

# **DEPARTMENT OF LABOUR INSPECTION**

# **ANNUAL REPORT 2021**

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# DEPARTMENT OF LABOUR INSPECTION (DLI)

#### I. INTRODUCTION

The mission of the Department of Labour Inspection (DLI) of the Ministry of Labour, Welfare and Social Insurance is the continuous and constant improvement of safety and health levels at the workplaces, the protection of employees, the public and the environment from risks arising from ionising radiation, chemical substances, machinery, equipment and offshore oil and gas extraction activities, as well as air quality monitoring.

In order to achieve the above mission, the DLI implements a specific strategy that includes an appropriate institutional framework, an appropriate legislative framework, a suitable and adequate labour inspection system, promotion of prevention through continuous awareness raising, information and training, the use of voluntary and economic incentives, incorporation of issues dealt with into other policy areas such as education, employment, agriculture, environment, transport, etc., encouragement of progress and research, close cooperation with the social partners and other stakeholders and, cooperation and active participation of the Department in the relevant activities of the European Union and international and regional organizations

The DLI's vision is to make the Department of Labour Inspection an excellent recognized organization that provides the citizens and the society with quality services with a high level of efficiency and productivity, utilizing modern technological knowledge.

The DLI has at its Headquarters the Safety and Health at Work Sector and the Radiation Protection, Environmental Issues and Equipment Sector. In addition, the Department has District Offices in Nicosia, Limassol, Larnaca, Pafos and Ammochostos. In the Department, there were in total, 85 posts in 2021, of which 20 (24%) were vacant. These posts did not include temporary and seconded staff, the occupational physician and administrative, secretarial, accounting and computer support staff. The organizational chart of the DLI is presented in **Chart 3. 1 on page 38** of the **Appendix.** 

The DLI in 2021, was entrusted with the implementation of the 385 pieces of legislation, for which it was the competent authority, with a reduced number of available staff.

### A. Safety and Health at Work Sector

The Sector deals with all safety and health at work issues regarding the protection of life, health and wellbeing of workers at workplaces, as well as the protection of other persons who may be affected by work activities. The main competences of each of the Sections of this Sector are the following:

# A.1. Awareness Raising and Horizontal Issues Section

The Section on Awareness Raising and Horizontal Issues was established in order to better promote the issues of information dissemination, training and awareness raising regarding Safety and Health at Work. The Section is responsible for the operation of the Training Centre, for monitoring the activities and obligations of the DLI with regards to the European Agency for Safety and Health at Work, for the approval of the Safety Officers and the monitoring of their training and the evaluation of the work performed by them, as well as for the functioning of the Pancyprian Council for Safety and Health, and the handling of issues regarding Approved Persons who offer preventive and protective services. The Section also coordinates the statistical processing of the data and the management of the computerized system of the DLI.

# A.2. Services and Chemical Industry Section

The Chemical Protection and Safety of Services Section has the following main responsibilities:

- Supervising the implementation and enforcement of the Chemicals Legislation, a legislation that covers issues related to the manufacture, import, export, use and placing of chemical products on the Cyprus market.
- The dedicated REACH and CLP helpdesks participate in various activities of the European Chemicals Agency (ECHA) and their role is to promote the harmonised dissemination of knowledge and information of the chemicals legislation and to guide companies in fulfilling their legal obligations.
- Overseeing the implementation of the legislation on health and safety at work of employees and other affected persons in the chemical and pharmaceutical industry, storage of chemicals, private sector services, including public and private hospitals, education, transport, commerce, as well as municipalities and communities. Additionally, the Section deals with issues related to health hazards of workers from their exposure to chemical, biological, carcinogenic and mutagenic agents, as well as exposure to physical agents such as noise, vibrations etc.
- The implementation of the legislation dealing with the contained use of genetically modified micro-organisms and the licensing of their users.
- ❖ The inspection, control and licensing of liquid petroleum storage facilities.
- The prevention of large-scale accidents, that could be caused due to the storage or use of hazardous chemicals in installations. In the Section there is a special Unit that deals with this issue.

The safety of offshore oil and gas operations with the aim of preventing serious accidents and dangerous incidents during such offshore operations and reducing the consequences of such incidents. In the Section there is a special Unit that deals with this issue.

## A.3. Manufacturing and Construction Section

The Manufacturing and Construction Section is engaged in the organization, management of safety and health at work and the safety and health requirements of workplaces and work equipment that must be met. It also deals with the preparation and monitoring of the inspection program, the monitoring of court cases, the coordination and carrying out of inspections in the construction industry, the mining and quarrying industry, the manufacturing industry, the public sector, as well as in farming activities. In addition, the Section deals with issues regarding the prevention of risks and protection from exposure to asbestos and thermal load, as well as, consultation with the competent authorities for issuing building permits, certificates of final approval and planning permits. Moreover, the Section is engaged with the coordination of the unit for the control of working hours and rest periods for drivers of certain vehicles. Finally, the Section is engaged with supporting activities of the DLI that include computer equipment and other equipment (e.g. scanners, photocopy machines, cameras) and the monitoring of the fire safety, security and access systems in the building.

In 2021, the Section coordinated the compliance of the staff of the DLI with the provisions of the Decrees of the Ministry of Health, in accordance with the Quarantine Law Act, as well as the record keeping of data regarding inspections for the purpose of enforcing compliance with these Decrees.

# B. Radiation Protection, Environmental Issues and Equipment Sector

The Sector deals with the protection of workers, the public and the environment against risks related with machinery, equipment, radiation and industrial air emissions. It also deals with all issues related to air quality. The main competences of each of the 4 Sections of this Sector are the following:

# **B.1.** Machinery and Equipment Section

The Machinery and Equipment Section operates a Machinery, Pressure Vessels and Lifts Unit, which deals with the inspection and certification of inspectable machinery and pressure vessels such as steam boilers, steam receivers, cranes, hoists, overhead travelling cranes and air receivers. This Unit also enforces the legislation that regulates the operation, maintenance and periodic audit of lifts. Furthermore, this Section is responsible for the surveillance of the Cyprus market to safeguard the free movement of specific products, which satisfy the safety and health requirements of the European Union Directives or Regulations bearing the CE mark. Such categories of products include: (i) Pressure Equipment, (ii) Simple Pressure Vessels, (iii) Machinery, (iv) Lifts, (v) Personal Protective Equipment, (vi) Equipment and Protective Systems for Use in Explosive Atmospheres and (vii) Noise Emission in the Environment

by Equipment for Outdoors Use. Moreover, the Section deals with the inspection, control and licensing of Liquefied Petroleum Gas (LPG) installations and storage facilities as well as LPG vehicle refueling stations.

#### **B.2.** Radiation Protection Section

The main objective of the Radiation Protection Section, is to safeguard the health and safety of the workers and the public from risks arising from exposure to radiation in various economic activities, such as in medicine, industry, construction, agriculture and research, and to protect the health of the population, property and the environment from risks that may arise from the dispersion of radioactivity in the environment.

#### **B.3.** Industrial Air Pollution Control Section

The Section of Industrial Pollution Control deals with the permitting of industrial installations which pollute the atmosphere. The Section also deals with monitoring and control of air pollution caused by substances emitted into the atmosphere during the operation of industrial installations, such as dry cleaners, and vehicle fuel stations so as to safeguard the protection of the health and welfare of the citizens and the protection of the environment.

## **B.4.** Air Quality and Strategic Planning Section

The Air Quality and Strategic Planning Section deals with the continuous monitoring and information for the levels of specific pollutants in the ambient air, as well as with the assessment and management of the air quality, in order to secure, as practically possible, the protection of the health and well-being of workers and citizens and the protection of the environment. Additionally, the Section deals with the formulation and monitoring of the implementation of the Strategic Plan of the Department.

