WASTE REDUCTION AND PREVENTION PROGRAM - 2021

S.N.G.N. ROMGAZ S.A. MEDIAS

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Content

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ANNEXES

1. Waste management in 2020;
2. Waste management in 2021;
3. Test report (hydraulic mineral oil, motor oils, lubrication oils, transmission oils);
4. Waste description and interpretation – waste description sheet (base oil, oily waste, oily mud, polishing material, oil filters, antifreeze fluids with hazardous substances, etc.).

1. INTRODUCTION

This Waste Prevention and Reduction Program approaches the measures and methods to prevent and mitigate waste generated from the activities performed by S.N.G.N. ROMGAZ S.A., in compliance with the requirements of GEO No. 92/2021 on the waste regime as well as with a preferred waste management hierarchy.

Measures and methods are identified following assessments on mitigation of waste quantities and by reference from the internal waste audit. The waste management hierarchy refers to source reduction, recycling, valorising, treatment, incineration and storage.

Minimising waste by:

- Prevent and/or reduce source waste generation;
- Improve quality of waste (reduce the hazard, harmfulness, etc.);
- Encourage reuse, recycling and recovery;
- Selective waste collection;
- Reuse packaging waste ensuring their lifespan.

The prevention and reduction program of waste generated from S.N.G.N. ROMGAZ S.A. activities offers information on the detailed inventory of waste and on a plan to minimize waste, in line with the Policy Statement on Quality, Environment, Health, Occupational Security and Energy undertaken by S.N.G.N. Romgaz S.A. Moreover it describes the processes related to selective collection, transportation, treatment, valorisation, storage and waste elimination, including monitoring these operations.

The responsibility for waste management activities resides to those who generate waste, according to the principle "the polluter pays" or as the case may be, to the producer, "the producer responsibility" principle. In all cases, external contractors specialized in waste management holding

environmental permits are used. Waste management activities are performed by complying with environmental protection norms reflecting the requirements of national and European laws.

2. SCOPE

The waste prevention and reduction program intends to identify objectives, targets and action policies to be complied by S.N.G.N. Romgaz S.A. in order to reach Romania's strategic objectives.

Moreover, the program sets the framework for ensuring a sustainable waste management to ensure fulfilment of objectives and targets.

Priority objectives in the field of waste management take into account general principles that underlying such activities:

Prevention and reduction of waste and of their hazard by:

- Developing clean technologies with low consumption of natural resources;
- Purchasing products which have low or the least impact by the method of manufacturing, usage or disposal, on the increase of waste or on the related hazard or on the pollution degree;
- Determining the investments necessary for waste management;
- Setting measures for achieving objectives by allocating financial and human resources;
- Developing a responsible behaviour towards waste prevention and waste management – transition to a circular economy;
- Increasing the efficiency of law enforcements in the field of waste management.

Reuse, waste valorisation by recycling, recovery or any other process to obtain secondary raw materials:

- Develop and expand selective waste collection systems in order to promote a high quality recycling.

3. APPLICABLE LEGAL FRAMEWORK

- GEO No. 195/2005 on environmental protection;
- GD No. 188/2002 on approving enforcement guidelines for wastewater discharge in the aquatic environment;
- GEO No.92/2021 on the waste regime;
- ORDER No. 140/2019 issued by the Ministry of Environment on approving the Methodology for preparing, monitoring, assessing and reviewing county plans for waste management and the waste management plan for Bucharest;
- GD No. 942/2017 on approving the National Waste Management Plan;
- GD No. 870/2013 on approving the National Waste Management Strategy 2014-2020;
- GD No. 856/2002 on the waste management record keeping and for approving the waste list, including hazardous waste;
- GD No. 856/2008 on waste management from extraction industries;
- GD No. 1.061/2008 on the transportation of hazardous and non-hazardous waste on the Romanian territory;
- LAW 132/2010 on the selective waste collection in public institutions;
- ORDER No. 95/2005 MMGA on establishing acceptance criteria and preliminary acceptance procedures for waste disposal and the national waste list accepted in each waste disposal class;
- ORDER No. 1226/2012 Health Ministry on approving technical norms for waste management resulted from medical activities and the Data Collection Methodology for the national data base on waste resulted from medical activities;
- GD No. 6/2021 on reducing the impact of certain plastic products on the environment;

- GEO No.5/2015 on waste from electric and electronic equipment;
- Government Ordinance No.2/2021 on waste landfill;
- GD No. 170/2004 on management of used tires;
- ORDER No.757/2004 issued by the Ministry of Environment and Water Management for approving waste landfill;
- ORDER No. 1281/2005 issued by the Ministry of Environment and Water Management on methods to identify containers for various material types for selective collection;
- Law No. 212/2015 on methods for management of vehicles and phased out vehicles;
- Law No. 181/2020 on management of non-hazardous compostable waste;
- Law No. 249/2015 on management of packaging and packaging waste;
- GD No.1132/2008 on batteries and accumulators and the related waste;
- Law No. 360/2003 on the regime of hazardous substances and chemicals.

4. GLOSSARY

- **Environmental aspect** - element of activities, products or services of an organisation that might interact with the environment;
- **Waste audit** – instrument for systematic, documented and objective evaluation of waste management processes to facilitate waste management control and waste valorisation, including achieving environmental objectives and targets of the organisation, company performance elated to waste prevention and reduction from its own activity and company performance related to reducing waste harmfulness;
- **Waste code** – code consisting of 6 figures, defining individually all types of waste generated by economic agents;
- **Waste** – any substance or object which the holder discards or intends or is required to discard;
- **Sustainable development** – development meeting the needs of the present whilst ensuring future generations can meet their own needs;
- **Recyclable waste** – waste potentially used as raw material in a production process to obtain the initial product or for other purposes;
- **Waste management records** – record held by economic operators on the quantity, temporary storage, transportation, valorisation/disposal of waste;
- **Loading/unloading form for non-hazardous waste** – standard form, with special regime, for controlling transportation of non-hazardous waste used for collecting/temporary storage/treatment/valorisation/disposal operations, prepared by the generator and signed by the transporter and by the waste producer and the receiver;

- **Waste management** - the collection, transport, recovery and disposal of waste, including the supervision of such operations and the after-care of disposal sites, and including actions taken as a dealer or broker;
- **Integrated Environmental System** – unique and unitary data base managed by the National Agency for Environmental Protection, used by economic operators to submit online regulation acts and reports; competent authorities monitor in real time the environmental indicators and manage nationally the protected natural areas Natura 2000;
- **Re-use** - operation by which products or components that are not waste are used again for the same purpose for which they were conceived;
- **Environmental Management System** – component of the general management system, including the organizational structure, planning activities, responsibilities, practices, procedures, processes and resources to prepare, implement, achieve, analyse and maintain the environmental policy;
- **Traceability -** the characteristic of a system to allow the retrieval of the history, use or location of a waste by registered identifications.

5. ROMGAZ OVERVIEW

S.N.G.N. ROMGAZ S.A. is the largest natural gas producer and the main supplier in Romania. Since 2013, the Company is admitted to trading on Bucharest Stock exchange and on London Stock exchange. The Romanian State is the majority shareholder with a 70% stake, represented by the Ministry of Energy. The Company has a vast experience in natural gas exploration and production, with a history that began more than 100 years ago, in 1909, when the first natural gas field was discovered at Sarmasel, in the Transylvanian Basin.
Romgaz extended its business in 2013 by taking over Iernut thermal power plant, becoming electricity producer and supplier.

S.N.G.N. ROMGAZ S.A. Medias operates as a national company, consisting of:

- Sucursala Medias (Medias Branch) – natural gas production;
- Sucursala Targu-Mures (Targu Mures Branch) - natural gas production;
- Sucursala de Interventii, Reparatii Capitale si Operatii Speciale la Sonde Medias (SIRCOSS) – Branch for Well Workover, Recompletions and Special Well Operations);
- Sucursala de Transport Tehnologic si Mentenanta Targu-Mures (STTM) - Technological Transport and Maintenance Branch);
- Sucursala Bratislava (Bratislava Branch) - natural gas exploration;
- Sucursala de Productie Energie Electrica Iernut (SPEE) Iernut Power Generation Branch – electricity generation;
- Sucursala Drobeta-Turnu Severin (Drobeta-Turnu Severin Branch) – natural gas supply.

S.N.G.N. ROMGAZ S.A., leader in the field of geological exploration, gas production and storage, operates in 23 counties in Romania, holds 124 environmental permits, 2 integrated environmental permits, 1 permit for greenhouse gas emissions and 81 water management permits.

6. GENERAL CONDITIONS ON THE WASTE REGIME

6.1 CURRENT SITUATION

The current situation is considered as a reference point and helps to identify the needs for further developments in waste management.

An overview of the existing situation (types and quantities of waste) gives information about the achievement of objectives and targets, but also about the weaknesses within the system, regarding:

- Organisation of the waste management system;
- Waste generation;
- Selective collection and waste transportation;
- Waste treatment and recovery;
- Waste disposal.

In this respect, Romgaz acts in order to:

- Comply with legal and regulatory requirements, operating in a environmental responsible manner;
- Reduce the consumption of utilities, materials as well as the level of polluting emissions;
- Reduce the consumption of technological water, technological gas and to reduce the consumption of triethylene glycol (used for natural gas conditioning);
- Reduce consumption of compressor parts and compressed gas cooling parts;
- Dispose hazardous substances treating cooling water;
- Integrate environmental aspects in all decision making processes;
- Communicate and cooperate with all suppliers and stakeholders to minimise their impact on the environment;
- Maintain conformity with provisions of regulatory acts (environmental and water management endorsements/agreements/permits) issued for the performance of activities;
- Promote respect for the environment in line with the economic growth, in each strategic decision.

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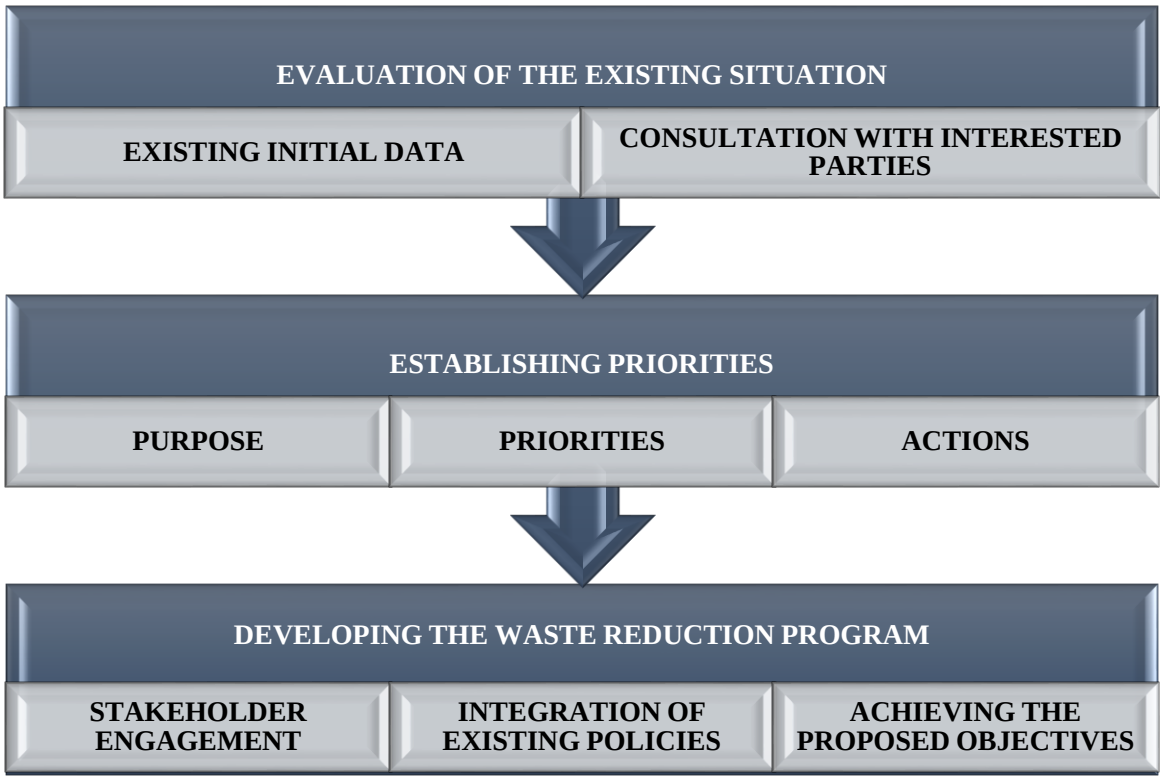
S.N.G.N. ROMGAZ S.A. complies with the National Strategy for Sustainable Development, with the National Strategy for Waste Management and with the standard SR EN ISO 14001:2015 – Environmental Management Systems, undertakes to:

- Continuously improve and set procedures for evaluation of environmental performances and specific indicators;
- Prevent and combat pollution from its processes and activities and to protect the environment by reducing the consumptions of resources (materials, fuel and energy);
- Ensure a framework for setting and analysing general and specific environmental objectives, as well as the environmental policy;
- Communicate and understand the Policy Statement on quality, environment, health, occupational safety and energy, in all organisational levels and to ensure its availability t the public;
- Promote a sustainable development;
- Ensure the necessary means (technical, human and financial resources).

S.N.G.N. ROMGAZ S.A. general environmental objectives are:

- Identify the conformity with the environmental legislation and to enforce the best measures to improve environmental performances;
- Identify inconsistencies and to adopt solutions to comply, prevent, reduce or eliminate the effects of negative impact generated by the company's activity on the environment;
- Obtain and maintain validity of environmental permits/integrated environmental permits, water management permits issued for performing activities;
- Educate, train, raise awareness and motivate the personnel in the field of environmental protection;
- Reduce the impact on the environment, this objective is undertaken in the Policy statement on quality, environment, health, occupational safety and energy;
- Set and implement emergency response measures to prevent and/or limit the effects on the environment in case of incidents, damages or disasters;
- Improve waste management by reducing, recovery, recycle and/or dispose waste, with special focus on hazardous waste;
- Take into account requirements and expectations of all parties interested in environmental problems.



6.2 INTEGRATED MANAGEMENT SYSTEM

S.N.G.N. ROMGAZ S.A. aims to strengthen its image by increasing customer satisfaction, in the context of a constant concern for environmental protection, but also for ensuring the occupational health and safety of employees. Proof of a successful management, oriented towards cultural values, which considers quality and sustainable development as fundamental factors of progress, Romgaz has implemented the certified Integrated Management System in the field of environmental quality and occupational health and safety, a system that supports the organization's mission to continuously increases performance, competitiveness and value.

Thus, the Integrated Management System supports awareness of environmental issues by fully complying with applicable legal environmental requirements and by carrying out specific programs, emphasizing the involvement of our employees and contractors on environmental protection and appreciation of the country's natural resources, for a sustainable development.

We also aim to maintain and continuously improve the Integrated Management System in accordance with the requirements of the standard within the entire organizational structure of the company.

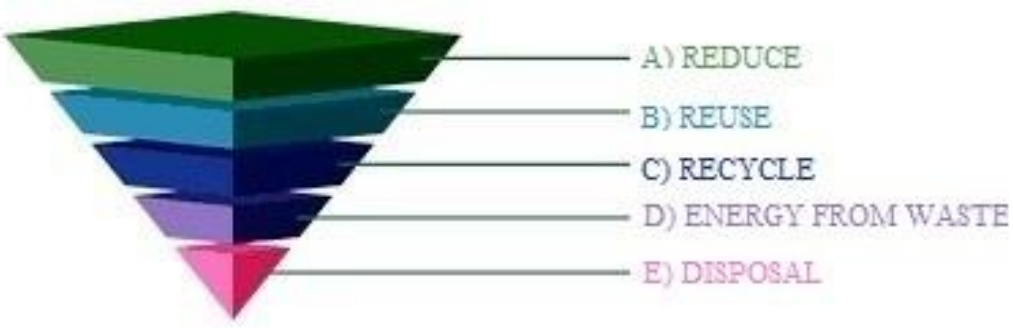
The 2021 Waste Minimization Audit concluded that waste management complies with legal requirements, and that regular company measures help to prevent and reduce the amount of waste generated. In this respect, it should be noted that no sanctions were applied by the control bodies and the traceability evidences submitted by collectors confirm the quality of the waste taken over.

