

PETROBRAZI REFINERY

No and date of issuing the document: 3647/07.04.2022

**INFORMATION TO BE COMMUNICATED TO THE PUBLIC, CONCERNING
SAFETY MEASURES IN EXPLOITATION AND CONDUCT IN CASE OF ACCIDENT****PART 1**

For all locations falling under the provisions of Law 59/2016:

1. Activity holder's name and address of the location:

1.1. Name or trade name of the operator:

OMV Petrom SA BUCURESTI - PETROBRAZI

1.2. Full address of the location (**Locality, street, no, county, post code, pinpoint location coordinates - latitude:**

Brazi, Prahova County, 65, Trandafirilor street

Coordinates: 44051'50" lat and 24001'10" long

Telephone: 0244 541 452

Fax: 0244 541 452

2. Confirmation that the location falls under the regulations and/or administrative dispositions for implementing Law 59/2016 and that the Notification foreseen at art. 7 and the Policy of Preventing Major Accidents foreseen at art. 8 paragraph (1) or the Security Report foreseen at art. 10 paragraph (1) have been submitted to the authorities.

Following the communication received from the Risk Office of the Environment Protection Agency, OMV PETROM Petrobrazi is a higher / lower level location due to the presence in location of dangerous substances in quantities larger than those relevant, in compliance with the provisions of Law no 59/2016. In compliance with the legal provisions, the following documents have been updated and submitted to the Risk Office of the Environment Protection Agency (county), respectively ISUJ Prahova:

- ▶ Activity notification, ed.5, no 2331/ 29.04.2021 and registration no SRAPM 8609/ 04.05.2021;
- ▶ Prevention Policy on Major Accidents where dangerous substances are involved Ed. 2/rev 0, no 197/19.06.2020 and registration no SRAPM 9305/30.06.2020;
- ▶ Security Report Ed. 8/2020, no. 201/19.06.2020, registered at SRAPM under no 9306/30.06.2020;
- ▶ Internal Emergency Plan no 205/23.06.2020, registered at ISUJ Prahova under no 3130341/24.06.2020.

Besides, the operator is part of a domino group, together with companies Veolia Energie Prahova S.R.L., Linde Gaz Romania S.R.L., Gaspeco L&D S.A. – Negoiești unit, Electric Power Plant with Combined Cycle at Brazi.

3. Explanation in simple terms of the activity or activities performed in the location

The field of activity of company OMV Petrom Petrobrazî is that of processing oil.

The main products manufactured in the unit are:

- ▶ fuels: vehicle gasoline, oil and Diesel fuel types;
- ▶ flare fuels;
- ▶ liquefied gases;
- ▶ aromatic hydrocarbons;
- ▶ petroleum coke, petroleum sulphur;
- ▶ ethyl-tert-butyl-ether (ETBE).

The operator is classified as SEVESO objective given that:

- it uses dangerous substances in their activity of oil processing, NACE code 1920 – Manufacture of refined petroleum products.

Setting-up and proximities



4. Common designations or, in the case of dangerous substances mentioned in part 1 of Law 59/2016, general designations or the general danger category of substances and mixtures involved at the setting that could trigger a major accident, indicating their main dangerous characteristics.

Art no	Used substances	State of aggregation	Hazard statements/Hazard category	
1	Diesel fuels	liquid	H226 H332 H315 H304 H351 H373 H411	Flammable liquid Acute toxicity Corrosion/Skin irritation Danger by aspiration Carcinogenicity Toxicity on a specific target organ – repeated exposure Dangerous for the aquatic environment
2	Gasolines	liquid	H224 H315 H304 H361fd H340 H350 H336 H411	Flammable liquid Corrosion/Skin irritation Danger by aspiration Toxicity to reproduction Mutagenicity of the embryonic cells Carcinogenicity Toxicity on a specific target organ – repeated exposure Dangerous for the aquatic environment
3	Petroleum	liquid	H226 H315 H304 H336 H411	Flammable liquid Corrosion/Skin irritation Danger by aspiration Toxicity on a specific target organ - one single exposure Dangerous for the aquatic environment
4	Fuel oil	liquid	H332 H315 H350 H361d H373 H400 H410	Acute toxicity Corrosion / Skin irritation Carcinogenicity Toxicity to reproduction Toxicity on a specific target organ– repeated exposure Dangerous for the aquatic environment Dangerous for the aquatic environment
5	Vacuum distillation	liquid	H332 H361d H350 H373 H400 H410	Acute toxicity Toxicity to reproduction Carcinogenicity Toxicity on a specific target organ– repeated exposure Dangerous for the aquatic environment Dangerous for the aquatic environment
6	Crude oil	liquid	H225 H350 H304 H319 H336 H373	Flammable liquid. Carcinogenicity Danger by aspiration Serious injury to the eyes / irritation of the eyes Toxicity on a specific target organ– one single exposure Toxicity on a specific target organ– repeated exposure

Art no	Used substances	State of aggregation	Hazard statements/Hazard category	
			H340 H361f H412	Mutagenicity Toxicity to reproduction Dangerous for the aquatic environment
7	Benzene	liquid	H225 H350 H340 H372 H304 H319 H315 H412	Flammable liquid. Carcinogenicity Mutagenicity Toxicity on a specific target organ– repeated exposure Danger by aspiration Serious injury to the eyes / irritation of the eyes Corrosion / Skin irritation Dangerous for the aquatic environment
8	Toluene	liquid	H225 H315 H304 H361d H336 H373 H412	Flammable liquid. Corrosion / Skin irritation Danger by aspiration Toxicity to reproduction Toxicity on a specific target organ– one single exposure Toxicity on a specific target organ– repeated exposure Dangerous for the aquatic environment
9	Intermediary oil products*	liquid	H224 H315 H304 H361f H340 H350 H336 H411	Flammable liquid. Corrosion / Skin irritation Danger by aspiration Toxicity to reproduction Mutagenicity Carcinogenicity Toxicity on a specific target organ– one single exposure Dangerous for the aquatic environment
10	Liquid heat fuel	liquid	H226 H332 H315 H304 H361d H350 H373 H410 H400	Flammable liquid. Acute toxicity Corrosion / Skin irritation Danger by aspiration Toxicity to reproduction Carcinogenicity Toxicity on a specific target organ– repeated exposure Dangerous for the aquatic environment Dangerous for the aquatic environment
11	Recycle light fraction	liquid	H226 H332 H315 H304 H350 H361d H373 H400 H410	Flammable liquid. Acute toxicity Corrosion / Skin irritation Danger by aspiration Carcinogenicity Toxicity to reproduction Toxicity on a specific target organ– repeated exposure Dangerous for the aquatic environment Dangerous for the aquatic environment
12	MTBE, ETBE	liquid	H225 H315	Flammable liquid. Corrosion / Skin irritation