#### **II. WORK CONDUCTED DURING 2021**

# 1. SAFETY AND HEALTH AT WORK SECTOR

# 1.1. Workplace Inspections

A main activity of the Safety and Health at Work Sector consists of carrying out inspections, for the enforcement of the provisions of the labour legislation falling within the competency of the DLI. According to the annual inspection program of DLI, as shown in **Table 3.1 on page 39** of the **Appendix**, inspections in various economic sectors, as well as specific activities and focused campaigns were carried out during 2021. To better conduct the specific campaigns, special questionnaires, informational material and instructions were conveyed to the mass media and all concerned parties and additionally were posted

on the DLI website.

During 2021, the Inspectors carried out 16.612 inspections in 4.563 different undertakings for safety and health matters at workplaces whereas during 2020, 6.037 such inspections were carried out in 4.027 different undertakings. The table of **Appendix** (**Table 3.2 on page 40**) contains the inspections carried out in 2021 analytically, by economic activity and district. Furthermore, during 2021 following inspections, 169 letters were sent to employers, self-employed persons or other persons where serious violations of the legislation on safety and health at work were identified during inspections, in contrast to 232 which were sent during 2020. In addition, in 2021, 23 Improvement Notices and 176 Prohibition Notices were issued while in 2020, 55 Improvement Notices and 270 Prohibition Notices were issued by Inspectors.

# 1.1.1. Inspections regarding the COVID-19 Pandemic

In 2021, the Inspectors and Auditors hired on temporary basis conducted inspections to monitor and control the implementation of measures to limit the spread of the coronavirus. The DLI had the coordination of the inspections carried out, for the same purpose, in premises of the retail trade, by personnel of other Services / Departments of the Public and wider Public Sector, until 15.3.2021. A total of 25.599 inspections were carried out by the DLI staff. More information is given in section 1.25.

Also, from the 15.3.2021, the DLI undertook the general coordination of data collection for the inspections carried out by all the Departments of the Ministry of Labour, Welfare and Social Insurance (MLWSI) to control the implementation of measures to limit the spread of the coronavirus. In this context, a comprehensive table of data with the inspections was kept, which was forwarded every fortnight to the MLWSI, for the information of the Ministry of Justice and Public Order.

### 1.1.2. Investigation of Complaints with regard to Health and Safety Issues

During 2021, more than 400 complaints that submitted orally and / or in writing by citizens with regard to occupational safety and health issues were investigated.

# 1.1.3. Issue of Registration of Premises, Installations, Enterprises and Work Places

During 2021, following the examination of relevant applications and on the spot inspections, the DLI issued 55 Certificates of Registration of premises and work places, under the Safety and Health at Work (Registration of Premises, Installations, Enterprises and Work Places) Regulations of 2019. It is noted that during 2020, 43 Certificates of Registration of premises and work places were issued. Also in 2021, 59 Certificates to Private Hospitals / Clinics were issued / renewed after inspection.

## 1.1.4. Measurements of Physical and Chemical Agents

The Sector maintains a laboratory with instruments for the direct or indirect measurement of physical and chemical agents. In 2021, in the framework of surveillance of health and safety legislation, a total of 96 measurements of physical and chemical agents were carried out. The following **Table** shows in detail the measurements made for each physical or chemical agent.

Table 1. 1: Measurements per physical or chemical agent in 2021

No.	Temperature	Noise	Lighting	Combined Air Rate (Air Changes)	Suspended particles (dust)	Carbon Dioxide (CO <sub>2</sub> )	Ozone (O <sub>3</sub> )	Ammonia (NH <sub>3</sub> )	Organic volatile compounds (VOCs)
Number of Measurements	6	0	0	6	6	6	6	6	6

No.	Humidity	Chlorine (Cl <sub>2</sub> )	Hydrogen Sulphide (H <sub>2</sub> S)	Carbon Monoxide (CO)	Nitrogen Dioxide (NO <sub>2</sub> )	Sulphur Dioxide (SO <sub>2</sub> )	Lower Explosive Limit (LEL)	Oxygen (O <sub>2</sub> )	Formaldehyde (HCHO)
Number of Measurements	6	6	6	6	6	6	6	6	6

#### 1.2. Prosecutions

In 2021, the trials of 30 cases concerning 138 breaches of Labour Laws of the safety and health of workers at the workplace and other persons affected by work activities were completed. The fines imposed upon those who were convicted in 2021 totaled to €190.600, compared to €63.250 in 2020 concerning the trials of 11 cases. The number of penal cases, the relevant legislation breached by the offenders as well as the fines imposed by the Courts in year 2021 in comparison to years 2018 -2020, are illustrated in Appendix (**Table 3.3 on page 41**). Additionally, in 2021, a total of 16 new penal cases were compiled by DLI, 15 of which were sent to the Legal Service of the Republic for approval and submission of the penal proceedings.

## 1.3. Analysis of Notified Work Accidents and Dangerous Occurrences

#### 1.3.1. Accidents to employed persons during their work

During 2021, a total of 1.433 accidents which occurred to employed persons during their work were notified to the DLI. **Table 3.4 on page 42** of the **Appendix** presents an analysis of accidents by section of economic activity, gender, age, degree of injury and cause of accident. In **Figure 3.1 on page 44** of the **Appendix**, accidents are categorized by sector of economic activity. As shown in the mentioned figure, the biggest number of accidents during 2021 occurred in both the Construction sector and the

sector of Accommodation and Food Services (Hotels & Restaurants) with the same percentage of 19,47%, followed by the sector of Manufacturing with a percentage of 17,73% and the sector of Wholesale and Retail Trade and Repair of Motor Vehicles and Motorcycles with a percentage of 13,33%. **Figure 3. 2 on page 45** of the **Appendix**, presents the annual number of notified work accidents for the period 2010 – 2021. **In Figure 3. 3 on page 45** of the **Appendix**, accidents at work during 2021 are analyzed by cause and are categorized in five basic categories (buildings/installations, machinery/equipment, transport means, materials/substances and other causes).

Tables (Table 3.5 to Table 3.8 on page 46) of the Appendix present analysis of the fatal accidents, which occurred during 2021, by district, economic activity and cause. These tables present the accidents occurred to employed persons and self-employed persons during the course of their work, as well accidents to employed persons during the normal journey between home and the place of work (commuting accidents). Additionally, they present accidents occurred to third persons (not employed), but arose out of work activities. During 2021 a total of 6 fatal accidents occurred to employed persons and 1 to a self-employed person during the course of their work, as well as 1 commuting accident to an employed person and 1 fatal accident to person out of work (not employed), but arose out of work activities. In Figure 3. 4 on page 47 of the Appendix, the annual number of fatal accidents to employed persons during their work which were notified during the period 2010-2021 is shown.

As it is shown in the **Appendix** (**Figure 3. 5 on page 48**), the Average of the Incidence Rate (number of accidents per 100.000 employed persons) for accidents which occurred to employed persons during the course of their work for year 2021, was 381,2. This Figure presents also the average of the Incidence Rate by section of economic activity. It is noted that this refers to preliminary and not final results. This is due to the fact that the "Number of Employed Persons" used in calculating the Incidence Rate, is based on the results of the Labour Force Survey of the Statistical Service for first, second and third trimester (mean value) and not on the overall results (mean value) for the whole year. These data were not available at the time of preparation of this Report. It is noted that the final Incidence Rate of Accidents at Work for year 2020 (Mean Value) was 424,4.

In **Figure 3. 6 on page 49** of the **Appendix**, the change in the Incidence Rate (Annual Mean) is presented for the period 2010 - 2021, as well as the number of accidents and employed persons for the same period. Conclusively, the Incidence Rate during the period 2010 - 2021 decreased by 43,8% and the number of accidents by 34,4%, while during the period 2020 - 2021 the Incidence Rate decreased by 10,2% and the number of accidents decreased by 6,2%.