6.3 PRINCIPLES

The following principles underlying waste management activities are listed in the National Waste Management Strategy and in the community legislation.

- **the principle related to protection of primary resources** – underlines the need to minimise and enhancing efficiency in the use of primary resources, particularly non-renewable resources, with an emphasis on the use of secondary raw materials;
- **the prevention principle** – sets up preparing activities for reuse, recycle, other recovery operations and disposal in environmentally friendly conditions (development of clean technologies with low consumption of natural resources);
- **the substitution principle** – sets the need to replace hazardous materials with non-hazardous raw materials, minimizing hazardous waste quantities;
- **the subsidiarity principle** - states that responsibilities should be assigned in such a way as to allow waste management decisions to be taken at the lowest administrative level against the source of generation;
- **the proximity principle** – sets that waste has to be treated and disposed as close as possible to the generation source;
- **the principle of preliminary measures** – sets the main aspects to be considered in any activity: current technology development status, environmental protection status, choose and implement those economic feasible measures.

The hierarchy of processes applied to waste shows the ways in which waste can be processed after its generation. The order of preferences in waste management is presented in the attached diagram, which is made in accordance with the regulations in force in the European Union and implicitly in Romania.

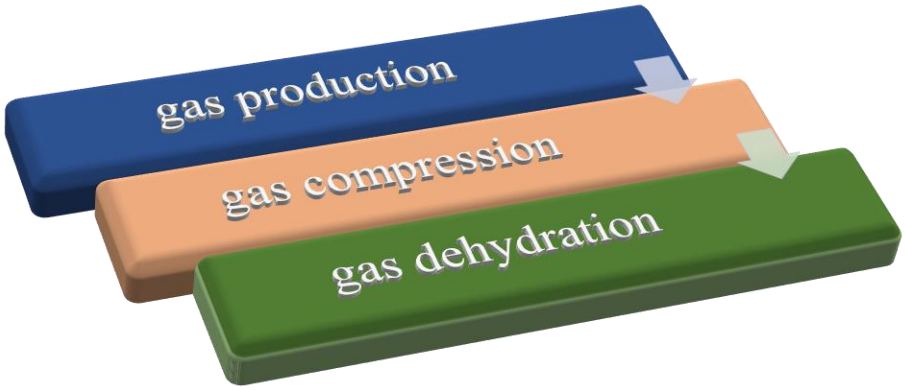


A	REDUCE	Prevent waste. Main priority involves the circular economy where the source of waste is minimised and waste mass and volume is reduced to zero
B	REUSE	Prepare for re-use. Selective collection and waste treatment by mechanical and biological methods
C	RECYCLE	Reprocessing products and materials to be used as secondary sources for materials
D	ENERGY FROM WASTE	Energy recovered from waste can be considered as "alternative energy", reducing consumption of energy from fossil fuel
E	DISPOSAL	Disposal means which means depositing in landfills the remaining fractions after the application of preliminary technologies, namely: selective collection, sorting and extraction from municipal solid waste of materials that can be used / recycled / recovered

6.4 WASTE MANAGEMENT

The technological process for gas production that generates waste can be divided in several stages:

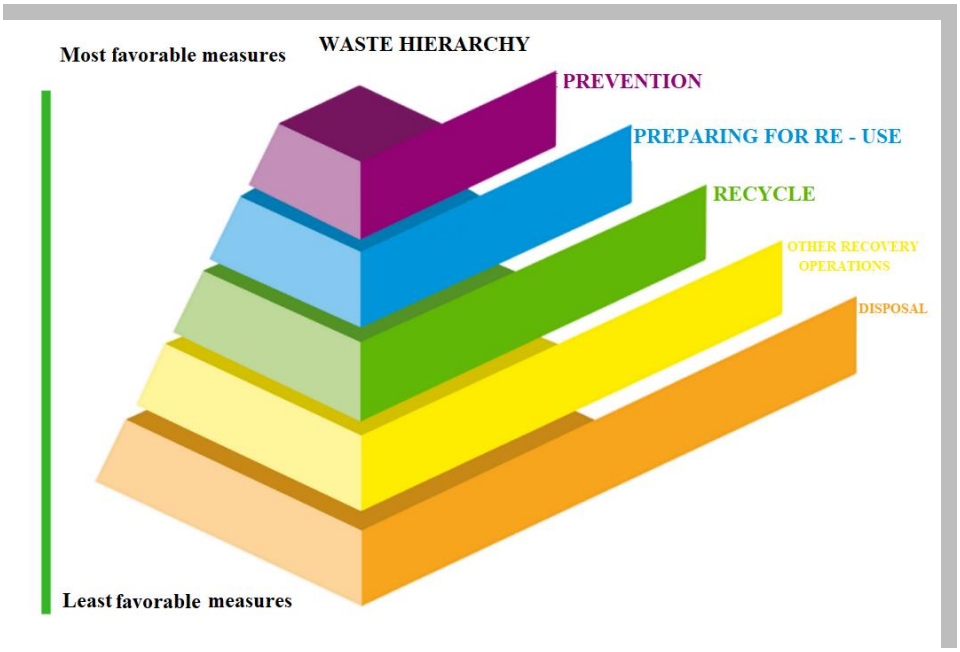
- natural gas production;
- natural gas compression;
- natural gas dehydration;



Waste management includes the following activities:

- collection;
- transportation;
- treatment;
- recovery;
- disposal, including surveillance of operations.

Recovery is a priority before disposal by landfilling in the waste hierarchy included both in the EU and in national regulations. The necessary measures have to be planned to reach the most efficient recovery and recycling method, taking into account the waste type, sources and composition. Waste hierarchy priorities are shown in the figure below:



The main objective of waste management is to protect the health of people and of the environment against negative effects caused by collecting, transportation, treatment, storage and disposal of waste. The following mandatory conditions have to be fulfilled:

- to have no risk for water, air, soil, fauna or vegetation;
- no pollution or olfactory discomfort;
- It should not affect landscape or protected areas/special interest areas.

S.N.G.N. ROMGAZ S.A. undertook a series of measures and works with positive impact on the environment, such as:

- the company issued decisions to appoint persons responsible with waste management starting with 2011;
- record the company in the integrated environmental system and online reporting;
- Identify waste, their classification, code, labelling, selective collection, as well as the monthly/quarterly/annual evidence of waste management according to the model provided by effective laws;
- Prepare waste loading/unloading forms (annex 1 for approving transportation of hazardous waste over 1t/year, annex 2 handing over hazardous waste, annex 3 non-hazardous waste);
- Evidence of produced/imported oils, fresh, consumed, as well as used oils/generated/collected/recovered/disposed;
- Replace the water cooling system at the forced cooling tower 2;
- Replace asbestos panels by non-asbestos panels (final disposal certificate – construction materials with asbestos content, code 17.06.05* - 1735.84 tons - SC Fibrocim SRL, operation D5 between 2019-2020);
- Develop a selective waste collection system by purchasing in 2019-2020 -565 containers of different capacities and 15 metal containers;
- In 2020, 152 ecological toilets were purchased and installed at locations with dry toilets. This action continued in 2021, the procurement procedure for renting and installing 108 ecological toilets is ongoing;
- Maintenance, emptying and cleaning toilets is performed under service provision contracts concluded with economic operators authorised in this respect;
- To reduce accidental leakage or discharge of reservoir water, within environmental protection works 12 reservoir water collecting tanks with potential soil pollution risks were replaced and in 2020 well 1 Comanesti was transformed into a reservoir water injection well;
- Replacement of a number of 10 mechanical-biological treatment plants in order to treat fecal-domestic water in locations where the water is discharged into the emissary. The purchase is in progress;
- projects for the execution of washing ramps for own vehicles, in conditions of maximum protection for the ground and the groundwater;
- Purchase of high-performance vehicles with EURO 5 engines to reduce emissions into the atmosphere;

- During 2020 – 2021 most of the SIRCOSS workover rigs have been purchased, Dura-Base tiles to ensure access in good conditions to the work points presenting mud, marshlands, wet areas or other ecologically sensitive areas;
- Upgrading interior/exterior electric lighting (in 2020 an illuminated panel with S.N.G.N. ROMGAZ S.A. logo was assembled by means of a photovoltaic solar kit);
- Cleaning and disinfection within the premises;
- In 2020 18 vertical DN 80-200-250 PN 25 bar separators were bought at Sangeorgiu de Padure and Grebenis production units. Vertical separators replace horizontal buried two-phased separators, the advantage from an environmental point of view is the automatic discharge of impurities separated from gas. Thus, discharge of impurities separated from the produced gas is no longer carried out through manual manoeuvres and the natural gas from the technological facilities are no longer discharged in the atmosphere;
- In 2020, the new cooling system form Taga compressor station was put into operation, replacing the old system that was working with water in an open circuit for cooling compressor and compressed gas. The water was cooled in the cooling tower by natural cycle, the inconvenience being high energy and water consumption, discharged water and regular washing (2000 – 3000 cubic meters/months). The new technology is based on air ventilators cooling, cooler agent cooling system (water/glycol) in closed circuit, with a reduced water consumption;
- Upgrades were proposed for the atmospheric gas discharge systems at the dehydration stations, namely replacing the stripping methane atmospheric discharge system with a stripping methane recovery system, and the necessary steps were taken during the previous years to purchase these systems. The purchase was not made, however the purchase procedures will be resumed.
- There were built concrete, secured, covered, platforms for temporary storage of non-hazardous waste;
- In 2021, a collecting system was made on the storage location for potential oil leaks;
- CFR sleepers impregnated with hazardous substances resulted from the industrial railroad decommissioning were stored on supports and covered with foil until their disposal to authorized economic operators;
- In 2020, the mud/oil products (waste water) 56 l/s separator was replaced with a more efficient 150 l/s one;
- During 2019 – 2021 the forced cooling tower No. 2 was restored which lead to increasing the water cooling efficiency;
- Devices (tanks) were purchased and used for cleaning and degreasing all the existing components: spare parts and tools with surfaces covered in oils and lubricants. These devices also named “BIO-CIRCLE” tanks work based on a cleaning/degreasing agent with bioremediation “BIO-CIRCLE” – L – liquid based on water free of solvents, thus avoiding COV emissions. The degreasing operation is performed in a closed circuit during the whole lifecycle of the liquid, no waste generated and the bioremediation process is optimised.
- Rehabilitation plans were made for towers/circuits used for cooling water /buildings and also the annual revision program for internal sewage/underground pools;

- Topogeodesy measurement services were purchased for monitoring in time buildings behaviour;
- Performing daily check-ups by operational control of oil retention tanks and emergency pits for each transformer;
- Performing efficient operational control of technological phases in order to reduce raw materials quantities, respectively generated waste;
- Metering volumes of abstraction/treated/recirculated/discharged water;
- Managing hazardous substances and chemical mixtures;
- Setting up overfill and exceeding parameters detection and warning systems;
- Smoke detectors and cable sprinkler systems set-up;
- Allocating resources in the Acquisition Plan for Eurobins and plastic bags;
- Purchasing absorbent materials to avoid water/soil contamination;
- Instructing the personnel using hazardous substances with data/information comprised in the security data Files;
- Starting the procedures for resuming the construction works for the new combined cycle power station with gas turbine;
- Resources allocation for generated waste management from the decommissioning of the existing power plant;
- Posting on Infoweb environment matters, significant environment matters, environment goals and risks;
- Establishing mandatory requirements for electric and electronic equipments suppliers to take-over on a free basis DEEE/batteries when purchasing similar products;
- Establishing mandatory requirements for suppliers to return barrels and cylinders for refill and bulk purchase;
- Requesting traceable evidence for transported waste – according to GD No. 1061/2088;
- Since 2019 CTE Iernut concluded more favourable contracts, for 12 months compared to 30 days contracts concluded before;
- Mandatory reporting related to waste management field;
- Concluding contracts with authorized/licensed laboratories for analysing the emissions in air, water, soil;
- Establishing environment requirements in the sectorial acquisitions sector, respectively, avoiding over packing products, purchasing liquid products in large volume containers in order to avoid generating package waste that contains residue or are contaminated with hazardous substances, eco cleaning products free of propellants, equipped with refill system and recyclable package, etc.;
- Requirements for all contractors to submit justifying documents (authorizations, certifications, licenses, statements of compliance, testing reports, CE mark, security data charts, etc.);
- Purchasing cost effective engines provided with frequency convertors;

- Replacing used Freon with ecological one in air-conditioning devices;
- Allocating resources for certified training courses for the personnel in charge of waste management, etc.

The following have been included in the 2022 Investment Plan Proposals:

- Developing CTE Iernut by building a new gas turbine combined cycle power station, electric power – 56%;
- Replacing other 4 mechano-biological treatment stations;
- Reducing noise level at the property limit in residential areas/industrial enclosures at Cristur Compressor Station;
- Analysing development opportunities for photovoltaic panels power production projects, capitalization of buildings' roofs/terraces on SNGN Romgaz SA locations. Installed production capacity could be used both for the above mentioned locations own consumption and for delivering energy or extra power in the network;
- In March 2022 a contract for sound proofing panels' design and execution services was concluded at Cristur compressor station;
- Replacing hazardous substances with non-hazardous substances, respectively, hidrazyne hydrate classified as hazardous and currently used as corrosion inhibitor in the vapour circuit, is expected to be replaced by carbohidrazyde when putting into operation the new station;

Within the Compression Section it is planned to invest in 3 compressor stations (SC Tigmandru, SC Delenii, SC Filitelnic) which will use new technologies. The investment is at tender stage for the feasibility study.

S.N.G.N. ROMGAZ S.A. investments will be CONTINUOUSLY oriented towards:

- Organization and support of education, awareness and responsibility of employees;
- Development of measures meant to encourage the prevention and reuse of waste, by promoting the sustainable use of resources;
- Promoting the recovery of packaging waste, as well as other waste categories;
- Encouraging green investment;
- Selective collection.

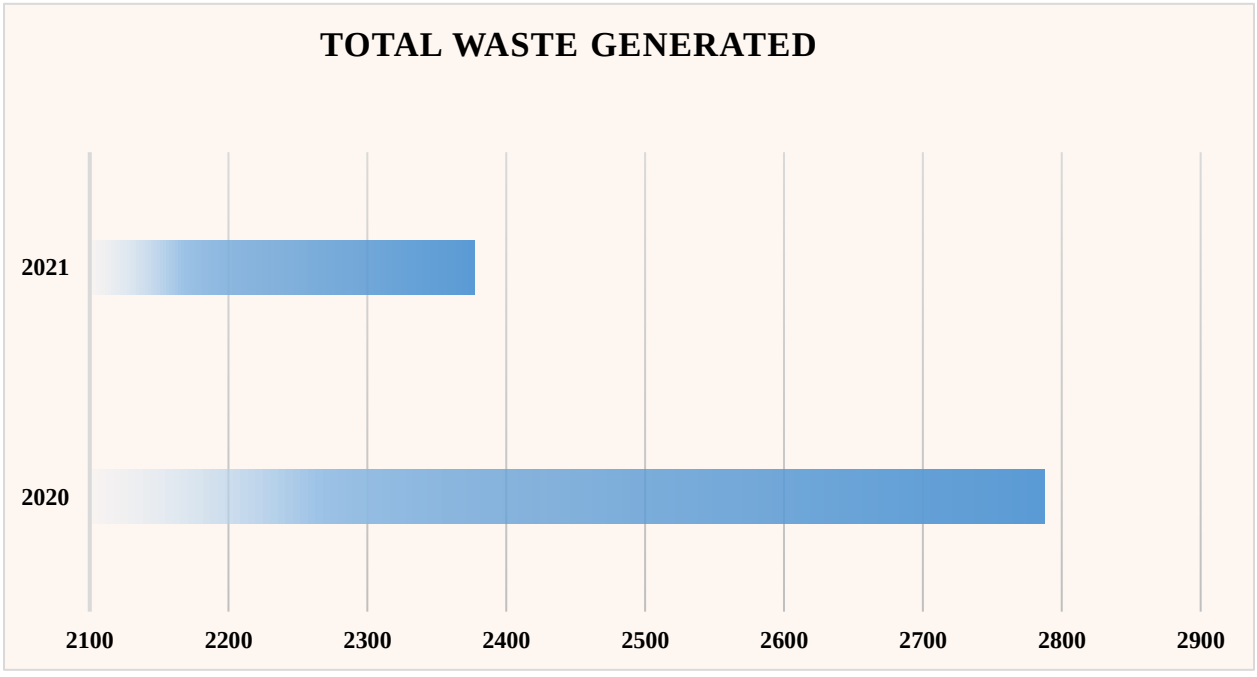
When purchasing equipment, technologies or planned investments, the energy efficiency component is taken into account.