Art no	Used substances	State of aggregation	Hazard statements/Hazard category	
13	Gasoline	liquid	H224 H350 H340 H304 H361f H336 H315 H411	Flammable liquid. Carcinogenicity Mutagenicity Toxic by aspiration Toxic to reproduction Toxicity on a specific target organ– one single exposure Corrosion / Skin irritation Dangerous for the aquatic environment
14	Ethanol	liquid	H225 H319	Flammable liquid. Serious injury to the eyes / irritation of the eyes
15	Propylene	gas	H220 H280	Flammable gas Under-pressure gas
16	blau-gas: GPL; propane*	gas	H220 H280	Flammable gas Under-pressure gas
17	Hydrocarbons with C4	gas	H220 H280 H340 H350	Flammable gas Under-pressure gas Mutagenicity Carcinogenicity
18	Natural gas	gas	H220 H280	Flammable gas Under-pressure gas
19	Refinery gas	gas	H220 H280 H360 H373	Flammable gas Under-pressure gas Toxicity to reproduction Toxicity on a specific target organ– repeated exposure
20	TAME	liquid	H225 H302 H336	Flammable liquid. Acute toxicity Toxicity on a specific target organ– one single exposure
21	Methanol	liquid	H225 H301 H311 H331 H370	Flammable liquid. Acute toxicity Acute toxicity Acute toxicity Toxicity on a specific target organ– one single exposure
22	Additives, markers*	liquid	H302 H312 H332 H411	Acute toxicity Acute toxicity Acute toxicity Dangerous for the aquatic environment
23	Alkylate*	liquid	H224 H315 H304 H336 H411	Flammable liquid. Corrosion / Skin irritation Danger by aspiration Toxicity on a specific target organ– one single exposure Dangerous for the aquatic environment
24	Catalysts*	solid	H332 H334 H317 H351	Acute toxicity Sensitivity of the skin / airways Sensitivity of the skin / airways Carcinogenicity

Art no	Used substances	State of aggregation	Hazard statements/Hazard category	
			H400	Dangerous for the aquatic environment
			H410	Dangerous for the aquatic environment

*Note 1: *there have been taken into consideration the characteristics of the most hazardous product*

Note 2: the physical, chemical, toxicological, eco-toxicological characteristics and hazard identification, modality of storage and handling are described in the product Safety Sheets.

5. General information concerning the modalities of warning the interested public, if necessary; adequate information concerning the proper conduct in case of a major accident or indication of the place where the respective information may be electronically accessed.

Taking into consideration the specific risk factors at Petrobrazi and the possibility of occurrence of internal or external emergencies, for the protection of the employees and population in the proximity of the platform, as well as that of the economic operators on the platform or in the proximity, the warning - announcement system in case of disaster operates with the following types of sound signals:

In this sense, PAY ATTENTION TO:

Alarm: 2-minute duration with 5 impulses of 16 seconds each, with 10-second breaks between the impulses; ceasing of the alarm - 2-minute continuous signal.

The sound signal triggered locally or at the entire platform level induces the following activities:

- ▶ Removal from the area of the employees that are not involved in the intervention activities, in the directions established in compliance with the weather data recorded by the Emergency Situations Private Service (SPSU) Falck dispatch, and sent by the representatives of the Emergency Situation Cell of the Unit at Petrobrazi;
- ▶ Sheltering the employees that are not involved in the intervention activities, wherever possible, in the special set-up civilian protection shelters.

The Emergency Situation Private Service dispatch, FALCK is the reception point for the notifications in case of emergency and ensures the phone call connections at Petrobrazi. At the Emergency Situation Private Service dispatch, (Falck Fire services) operates the warning system for the electric and electronic buzzers. The weather data are made available by the Falck (SPSU) dispatch.

In internal or external emergency cases, when the situation imposes the evacuation of the dispatch location, all phone call connections are transferred to the civilian command centre that has available supplementary protection equipment for the personnel and members of the "Emergency Situation Cell".

For Brazi township, warning is done by phone call to the mayor's office. The same procedure is followed for the objectives located further away from Petrobrazi area, that could be affected (Ploiești Triaj, Brazi, Society Linde GAZ Negoiești Railroad stations etc.).

In the case of occurrence of a major accident, the role to warn and inform the population, as well as the coordination of the immediate activities to isolate the affected area, evacuation of the population from the affected and neighbouring areas and the intervention to limit the consequences of the accident belong to the competent territorial authorities.

The adequate information on the actions to be taken by the targeted population and on the conduct to adopt in case of occurrence of a major accident, are mentioned in the warning Plan of the Emergency Situation Inspectorate "Șerban Cantacuzino" of Prahova County that warns the population about the event and sends rules of conduct and organizes and manages the evacuation of the population.

The warning system that operates within the Emergency Situations Private Service (Falck Fire Services) dispatch, is an integrated system featuring the possibility to send both vocal messages as well



as warning sound signals.

To avoid accidents / intoxication, the persons to be found in the risk area must observe the following indications:

a) In case of major emissions (toxic dispersions):

- ▶ Move away from the scene of the accident.
- ▶ Do not sit outdoors to avoid inhaling any toxic substances.
- ▶ Immediately find shelter inside the building.
- ▶ Immediately close all windows and doors.
- ▶ If need be, help children, disabled people and the seniors.
- ▶ Disconnect all AC devices or fans in the premises where you are located or your vehicle.
- ▶ Cover your mouth and nose with a wet handkerchief.
- ▶ In case of health issues subsequently occurred, seek medical advice.

b) In case of fire or explosion:

- ▶ Move away from the scene of the accident.
- ▶ Do not stand on the direction of the air currents carrying the products resulted from burning. If case be, protect your airways covering your mouth and nose with a wet handkerchief and immediately leave the area.
- ▶ Leave the building where you are if it is affected by the incident. If you can remain inside the building, disconnect all AC devices or fans in the premises where you are located.
- ▶ Help children, disabled people and the seniors if needed.