It is noted that the year 2021, as well as the year 2020, are characterized by the special situation that emerged due to the pandemic that led to the significant reduction in various sectors of the Labour market. Therefore, as for the year 2020, it is not accurate to compare the results of the year 2021 with previous periods for safe conclusions regarding the levels of safety and health in the workplaces, with the sole

criterion being the number of accidents and the Incidence Rate. It is important, however, to say that despite the increase in activities during 2021, compared to 2020, there was, as mentioned in the previous paragraph, a significant decrease in the Incidence Rate and to a lesser extent in the number of accidents reported. The **table** below shows comparative data regarding the reduction of the number of accidents in the years 2019, 2020 and 2021 in the main economic activities.

Table 1. 2: Comparison of Number of Accidents 2019 - 2021

SECTION OF ECONOMIC	2019		2020		2021		2019 - 2020		2020 - 2021	
ACTIVITY	No. of	Percentage	No. of Percenta	Percentage	No. of	Percentage	Reduction		Reduction / Increase	
	Accidents	(%) Accidents	(%)	Accidents	(%)	(Number)	(%)	(Number)	(%)	
MANUFACTURING	378	17,44	265	17,35	254	17,73	-113	-29,89	-11	-4,15
CONSTRUCTION	333	15,36	329	21,55	279	19,47	-4	-1,20	-50	-15,20
WHOLESALE AND RETAIL TRADE	312	14,39	229	15,00	191	13,33	-83	-26,60	-38	-16,59
TRANSPORT AND STORAGE	149	6,87	95	6,22	97	6,77	-54	-36,24	2	2,11
HOTELS & RESTAURANTS	572	26,38	286	18,73	279	19,47	-286	-50,00	-7	-2,45
ALL ECONOMIC ACTIVITIES	21	.68	15	27	14	133	-641	-29,57	-94	-6,16

Regarding the severity of accidents that can in some way be identified as the days of the victim's absence from work due to the accident, it is noted that the average number of days of absence in all economic activities in 2020 was 26 compared to 24 in the year 2019 and 23 in the year 2018. It is noted that the relevant data concerning the accidents of the year 2021 were not available until the date of completion of this report and will be announced in the Annual Report of the Department for the year 2022. As shown in the **table** below, in terms of the most important economic activities, the most serious accidents occurred in order in the following areas:

Table 1. 3: Average days of victim's absence from work (employees)

Economic activity	2018	2019	2020
Construction	26	30	32
Manufacturing	24	23	27
Wholesale and Retail Trade	22	18	25
Transportation and Storage	22	29	22
Hotels & Restaurants	18	20	21

#### 1.3.2. Other Accidents notified to the Department of Labour Inspection (DLI)

During 2021, additional 93 accidents were notified to the DLI, according to the relevant legislation [6 to self-employed persons during the course of their work, 1 to person out of work and 86 during the normal journey between home, and the place of work (commuting accidents)].

# 1.3.3. Analysis of Notified Dangerous Occurrences

In 2021, 20 dangerous occurrences regarding work place incidents were notified to the DLI as follows: 5 fire / explosion, 4 contact with an underground electric line, 3 collapse of scaffolding, 3 collapse / failure of equipment, 2 contact with overhead electric lines, 1 electrical short circuit, 1 leakage of substances, 1 collapse of a structure.

# 1.4. Occupational Diseases Prevention Unit

During 2021, the Occupational Physician Counselor in close collaboration with Labour Inspectors investigated two cases of diseases possibly related with working conditions and working environment of affected persons. These diseases were related with one case of exacerbation of allergic bronchial asthma and one case of lumber spine disc disease that has been surgical treated. In addition to the above cases, during 2021, 11 new cases of mesothelioma registered by the Cancer Registry of the Ministry of Health and 5 new cases of mesothelioma registered by the Cancer Registry of the Oncology Center of Bank of Cyprus were notified to the DLI.

### 1.5. Providers of First Aid at Work Training Courses

For the provision of first aid at work training programs, the Chief Inspector renewed the licenses of 26 existing providers according to procedures and evaluation applied by the DLI. According to Safety and Health (Prescribed Fees) Order of 2021 (R.A.A 466/2021), the existing Provider will pay a fee of 295 euros for the renewal of its approval, while the new candidate Provider will pay a fee of 700 euros for its approval. The Department of Labour Inspection is in consultation with Resuscitation Services of the Ministry of Health, for the promotion of a new legislation prepared by them to regulate the provision and quality of first aid and resuscitation programs.

#### 1.6. Surveillance of Workers' Health

The DLI continues the enforcement of the Safety and Health at Work (Medical Examinations for Asbestos) Order of 2018 (R.A.A.184/2018) the Safety and Health at Work (Medical Examinations for Dockwork) Order of 2018 (R.A.A. 185/2018) and the Safety and Health at Work (Medical Examinations of Workers Climbers at Height) Order of 2020 (R.A.A 30/2020). The above Orders have been issued Under the Safety and Health at Work (Heath Surveillance) Regulations of 2017 (R.A.A. 330/2017).

These Regulations determine the procedures and operating framework of the health surveillance system of employees in Cyprus. Companies that perform certain activities at ports, companies that have license to perform activities related to insulation and coating of asbestos and companies that perform activities of climbers at mast and poles above 5 meters without the use of motorized work equipment, have been contracted with occupational physician for the surveillance of their workers and for the implementation of the medical examinations defined in the above Orders. During 2021, the Safety and Health at Work (Medical Examinations of Workers at Mines and Quarries) Order of 2021 (R.A.A. 143/2021) has been issued and all related employers performing such activities were informed for their obligation to contract with occupational physician and to apply all the relevant provisions of the Regulations for the surveillance of workers' health. According to the action plan and the framework for the preparation of new Orders for medical examinations in other occupations or working activities, agreed by social partners, the DLI prepared two new draft Orders. These Orders refer to medical examinations of workers, in factories for manufacture, standardization, packaging and repackaging of agriculture medicines and in the health care sector for activities related with cytotoxic drugs. These two new Orders were consulted with all members of the enlarged Technical Committee of the Labor Advisory Board and other stakeholders.

With raising awareness of employers on the benefits of the provision of services by occupational physician in companies, the number of companies contracted occupational physicians is increased gradually. Based on the information and data held by the DLI until 2021, more than 40 companies contracted occupational physician for the provision of health surveillance services to employees.

### 1.7. External Services for Protection and Prevention

During the course of 2021, based on the prescribed Minimum Required Qualifications, the Chief Inspector granted 4 initial approvals and one re-approval of a person whose initial approval had expired. The transference of the approval of a physical person to a defined legal entity was also approved. In the cases of 3 candidates, the DLI requested further proof of possession of all the prescribed Required Qualifications. Additionally, during the course of the year, the DLI terminated the approval of one Approved Person. On the 31.12.2021, the relevant Registry of Approved Persons contained a total of 98 persons for the provision of External Services of Protection and Prevention.

Also, during 2021, the annual inspection campaign of Approved Persons continued, focusing on the quality of the deliverable work undertaken by these Persons on behalf of employers and /or self-employed persons. In the course of 2021, the penal prosecution of a physical person carrying out duties of Approved Persons, without having received the prior approval of the Chief Inspector, was completed, at the Nicosia District Court. The person concerned was handed a monetary fine by the Court.

Finally, during 2021, based on the findings of the competent Committee of Senior Labour Inspectors of the European Union (known as SLIC), which carried out an assessment of the Labour Inspection System of Cyprus during 2019, the DLI continued to take action in order to upgrade the External Services framework. For this purpose, all Approved Persons were duly informed of the additional legal requirements for ensuring the continuation of their approval, as Approved Persons, according to the provisions of the Management of Safety and Health at Work Regulations of 2021 (R.A.A 158/2021).

# 1.8. Activities to reduce work accidents and occupational diseases in the construction sector

#### 1.8.1. Action Plan

Under the Joint Policy Statement on the reduction of work accidents and occupational diseases in the construction sector, the DLI continues to implement since 2013 a specific Action Plan. In addition, an Action Plan is being implemented to reduce accidents, which was drafted by the Pancyprian Safety and Health Council and includes actions based on the suggestions of social partners and other members of the Council.