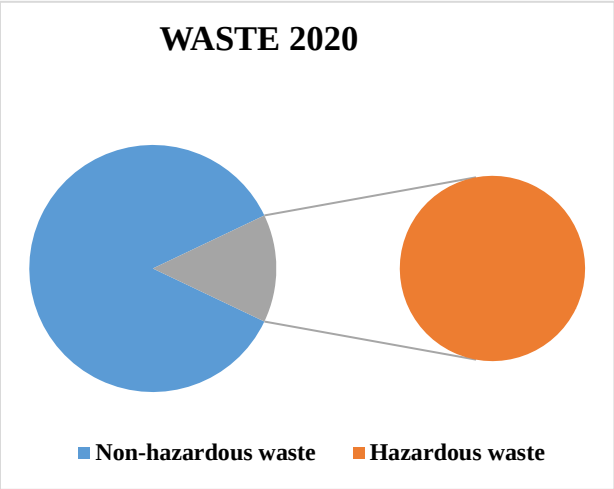
6.5 WASTE MANAGEMENT SITUATION (2020 - 2021)

The annexes include the situation of waste management generated from Romgaz activity for the period 2020 – 2021 (waste generating operation/equipment, location of generation, frequency of generation, waste characteristics, waste storage (location, method), management options (restrictions, legislation, policies) and quantities of generated waste, methods of treatment/disposal (recovery, elimination).

TOTAL QUANTITY OF WASTE GENERATED AND A BREAKDOWN OF THIS TOTAL BY COMPOSITION

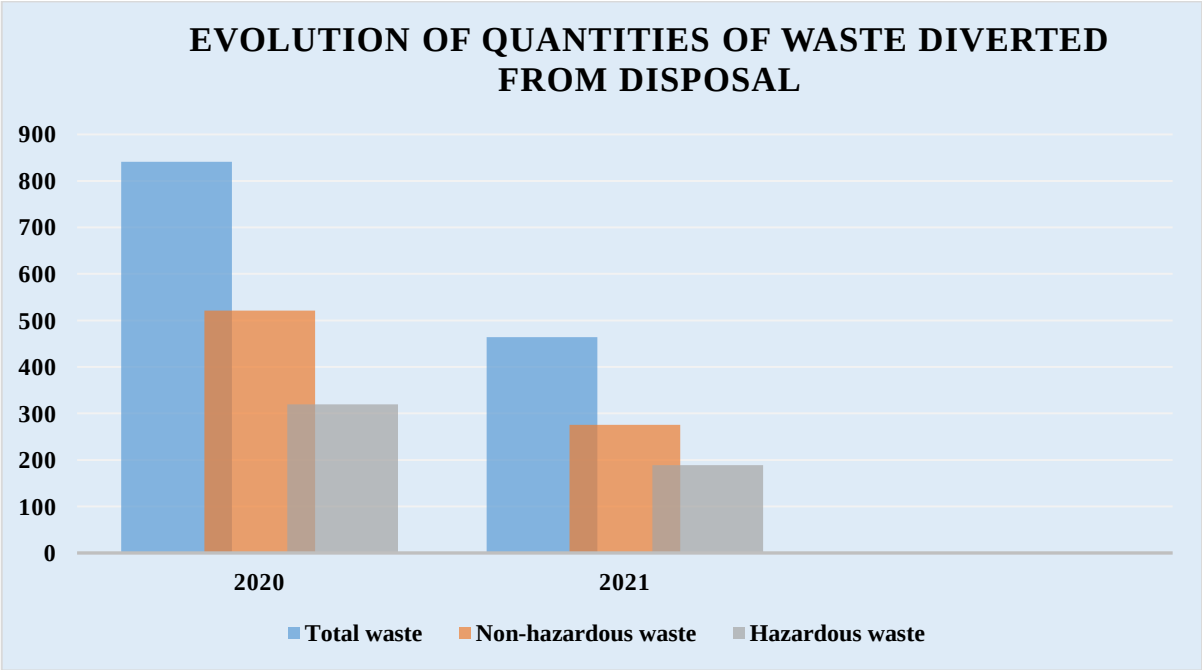
WASTE GENERATED			
COMPOSITION	**UM**	**2020**	**2021**
Non-hazardous waste	tons	2,393.895	2,181.840
Hazardous waste	tons	393.965	195.454
TOTAL	**TONS**	**2,787.86**	**2,377.294**



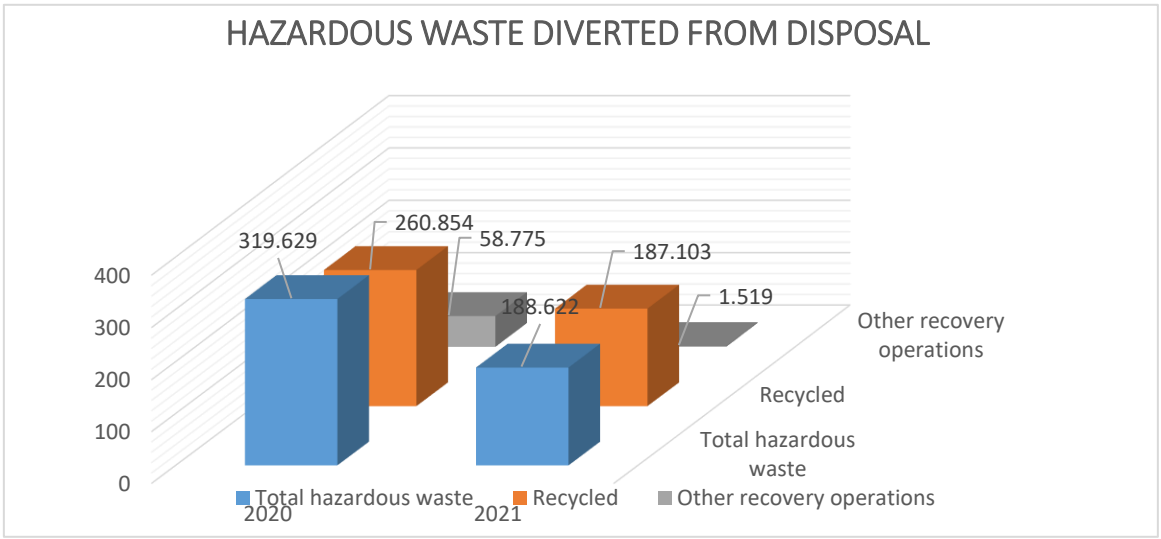


TOTAL QUANTITY OF WASTE DIVERTED (RECOVERED) FROM DISPOSAL AND A BREAKDOWN OF THIS TOTAL BY COMPOSITION

WASTE DIVERTED FROM DISPOSAL			
COMPOSITION	**UM**	**2020**	**2021**
Non-hazardous waste	tons	521.517	275.638
Hazardous waste	tons	319.629	188.622
TOTAL	**TONS**	**841.146**	**464.26**



TOTAL QUANTITY OF HAZARDOUS AND NON-HAZARDOUS WASTE DIVERTED FROM DISPOSAL AND A BREAKDOWN OF THIS TOTAL AFTER RECOVERY OPERATIONS



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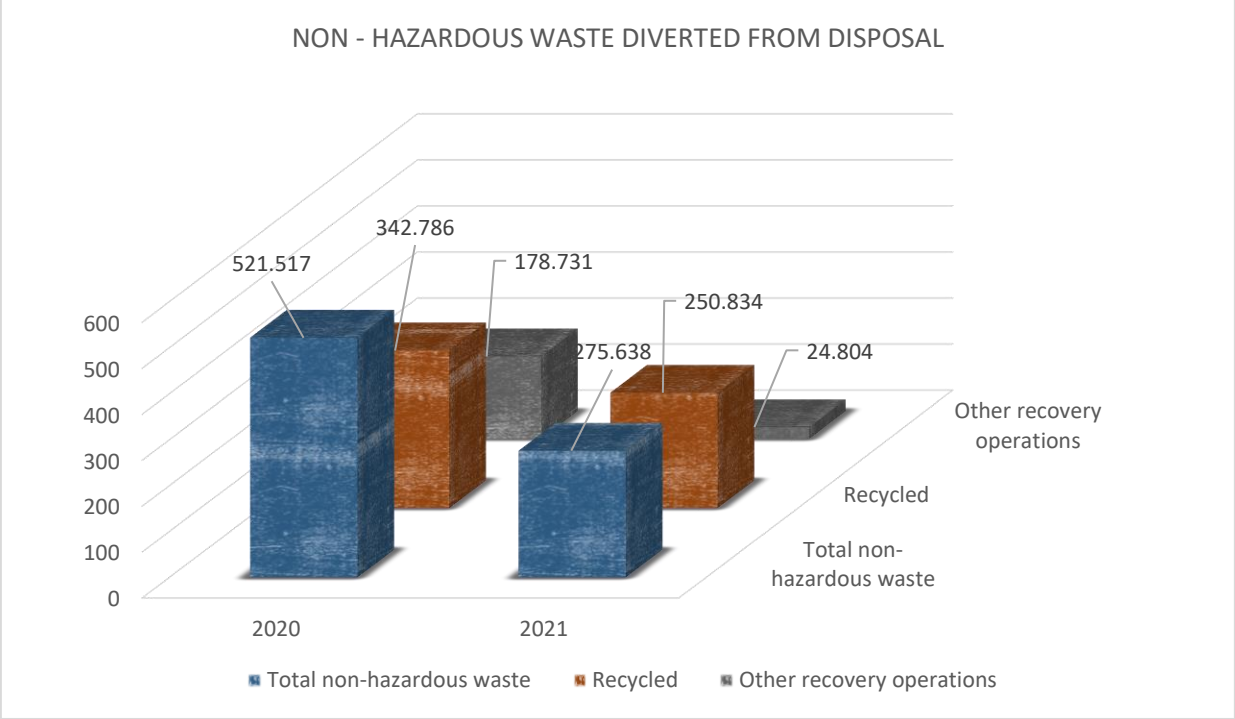
WASTE DIVERTED FROM DISPOSAL	2020	2021
Hazardous waste	319.629	188.622
Recycled	260.854	187.103
Other recovery operations	58.775	1.519
Non-hazardous waste	521.517	275.638
Recycled	342.786	250.834
Other recovery operations	178.731	24.804



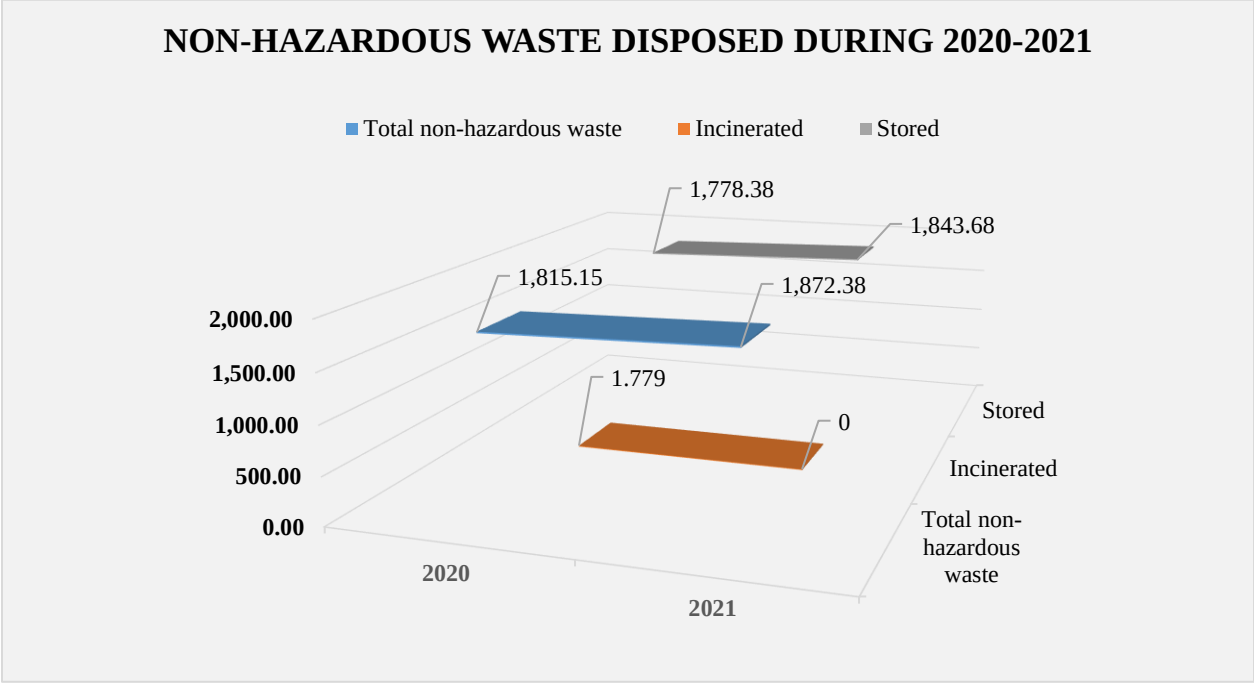
ADDITIONAL INFORMATION REGARDING RECYCLED WASTE

RECYCLED WASTE	2020	2021
	Quantity tons	**Quantity tons**
Packing materials (paper)	13.405	7.309
Glass	0	0.006
Aluminium	0.175	0.012
Luminaires	0.262	0.27
Oils	258.203	151.921
Batteries	4.807	2.939
Plastics	4.247	1.238
Sawdust, wood shavings, chips, remnants of plank and veneer scrap, other than those specified in 03.01.04	0.161	0.055
Oily sludge from plant and equipment maintenance operations	15.35	0
Other waste not specified from oil refining	0.962	0
Other waste not specified –from gas purification (reservoir water + TEG)	245.052	3.847
Other waste not specified (rubber – hoses waste)	1.797	0.949
Ferrous metal dust and particles	3.64	7.24
Waste machining emulsions and solutions free of halogens	0.590	0.18

Oily waters from oil/water separators	94.54	13.02
Packaging containing residues of or contaminated with hazardous substances	3.517	1.803
Absorbents, filter materials, wiping cloths and protective clothing other than those specified in 15.02.02*	2.832	1.231
Absorbents, filter materials (including oil filters without other specification), polishing materials, protective clothing contaminated with hazardous substances	5.243	4.649
End-of-life tyres	13.652	6.051
Oil filters	0.222	0.172
Ferrous metals	51.803	42.665
Components removed from discarded equipment other than those specified in 16.02.15*	0	0.883
Copper, bronze, brass	0.205	0
Iron and steel	471.145	165.892
Discarded electrical and electronic equipment other than those specified in 20.01.21 and 20.01.23 containing hazardous components	0.686	0.114
Discarded electrical and electronic equipment other than those specified in 20.01.21*, 20.01.23* and 20.01.35	1.951	0.73
Plastic packaging waste	6.218	4.618
Wooden packaging	0.120	0.230
Metal packaging	0	0.010
Glass packaging	0	0.280

TOTAL QUANTITY OF HAZARDOUS AND NON-HAZARDOUS WASTE AND A BREAKDOWN OF SUCH TOTAL QUANTITY BY RECOVERY OPERATIONS

DISPOSED WASTE	2020	2021
Hazardous waste	64.919	3.802
Incinerated waste – without energy recovery	4.779	0.092
Stored waste	60.14	3.71
Other disposal operations	0	0
Non-hazardous waste	1,815.154	1,872.384
Incinarated waste- without energy recovery	1.779	0
Stored waste	1,778.375	1,843.684
Other disposal operations	0	0