Adequate information on the proper conduct in case of a major accident may be electronically accessed on our company's site, on the following link: <https://www.omvpetrom.com/ro/locatii-seveso>



Information on the conduct to adopt in case of occurrence of a major accident may be accessed on ISU Prahova site: <http://www.isuprahova.ro/educatie-preventiva.html>.

6. Date of the last visit in the location, in compliance with art. 20, paragraph (5) of Law 59/2016 or the indication of the places where the respective information may be electronically accessed; information on the place where it is possible to obtain, upon request, more detailed information on the inspection and intervention plan, under the dispositions of art. 22 of Law 59/2016 (confidentiality requirements set in compliance with the law).

Specify the latest date of the visit performed in location by the competent authorities, the participating authorities, type of control and the place where more detailed information can be obtained.

Art no	Date of the visit performed in location by the competent authorities	Participating authorities	Scope of the inspection

1	21-22.03.2022	Environment National Guard The Prahova County Commissary The Inspectorate for Emergency Situations "Șerban Cantacuzino" of Prahova County	<ul style="list-style-type: none"> - The manner of implementing the provisions of Law no. 59/2016 on the Security Management System, respectively on Risk Identification and Assessment; - Status of implementation of the measures set out in previous inspection reports; - Checking the Control List / Questionnaire; - Informing the public according to the provisions of Law no. 59/2016; - Verification of the implementation of the Major Accident Prevention Policy as well as of the Safety Management Plan for the application of this policy, according to the provisions of Law no. 59/2016, regarding the identification and assessment of risks.
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Note: Detailed information on the inspection and inspection plan, under the dispositions of art. 22 of Law 59/2016, may be obtained upon request, at the headquarters of OMV Petrom SA, located in Bucharest, district 1, 22 Coralilor street - direct phone line 0800 800 041 or by accessing the following link: <https://www.omvpetrom.com/en/seveso-locations>.

Contact person:

- ❖ Nicolae Narcis, Responsible for safety management;
- ❖ Mastan Gabriela Head of Environment Protection / Responsible for the Environment Protection
- ❖ Nicolae Narcis, responsible for the Emergency Situations Private Service;
- ❖ Nicolae Narcis, Civilian Protection Inspector.

7. Data regarding the sources where more relevant information may be obtained, under the dispositions of art. 22 of Law 59/2016

Detailed information under the dispositions of art. 22 of Law 59/2016, may be obtained upon request, at the headquarters of OMV Petrom SA, located in Bucharest, district 1, 22 Coralilor - directly at the phone number 0800 800 041 / email: office.petrobrazil@petrom.com or access the link:

EN: <https://www.omvpetrom.com/en/seveso-locations>;

Contact person:

- ❖ Nicolae Narcis, Responsible for safety management
- ❖ Mastan Gabriela Head of Environment Protection / Responsible for the Environment Protection
- ❖ Nicolae Narcis, responsible for the Emergency Situations Private Service
- ❖ Nicolae Narcis, Civilian Protection Inspector

And at the location: SRAPM: phone 0244/544134, email office@apmph.anpm.ro

CJ-GNM: tel. 0244/544495, e-mail: cjprahova@gnm.ro.

ISUJ: phone 0244/595366, e-mail: isuph@isuprahova.ro; ispecerat@isuprahova.ro

PART 2

for the higher levels locations, supplementary to the information mentioned at part 1:

1. General information regarding the nature of major accident risks, including their potential effects on human health and surrounding environment and brief details on the main types of major accident scenarios and control measures for their management.

Example

On OMV Petrom SA - Petrobrazil platform, the following types of accidents could occur:

- Fire due to oil product leakages caused by non-tightness issues on the technical / technological equipment.

- Explosions of the flammable vapour clouds in open air (UVCE) or partly or totally closed (CVE) spaces at the level of installations and/or equipment containing flammable oil products.
- toxic dispersion.
- jet fire on the flammable fluid layouts.

A major accident could affect both the exploitation personnel as well as the population in the areas neighbouring the industrial installations, surrounding environment and material goods.

People can be exposed to:

- ❖ intoxication with chemical substances or combustion products.
- ❖ combustion under direct effect of the flame or under its thermal radiation.
- ❖ Impact due to the explosion blast or crashing down of the construction elements or technological equipment.

The major impact on the environment consists in:

- The possibility of polluting the air with substances resulted from oil product combustion in the case of fire ;
- The possibility of contaminating the ground/vegetation surrounding the area along the direction of the land slope (slight NW-SE slope) with oil products.

The surfaces affected by the consequences of a major accident, called impact areas can be found below, in compliance with Addendum 1.

The maximum radius to feel the effects of possible accident scenarios that could occur at the refinery (effects outside the setting) are as following:

- ▶ Release of highly flammable products with fire and explosion generation in the Catalytic Cracking installation: 640 m.
- ▶ Release of highly flammable products with fire and explosion generation in the Catalytic Cracking gasoline hydrosulphurisation installation: 580 m.
- ▶ Release of dangerous products in the air from the DGRS installation; 6700 m.
- ▶ Release of highly flammable products with fire generation in the HB 120 installation: 460 m.
- ▶ Release of highly flammable products with fire and explosion generation in the HP 121:205m.
- ▶ Release of highly flammable products with fire generation in the HM 123 installation: 540 m.
- ▶ Release of dangerous substances in the air from the HM 123 installation; 3200 m.
- ▶ Release of highly flammable products with fire and explosion generation in the RC 130 installation: 700 m.
- ▶ Release of highly flammable products with fire and explosion generation in the AD Section – oil product warehouse: 130 m.
- ▶ Release of highly flammable products with fire and explosion generation in the Vehicle Uploading Ramp: 210 m.
- ▶ Release of highly flammable products with fire and explosion generation in the RGF– 125 m

To prevent and remove the effects of accidents involving hazardous substances, at the level of the location there is a series of technical and organizational measures implemented, of which we mention:

- use of BAT (Best Available Techniques)/BREF, adopting the best techniques, ISO 9000:2015 /ISO 14000:2015/ISO 45001:2018 standards
- selection and training of the personnel in location is rigorously done, having periodical training courses.
- response exercises to accidents are organized monthly, when various accident scenarios are tested.
- there is a permanently drafted and tested PUI.
- specialty inspections from outside the location are organized yearly.
- automatic fire fighting / substance release detection / sealing systems in case of accidental leakages of oil products.

The probability of occurrence of an accident is very low, likely to never occur throughout the entire duration of operation of an installation, machinery, but not negligible.