# 1.8.2. Technical Committee for Training of Workers who work at Height

In the framework of the activities of the Technical Committee, which was established in 2019, a Table was prepared with the training programs for Work at Height offered in Cyprus. An online meeting of the Technical Committee was held on 15.4.2021. The contribution of all the members of the Technical Committee is expected for the content of the relevant Decree that will be issued in accordance with the provisions of the Safety and Health at Work (Minimum Requirements for Temporary or Mobile Construction Sites) Regulations of 2015 (P.I. 410/2015) including adequate special training and experience in the installation, assembly, reconstruction and disassembly of scaffolding.

#### 1.8.3. Working Group for Metal Constructions Works

The purpose of the Working Group, which was established in 2019, is to prepare a document with Special Terms for the safe construction of metal structures, which can be incorporated in the contracts for construction and technical works. A working sub-group was set up in 2020, to prepare the draft document. No meeting of this subgroup was held in 2021 due to the COVID-19 pandemic.

# 1.8.4. Collaboration with University Institutions in order to inform students about Health and Safety at Work

The cooperation with the Cyprus University of Technology continued in 2021 with the training of students in the field of Civil Engineering on safety and health issues with online lectures by Labour

Inspection Officers of the DLI.

# 1.8.5. Joint Technical Committee between the Department of Labour Inspection (DLI) and the Cyprus Scientific and Technical Chamber (CSTC) for Safety and Health in construction sector

The joined Technical Committee between the DLI and the CSTC was established in 2020 with the aim to promote actions to improve safety and health levels in the construction sector. Within this Technical Committee, an Action Plan was prepared, which is implemented in cooperation with the DLI and the CSTC. In 2021, an online meeting of the Committee was held on 14.2.2021 and it was agreed to distribute the coordination of each action of the Action Plan.

#### 1.8.6. Informative Seminars in collaboration with other Bodies

During 2021, three webinars were held in collaboration with the Cyprus Scientific and Technical Chamber and the Cyprus Association of Civil Engineers (CACE) to inform engineers on safety and health issues in construction sector and the management of the COVID-19 pandemic in construction projects. The Department of Labour Inspection also supported the International Conference on Safety and Health in Construction Projects entitled "Evolution or Revolution? The future is now! Mission Possible! », Which took place on November 5 and 6, 2021. The Conference was organized by CACE under the auspices of the Minister of Labor, Welfare and Social Insurance with co-organizers the Construction Department of the International Social Security Association (ISSA-C) and the German Institute for Compulsory Insurance and Accident Prevention in the Construction Sector (BG BAU).

#### 1.9. Asbestos works

In 2021, after appraisal of applications, 4 companies were approved to carry out works concerning removal of asbestos insulation or coating. Also, in 2021, a total of 81 specific Work Plans were approved prior to commencement of asbestos work.

# 1.10. Building Permits, Planning Permits and Certification of Approval

During 2021, 855 applications concerning building permits, planning permits and certificates of Approval for premises intended for use as workplaces and/or residential units were examined and terms concerning safety and health at work issues were imposed. 42 of these applications include premises that are affected by units that could cause a major scale accident (SEVESO), or could cause such accidents themselves.

#### 1.11. Safety Officers

During 2021, 22 new Safety Officers were approved. The Safety Officer deals with the subjects of safety

and health in the installations of his/her employer on a full-time basis. The total number of approved Safety Officers at the end of 2021 was 177. At the same time, within the year the evaluation of the work carried out by Safety Officers through examination of the Annual Reports prepared for their activities and submitted to DLI continued and letters of compliance were sent accordingly.

# 1.12. Occupational Safety and Health Training Centre

In 2021, despite the difficulties caused by the COVID-19 pandemic, several enlightenment activities on safety and health at work were implemented. Specifically, informative programs, seminars and lectures were organized, either entirely by DLI or co-organized with other bodies, both online and in the physical presence of the participants, which were addressed to members of Public Service Safety Committees, members of Professional Associations, students of the University of Cyprus, kindergarten teachers, Public Service employees, Safety Officers and Authorized Persons providing External Services for Protection and Prevention.

In total, during 2021, officers of the DLI gave lectures lasting 28 hours in 16 events, in which 1.128 people participated.

In addition, the Training Center on the 18th of October, organized a Ceremony for awarding the winners in three Competitions organized within the year and for promoting the three-year campaign of the European Agency for Safety and Health at Work, within the framework of Safety and Health Week 2021.

Also, during 2021, the DLI:

- continued the promotion of the Online Interactive Risk Assessment tool from the Coronavirus SARS CoV-2, (OiRA COVID-19),
- prepared, in collaboration with the Press and Information Office, a television and radio message on occupational safety and health issues, which was promoted on television and radio stations and on Social Media,
- maintained a special pandemic section on its website, which is constantly updated,
- provided information to the public and answered questions submitted by telephone or through its website.

#### 1.13. Competitions

The DLI, in collaboration with the Ministry of Education, Sports, Culture and Youth, organized for the nineteenth consecutive year, the Poster Competition 2021 among the students of Secondary Education.

The subject of the competition was «Safety and Health at Work» and it was aiming to raise awareness on safety and health among young people. The first prize of the Competition was awarded to a student of Agios Stylianos Strovolos High School, the second prize was awarded both to two students from Aradippou High School and Athienou High School and the third prize was awarded to a student of Athienou High School. Praise was given to two students from the High School of Agios Stylianos Strovolos and a student from the High School of Polis Chrysochous.

Also, a Competition of Good Practice Examples in Schools was organized, for the twelfth year among all schools, in collaboration with the Ministry of Education, Culture, Sports and Youth. The prizes were awarded to the Primary School of Lythrodontas and the Regional High School of Paliometocho.

Additionally, the DLI announced the Good Practice Awards for businesses in the occupational safety and health sector. There were 13 nominations in total and the 1st prize was given to MUSKITA HOTELS LTD – FOUR SEASONS HOTEL for the development of a web application on occupational safety and health. The 2nd prize was given to SWISSPORT CYPRUS LTD for being part of a research program on manual handling, while the 3rd prize was jointly given to PRICEWATERHOUSECOOPERS LTD and C.A. PAPAELLINAS Group (Alphamega Hypermarkets). The examples concerned the implementation of a wellness program and measures to respond to potential CO<sub>2</sub> leakage or other emergency situation. respectively.

Two of the Good Practice Awarded Examples, the ones of SWISSPORT CYPRUS LTD and PRICEWATERHOUSECOOPERS LTD, that were focused on lighten the load, have also been nominated for the European Agency for Safety and Health at Work for the European Good Practice Awards.

#### 1.14. Publications of the Department of Labour Inspection

Within 2021 the DLI, in collaboration with the Press and Information Office updated, based on the revised Decrees of the Ministry of Health, the guides and brochures prepared in 2020 for the management of the pandemic, which are posted on its website.

It is noted that the above guides and brochures, as well as all the information leaflets that it prepares each year, are posted on the DLI website and available to anyone interested. On the website of the Department, there is also a lot of information, analysis, statistics as well as all the legislation for which the Department is responsible.

# 1.15. Cooperation of DLI with European Agency for Safety and Health at Work (EU-OSHA)

# 1.15.1. Healthy Workplaces European Campaign

DLI as the National Focal Point of EU-OSHA, continue to implement at national level, the European Campaign organized by EU-OSHA, with the theme "Healthy Workplaces – Lighten the Load".

The launching of the European Campaign was done in 2020 and expected to be completed in October 2022.

# 1.15.2. Online Interactive Risk Assessment (OiRA)

DLI and EU-OSHA, in an attempt to facilitate the compliance of the employers with Safety and Health at Work Legislation, and at the same time to enhance the mutual effort to improve the safety and health at workplaces, have developed and offer for free the online interactive risk assessment tools (OiRA). With the use of OiRA, every employer might be able to ensure the safety, health and wellbeing of his/her employees.