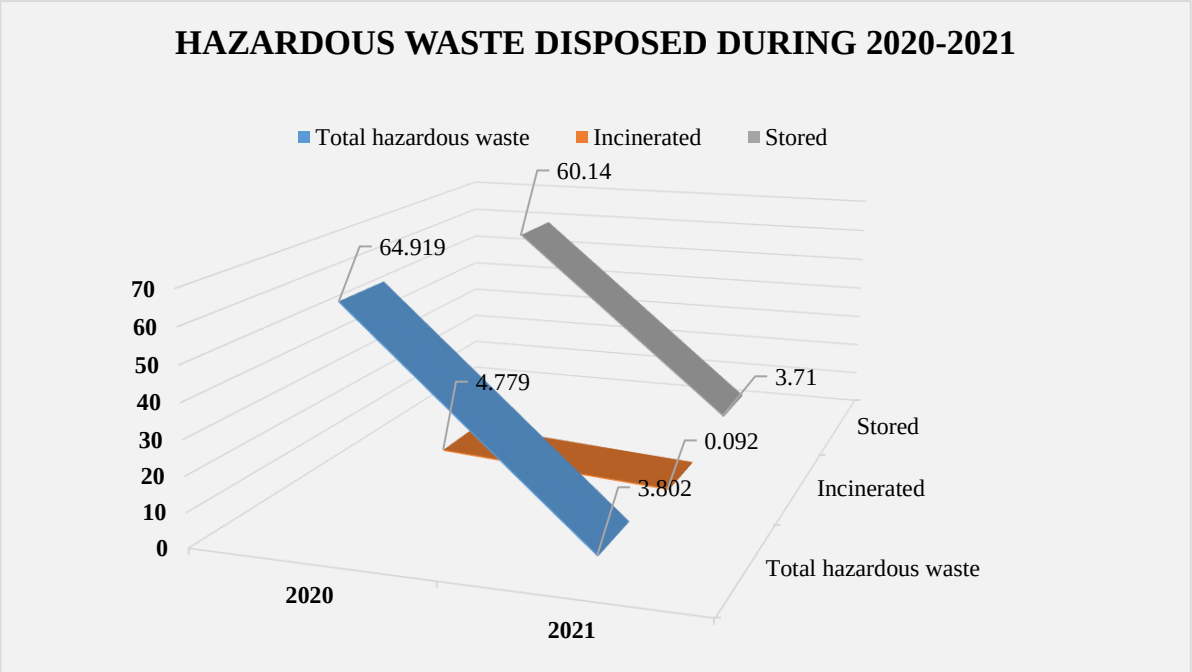


7. SPECIFIC WASTE STREAMS

7.1 DRILLING MUD WASTE

This type of waste results from well recompletion operations, special operations and production tests. Categories of drilling mud waste resulted from the above mentioned operations are:

- Drilling mud and other drilling waste containing hazardous substances, code 01 05 06*;
- Fresh water based drilling mud and waste, code 01 05 04
- Drilling mud containing barite, code 01 05 07;
- Drilling mud containing chloride, code 01 05 08;
- Other non-specified waste, code 01 05 99.



Waste coding was performed following laboratory tests carried out by accredited laboratories and technical sheets of generated waste (waste description). Such waste is disposed of by authorized companies.

Operations carried aut by such companies are:

- Treatment with various chemimals (to reduce hazard);
- Centrifugation (to separate the solid from the liquid part);
- Final storage in appropriate storages.

DESCRIPTION OF DRILLING MUD WASTE AND OTHER DRILLING WASTES CONTAINING HAZARDOUS SUBSTANCES – WASTE CODE: 01 05 06*

Drilling mud is the most used drilling fluid. This waste results from the use of chemical products during well recompletions, depending on the structure of the layer and on the operations performed in wells undergoing recompletion, namely:

- cheminal products for corection of viscosity or filtration;
- Components adding weight to drilling fluids (barite - $BaSO_4$).

Chemical subtances or mixtures are used depending on the geological structures of the layers, well depths and the need to change composition:

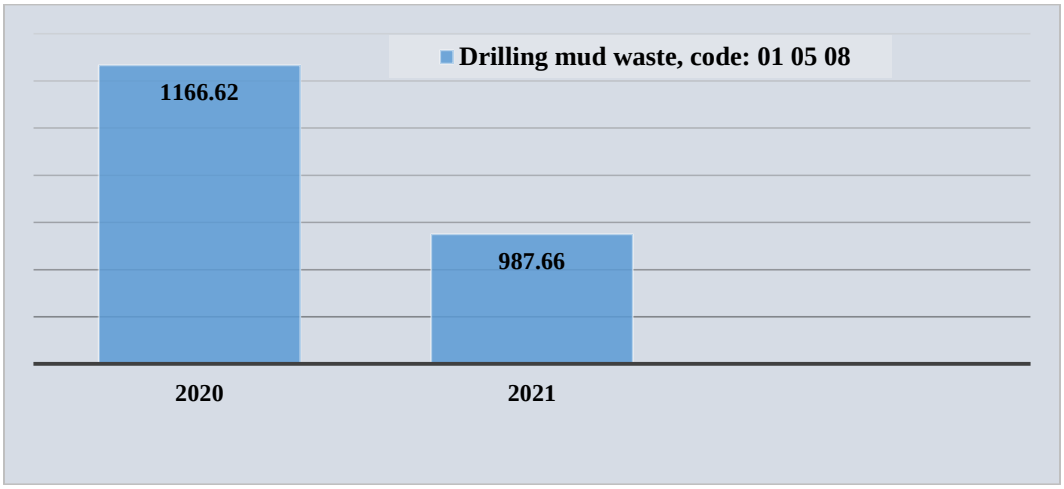
- harmful to aquatic organisms;
- can cause long-term adverse effects on the water environment.

Drilling mud waste containing hazardous substances were generated on Bilciuresti and Garboci fields where deep wells were drilled. Treated muds were used in several stages compared to muds used in other wells. Depending on the requirements, the composition can be changed during the process in order to achieve better buoyancy or to minimize friction. For this purpose, agents reducing viscosity, filtration and weight increasing materials were used. In order to decrease viscosity fluidicants and corrosion inhibators were added which are in the category of hazardous substances, which made the mud waste resulted after several treatment and usage operations a waste containing hazardous substances, above the acceptable levels pursuant to Order of the Ministry of Environment and Water Management no. 95/2005 on establishing the criteria for waste acceptance and for the preliminary procedures of waste acceptance in storages and the national list of wastes accepted in each class of waste storage.

Starting with 2014 less hazardous substances have been used which, following laboratory analyses, led to the drilling mud waste and other drilling wastes falling within the maximum allowed limits for non-hazardous wastes pursuant to Order of the Ministry of Environment and Water Management no. 95/2005 on establishing the criteria for waste acceptance and for the preliminary procedures of waste acceptance in storages and the national list of wastes accepted in each class of waste storage.

DRILLING MUD WASTE GENERATED DURING 2020 - 2021

YEAR	Code: 01 05 07 (TONS)	Code: 01 05 08 (TONS)	Code: 01 05 04 (TONS)
2020	0	1,166.62	0
2021	0	987.66	0



Target values for performance indicators were established to 90% and were 100% achieved as the waste quantity (drilling mud) disposed in 2021 was not exceeded as compared to 2020 (see table).

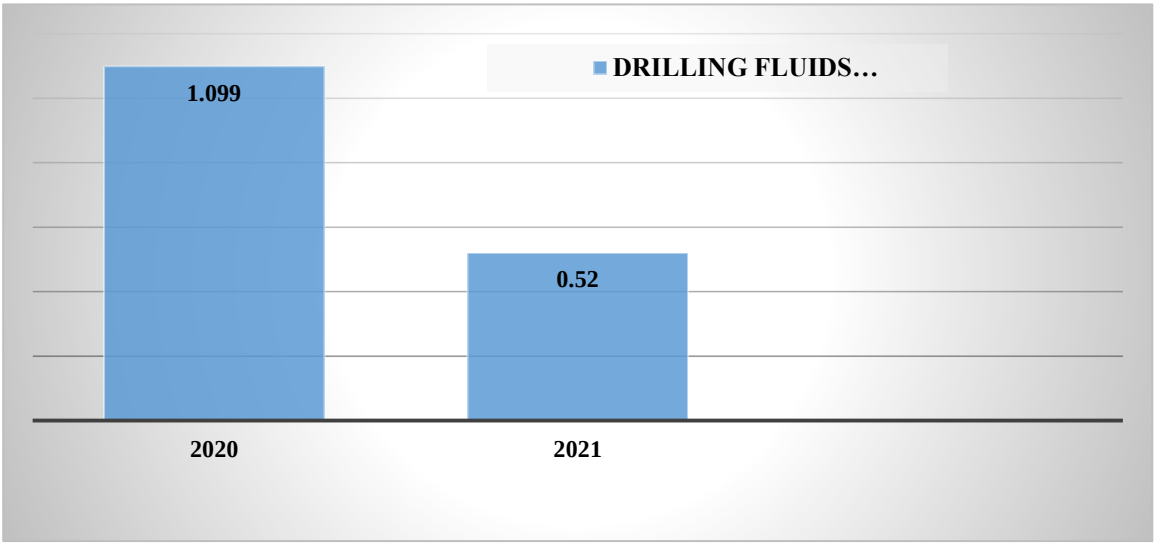
During 2020-2021 no drilling mud waste and other drilling waste containing hazardous subtances was generated, code 01 05 06*, due to the fact that in the preparation of the drilling fluid citric acid (organic acid) was used, weaker compared to hydrochloric acid (inorganic acid), which led to generation of non-hazardous waste pursuant to test reports and thus not exceeding the maximum allowed limits for storage in non-hazardous waste storages.

Disposal of such waste was carried out under the drilling mud and contaminated fluids disposal contract. Moreover, caustic soda (sodim hydroxide) used in preparing the drilling fluid represents maximum 0.076% of the total quantity of drilling fluid prepared without using safety materials. If safety materials are used in the preparation/stabilisation of the drilling fluid, the caustic soda represents 0.060%.

By estimating the exposure it was established that there is no mud, sediments exposure, the effect is not relevant for the sodim hydroxide and the absorption of sediment particles is insignificant. Due to a low vapour pressure significant emissions to air are not expected. If emmissions occur in the atmosphere, as aerosol in water, NaOH will be promptly neutralized by the reaction with CO2 (or other acids). Significant realeases are not expected to occur in the terrestrial environment also, the absorption in soil particles being insignificant, the OH^- ions will be neutralized by the water in soil. There is no bioaccumulation. Following analysis, the low percentage of hazardous substances used in the preparation of drilling fluid led to compliance with the maximum allowed limits provided by the legislation in force.

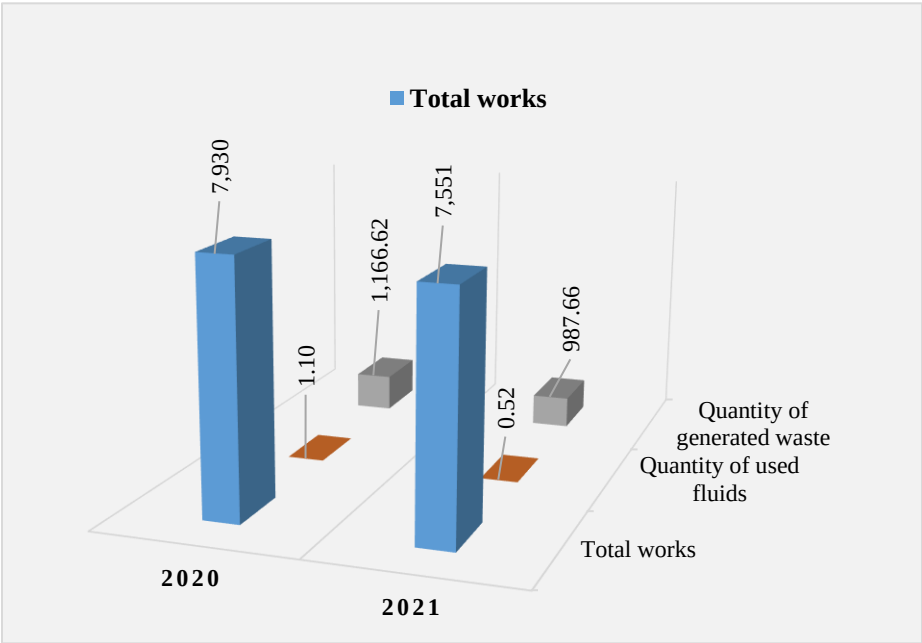
CONSUMPTION OF DRILLING FUIDS USED IN WELL RECOMPLETIONS AND SPECIAL INTERVENTIONS

YEAR	UM	TOTAL
2020	tons	1.099
2021	tons	0.520

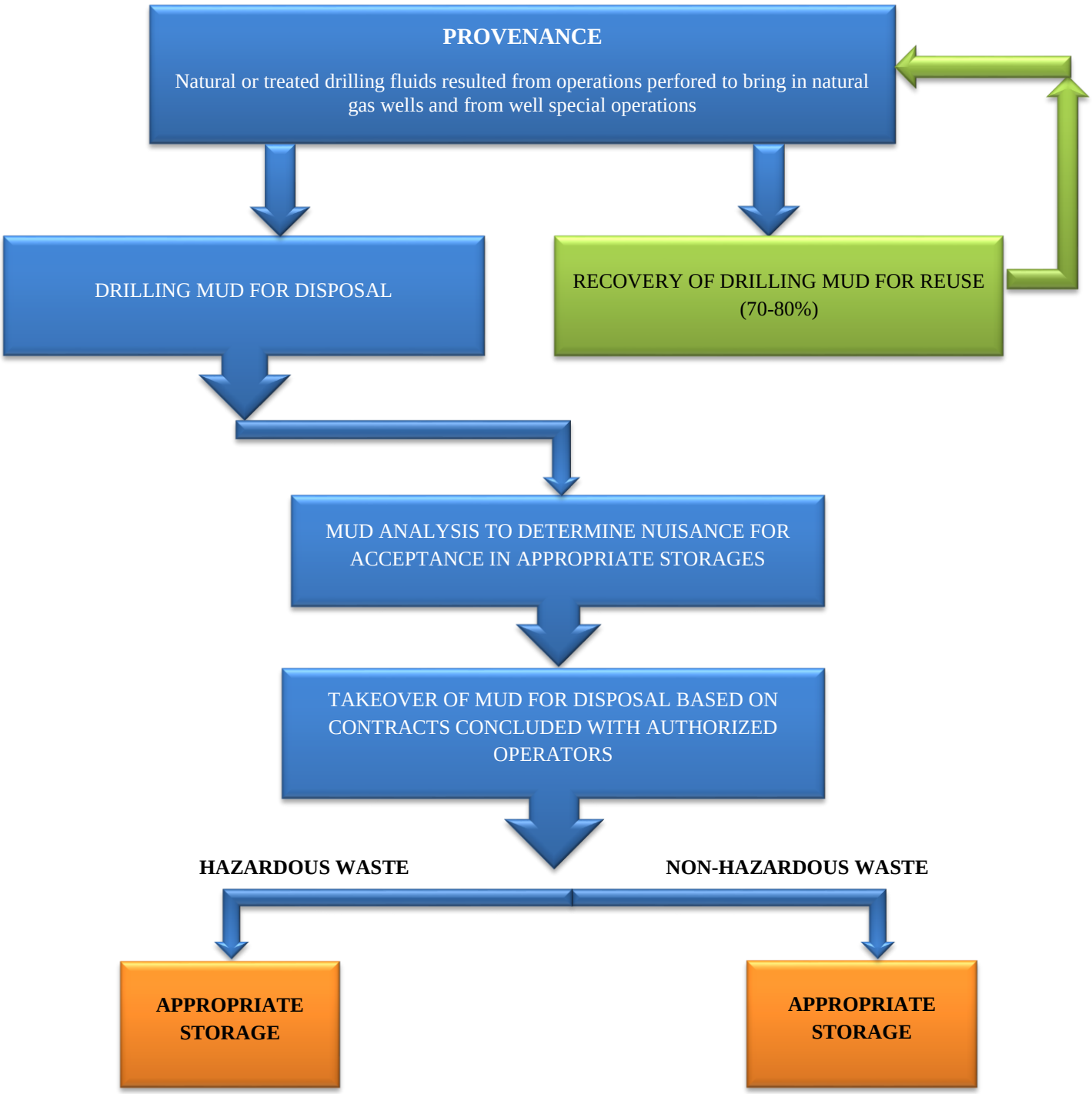


EVOLUTION OF CONSUMPTION OF DRILLING FLUIDS AND GENERATED WASTE QUANTITIES/WELL RECOMPLETIONS, SPECIAL OPERATIONS AND PRODUCTION TESTS

YEAR	UM	TOTAL FLUIDS	TOTAL WASTE	TOTAL WORKS (NUMBER)
2020	tons	1.099	1,166.62	7,930
2021	tons	0.520	987.66	7,551



WASTE STREAM – CONTAMINATED DRILLING FLUIDS



7.2 METAL WASTE

These wastes result from decomissioning of fixed assets which can no longer be used in the production process due to technical and moral wear and whose repair costs are very high and from metal cutting operations in mechanical workshops. Categories of wastes in this stream are:

- Metal cuttings code: 12 01 01;t
- Ferrous metal code: 16 01 17;
- Non-ferrous metal code: 16 01 18;
- Iron and steel code: 17 04 05.