2. Confirmation that the activity holder (the operator) has the obligation to take proper measures within the location, especially keeping in touch with the emergency services, to act in case of major accident and to minimize its effects.

OMV Petrom - Petrobrazî confirms having taken all the proper technical and organizational measures within the location, both to safely operate the installations by using the international norms and standards, BAT / BREF, periodical auditing, theoretical and practical training both in location as well as outside, together with the response task authorities in case of major accident, to act in the case of major accidents and to minimize their effects. In this sense, the Internal Emergency Plan was drafted in compliance with the requirements of Law 59/2016 and OMAI 156/2017. It sets actual measures to be taken in all situations of accidents identified by a systematic risk analysis within the Safety Report, both at the level of the affected installations as well as at the location management level. Besides, protocols and procedures to warn all intervention tasks inside and outside the location are set.

Also, OMV Petrom – Petrobrazî has an contract with Emergency Situations Private Service that has both the training as well as the equipment necessary for intervention in case of an emergency incident / accident.

To obtain information regarding the above documents, the interested public may address the contact persons:

- ❖ Nicolae Narcis, Responsible for safety management;
- ❖ Mastan Gabriela Head of Environment Protection / Responsible for the Environment Protection
- ❖ Nicolae Narcis, Responsible of the Emergency Situations Private Services;
- ❖ Nicolae Narcis), Civilian Protection Inspector.

3. Proper information from the external emergency plan drafted to face any effects outside the location, following an accident.

These should include the recommendation to follow all instructions and to answer all requests from the intervention services in case of emergency during an accident.

Information regarding the external emergency plan can be found on the website of the Emergency Situation Inspectorate “Șerban Cantacuzino” of Prahova County on the following link: www.isuprahova.ro/seveso

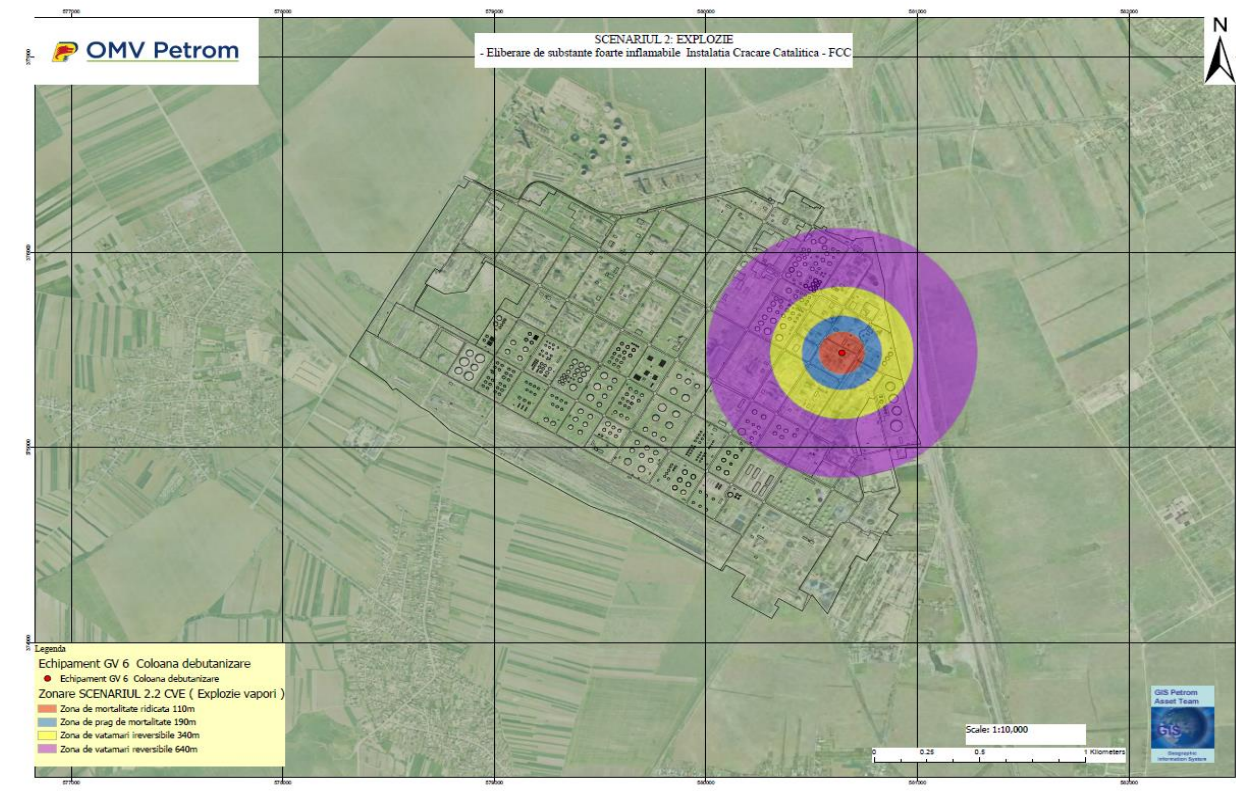
4. Wherever applicable, there shall be indicated if the location is nearby the territory of another member state and if there is the possibility of a major accident with cross-border effects, in compliance with the Economic Commission Convention of the United Nations for Europe regarding cross-border effects of industrial accidents:

- Not applicable.