Under the financial aid of EU-OSHA, the review of 6 of the existing OiRA tools for Cyprus was attained so as to comply with the amendments of legislation and in general with the new fundamentals concerning safety and health at work. At the same time, the development of a new electronic tool on "Metallic Structures at Construction Sites" began.

### 1.16. Control of Major Accident Hazards Special Unit

During 2021, the Control of Major Accident Hazards Special Unit conducted 39 inspections of the establishments covered by the legislation and cooperated with the Civil Defense for External Emergency Plans and with the Department of Town Planning and Housing on issues of site planning of new establishments and on building developments in proximity to existing establishments.

During 2021, the Unit received 2 new Notifications of establishment, 1 Major Accident Prevention Policy Document and 4 Safety Reports. The Unit evaluated 1 Notification, 2 Major Accident Prevention Policy Documents and 4 Safety Reports.

## 1.17. Control of Offshore Oil and Gas Operations Hazards Unit

In December 2021, 1 offshore drilling work was conducted. Regarding this drilling work in 2021, 1 Major Hazard Report, 3 Reports with a substantial change in drilling notification and 13 daily drilling reports were submitted and evaluated by the Control of Offshore Oil and Gas Operations Hazards Unit.

In addition, in 2021 the Unit had meetings with companies operating in offshore hydrocarbon exploration activities in the Cyprus Exclusive Economic Zone (EEZ). The Unit also reviewed and submitted views as a member of the Environmental Impact Assessment Licensing Committee and the Licensing Committee under the Barcelona Convention (Offshore Protocol) for the licensing of offshore works.

# 1.18. Safety of Petroleum Installations

During 2021, Inspectors inspected 892 small and large petroleum storage facilities (storing liquid petroleum products and LPG) for control and for issuing a Certificate, a prerequisite for acquiring a Petroleum Storage Permit. Of the above inspections, 133 were conducted at liquid petroleum storage facilities, 109 at liquid petroleum and LPG facilities and the rest were conducted at LPG facilities.

During 2021 the public consultation on the repeal of the current Petroleum Legislation and on the new draft regulations for its replacement was completed. It should be noted that the new draft regulations fall under the scope of the Health and Safety at Work Law. The DLI forwarded to the Attorney General's Office for legal vetting a draft Law for the Repeal of the current Petroleum Law, draft Regulations regarding the safety of liquid petroleum installations and draft Regulations for the transfer of provisions of the current Petroleum Legislation that cannot be repealed to existing Regulations. It should also be noted that for the safety of LPG installations, the Storage and installations LPG Unit, promoted the adoption of the new relevant legislation "Safety and Health at Work (Installation, Operation, Maintenance and Control of Liquefied Petroleum Installations) Regulations of 2021".

For the safety of installations storing flammable liquids in tanks as well as installations storing flammable liquids in movable vessels two corresponding guides regarding the design, construction and operation of such installations were prepared and published on the DLI webpage.

# 1.19. Unit for the Control of Working Hours and Rest Periods for Drivers of Certain Vehicles

The Unit for the Control of Working Hours and Rest Periods for Drivers of Certain Vehicles carries out control checks at the premises, as well as at the roadside, with the cooperation of the Cyprus Police and the Road Transport Department.

On the basis of the European obligations of Cyprus, the minimum number of working days' checks to be carried out per year and the minimum percentage of the total number of controls on the road and in the premises of enterprises are set. DLI has undertaken the responsibility of fulfilling 50% of the above specified number of checks, while the Cyprus Police 35% and the Department of Road Transport 15%. During 2021, DLI checked a total of 54.790 working days, of which 52.308 days at the premises of the enterprises and 2.482 days on the roadside. The following table shows in detail the audits carried out in 2021 and the target coverage rates, per case.

Table 1. 4: Drivers' working days examined

	Minimum requirement as per E.U.	Number of examinations carried out in 2021	Percentage coverage of the E.U. requirements (%)
Total number of examinations of working days	70.497 (3% of working days)	54.790	77,7
Examination of working days at the road side	21.149 (30% of 70.497)	2.482	11,7
Examination of working days at the premises of the enterprises	35.249 (50% of 70.497)	52,308	148,4

The above number of examinations of drivers' working days that have been carried out at the road side, includes the examinations that have been carried out by the DLI during campaigns organized by the Cyprus Police, as member of ROADPOL (former TISPOL) and the Department of Road Transport. The said campaigns took place in May, July and October of 2021.

# 1.20. European and International Representation and Relevant Obligations in Safety and Health Issues

The DLI actively participates in the work carried out by (a) the EU Advisory Committee on Safety and Health at Work (ACSHW), (b) the EU Senior Labour Inspectors Committee (SLIC) and (c) the European Agency on Safety and Health at Work (EU-OSHA), as well as in sub-committees or working groups dealing with specific issues. Within the framework of Cyprus obligations on health and safety at work issues, the DLI submitted to the ACSHW, SLIC and EUOSHA annual reports, completed questionnaires and contributions with information. The Department also prepares reports on the implementation of International Labour Organisations (ILO) Conventions in Cyprus related to Safety and Health at Work.

### 1.21. Consultation with Social Partners at Pancyprian and District level

### 1.21.1. Pancyprian Safety and Health Council

The Pancyprian Safety Council was established in 1965 and since 1996 is a statutory body under the Safety and Health at Work Laws. Representatives from Public Service Departments, from Employers' and Trade Unions' Organizations, as well as from other stakeholders with particular interest in safety and health at work participate to this Council. The purpose of the Council is to submit to the Minister of Labour, Welfare and Social Insurance recommendations for measures to be taken, as well as the best and efficient working methods that should be followed to ensure the occupational safety and health of workers and to advise her on issues related to prevention of accidents and the drafting or revision of the

relative Legislation.

Due to the pandemic, the Council meeting for the first half of the year did not take place, while, with the physical presence of the members, a meeting took place on 22.9.2021. It is clarified that, before each meeting, the members of the Council, receive Notes prepared by DLI on the issues of the agenda.

#### 1.21.2. District Advisory Committees

In these Committees representatives of the Social Partners at local level participate and discuss issues concerning the implementation of legislation on safety and health at work.

Due to the pandemic, the meetings of the Committees, which take place every year in February and September, were canceled. Nevertheless, relevant informative Notes prepared by DLI and sent electronically to representatives participating in the Committees.

## 1.22. Announcements on Safety and Health at Work

During 2021, 40 announcements on Safety and Health at Work were issued, which were sent to Media and posted on the Department's website. These announcements were related to convictions from Courts, the protection of workers against thermal load, targeted inspection campaigns, the publication of information leaflets, the publication of the Inspection Program and the organization of Webinars.

#### 1.23. Chemical Substances

# 1.23.1. National Helpdesks for REACH and CLP and Awareness Campaigns

For the effective implementation of REACH Regulation (No. 1907/2006) and CLP Regulation (No. 1272/2008), the two appointed National Helpdesks provided constant and support to stakeholders and all other interested parties. During 2021, the National Helpdesks provided guidance on issues related to the obligation to register chemical substances, the structure and content of the Safety Data Sheets, the authorisation obligation, the specific restrictions which apply to certain chemical substances and the correct classification, labelling and packaging of substances and mixtures. In total, the National Helpdesks responded to 194 questions related to REACH and 195 questions related to CLP as well as a number of questions related to other relevant legislations dealing with chemicals. During the first semester of 2021, a high number of REACH questions were received. These were related to BREXIT and the obligations of the imported chemicals from the United Kingdom (UK).

In 2021, the Chemicals Section prepared a leaflet entitled the "Advertisement and Online Sales of Chemicals – What you need to know".