Metal wastes are capitalized pursuant to contracts concluded with authorized economic operators.

7.3 WASTE ELECTRICAL AND ELECTRONIC EQUIPMENT WEEE

- code: 20 01 36

These wastes are decomissioned products and include a a full range of electrical and electronic items such as: IT and telecomunication equipment, electrical and electronic instruments, monitoring and control instruments, refrigerators etc. Such wastes are collected and handed over to authorized economic operators.

7.4 SOLID IMPURITIES WASTES (DETRITUS, OTHER MECHANICAL IMPURITIES)

In the production activity, after separation of natural gas, reservoir water and solid impurities are generated together with natural gas (detritus, other mechanical impurities).
Pursuant to Government Decision no. 856/2002 mechanical impurities were classified in:

- code: 19 02 06 sludges from physico-chemical treatment, other than those provided under 19 02 05;
- code: 05 07 99 other unspecified wastes from gas purification.

These wastes are discontinuously generated, following cleaning of separators and reservoir water collection/storage basins.
In order to dispose of these wastes in a controlled manner a single legal processing, incineration and storage method can be used.

S.N.G.N. ROMGAZ S.A. disposes of these wastes by storing them in its own storage for specific wastes from extractive industry, at Ogra, Mures County, for processing; this storage is authorized from the point of view of environmental protection (Figure 1).

OGRA LANDFIL FOR SPECIFIC WASTE FROM EXTRACTIVE INDUSTRY, MURES COUNTY

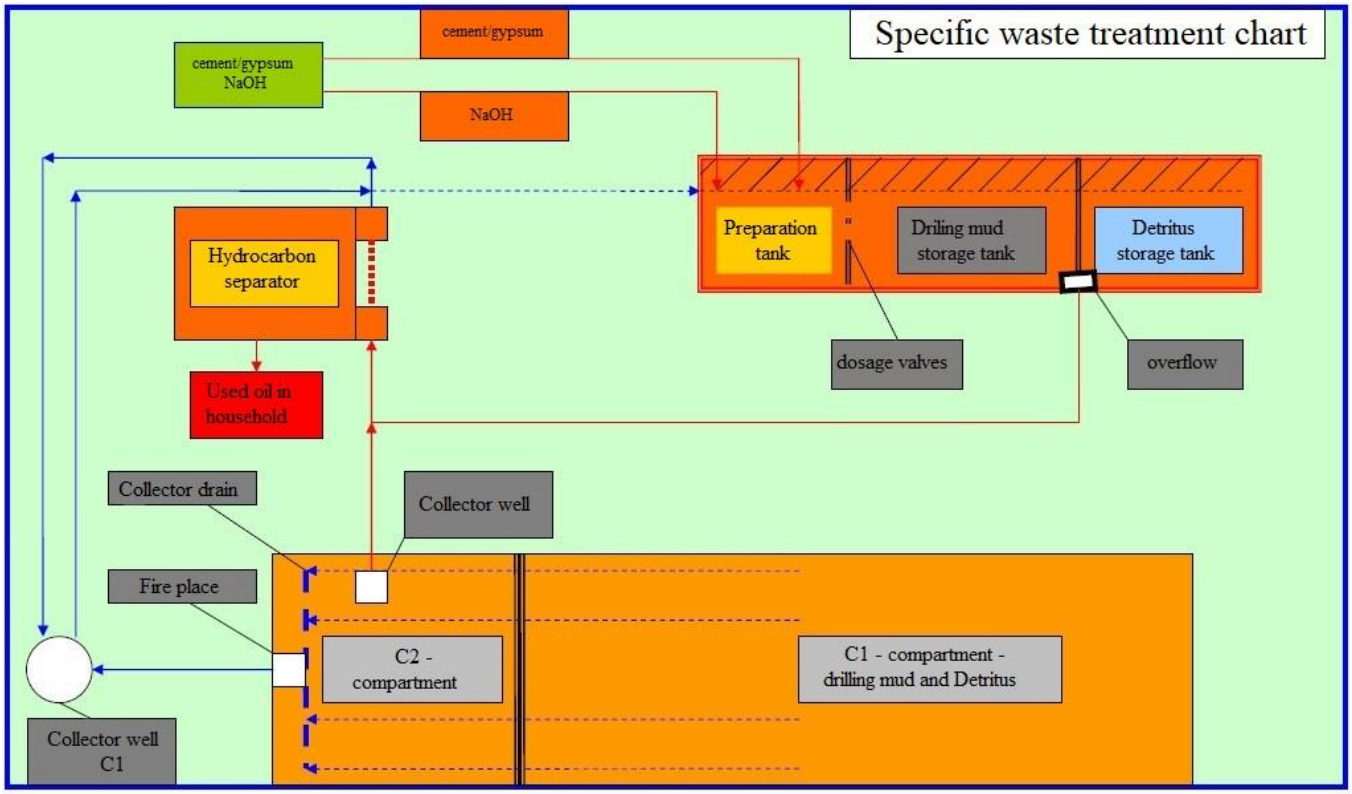
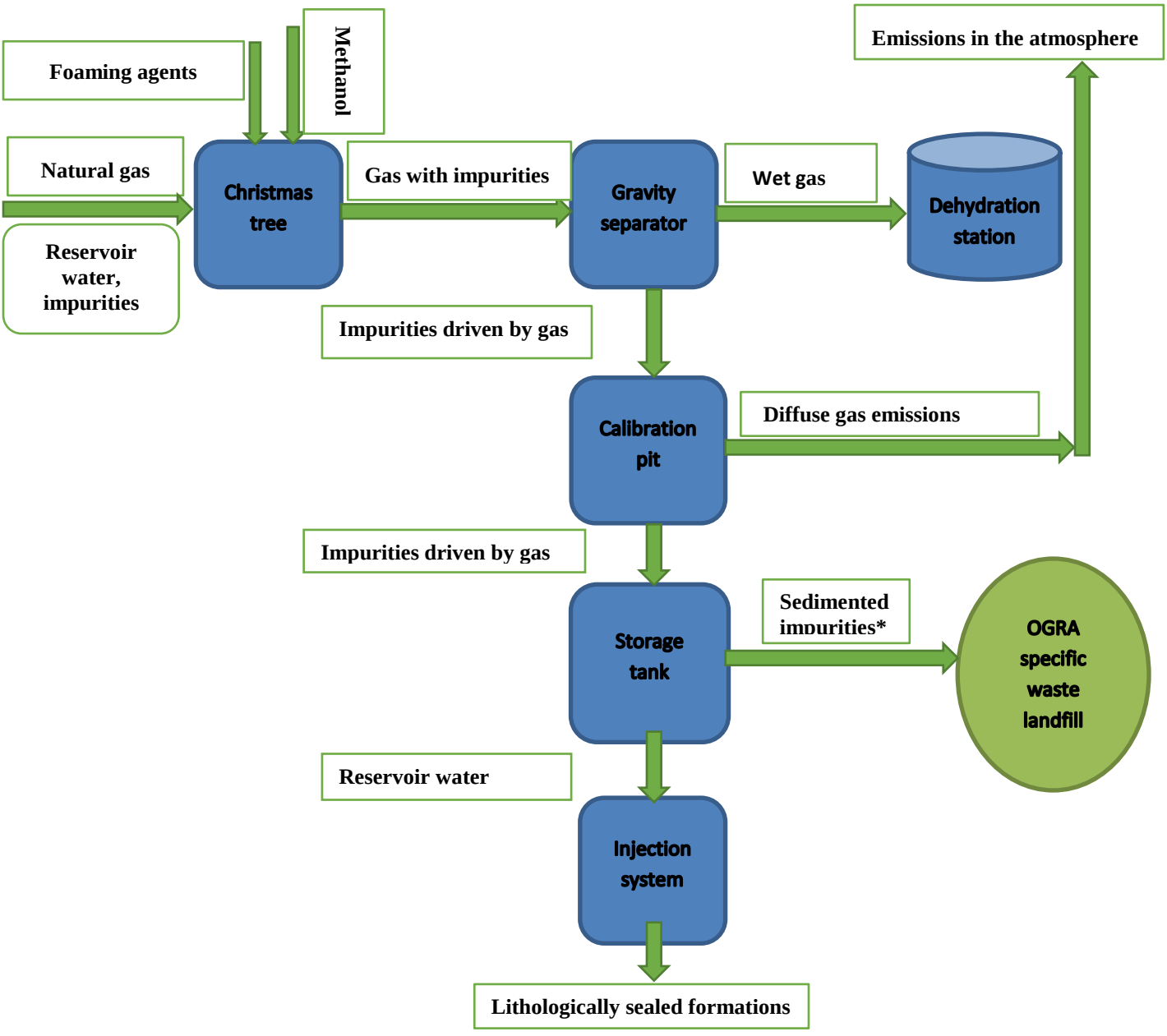


Figure 1

DIAGRAM OF GAS EXTRACTION PROCESS AT A PRODUCTION UNIT

WASTE STREAM – SEDIMENTED IMPURITIES



*sedimented impurities – waste code 19 02 sludges from physico-chemical treatment, other than those provided under 19 02 05**, pursuant to GD 856/2002

7.5 TRIETHYLENE GLYCOL WASTE (TEG)

TEG is the main waste generated by the natural gas dehydration activity following contamination with:

- excess chloride in the well killing fluid when the well is equipped with filter-packer assembly;
- quality of stored gas coming from different sources and containing fractions which influence TEG viscosity, structural changes with consequences on the components of the dehydration station and on the dehydration process of gas delivered in the system, on the achieved dew point.

During the operating process of gas dehydration stations, TEG modifies its parameters becoming waste. The triethylene glycol content decreases and through decomposition becomes mono and diethylene glycol while chloride content increases thus becoming waste.

Following conditioning of natural gas in triethylene glycol dehydration stations, significant quantities of TEG waste are anually generated. Eventhough TEG waste is not classified as hazardous waste in the European legislation, the costs of disposal are high.

Currently the possibilities to treat TEG waste generated within dehydration stations on site, ont he generator location are analysed with a view to reuse it.

The study made available to SNGN Romgaz SA proposes decontamination of TEG waste rather than disposal of such through treatment with anaerobic bacteria.

Triethylene glycol is not classified as hazardous in the European legislation.

Performed analyses and the analysis of the origin and composition of waste showed that it does not contain hazardous substances classified as such by the legislation in concentrations that would make the waste hazardous (does not contain heavy metals, mononuclear and polycyclic aromatic hydrocarbons (BTEX and PAH).

The waste has low concentrations of petroleum hydrocarbons from C12-C40 range corresponding to oils and lubricants. As a result of analysing the TEG waste (data sheet and laboratory analysis) it was classified under code: 05 07 99 other unspecified wastes – from gas purification (TEG)

Eventhough is a non-hazardous liquid waste, TEG waste has limited possibilities of controled disposal. It can be disposed in a controlled manner, by landfilling or incinaration (high costs).

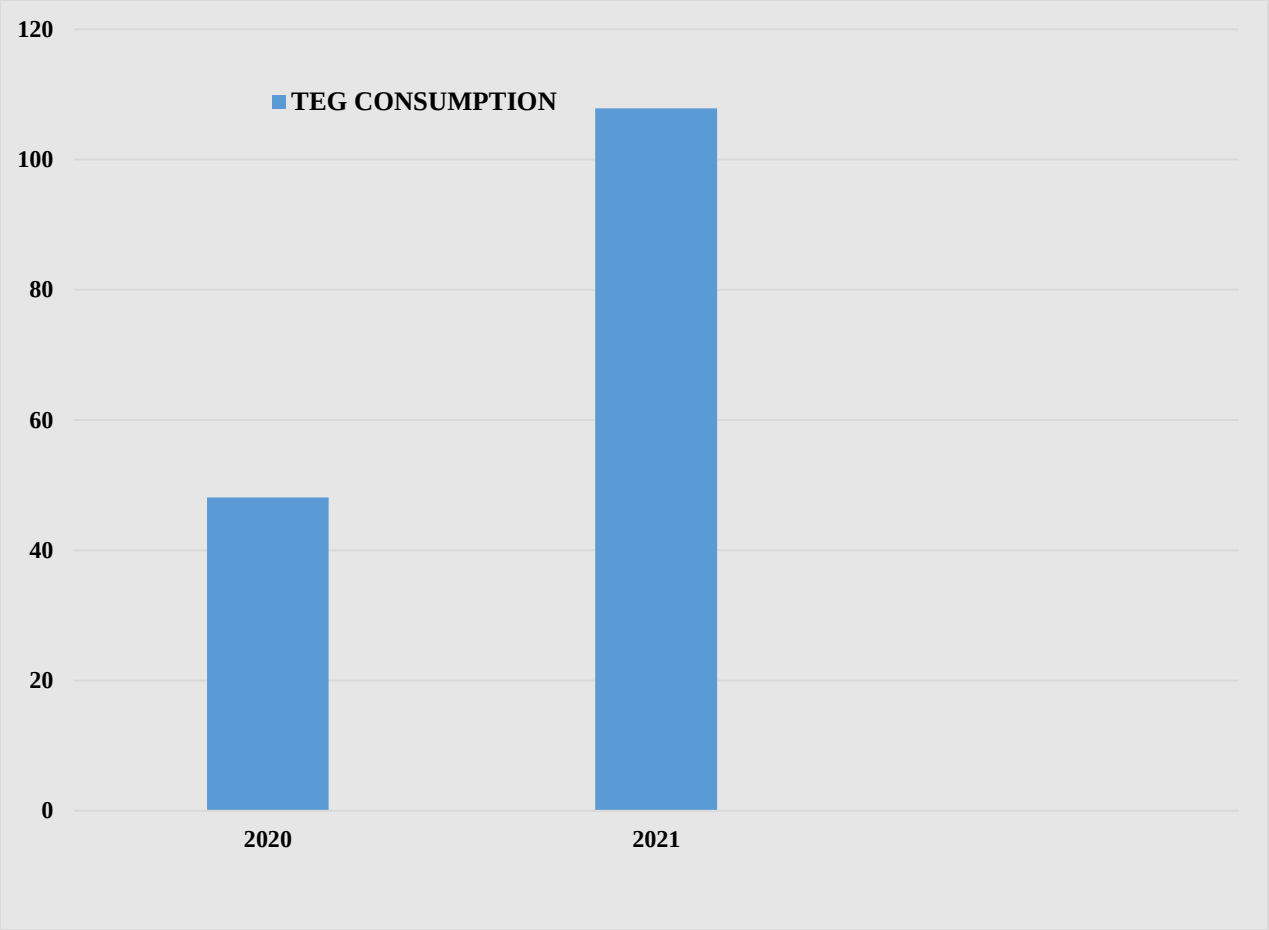
For the controlled disposal of wastes generated by supporting activities, Romgaz concluded contracts with authorized companies, such as:

- SC Remat SA Brasov – recovery of ferrous and non-ferrous waste, paper and cardboard;
- SC Oildepol Service SRL Constanta – disposal of sluges;
- SC Ecopaper SA Zarnesti – paper and cardboard waste;
- SC Jifa SRL Avrig – hazardous wastes;
- SC Greendays SRL Baia - Mare;
- SC Schuster Ecosal SRL Sighisoara – emptying services;
- SC Yann Holding Company SRL Sebes - recoverable wastes;
- SC Professional Recycle SRL Targu-Mures – recoverable wastes;
- SC Sylevy Salubriserv SRL Ceausu de Campie – household wastes;
- SC Stericycle Romania SRL Jilava – medical wastes;
- Recolamp Bucuresti – neon tubes;

- SC Recycling Prod SRL Targu-Mures – hazardous wastes;
- Etc.

