

INFORMATION ON SAFETY MEASURES, WARNINGS AND CONDUCT OF COMMUNITY IN THE EVENT OF A MAJOR INDUSTRIAL ACCIDENT AT RAFINERIA GDAŃSKA SP. Z O.O.

Gdansk, June 2023

Issue 1

1. DESIGNATION OF THE OPERATOR OF THE ESTABLISHMENT

Operator:	Gdansk Refinery Sp. z o.o.
Address:	Eiśląska 135 80-718 Gdansk
Plant manager:	President of the Management Board
Address of the plant manager:	Eiśląska 135 80-718 Gdansk
Website Address	www.rafineriagdanska.pl
email	info@rafineriagdanska.pl
Spokesman	695 202 520

2. INDUSTRIAL ACCIDENT PREVENTION REGULATIONS

The Rafineria Gdańska Sp. z o.o. plant in Gdańsk has been classified as an upper-tier establishment and is therefore subject to the provisions of the Environmental Protection Law (i.e. Journal of Laws of 2024, item 54, as amended) on combating industrial accidents.

The operator of the plant notified the Plant to the competent authorities in accordance with the provisions of Article 250 (1) and (9) of the Act of 27.04.2001. 250 of the Environmental Protection Law (consolidated text, Journal of Laws of 2024, item 54, as amended), and submitted the Major - Accident Prevention Program and the Safety Report in accordance with Article 251(5) and Article 253(1) of the above-mentioned Act.

3. DESCRIPTION OF THE PLANT'S ACTIVITIES

Rafineria Gdańska Sp. z o.o. process crude oil for the production of petroleum products such as: liquified petroleum gas, gasoline, aviation fuel, diesel oil, heating oil, paraffin wax, sulphur, base oils, plasticizers, bitumen and petroleum coke. It also purchases fuel components and chemical additives needed to process and manufacture products.

Crude oil is supplied to the refinery installations by tankers from the Northern Port in Gdansk, as well as by rail and pipelines.

The pouring of products using road, rail and sea logistics is carried out by Rafineria Gdańska Sp. z o.o., while the owners of the products are responsible for further distribution of the products processed by the products.

The main technological processes carried out at Rafineria Gdańska Sp. z o.o. are the distillation of crude oil, followed by the separation and refining or processing of distillation products, in the following processes: isomerization, reforming of gasolines, hydrodesulphurization, hydrocracking and delayed coking. The obtained products are then placed in storage tanks, where they are mixed together in appropriate proportions, enriched with special refining additives and shipped to customers as finished products.

4. CHARACTERISATION OF HAZARDOUS SUBSTANCES

Various hazardous substances and mixtures are present on the premises of the Gdansk Refinery, including crude oil, refinery products, and auxiliary substances and mixtures in smaller quantities. The hazards arising from the properties of the substances used can be divided into the following groups:

- fire and explosion hazards,
- risk to human health and life,
- environmental hazards.

Flammable substances are the main group of hazardous substances used on the premises of the plant. Most substances and mixtures are flammable, but they are also classified as harmful to health, including carcinogens. There are also substances classified as flammable and toxic to health, e.g. 1,2 dichloroethane, furfural and hydrogen sulfide, as well as hazardous to the environment.

Flammable substances released as a result of an accident can also spread in the form of vapor clouds after release. If the substance is heavier than air (e.g., liquefied petroleum gas), the vapor cloud may linger near the ground surface and penetrate all openings and depressions below ground level. If the substance is lighter than air, the cloud may spread on the wind. Hydrocarbon vapors can form explosive mixtures when combined with air. Gaseous substances of a toxic nature can spread in the form of gas clouds when released.

A list of substances determining the classification of a plant as a plant with a high risk of industrial accident along with an indication of the hazards they cause is presented in the table below.

Hazardous substances	Type of threat			
	Fire	Explosive	toxic to humans	toxic or harmful to the environment
petroleum	yes	–	–	yes
petroleum products (m.in. gasoline, diesel oils, heating oils, aviation fuel)	yes	–	–	yes
liquefied petroleum gases (propane, butane)	yes	–	–	–
hydrogen	yes	–	–	–
hydrogen sulfide	yes	–	yes	yes
1,2 Dichloroethane	yes	–	yes	–
furfural	yes	–	yes	–
Fuel additives	–	–	–	yes

5. INFORMATION ON HOW TO WARN AND ACT IN THE EVENT OF AN INDUSTRIAL ACCIDENT

The Operator of the Plant, acting on the basis of Article 261a(1)(5) of the Act of 27.04.2001. The Environmental Protection Law (consolidated text, Journal of Laws of 2024, item 54, as amended) has agreed with the Pomeranian Regional Commander of the State Fire Service in Gdańsk on the content of information on how to warn and act in the event of a serious industrial accident in the form of the "Instructions for conduct of the public in the event of a serious industrial accident on the premises of the Gdańsk Refinery" constituting Appendix 1 to this Information.

If an industrial accident occurs on the premises of the Refinery, the effects of which may have a direct impact on the area outside the plant, the Gdańsk Refinery Dispatcher, at the request of the Rescue Operations Manager (KDR), notifies the relevant rescue services and the Municipal Crisis Management Centre in Gdańsk and, depending on the situation, the representatives of the Pruszcz Gdański municipality responsible for crisis management and security and the Country Crisis Management Centre in Pruszcz Gdański. Information about the industrial accident is also forwarded to the Regional Crisis Management Centre in Gdańsk.