Due to the high number of imports of chemicals from the UK, an online Seminar for the companies was organised entitled "Import of Chemicals from Third Countries". The seminar was co-organised with the Cyprus Chamber of Commerce and Industry (KEBE) on the 14.6.2021. The new provisions and the changes caused on the customs procedures due to BREXIT were the main topics presented in the seminar as well as the general REACH provisions (Registration obligations and Safety Data Sheets) and CLP (labelling and obligation to submit information to the Poison Center Notification Portal).

In addition, during 2021, 46 announcements were issued to keep stakeholders and the public informed on specific provisions of the chemicals legislation or on issues related to non-compliant products placed on the European market.

# 1.23.2. European Database for the submission of information for the Poison Centers

During 2021, some new and important developments took place at European level, in relation to the provisions of Article 45 of CLP Regulation concerning the obligation to submit information to the National Appointed Bodies and the Poison Centers. The national procedure for collecting this information will no longer be used. Until the final deadline of 31.12.2020, more than 5.000 hazardous mixtures were notified to the National Chemicals Registry.

From 1.1.2021, a Central European Database containing all this information has been developed and will be maintained by the European Chemicals Agency (ECHA). Companies placing hazardous mixtures on the EU market are obliged to submit the required information for their mixtures only through the ECHA's Poison Centre Submission Portal (PCN Portal). The PCN database will contain information for use by the Appointed Bodies and the Poison Centres in case of emergency health response requirements.

The DLI, as the National Appointed Body responsible for collecting this information, has actively participated to the European Meetings and consultations in order to proceed to all necessary amendments for the establishment of the new procedures. During 2021, a total of 113.628 hazardous mixtures were submitted to the PCN database by companies, 856 of which by Cypriot companies.

### 1.23.3. Inspections, Chemical Analysis of Samples and Prosecutions

In 2021, a total of 563 targeted inspections were carried out at undertakings where various chemical substances and/or mixtures were produced, stored or imported, such as at retail and wholesale stores, suppliers of toys, textiles, jewellery and stationery shops, industries producing and storing chemical products, suppliers / distributors of other chemicals of consumer or professional use. The total inspections include the inspections done during customs control before the release of the products for free circulation.

Targeted campaigns included sampling and control of consumer and industrial products of the Cyprus

market. The samples were analysed to identify if they contain restricted chemical substances such as superglues or other professional glues and stationery articles (markers) for their Benzene, Toluene and Chloroform content, toys and child care articles for certain Phthalates which are toxic to reproduction, thermal paper for Bisphenol A content and leather articles for their Chromium VI content. In addition, the classification, labelling and packaging of bleaching / cleansing products were checked, in relation to their pH value / corrosivity.

All non-compliant products were withdrawn from the Cyprus market and the importers / producers were accordingly informed. In addition, all non-compliant products were notified to the RAPEX System and communicated to the local press and the public media for raising public awareness.

Additional information on the inspections of the Chemicals Sector is presented in **Figure 3. 7, Table 3.9** and **Table 3.10 on page 50** of the **Appendix.** 

During 2021, the operational phase of the REF-8 campaign (European campaigns of the FORUM Committee) was completed. The main goal of this campaign was to check the compliance of chemical products sold online. The controls were dealing with the obligation to provide hazard information in the online offer (advertisement). The results of this campaign showed that more than 80% of the chemical products sold online are not compliant with the provisions of the legislation.

The DLI also participated in the REF9 campaign during which there was one industry inspection for an authorised use of a chemical substance of the Authorisation List according to REACH.

During 2021, nine companies were prosecuted and administrative fines were imposed for breaching the national chemicals legislation for placing non-compliant chemical products on the Cyprus market.

#### 1.23.4. Collaboration with the Customs Department

In the frame of the close collaboration with the Customs Department, 75 cases of chemical imports were further investigated in 2021, for their compliance with the Chemicals Legislation. The collaboration with the Customs was considerably improved with the physical presence of an Inspector from the Limassol District Office for a fixed time period per week, at the Limassol Port.

#### **1.23.5.** LIFE + Programme (LIFE CHEREE)

In 2021, the European Project LIFE+ (LIFE CHEREE: Chemicals Regulations Enforcement & Inspections Building Authority Capacity for REACH/CLP and SEVESO III Compliance) which started in 2016 was completed. The coordinating beneficiary was the Technical University of Crete (Greece) and the associated beneficiaries were the Competent Authorities for REACH, CLP and SEVESO III Legislations in Cyprus and Greece, which are the DLI of Cyprus and the General Chemical State

Laboratory of Greece. The project aimed at the development and implementation of common good-practices, guidance, training and supporting inspections for the effective enforcement of REACH/CLP Regulations and SEVESO III Directive in Greece and Cyprus. The project time frame was for 3,5 years. Due to the COVID-19 pandemic the project deadline was extended for one more year and it was completed on March 2021. The project actions/ goals were carried out as planned and are described in a dedicated webpage of the project. The final evaluation report was submitted by the coordinator on 15.12.2021.

## 1.23.6. Pancyprian Chemicals Council

The Pancyprian Chemicals Council has been established through a special provision of the National Chemicals Legislation of 2010. The Council consists of Public Authorities and NGOs (Employers and Trade Union Organizations, Professional and Environmental Organizations and Consumer Associations) and its role is to consult the Minister of Labour, Welfare and Social Insurance on various issues related to chemicals management and control. The Council meets once per year and during the meetings, the latest developments on the chemicals management and legislation are presented and different issues are further discussed. The meeting of the Council took place on 29.9.2021.

# 1.23.7. Participation to Committees – Working Groups in Cyprus

The DLI is in close cooperation with other Ministries / Departments and provides help and advice on specific issues related to chemicals. In this framework, officers of the DLI actively participated to the Tender Evaluation Committees (a) at the Ministry of Finance and (b) at the Ministry of Health, where they were involved in the evaluation of tenders related to chemical products. Also, they participated to the Plant Protection and Biocides Board, to the Advisory Committee for the evaluation and Authorisation of EU Ecological products and to the Cyprus National Committee on Environment and Child's Health. In addition, DLI provides support to other Ministries related to chemicals (Ministry of Foreign Affairs for chemical weapons, Ministry of Interior for construction products, Ministry of Commerce for Explosive Precursors and Dual Use Products).

During 2021, due to the pandemic, there was an increased number of applications for authorisations of Biocidal Products. During this procedure, the DLI, as a member of the above-mentioned Board, provided its expertise and proceeded to the compliance check of the classification, labeling and packaging of 188 products and the evaluation of their Safety Data Sheets.

#### 1.23.8. Participation to European and International Meetings

During 2021, DLI officers actively participated to the majority of the European Chemicals Agency (ECHA) Committee online meetings, as well as to the meetings of the Competent Authorities for Regulations REACH and CLP. In 2021, the DLI participated to several Presidency and Commission

discussions on the European Chemicals Strategy for Sustainability, which is under the European Action Plan for Zero Pollution.

In addition, DLI followed all the international efforts undertaken by the United Nations to control and manage chemicals. During 2021, the annual report of the European Regulation 649/2012, on the import / export of certain hazardous chemicals, has been submitted, as well as the annual survey on the activities of the national CLP and REACH Helpdesks was submitted online to ECHA.

There was also active involvement in a targeted ECHA awareness campaign for the promotion of the legislative obligations related to the submission of information to the Poison Center Data Base and the importance of the UFI number. Starting from 1.1.202, the UFI number will be included in the labels of the chemical products which are notified to the Data Base.