TEG CONSUMPTION AT GAS DEHYDRATION STATIONS

YEAR	UM	QUANTITY
2020	tons	48.116
2021	tons	107.875



QUANTITIES OF USED TEG GENERATED FROM S.N.G.N. ROMGAZ S.A. ACTIVITIES

YEAR	UM	QUANTITY
2020	tons	245.052
2021	tons	3.847

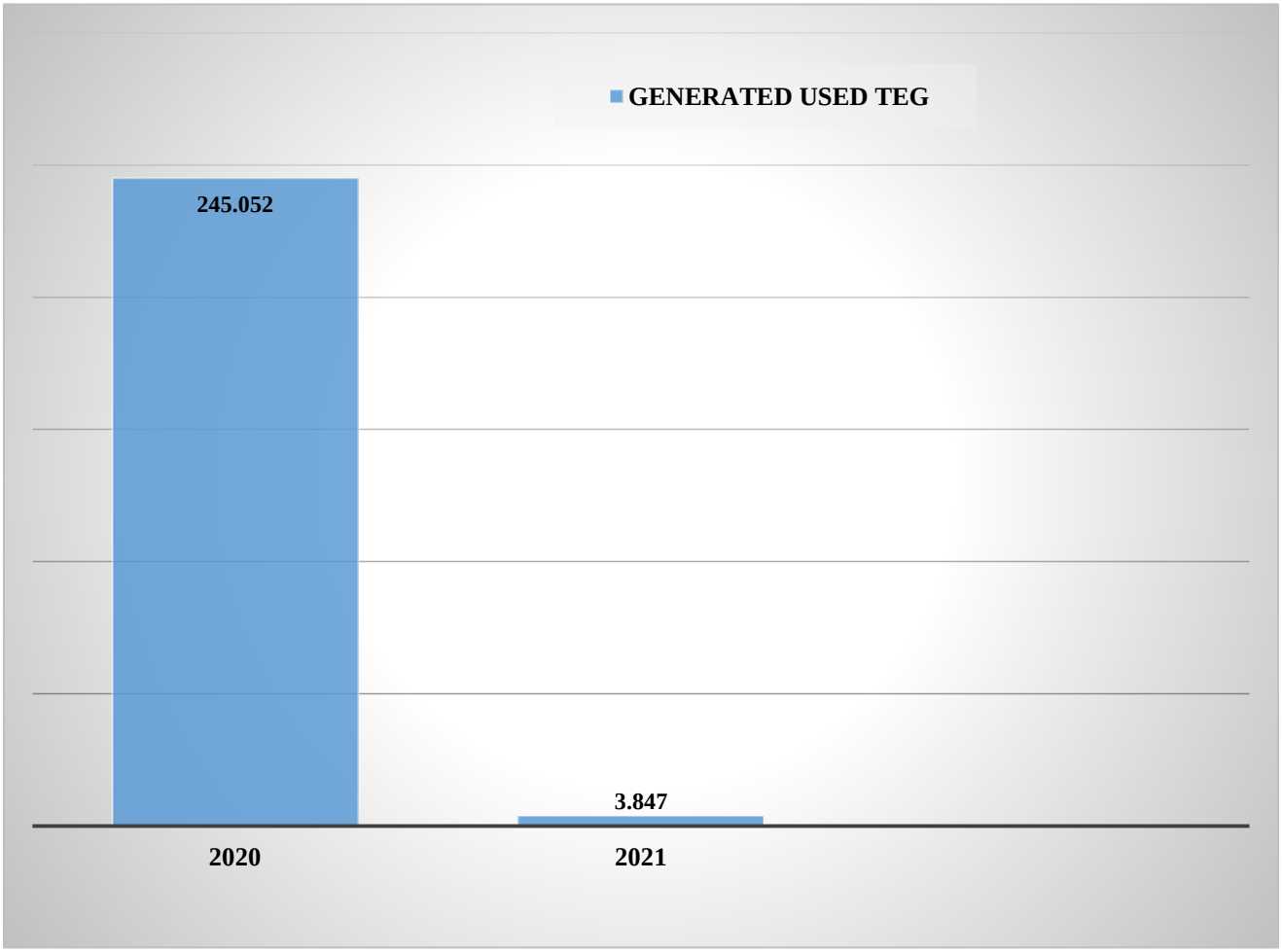
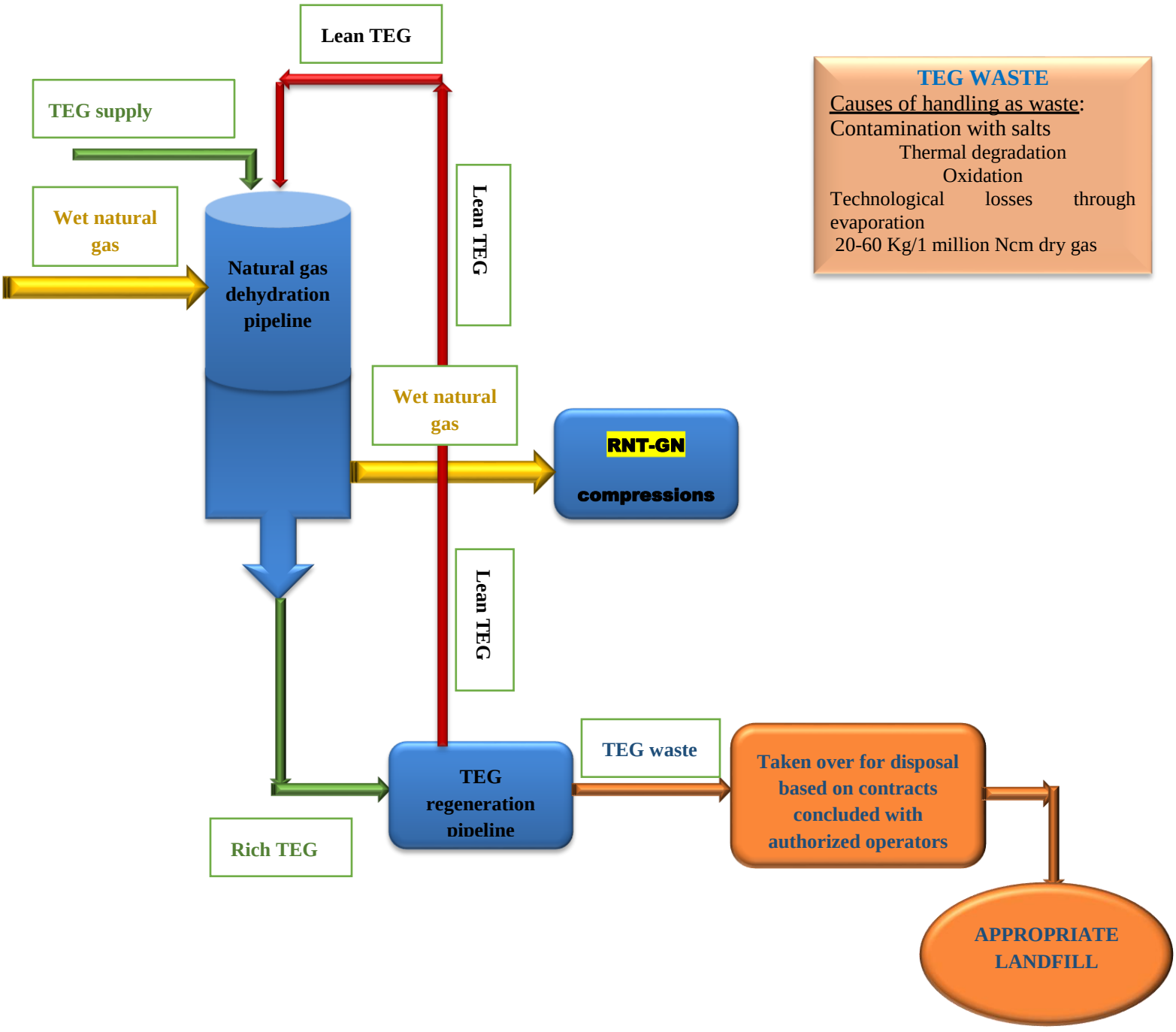


DIAGRAM OF TRIETHYLENE GLYCOL GAS DEHYDRATION STATION

TEG WASTE STREAM



TEG WASTE

Causes of handling as waste:

Contamination with salts

Thermal degradation

Oxidation

Technological losses through evaporation

20-60 Kg/1 million Ncm dry gas

QUANTITIES OF GAS TREATED IN DEHYDRATION STATIONS

YEAR	UM	QUANTITY
2020	Thousands cm	4,937,568.655
2021	Thousands cm	5,323,517.509

Between 2020 - 2021, Romgaz REUSED approximately 50% of the TEG resulted from the natural gas dehydration process.

TEG waste management being costly, Romgaz analyses and implements the gas conditioning process using deliquescent salts.

As the process of gas dehydration with deliquescent salts DOES NOT RESULT IN WASTES, Romgaz' concern is to put in operation new gas dehydration stations with deliquescent salts as well as to modernize and upgrade the existing ones.

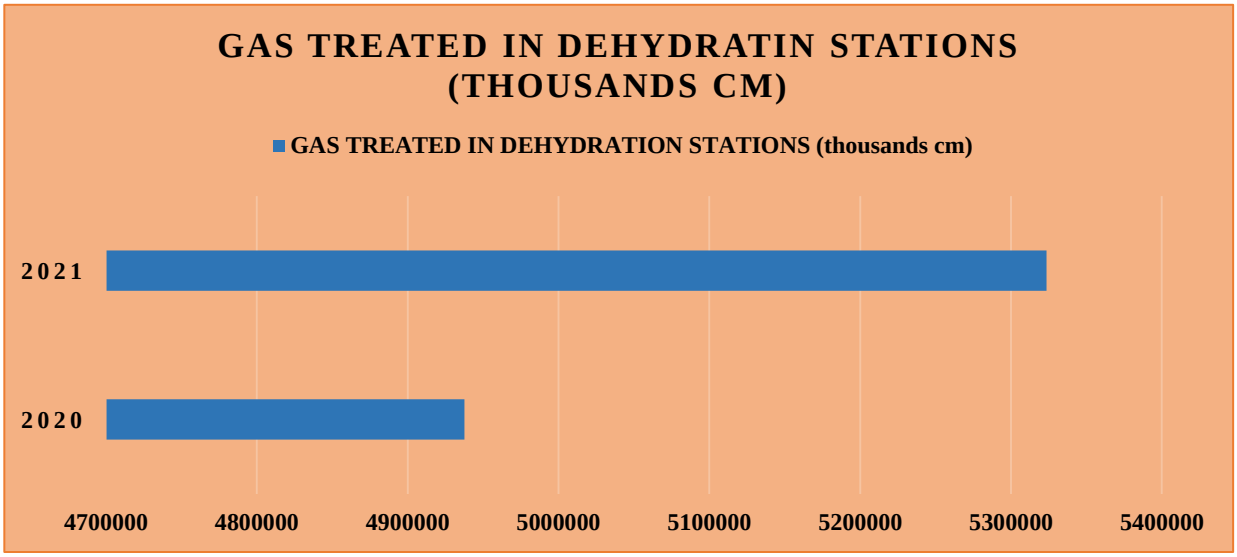
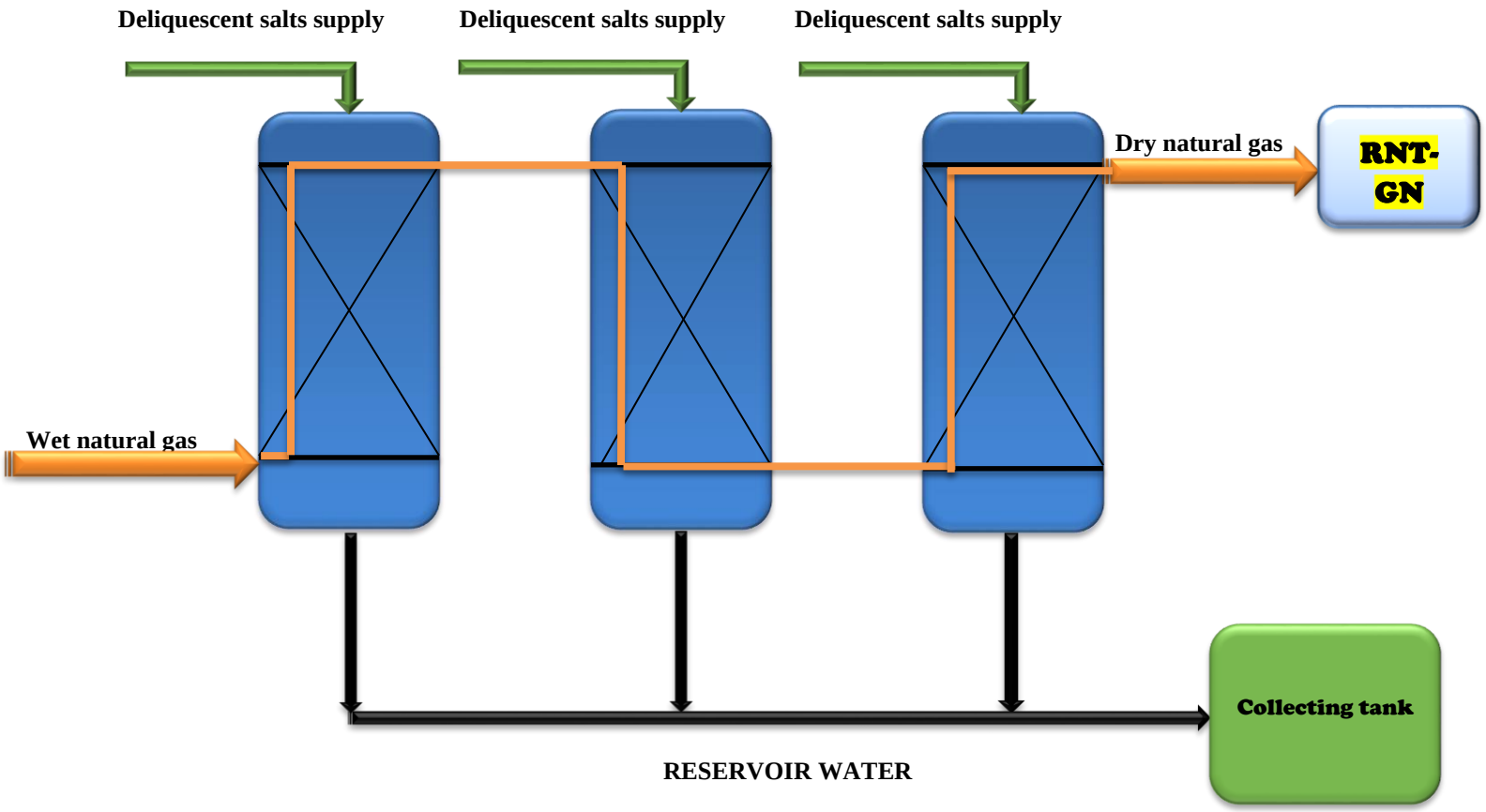