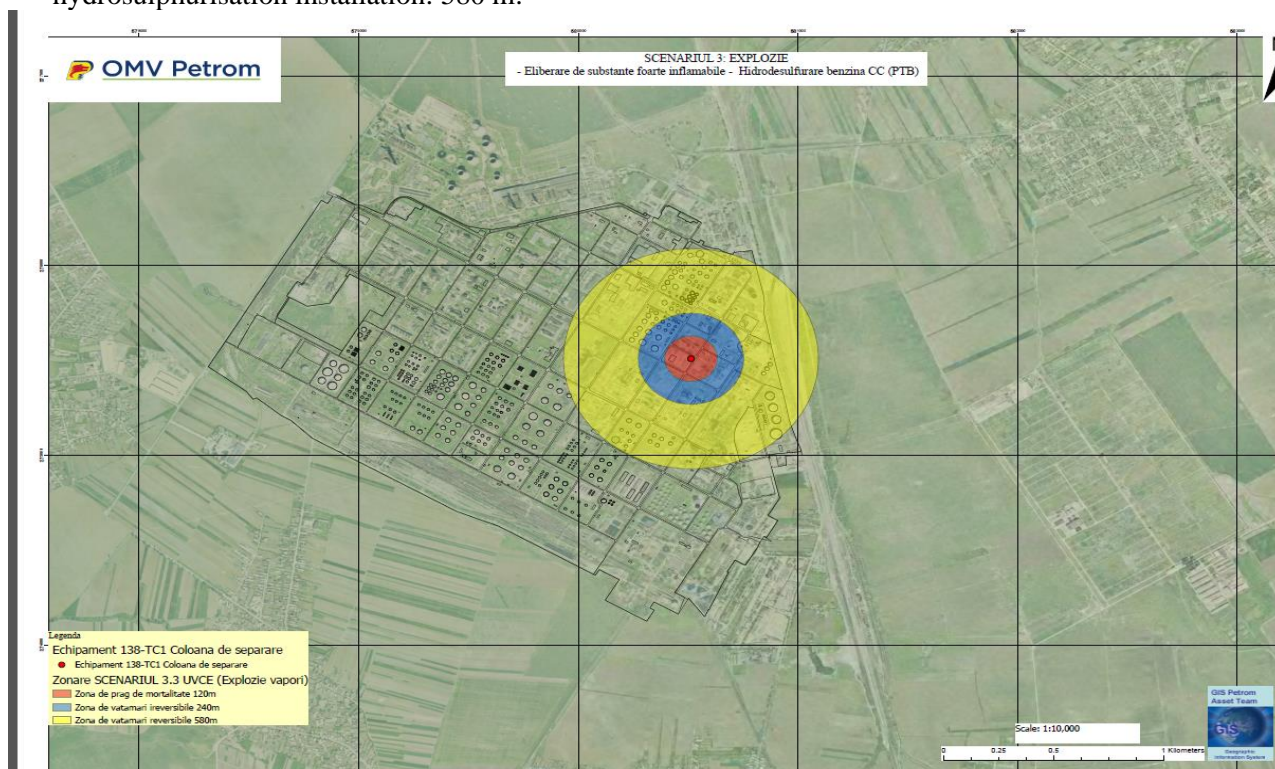
***Note:** This document replaces the previous edition. The amendments / additions to the previous edition are marked in yellow.*

Graphic representation of the maximum areas where the effects of possible accident scenarios that could occur at the refinery, can be felt (effects outside the location)

- Release of highly flammable products with fire and explosion generation in the Catalytic Cracking installation: 640 m.



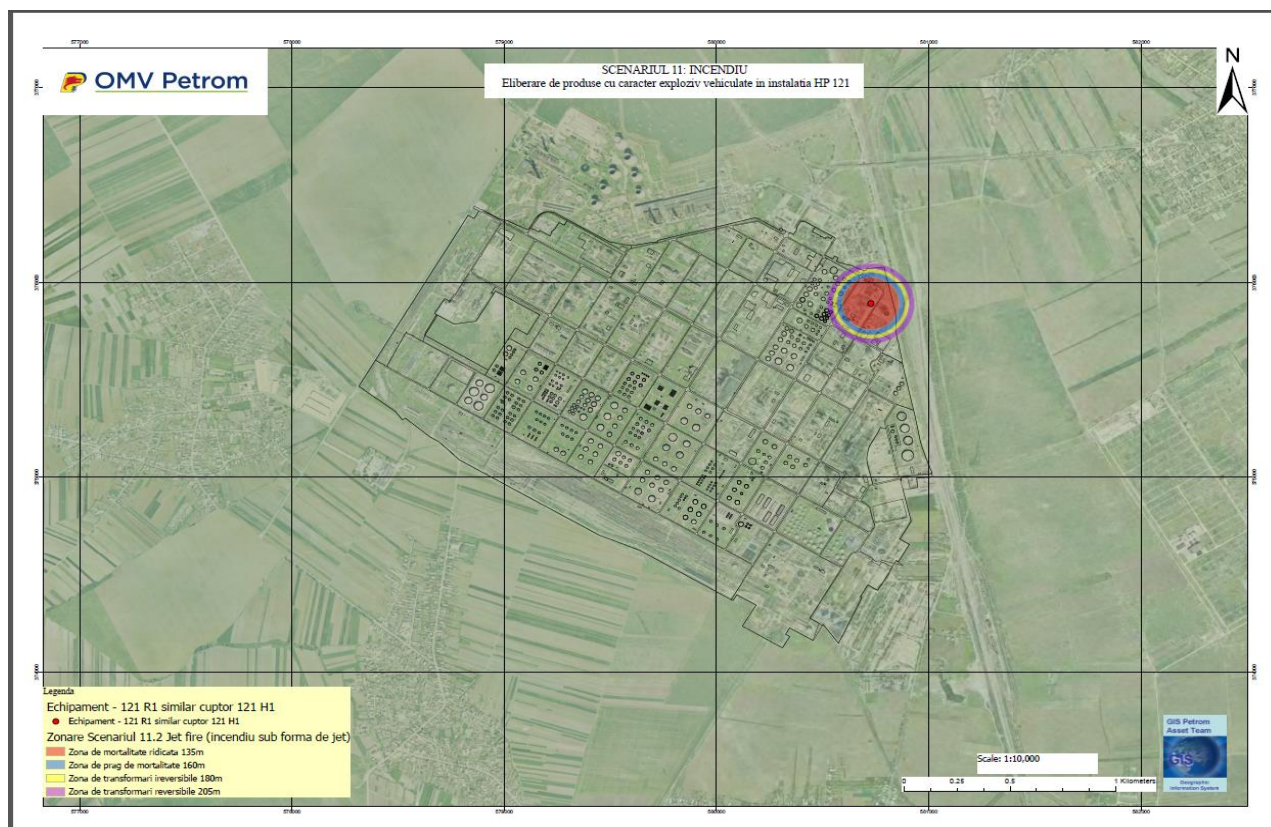
- Release of highly flammable products with fire and explosion generation in the Catalytic Cracking gasoline hydrosulphurisation installation: 580 m.