# 1.24. Legislation Update for Issues of Safety and Health at Work Sector

In 2021, the following legislation was approved by the House of Representatives and published in the Official Gazette of the Republic:

- 1. The Management of Safety and Health Issues at Work Regulations of 2021 (R.A.A 158/2021).
- 2. The Management of Safety and Health Issues at Work (Safety Committees) Order of 2021 (R.A.A 237/2021).
- 3. The Management of Safety and Health Issues at Work (Training of Employees, Self-employees, Members of ESYPP and Members of Safety Committees) Order of 2021 (R.A.A 238/2021).
- 4. The Management of Safety and Health Issues at Work (Designation of the Number of Safety Representatives) Order of 2021 (R.A.A 239/2021).
- 5. The Safety and Health at Work (Code of Practice for the Consultation of Employer and Employees on Safety and Health Issues) Order of 2021 (R.A.A 240/2021).
- 6. The Rotterdam Convention on the Prior Informed Consent for Certain Hazardous Chemicals and Pesticides in International Trade Ratifying (Amendment) Law of 2021 (Law 2 (III)/ 2021).
- 7. The Safety and Health at Work (Biological Agents) (Amendment) Regulations of 2021 (R.A.A. 106/2021)
- 8. The Safety and Health at Work (Carcinogenic and Mutagenic Agents) (Amendment) Regulations of 2021 (R.A.A. 298/2021)
- 9. The Safety and Health at Work (Chemical Agents) (Amendment) Regulations of 2021 (R.A.A.

- 10. The Control of Factory Atmosphere and Dangerous Substances in Factories (Amendment) Regulations of 2020 (R.A.A. 300/2021)
- 11. The Minimum Requirements for Safety and Health (Use of Personal Protective Equipment at Work) (Amendment) Regulations of 2021 (R.A.A 535/2021)
- 12. The Occupational Safety and Health in Dock Work (Amendment) Regulations of 2021 (R.A.A. 516/2021)
- 13. The Safety and Health at Work (Medical Examinations of Workers at Mines and Quarries) Order of 2021 (R.A.A. 143/2021).
- 14. The Safety and Health at Work (Prescribed Fees) Order of 2021 (R.A.A 466/2021).

# 1.25. DLI Actions to Respond to COVID-19 Pandemic

- ❖ DLI, in collaboration with the Ministry of Health and other bodies, developed Guides / Informative Brochures and Health Protocols for the Management of COVID-19 Pandemic and distributed this material to the general public, employers and trade unions as well as other involved stakeholders.
- ❖ Development and continuous update of a specific section on DLI's website on COVID-19.
- Scheduling and Coordination of Inspections at Construction Sites and Retail Companies, Large Shopping Malls and Other Workplaces. In 2021, 25.599 inspections were carried out totally and 90 sanctions were imposed (Prohibition Notices and extrajudicial fines). Out of the 25.599 inspections, 1.871 were carried out in the Retail Trade, mainly by the Officers of other Departments and Services that supported DLI, until 15.3.2021. It must be pointed out that 23.728 inspections, of which 2.932 were carried out at Construction sites, 6.040 in the Retail Trade, 287 in nursing homes and 14.469 inspections on processing facilities and other workplaces were carried out exclusively by DLI staff. Also, staff of the DLI and the Department of Labour Relations carried out a total of 279.011 checks on persons entering inside the Shopping Centers or Large Commercial Stores (over 500 sq.m.), in relation to the existence / possession of "SAFEPASS".
- Continuous presence at mass media and social media and publication of announcements.
- ❖ Market Surveillance for Personal Protective Equipment that meets safety and health standards and in particular the availability of masks.

- Management of frequently asked questions from public.
- Promotion in cooperation with EU-OSHA, of a new online interactive risk assessment tool for COVID-19. OiRA COVID-19, focuses exclusively on the management of hazards at workplaces due to COVID-19, suggesting preventive and protective measures for the safety, health and well-being of every employee. The tool is free and user friendly, it can be utilized by every business, no matter of size or economic activity and it can be an integrated part of the review of the existing risk assessment that every employer must have in place.
- All year targeted campaign for the promotion of OiRA COVID-19, through the projection of a specific video by tv channels and the social media and the broadcasting of a radio spot from all the radio stations.
- Continuous enlightenment campaign through the dissemination by DLI and other governmental services of guiding leaflets.
- ❖ Informing the Social Partners and the Members of the Pancyprian Safety and Health Council on the actions of DLI

# 2. RADIATION PROTECTION, ENVIRONMENTAL ISSUES AND EQUIPMENT SECTOR

# 2.1. The Machinery, Pressure Vessels Inspection and Lifts Unit

The Machinery, Pressure Vessels Inspection and Lifts Unit operates with personnel at the Headquarters as well as at the District Offices of the DLI and provides specialised inspection services to the owners of Inspectable Machinery (IM), which include inspection, testing and examination, according to the type of IM.

**Table 3.11 on page 51** of the **Appendix** shows an analysis of the 975 machinery inspections carried out by the Inspectors, per District and category of IM for 2021. **Table 3.12 on page 52** of the **Appendix** shows the maximum legal interval between two consecutive inspections and the corresponding number of inspections for 2021 for each category of IM in comparison with those for 2020.

Within the framework of the enforcement of the Safety and Health at Work (Operation, Maintenance and Audit of Lifts) Regulations of 2012 (R.A.A. 533/2012), the DLI carried out a total of 12 inspections. Specifically, in 2021, 2 inspections were carried out on the premises of 2 Lift Maintenance Persons, 2 inspections on Authorized Lift Inspectors and 8 inspections on complaint investigations. Moreover, the DLI assessed 39 requests from lift owners, who requested an Exemption from the application of certain technical provisions of the Regulations on their lifts. The DLI maintains up to date the Register of the Authorised Lift Auditors and the Register of the Lift Maintenance Persons. Both Registers are available at the DLI website. In 2021, 1 new Lift Maintenance Person was approved.

During 2021, the Health and Safety at Work (Operation, Maintenance and Control of Lifting Machines) Regulations were implemented in part, and more specifically the power of the Chief Inspector to authorize Lifting Machinery Inspectors. In the last quarter of the year, the Department received a total of 11 applications for approval as authorised auditors / inspection bodies. The persons that were included in the applications and met the criteria of the legislation, were notified to attend a written examination in 2022.

Moreover, the draft of the Regulations on Health and Safety at Work (Fluid Systems) Regulations was forwarded to the Legal Services for legal vetting, while at the same time it was notified to the Member States of the European Union, through the EU procedure 2015/1535 which aims to prevent obstacles in the internal market.

# 2.2. Safety and Health Requirements for Products bearing a CE Marking Unit

The CE Marking Products Unit is responsible for the enforcement of the national legislation that transposes the New Approach Directives on the seven following product categories:

1) Machinery, 2) Lifts, 3) Pressure Equipment, 4) Simple Pressure Vessels, 5) Personal Protective Equipment (PPE), 6) Equipment and Protective Systems for Use in Explosive Atmospheres and 7) Noise Emission in the Environment by Equipment for Outdoors Use.

The enforcement of the CE legislation is achieved through market surveillance on a sampling basis, as well as after information, which is received regarding non-conforming products. Such information is usually received from the Customs Authorities, other local Surveillance Authorities or from consumers, employees or from other persons. Periodically, random inspections at retail outlets and undertakings are carried out based on a special Market Surveillance Programme prepared for the Cyprus market. In the COVID-19 pandemic, the CE Marking Products Unit carried out inspections on personal protective equipment (PPE) at the points of entry of the Republic and in premises where protective masks are placed on the market. During 2021, 47 market surveillance activities were carried out that included 7 specialized inspections to investigate requests for derogation from the essential requirement 2.2. of the European Directive for Lifts.

Within the framework for the enforcement of European Regulation (EC) No 765/2008 setting out the requirements for accreditation and market surveillance relating to the marketing of products, the Unit prepared its Market Surveillance Programme for the year 2021, which was notified to the European Commission. This Programme included activities on lifts and machinery, personal protective equipment, pressure equipment and air vessels.