DIAGRAM OF GAS DEHYDRATION STATION USING DELIQUESCENT SALTS

WASTE- DELIQUESCENT SALTS STREAM/FLOW



7.5.1. INVENTORY OF TEG DEHYDRATION STATIONS

TEG GAS DEHYDRATION STATIONS

Item no.	DEHYDTATION STATION	PRODUCTION UNIT	YEAR OF PUTING INTO OPERATION	COUNTY
1.	Corunca	Sangeorgiu de Mures	2004	Mures
2.	Mures	Sangeorgiu de Mures	2004	Mures
3.	Ernei	Sangeorgiu de Mures	2007	Mures
4.	Miercurea Nirajului	Sangeorgiu de Padure	2010-2011	Mures
5.	Bordosiu	Sangeorgiu de Padure	2010-2011	Mures
6.	Grebenis	Grebenis	2004	Mures
7.	Vaidei	Grebenis	2007	Mures
8.	Ludus	Grebenis	2010-2011	Mures
9.	Sausa	Grebenis	2010-2011	Mures
10.	Bogata	Grebenis	2010-2011	Mures
11.	Sanmartin	Sarmasel	2004	Mures
12.	Balda	Sarmasel	2007	Mures
13.	Band	Grebenis	2007	Mures
14.	Taga	Taga	2007	Cluj
15.	Fantanele	Taga	2007	Bistrita-Nasaud
16.	Enciu	Taga	2010-2011	Bistrita Nasaud
17.	Bibesti	Oltenia	2007	Gorj
18.	Piscu Stejar	Oltenia	2007	Gorj
19.	Hurezani	Oltenia	2007	Gorj
20.	Zatreni	Oltenia	2010-2011	Valcea
21.	Gradistea	Oltenia	2010-2011	Valcea
22.	Finta	Muntenia	2007	Dambovita
23.	Caragele	Muntenia	2009	Braila

24.	Jugureanu	Muntenia	2010-2011	Braila
25.	Garbovi	Muntenia	2010-2011	Ialomita
26.	Fierbinti	Muntenia	2010-2011	Ialomita
27.	Galbenu	Muntenia	2018	Braila
28.	Delenii Cuci-Tarnaveni	Delenii	2007	Mures
29.	Bazna Medias	Delenii	2006	Sibiu
30.	Bazna NV	Delenii	2007	Sibiu
31.	Armeni	Medias	2006	Sibiu
32.	Lunca	Medias	2006	Sibiu
33.	Alamor	Medias	2006	Sibiu
34.	Soala	Medias	2007	Sibiu
35.	Rusi	Medias	2010	Sibiu
36.	Copsa	Medias	2006	Sibiu
37.	Marpod	Agnita	2007	Sibiu
38.	Nocrich	Agnita	2007	Sibiu
39.	Teline	Agnita	2006	Sibiu
40.	Noul Sasesc	Agnita	2007	Sibiu
41.	Cristur	Cristur	2007	Harghita
42.	Beia	Danes	2007	Mures
43.	Nades	Danes	2006	Mures
44.	Brateiu	Danes	2007	Sibiu
45.	Danes	Danes	2012	Mures
46.	Todiresti	Roman	2007	Suceava
47.	Valea Seaca	Roman	2010	Suceava
48.	Pocoleni - Sasca	Roman	2010	Suceava
49.	Sda 3 Sighisoara	Danes	2004	Mures
50.	Botorca	Delenii	2005	Mures
51.	Tigmandru	Filitelnic	2012	Mures
52.	Danes	Danes	2012	Mures

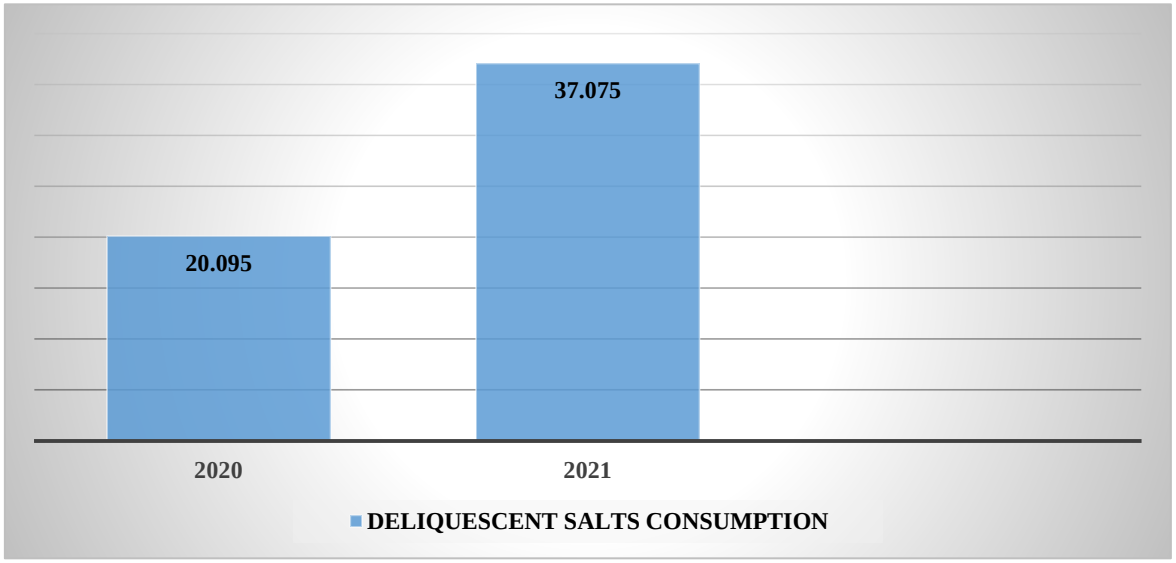
7.5.2. INVENTORY OF DELIQUESCENT SALTS DEHYDRATION STATIONS

DELIQUESCENT SALTS GAS DEHYDRATION STATIONS

Item no.	DEHYDRATION STATION	PRODUCTION UNIT	YEAR OF PUTTING INTO OPERATION	COUNTY
1.	Tamasesti	Oltenia	2009	Gorj
2.	Doba 23	Oltenia	2012	Olt
3.	Doba 26	Oltenia	2012	Olt
4.	Papucesti - în consevare	Oltenia	2012	Arges
5.	Urziceni	Muntenia	2012	Ialomita
6.	Florica	Muntenia	2012	Buzau
7.	Bratesti	Muntenia	2012	Dambovita
8.	Cucerdea	Grebenis	2012	Mures
9.	Turdas	Grebenis	2012	Mures
10.	Herepea	Grebenis	2013	Mures
11.	Iernut 10	Grebenis	2020	Mures
12.	Iernut 17	Grebenis	2020	Mures
13.	Sancel	Medias	2009	Alba
14.	Bogatu Roman - conservare	Medias	2014	Sibiu
15.	Barghis	Agnita	2012	Sibiu
16.	Bunesti	Danes	2012	Brasov

DELIQUESCENT SALTS CONSUMPTION AT DEHYDRATION STATIONS

YEAR	Unit of Measurement	TOTAL
2020	tons	20.095
2021	tons	37.075



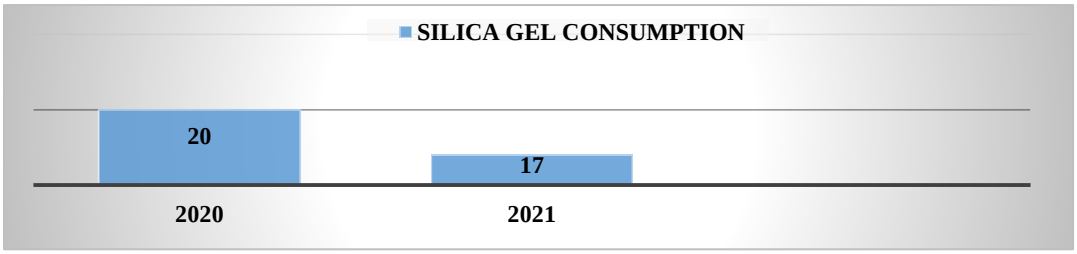
7.5.3. INVENTORY OF SILICA GEL DEGYDRATION STATIONS

SILICAGEL GAS DEHYDRATION STATIONS

Item no.	DEHYDRATION STATION	PRODUCTION UNIT	YEAR OF PUTTING INTO OPERATION	COUNTY
1	Tauni	Sectia Medias	1980	Alba
2	Barghis	Sectia Agnita	1981	Sibiu
3	Laslau	Sectia Filitelnic	1977	Mures
4	Filitelnic 3	Sectia Filitelnic	1978	Mures
5	Roman	Sectia Roman	1967	Neamt
6	Tazlau	Sectia Roman	1969	Neamt
7	Homocea	Sectia Roman	1968	Vreancea
8	Glavanesti	Sectia Roman	1975	Bacau
9	Frasin	Sectia Roman	1994	Suceava

SILICA GEL CONSUMPTION AT DEHYDRATION STATIONS

YEAR	UM	TOTAL
2020	tons	20.00 Medias
2021	tons	17.00 Medias



7.6 USED OILS

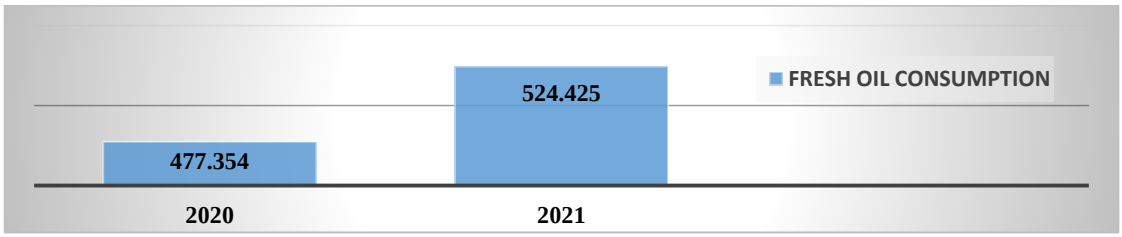
Used oils collected can be redistilled for recycling and mixing in lubricating oils facilities or can be revovered for obtaining energy pursuant to EU Directive on incineration.

The quantity of used oils is reduced in compliance with the requirements of the compressor manufacturer.

In order to monitor the degree of recovery of used oil generated at the compressor station, a monthly report was prepared on the degree of recovery of used oil in relation to lubricating oil used at the compressor station.

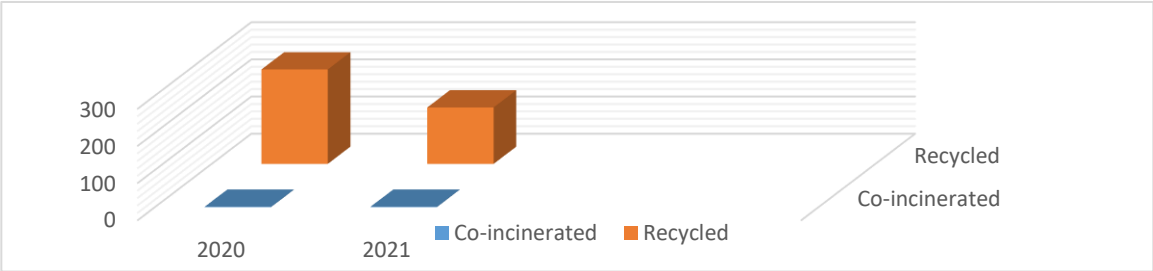
FRESH OIL CONSUMPTION

YEAR	UM	TOTAL
2020	tons	481.804
2021	tons	528.915

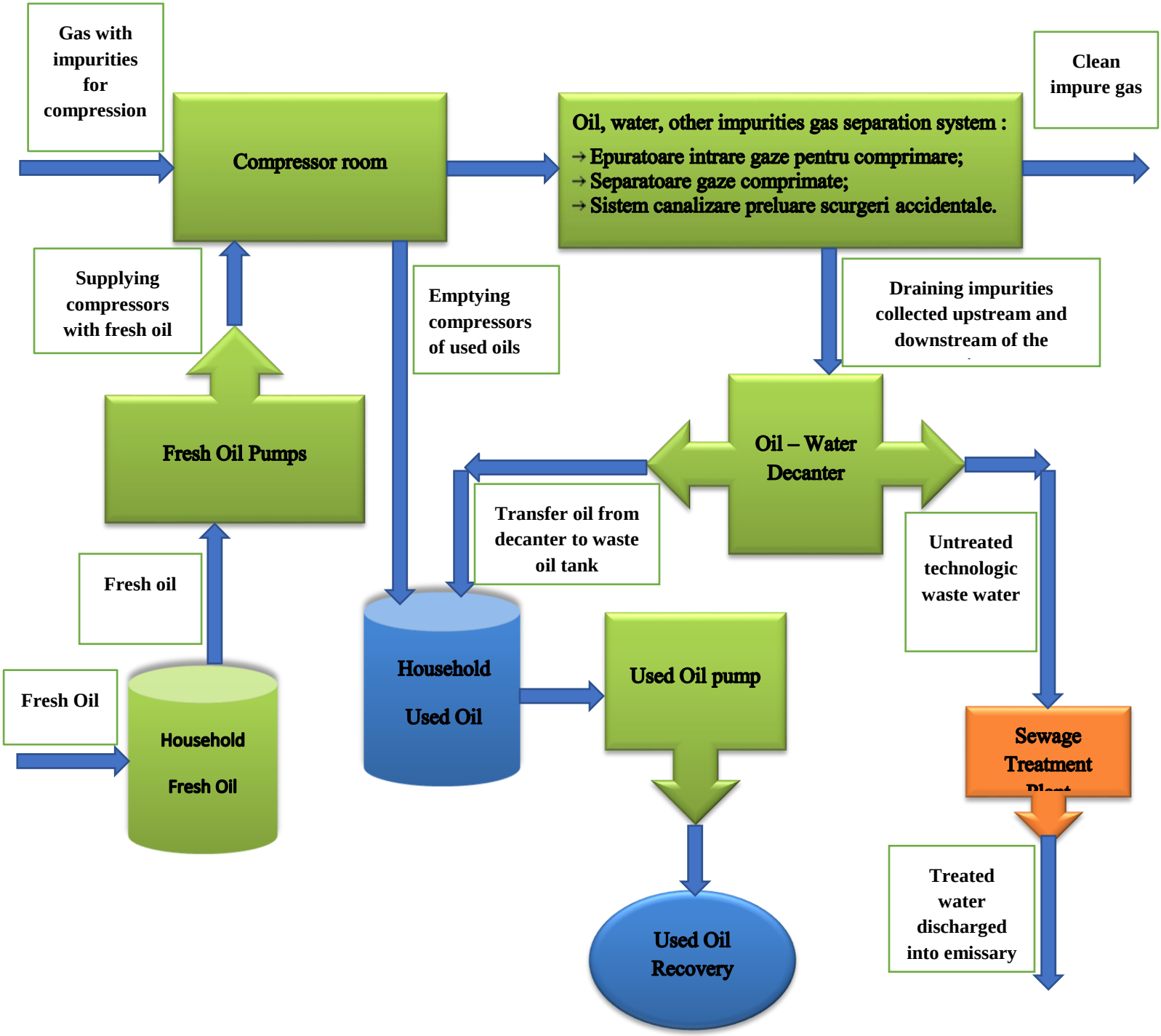


QUANTITIES OF USED OIL GENERATED FROM S.N.G.N. ROMGAZ S.A. ACTIVITIES

Item no.	YEAR 2020 GENERATED QUANTITY – 254.964 TONS TOTAL OUT OF WHICH:			RECOVERY	
				Recycling	Co-incineration
1.	Code: 13.02.05*	tons	Engine, transmission and lubrication non-chlorinated mineral oils	238.409	0.725
2.	Code: 13.02.06*	tons	Engine, transmission and lubrication synthetic oils	0.650	0.180
3.	Code: 13.03.07*	tons	Insulating and heat transmission non-chlorinated mineral oils	15.00	0
Item no.	**YEAR 2021** **GENERATED QUANTITY – 152.833 TONS TOTAL OUT OF WHICH:**			**RECOVERY** **Recycling**	**Co-incineration**
1.	Code 13 01 10*	tons	Hydraulic non-chlorinated mineral oils	0.577	0
2.	Code 13 02 05*	tons	Engine, transmission and lubrication non-chlorinated mineral oils	151.344	0.910
3.	Code 13 02 06*	tons	Engine, transmission and lubrication synthetic oils	0	0.002



TECHNOLOGICAL PROCESS OF FRESH AND USED OIL AT A COMPRESSOR STATION



On the other hand, the operation of natural gas compressor stations generates, depending on the type of cooling, the following types of waste:

13 01 10*	**Mineral based non-chlorinated hydraulic oils**
13 02 05*	**Mineral based non-chlorinated engine, gear and lubricating oils**
13 05 02 *	**Sludges from oil/water separators**
13 08 99 *	**Other waste not specified – petroleum oils or other degreasing agents**
14 06 02 *	**Other halogenated solvents and solvent mixes – Perchloroethylene waste**
15 01 02	**Plastic packaging**
15 02 02 *	**Absorbents, filter materials (including oil filters without other specification), polishing materials, protective clothing contaminated with hazardous substances**
16 01 15	**Waste anti-freeze fluids (emulsion waste from compressor cooling system)**

This waste is collected and temporarily stored at the sites of the compressor stations in metal tanks, PVC, specially designed cubicles.