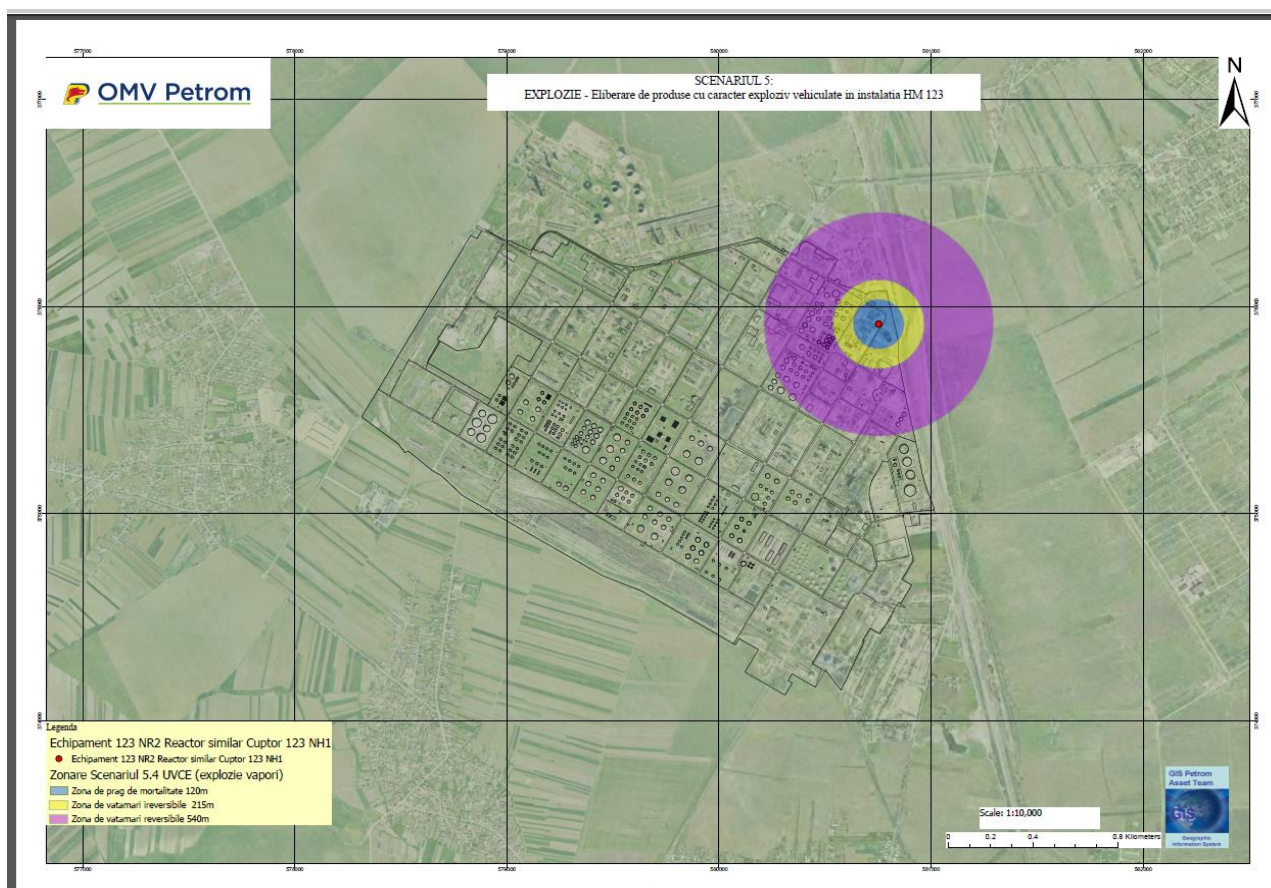
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- SCENARIUL 8: INCENDIU
Eliberare de produse cu caracter exploziv vehiculate în instalația HB 120
- Legendă
- Edificat - Coloana C1 (coloana de stropire similară cu vântul V15)
 - Edificat - Coloana C2 (coloana de stropire similară cu vântul V15)
 - Scenariul 8.1 Fie (măsură de foc) la instalația coloană C1 (coloana de stropire similară cu vântul V15)
 - Zona de incendiu radiație 10m
 - Zona de prag de incendiu 20m
 - Zona de incendiu severă 400m
 - Zona de incendiu severă 400m
- Scale: 1:10,000
- 0 0.25 0.5 1 Kilometri
- GIS Petrom Asset Team
- GIS Petrom Asset Team
- Information Systems

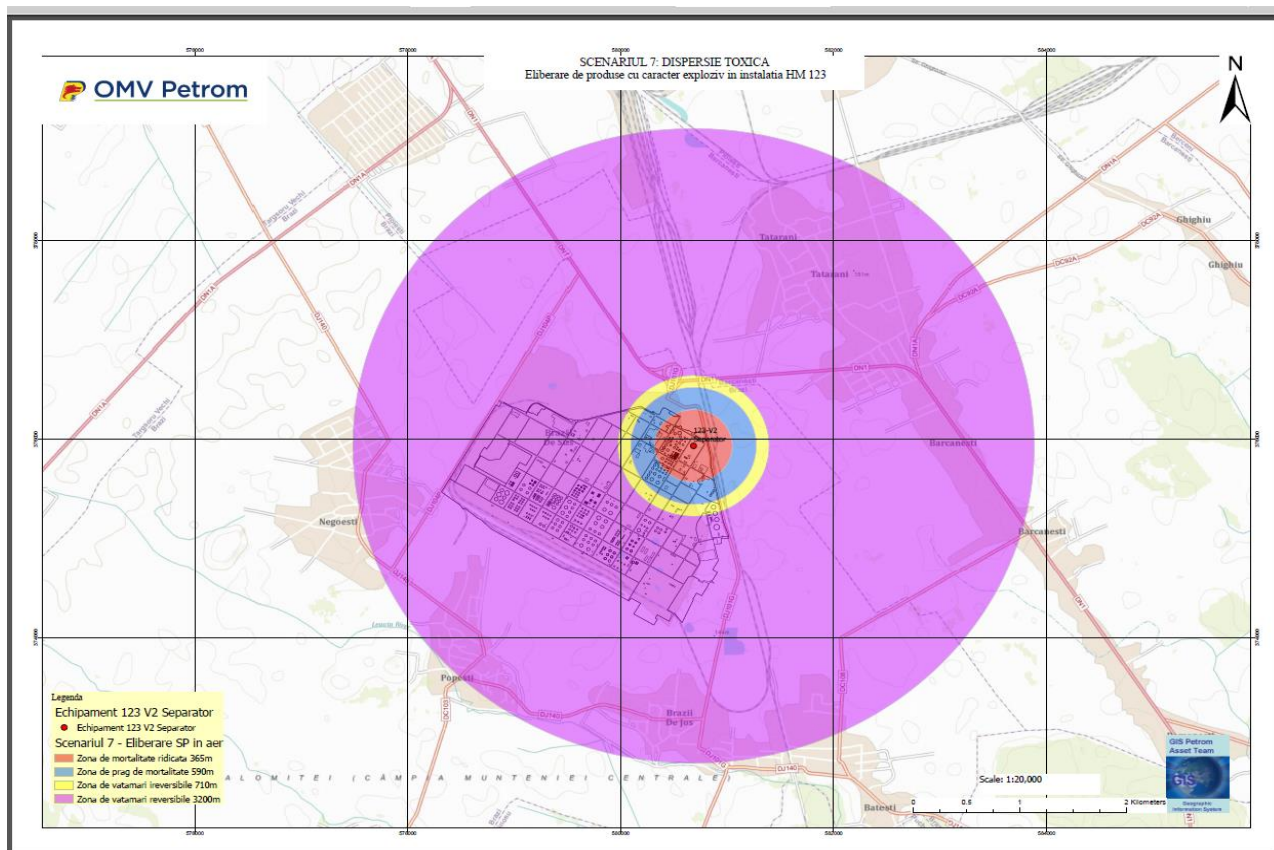
- Release of highly flammable products with fire and explosion generation in the HP 121: 205 m.