In an emergency situation, an internal alarm signal (a 3-minute intermittent signal consisting of a 10-second signal and a 25-30-second break) may be heard on the premises of the Gdańsk Refinery to inform the plant employees about the occurrence of the accident.

In order to warn and alert the population, the Municipal Crisis Management Centre (MCZK) has a system of sirens located in all districts of the city. In the event that the MCZK is notified by the duty services of Rafineria Gdańska Sp. z o.o. about an accident at the site, the duty officer will activate selected sirens (depending on the danger area) and notify the services of the Pomeranian Governor.

Within a radius of 5 km from the Gdańsk Refinery, sirens are located in the following locations:

- No. 35 – 135 Elbląska Street + 3 sirens on the premises of the Refinery,
- No. 33 – 38 S Kępną Street,
- No. 29 – 8 Sienna Street,
- No. 72 – 28 Turystyczna Street,
- No. 31 – 19b Stryjewskiego Street,
- No. 2 – 11 Głęboka Street,
- at the school in Wiślinka at 10 Szkolna Street,
- at the school in Przejazdowo at 8 Jesionowa Street.

The type of alarm that will be used is a modulated signal with information about the occurrence of an emergency, lasting three minutes.

The MCZK also uses the media to notify the inhabitants of Gdańsk and the "Local Government SMS Informer", which is used to transmit short text messages via SMS or mobile application to people logged into the system, with the possibility of division into districts.

There is also possibility of transmitting warning information by the Regional Crisis Management Centre (via SMS *Regional Warning System*) at the moment of providing such information by the MCZK in Gdańsk or the local government body in Pruszcz Gdański.

The endangered population, after hearing the alarm signaling installed in the vicinity of the Gdańsk Refinery, should follow the instructions presented in the "*Instruction concerning the methods of warning and conduct of community in the event of an industrial accident at Rafineria Gdańska Sp. z o.o.*". Appendix 1 to this Information.

Important phone numbers:

State Fire Service	112, 998
Police	112, 997
Ambulance	112, 999
Energy Emergency Service	991
Municipal Crisis Management Centre in Gdańsk	58 778 60 00, 58 778 60 01
Regional Crisis Management Centre in Gdańsk	58 302 32 32, 58 307 72 04, 58 305 89 68
Representatives of the Pruszcz Gdański municipality responsible for the area of crisis management and security in Pruszcz Gdański	731 483 838, 534 299 124
Pruszcz Gdański District Office Crisis Management Centre	58 773 12 95, 58 773 12 85, 58 773 12 59

6. SAFETY REPORT NOTICE

Safety Report pursuant to Article 253(1) of the Act of 27 April 2021 The Environmental Protection Law ((consolidated text, Journal of Laws of 2024, item 54, as amended) has been developed and submitted to the Pomeranian Regional Commander of the State Fire Service in Gdańsk and the Pomeranian Regional Inspector of Environmental Protection.

7. INFORMATION ON THE MAIN INDUSTRIAL ACCIDENT SCENARIOS AND THE SAFETY MEASURES THAT WILL BE TAKEN IN THE EVENT OF AN ACCIDENT

The main industrial accident scenarios affecting the environment are:

- fire
- explosion of a cloud of flammable mixture,
- emission of a toxic substance – hydrogen sulfide.

The Gdańsk Refinery Sp. z o.o. in Gdańsk uses technical and organizational security systems to prevent the occurrence of phenomena constituting deviations from the normal operation of the installation and major accidents, and in the case of their occurrence, to reduce the potential effects on people and the environment. The above-mentioned technical systems and devices include, m.in:

- signaling and alarm systems,
- fire alarm systems (fire detectors),
- system of degassing of the installation (pressure reduction),
- automatic emergency shutdown (ESD) system,
- safety valves,
- fire interrupters and grounding,
- hand-held firefighting equipment,
- designated explosion hazard zones with the use of equipment for work in this zone.
- trays, drainage systems
- fixed and semi-permanent firefighting systems,
- systems of internal and external water hydrants.

The fire protection unit providing services at the Refinery is LOTOS Straż Sp. z o.o. (hereinafter referred to as LOTOS Straż). LOTOS Straż provides round-the-clock fire protection supervision at the site. Medical support is provided by a medical team of an external company which is a provider of emergency medical services for Rafineria Gdańska.

The most important tasks performed by LOTOS Straż Sp. z o.o. include:

- fire extinguishing with the use of available firefighting equipment and installations,
- shutting off the supply of flammable, poisonous and explosive media to the facility affected by the fire,
- pumping out (otherwise removing hazardous media from the facility that may cause the spread of fire),
- cutting off the electricity supply to a facility affected by fire or threatened by fire.

Rafineria Gdańska has internal regulations and an Major-Accident Prevention Program in place that ensure that:

- there is alarming and response in the event of a major industrial accident,
- sufficiently rapid rescue operations with appropriate personnel and deployment of equipment suitable for specific applications are possible,
- appropriate and sufficient measures are activated to limit the release of and reducing the effects of the spread of hazardous chemical substances and mixtures present at the plant, in the event of a major accident.

Appendix 1

Instruction concerning the methods of warning and conduct of community in the event of an industrial accident at Rafineria Gdańska Sp. z o.o.

Scope of updating the document:

07.2024 - Change the spokesperson's phone number, add the issue number, and change the logo.

04.2024 –Appendix 1 containing information on the methods of warning and conduct of the public in the event of an industrial accident, agreed with the Pomeranian Voivodeship Commander of the State Fire Service in Gdańsk has been added, the telephone number of the Spokesman has been updated, the information in points 4 and 5 has been updated and information about the Safety Report has been added in a separate section (point 6).