. Al. Grigorov, Director of "Environment and Waters" Department, phone: 02/923 77 68.

Date: 15/08/2022

11. In addition to the information under items 1 - 10 for undertakings/facilities with high-risk potential, the following is also included:

11.1. General information related to the nature of major-accident hazards, including their potential impacts on the population and the environment, and a description of the major-accident scenarios and the measures taken to mitigate their effects

The occurrence of major accidents at the site of Ellatzite Explosives Plant is possible under the individual or simultaneous (combined) influence of the following factors:

- Human mistake;
- Technical problem with the equipment;
- Side reaction during the production process;
- External natural or man-made impacts;
- Unauthorized interference by third parties;
- Inadequate design, technology or work practice.





Behind each of these conditions for the occurrence of a major accident are several reasons of an organizational, managerial and technical nature.

A system for identification, assessment and risk management of major accidents has been introduced at Ellatzite Explosives Plant. The main stages correspond to:

- Gathering preliminary information related to hazard identification, assessment and risk management;
- Identification of the activities and processes in the factory that are a source of risk;
- Identification of major-accident scenarios and their probability;
- Assessment of the severity of the consequences and resulting affected elements;
- Assessment of risk acceptability, residual risk rating and identification of additional risk control measures.

The determination of the extent and severity of the outcomes of identified major-accident hazards was carried out using the rapid risk assessment methodology available on the website of the Ministry of Environment and Water for the ammonium nitrate and explosives major-accident scenarios. From the obtained results, it can be concluded that the adverse outcomes of a possible major accident will not have a significant impact on elements outside the territory of the Explosives Plant due to its geographical location and distance from other sites.

The measures and means to limit the consequences of major accidents are described in detail in the emergency plan of Ellatzite Explosives Plant, part of the Safety Report.

11.2. information from the external emergency plan, which includes advice on cooperation with the relevant operational center of the General Directorate “Fire Safety and Population Protection” with the Ministry of the Interior and the mayor of the municipality, which is directly endangered, during an emergency

Ellatzite Explosives Plant and Mine Complex have implemented "Emergency Prevention and Response Plans", in which the required information is available.

The emergency plan is updated annually and submitted to the mayor of Etropole municipality.

There is an integrated automated local system for issuing an emergency alert on the territory of the Explosives Plant, connected to the Regional Control Unit in Sofia, an integral part of the National Early Warning and Notification System.

11.3. Information on the possibility of a major accident in the facility with transboundary effects under the Convention of the UN on the Transboundary Effects of Industrial Accidents

There is no indication of a major accident at the Explosive Factory with transboundary effects on the territory of a neighboring Member State. As stated, the adverse outcomes of a possible major accident will not have a significant impact on elements outside the territory of the Explosives Plant due to its geographical location and distance from other sites.