For the controlled disposal of these categories of waste, contracts have been concluded with authorised economic operators. Examples:

S.C. DYTIV S.R.L. Ploiesti, which takes waste oils and uses them in the production of asphalt board;

Hazardous waste other than waste oil is taken by S.C. PRO AER CLEAN S.R.L. Timisoara and incinerated;

Emulsion waste from the cooling system of the compressors is disposed of in a controlled manner by S.C. ECODAVA Barlad, under the contract concluded with it; based on the same contract, TEG waste resulting from gas dehydration and incineration is also disposed.

These companies have environmental permits for the collection, transport and controlled disposal of waste.

In case of a compressor station, it has a a system of scrubbers, step separators, decanters, and their role is to retain as many solid and liquid impurities as possible that arise from the TRANSGAZ system for the injection stage or from the reservoir where the gas was stored in the extraction stage. Retaining such impurities (waste) in the largest possible quantity is proof that the installations are working, or this can only be achieved by increasing the quantity of used filters, etc.

We believe that increasing the quantity of used filters and solid and liquid impurities is a performance indicator for the quality of gas delivered to consumers and is in line with the Policy Statement on Quality, Environment, Health, Safety at Work and Energy, which states as the first strategic objective:

- To supply services and products of the quality requested by our clients to increase their satisfaction.

Waste oils from Romgaz activities are industrial oils and lubricants based on mineral, synthetic or biogenic basis, which have become unsuitable for their original purpose, in particular those oils from combustion engines and transmission systems, lubricating oils, turbine oils, hydraulic and industrial oils.

Waste oils are classified by law as hazardous waste and are subject to a special management regime established by law.

USE: Oil is stored and analysed to identify possibilities for re-use.

HAZARD COMPOSITION/IDENTIFICATION:

FRACTIONS (Composition)	CODE CAS	SIGNAL PHRASES PROPORTION
Hidrocarbons C15-C50	274-835-9/N,	Xi; R 7; R 36/37/38;
- Aditives"	70514-12-4 variable	
* Degradation products		

Used oils contain:

- aliphatic and aromatic hydrocarbons;
- light petroleum fractions, fuels, which may come from the collection;

Used oils contaminated with fuels which may become flammable.

Measures against accidental pollution taken by S.N.G.N. ROMGAZ S.A. on locations where fresh/used oil is handled:

Leakages on the ground:

- Prevention against spill of used leaked oil, with barriers of sand, land or other non-combustible material;
- Removal of ignition sources, stopping leakage, with safety measures taken;
- Leaking into water;
- Prevention against spill on water surface by using isolation barriers or absorbant materials.

The collection of used oil is carried out selectively, according to the law, in sealed containers, resistant to mechanical and thermal shock and visibly marked "USED OIL". All measures shall be taken to prevent leakage of used oil during handling, storage and use.

Used oil shall be stored in containers in well-ventilated and dry places, away from heat, flame, sparks or other sources of fire, and appropriate Fire Prevention and Extinction measures shall be taken.

7.6.1. INVENTORY OF NATURAL GAS COMPRESSOR STATIONS

Item No.	COMPRESSOR STATION	YEAR OF PUTTING INTO OPERATION	COUNTY
1	Balda	2007	Mures
2	Band	2004	Mures
3	Taga	2008	Cluj
4	Mures	2004	Mures
5	Sanmartin	2003	Mures
6	Fantanele	2001	Bistrita
7	Grebenis	2004	Mures
8	Delenii	2011	Mures
9	Botorca	1977 - In 2003 SOLAR modernization	Mures
10	Filitelnic	1989 10 GKNA - In 2008 Superior 825 – 12 SGTB	Mures
11	Tigmandru	1973 TVR – In 1983 KVSR	Mures
12	Cristur	2009	Harghita
13	Danes	1983	Mures
14	Brateiu	1976	Sibiu
15	Lunca	1987	Alba
20	Roman	2015	Neamt

In 2021, the Environment Protection Office established the objective of monitoring the degree of recovery of used oil generated in the compressor section, in order to ensure the highest possible degree of recovery and subsequent recovery and to identify any losses in the technological process.

8. CARACTERIZATION OF HAZARDOUS WASTE

Based on the legal requirement (Law No. 92/2021, Article 8 paragraph (4)), it is mandatory to characterize hazardous waste generated from its own activity and waste considered hazardous due to their origin or composition. This characterization is carried out in order to determine the possibilities of mixing and their methods of treatment.

Measures to reduce the harmfulness of waste implemented by Romgaz:

- Use of clean machinery and technologies;
- Replacement of drilling fluid components with less polluting substances (polymers etc.);
- Replacement of oils in machinery, thus avoiding the accumulation of hazardous substances;
- Choosing less hazardous solutions (acetic acid, citric acid instead of hydrochloric acid) in the case of layer acidisation where the composition of the layer allows this;
- Avoiding contamination of equipment by contact with hazardous substances (protective equipment, cardboard, paper, etc.);
- Respecting the process parameters in order to avoid damage;
- Allocation of resources for hazardous waste analysis/characterization;
- Strict delineation of waste generation sites;
- Purchase of rechargeable batteries instead of batteries;
- Purchase of LED lighting sources and floodlights for proper lighting that contributes to up to 80% electricity cunsumption;
- Replacing some hazardous chemicals/mixtures with others that perform the same function but are less toxic/hazardous, resulting in less toxic/hazardous packaging/product waste;
- Records in storages/warehouses regarding the validity term of products, compliance with storage compatibility of chemical substances, inventories etc.;
- Sellective collection of oils – by categories, in strong metal container;
- Sellective collection of medical waste/Covid 19;
- Treatment of produced waste (for example, drilling mud, acid solutions used in wells) with substances transforming hazardous waste into non-hazardous waste;
- Floor waterproofing works in the plant - Sodium hydroxide tanks - chemical section - 2021.

As regards reducing the harmfulness of waste, the most common practice is the sellective collection of waste at the point of generation. So environmental officers in the branches and production departments ensure that all waste-generating workplaces are equipped with marked bins for selective waste collection, concrete platform bins for the collection of metal and non-metal waste, and specially designed areas for the proper collection of hazardous waste.

9. MEASURES TO PREVENT WASTE GENERATION

S.N.G.N. ROMGAZ S.A. waste generation prevention measures are both quantitative and qualitative.

Quantitative waste generation prevention:

- Optimising waste generating production processes;
- Reusing materials and equipments.

Qualitative waste generation prevention:

- Reducing waste hazardous nature, especially minimising hazardous and/or toxic substances contents.

Both perspectives, quantitative as well as qualitative, lead to waste management reduced costs for the company.

Paper waste generation prevention is carried out by paper/cardboard efficient management, namely:

- Reducing – back and front printing (aproximately 50% reduction) or removing – using emails as an alternative for hard copy information.
- Purchasing recyclable packaging and paper;
- Small font documents editing;
- Reusing paper (drafts);
- Purchasing unpacked products or products without excesive packaging.

S.N.G.N. ROMGAZ S.A. focuses on using resources efficently and rethinking daily activities so that it would lead to a lower materials consume, thus generating smaller waste quantities.

The best practices in the acquisitions area helps the company to save materials and money. Besides the posibility to negotiate prices, we influence suppliers to offer products and services in a resources efficient manner.

10. MEASURES TO MINIMISE WASTE GENERATION

The company's approach regarding waste management is based on two **major principles**:

- Recycling and reuse – encouraging a high level of component materials recovery, preferably by material recycling. In this respect, some waste fluxes are being identified for which material recylcing is primary: package waste, metal waste, battery waste, electric and electronic equipment waste;
- Final waste disposal – in case waste cannot be recovered, it will be disposed in safety conditions for human health and evironment, with a stric monitoring program.

Waste generation minimization/reduction proposed solutions:

- Informing employees on the waste recyclable nature – informative materials;
- Separation at source, waste selective collection for valorification;
- Optimal placement of selective colletion bins within the offices;
- Reusing paper/cardboard packages;
- Reusing plastic packages (cleaning/washing) – bags, plastic cans;
- Using reusable recipients instead of the ones used for coffee/water machines;
- Avoiding scrap parts by complying with projects/blueprints;
- Reparing/reusing products;
- Connecting electric equipments/airconditioning strictly for the necessary time;
- Matching natural/artificial lightning.

Due to S.N.G.N. ROMGAZ S.A. business nature, the following waste cathegories should be taken into account for the minimisation plan:

Reducing at source/waste generation prevention - an extremly important factor within any waste management strategy, directly linked to enhancing production methids as well as influencing consumers to change the request related to products (green products orientatin) and to adopt a lifestyle resulting in smaller waste quantities;

Waste recycling/reusing– encouraging a high level of recovering compenent materials, material recycling prefferably. In this respect there are some waste cycles for which material recycling is a priority: packages waste, metal waste, baterries waste, electric and electronic equipment waste;

Developing and extending separate waste collection systems in order to promote a high quality recycling;

Management improvement, identifying waste and inventory control lead to actual waste generation reduction;

Monitoring purchase cycles up to waste disposal

Enhancing inventory control by – using the existing supply and the old one before using the new supply, ordering dangerous chimical substances only when these are needed and in minimum quantities for avoind their expiration;

Training employees related to hazardous waste management – training which includes aspects like:

- Hazardous substances danger;
- Leaking prevention;
- Preventive maintenance;
- Emmergency readiness;
- Environment audit on minimising waste;
- Implementing at company level the waste reduction program;

- Establishing an internal waste recycling program;
- Purchasing hazardous chimical substance only by order and in minimum quantities in order to avoid stacking and their expiration;
- Purchasing hazardous chemical substances in large volume containers in order to avoid produsing package waste containing residue or that is contamined with hazardous substances;
- Choosing suppliers that sell „green" products, to the extend possible from a technical point of view;
- Preparing a list on the evidence of hazardous and non-hazardous generated waste;
- Evaluating hazards and risks that can be generated by inadequate waste disposal;
- Respecting work procedures in order to avoid package damage of hazardous products;
- Market exploration in order to identify ecological cleaning products and those used in technological processes;
- Evaluating specilised companies in waste transport, disposal and recycling.

Reusing waste

- Reparing and storing materials/spare parts resulted from repairing/scrapping – ready to b reused;
- Filtering oils/lubricants at bigger agregattes (turbines) is done during operation, and their quality is confirmed by the analysis of the chemical department laboratories and instrumentary;
- At large intervals, according to the functioning hours, the full oil change is prformes for the aggregates and the opportunity to reuse some of the generated oil quantities is analysed;
- Peformant purchased machines (filtration systems, coolers, filters) extended oils' life cycle compared to previous years.

11. SELECTIVE WASTE COLLECTION – IMAGES

PAPER, PLASTIC, METAL, GLASS COLLECTING
 

USED LIGHT SOURCES COLLECTING

COVID 19 MASKS AND PROTECTION GLOVES COLLECTING

Paper and plastic packages, glass, hazardous substances packages collecting – Chemical Department

Used engine oil selective collection – Cojocna working point

USED OIL COLLECTING	SAWDUST, VENEER, ETC. COLLECTING
	
TEG COLLECTING	PLASTIC, MUNICIPAL WASTE COLLECTING

	
SCRAP METAL, METAL CUTTINGS COLLECTING	**GLASS, TEXTILE COLLECTING**
	

12. WAYS OF IMPLEMENTING PREVENTION METHODS/REDUCING WASTE QUANTITIES

Measures are implemented by:

- Promoting competitive technologies with low CO2 emission, efficient for using resources;
- Integrating in all decission making processes environment issues;
- Promoting carbon captation and underground (depleted gas fields);
- Developing management and monitoring programs for car park fuel consumption;
- Awareness through education/trening related to the benefits and the importance of implementing consumption reduction measures (raw materials, resources);
- Using natural sources in a rational manner;
- Using renewable energy sources;
- Promoting high energy efficiency technologies;
- Monitoring, continuous evaluation of energy efficiency and previewing energy consumption (up-to-date masurement and control systems, energy management systems);
- Continuous environement management enhancement;
- Noise reduction (replacing outworn machines, sound-absorbing pannels and Green Curtains);
- Extending machines life span (operation according to specifications, accurate maintenance, revisions);
- Promoting respect for environment in balance with economical growth in each strategy decission;
- Engaging each employer's responsibility for achieving the company's objectives/strategic directions;
- purchasinf ecological products (clear selction criteria for products/services/works suppliers);
- introducing/developing and implementing the environment concept in accounting;
- Investmens in environment related initiatives(plans, programs, campaigns) in order to produce significant changes on the long term in in culture and mindset regarding the way market operators use resources;
- updating buildings lightining (saving electricity costs), producing electricity using photovoltaiv pannels;
- using the best available technologies in investment decissions, from an economic and ecologic point of view;
- Firm introduction of ecoefficiency criteria in all production and services activities;
- Identifying extra financing sources for major projects, especially regarding carbon storage;

- Encouraging suppliers' voluntary involvement in management, audit and environment systems;
- Purchasing equiomentand technologies having in view as a priority the sepcifications on energy efficiency;
- Completing existent technologies with at source pollutants retention equipment;
- New wastewater treatment plants and upgrading those existent.

ROMGAZ TARGETS

OBJECTIVE	TARGET	MEASURABLE INDICATORS	MEASURES
Prioritising efforts related to waste management in compliance with waste ranking	Developing measures that encourage waste generating prevention and reusing it.	Total waste quantity generated within the subsidiary.	Monitoring the quantity of waste prepared to be reused, turned over to economic operators for recycling, energetic recovery, final disposal.
		The waste quantity prepared for being reused.	
	Increasing the recylcing and energetic recovery rate.	The waste quntity delivered to operators in order to be recycled (materials recovery).	
		The quantity of waste turned over to economic operators for energetic recovery.	
	Reducing quantities of waste destined for final disposal.	The quantity of generated waste destined for final disposal.	
Developing and extending waste selective collection systems in order to promote a high quality recycling.	Increasing the number of types of waste selectively collected and the number of collecting containers.	Number of types of selectively collected waste.	Organising the selective collecting infrastructure for types of waste generate within the subsidiary sites.
		The number of containers, bins, etc. used for waste collection.	
Adequate waste management by complying with the strategic principles and minimizing the impact on the environment and human health.	Preventing temporary waste collection/storage in other places than the ones set up for this purpose at all working points.	The number of waste storage spaces, set up for this purpose at working points.	Setting up at all working points waste storage spaces; Linking generated waste quantities with quantities registered in the waste transport forms; Verifying the waste transport forms return from the recipient to the sender, signed and stamped.
	Preventing waste disposal in other places than the indicated storages in the waste disposal contracts.	The number of waste transport forms, filled in completely.	

WASTE REDUCTION AND PREVENTION PROGRAM - 2021

S.N.G.N. ROMGAZ S.A. MEDIAS

OBJECTIVE	TARGET	MEASURABLE INDICATORS	MEASURES
Developing the responsible behavior regarding waste generation prevention and management.	Organisign and sustaining employee awareness/information campaigns.	Number of information and awareness companies.	Organising employee information and awareness campaigns on orevention and reducing the quantities of generated waste; Organising workshops, conferences courses for employees for aknowledging the importance of complying to waste legislation.
	Increasing applicable law efficency in waste management area.	Annual number of shares for aknowledging the importance of complying with the specific law on waste (workshops, conferences, courses) attended by employees.	

Date: May 27, 2022

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