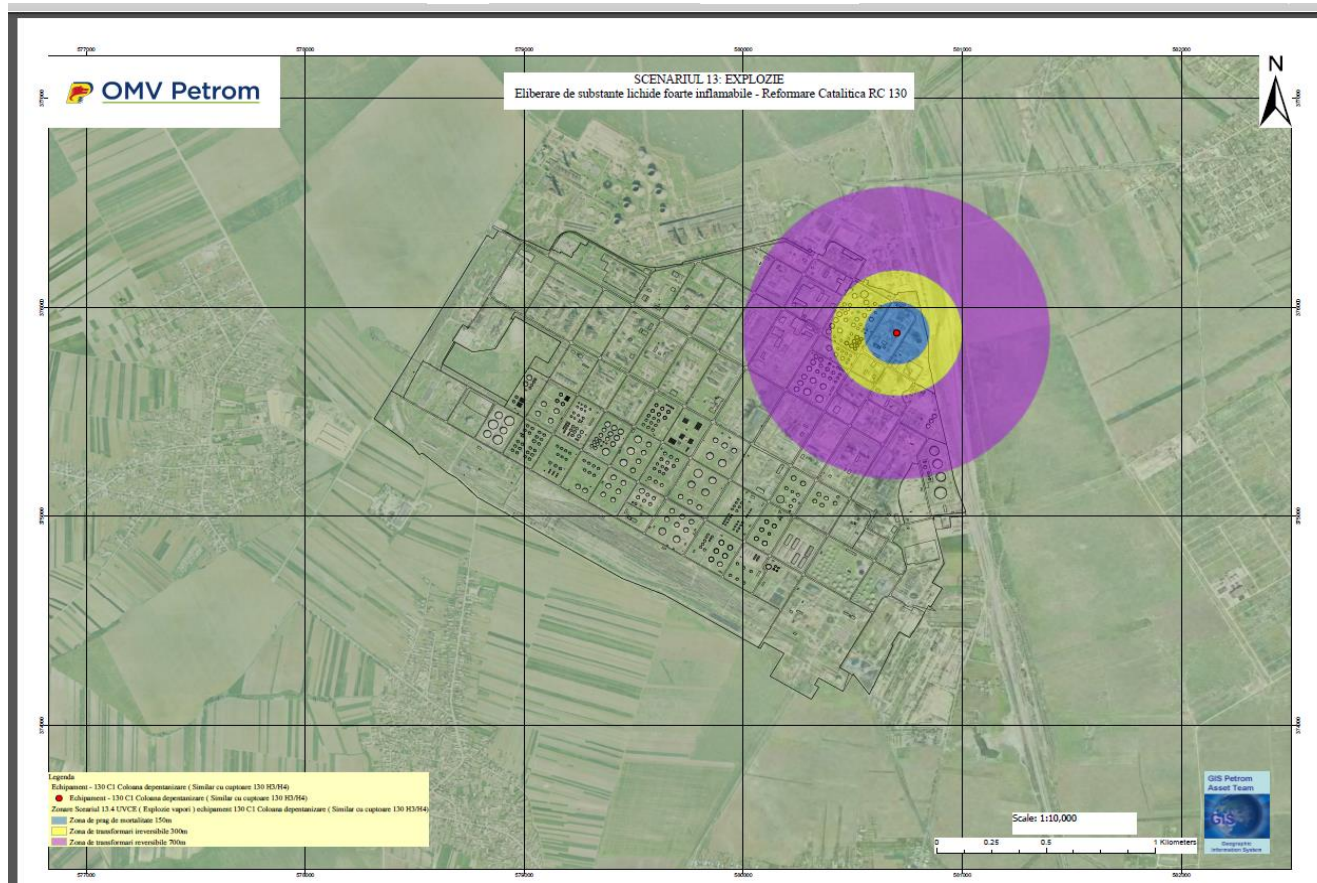
- Release of highly flammable products with fire generation in the HM 123 installation: 540 m.



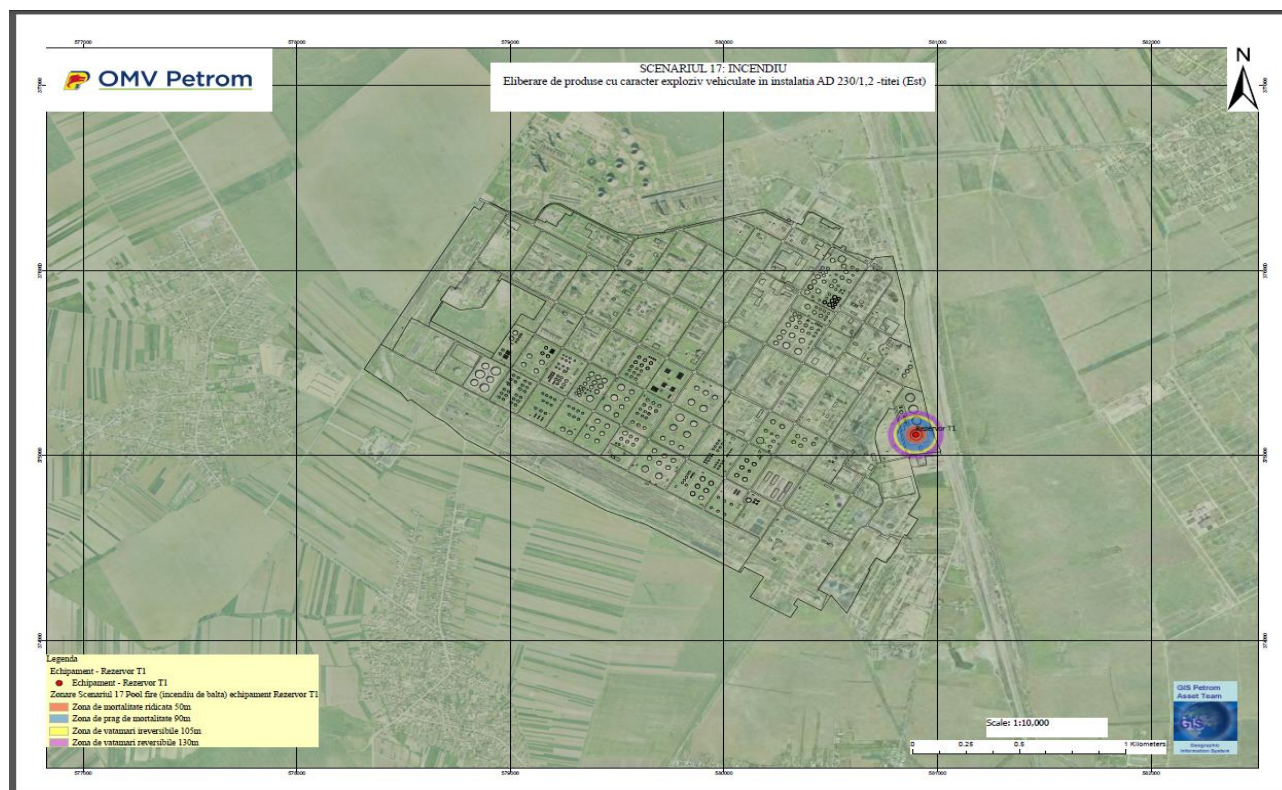
- Release of dangerous substances in the air from the HM 123 installation: 3200 m.



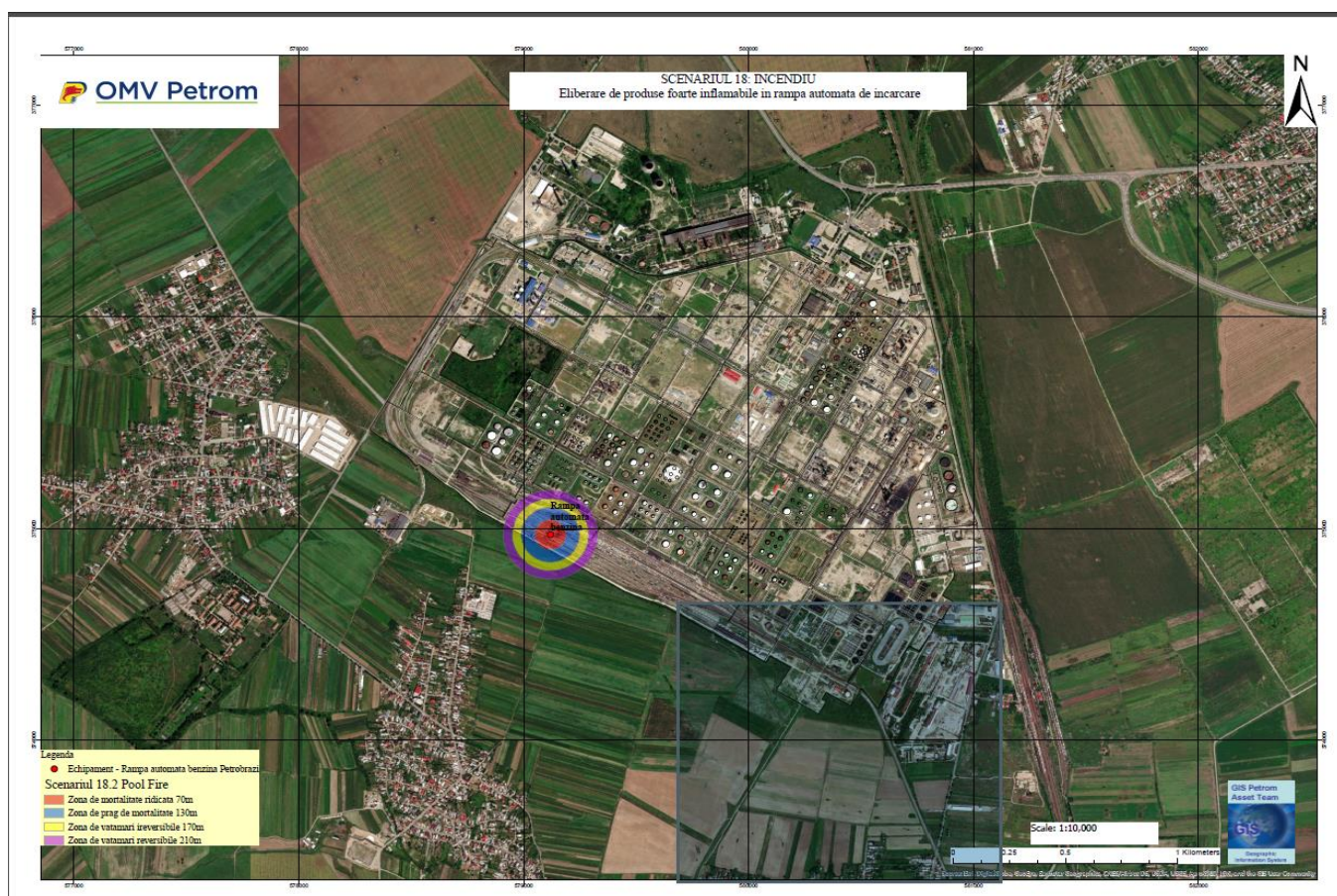
- Release of highly flammable products with fire and explosion generation in the RC 130 installation: 700 m.



- Release of highly flammable products with fire and explosion generation in the AD Section – oil product warehouse: **130 m.**



- Release of highly flammable products with fire and explosion generation in the Vehicle Uploading Ramp: **210 m.**



- Release of highly flammable products with fire and explosion generation in the RGF– 125 m.