Furthermore, in cooperation with the Customs Authorities, during the importation stage, non-compliant equipment was identified, and measures were taken to prohibit the clearing through the customs of such non-compliant products which included protective face masks, gloves, cranes, laser machines, generators, welding machines, electric bicycles and tricycles, wood shredders, etc. In the same context, a meeting was held with representatives of the Customs Department where the terms and conditions were defined so that a non-compliant product can be subject to a processing procedure. Moreover, measures were taken for compliance or prohibition of placement on the local market of protective face masks, following information received from the Consumers Protection Association. Also, Compliance and Suspension Notices were issued for a non-compliant lifting equipment and face masks.

As part of a European campaign, the DLI participated in a program funded entirely by the European Commission, which included sampling and laboratory testing in an accredited laboratory for helmets and safety vests, as well as exchanging experiences for market surveillance actions between Member States. The program will be completed in 2022.

Also, a Labour Inspection Officer, who chairs the Lifts Administrative Cooperation Group (AdCo) at EU level, participated in the Lifts Committee of the European Union, which took place online and presented the activities of the Group for the period 2019-2021.

Additionally, the CE Marked Equipment Sector informed the general public with a total of 52 Announcements for dangerous products and equipment, which were uploaded on the DLI website, the social media and the electronic press. Such non-compliant products intended for public use, were identified on the European market and posted on the Rapid Alert System (RAPEX) for non-food dangerous products.

## 2.3. Storage and Installations LPG Unit

During 2021, the Storage and Installations LPG Unit of the Machinery and Equipment Sector continued the monitoring of the enforcement of the legislation carrying out specific inspections on Liquified Petroleum Gas storage and installation facilities as well as Autogas refuelling stations. Within the process of License granting for storage of LPG, 592 inspections were carried out by the DLI Inspectors at premises where LPG is stored. The Inspectors also examined 29 complaints from the general public concerning LPG installations. In addition, 17 inspections were carried out on canteen type vehicles that use LPG and 7 inspections were carried out on LPG vehicle conversion workshops and petrol stations with autogas. The number of the 592 LPG inspections per District is shown on on **Table 3.13** of the **Appendix**.

Inspectors of the Unit also provided technical guidance on the interpretation of LPG legislation to LPG installers and importers of LPG equipment. They also set conditions for new industrial installations that will store large quantities of LPG and for new petrol stations with autogas.

In the context of the modernization of the legal framework for LPG, the public consultation for the amendment of the Codes of Practice for LPG concerning small and large LPG installations was finalised. The comments received were evaluated and their incorporation into the texts of the Codes is in process and will be completed in 2022. Also, the Safety and Health at Work (Installation, Operation, Maintenance and Control of LPG Installations) Regulations of 2021 (R.A.A. 189/2021) came into force. They constitute the new legal framework for LPG. Within 2021, 17 applications were submitted by persons wishing to be approved as LPG Installers or Authorized LPG Auditors and their evaluation began. The applicants who met the criteria of the legislation were notified to attend a written examination in 2022.

#### 2.4. Radiation Protection and Nuclear Safety (RP&NS)

The Radiation Inspection and Control Service (RICS), operating within the DLI as the Radiation Protection Section, was established under the Protection against Ionising Radiation and Nuclear and Radiological Safety and Security legislation.

#### 2.4.1. Revision and Improvement of RP&NS Legislative Framework

In 2021, following the 2018 enactment of the main RP&NS Law and Regulations, the harmonisation

process with BSS Directive 2013/59/Euratom and the International Atomic Energy Agency (IAEA) standards GSR Parts 1 and 3 continued.

In 2021, the following documents were approved and/or published:

- 1. The Protection against Ionising Radiation and Nuclear and Radiological Safety and Security (Standards (General Conditions) for Authorisation through Registration for practices with X-ray generators for Dental or Bone Densitometry applications) Notification of 2021 (R.A.A. 115/2021).
- 2. The Protection against Ionising Radiation and Nuclear and Radiological Safety and Security (Standards on the Safety and Security for the Transport of Radioactive Materials) Notification of 2021 (R.A.A. 154/2021).
- 3. The Protection against Ionising Radiation and Nuclear and Radiological Safety and Security (Fixed Penalty Notice) Notification of 2021 (R.A.A. 241/2021).

# 2.4.2. Implementation of a RP&NS Integrated Regulatory System (Authorisation, Inspection and Compliance Control) - Record Keeping

In 2021, RICS personnel performed 338 inspections, including measurements in workplaces, medical centres and other premises where activities with ionising or non-ionising radiation take place. The general outcome from the inspections is that, in general, there is compliance of the enterprises with the legislation on the conditions of the licenses. The main issue found is that a number of radiology centres do not comply with the requirement of performing quality assurance checks at least once per year. In addition, there were 3 meetings of the Technical Licensing Committee resulting in the granting of 33 licenses for practices with ionising radiation as well as 389 authorisations through registration and 34 authorisations to enterprises for the import / export / shipment of radioactive sources or radioisotopes were also granted. Additionally, 220 certificates for radioactivity levels in recyclable metals, plastics, batteries, feed, foodstuff and beverages, for the purpose of exportation, were issued. Finally, there were 3 approvals for RP&NS services.

RICS in 2021 continued updating and upgrading the National Registers of Ionising Radiation Sources and Practices, the National Personal Dosimetry Register of Workers exposed to ionising radiation, as well as the Radioactive Waste and Disused Sources Register.

# 2.4.3. Improvement of the Organisation and Strengthening of the RP&NS System in Cyprus

RICS continued its work on meeting the recommendations of the peer review of the RP&NS system and the competent authority of Cyprus that took place in 2017, following the action plan prepared for the

four-year period 2017-2020.

Two informational documents were published one for the protection of the public during nuclear medicine procedures and one for the protection of pregnant persons.

In 2021, RICS continued updating the 6 thematic areas in the IAEA "Radiation Safety Information System" (RASIMS-2).

In 2021 the public exposure doses from construction materials and nuclear medicine were collected and assessed.

Finally, the implementation of the two national projects for 2020-2023 aimed at strengthening the capabilities of the involved services in radiation safety and in the management of radioactive waste and disused radioactive sealed sources continued.

## 2.4.4. Monitoring of Environmental Radioactivity

The monitoring, sampling and measuring of radioactivity levels in air, soil, water, the marine environment, foodstuff, feed, materials from the hydrocarbon exploitation industry, building materials and miscellaneous goods continued in 2021, in collaboration with the State General Laboratory and the Department for Fisheries and Marine Research. In addition, drinking water was sampled from the main drinking water sources.

The telemetric network for the monitoring of environmental radioactivity in the atmosphere of Cyprus, which also functions as the early warning system in the event of a radiological incident has seven fixed local measuring stations covering the entire area under the control of the Republic, a portable gamma-radioisotope spectroscopic measuring station and a fixed total  $\alpha$ -radiation, total  $\beta$ -radiation and  $\gamma$ -radioisotopes spectroscopic station for aerosol. The telemetric network is also linked to the European network EURDEP and sends data automatically (on an hourly basis) to the EU Joint Research Centre. The national radioactivity monitoring network, in addition to the telemetric network, includes two automatic air sampling pumps, one in Nicosia and one in Limassol, for measurements of total  $\beta$ -radiation in the atmosphere and an automatic high-volume sampling pump in Nicosia for the monitoring of  $\gamma$ -radioisotope concentrations in the atmosphere.

In 2021, RICS completed the digital mapping of radon concentration in buildings, schools and workplace environments in Cyprus, through a 3-year project.

In June 2021, Cyprus sent the results of the environmental monitoring for 2020 to the European Commission data bank REM (Radioactivity Environmental Monitoring).

# 2.4.5. National Action Plan ELECTRA for Nuclear / Radiological Incident Preparedness and Response

In 2021, the actions to upgrade the emergency preparedness framework for dealing with radiological / nuclear incidents continued through the implementation of the ELECTRA National Plan. An updated version of the plan was approved by the Minister of Labour and Social Insurance and all the involved Services were sent the updated plan.

In 2021, RICS participated in IAEA (ConvEx) and EU (ECUREX) Preparedness and Response exercises and related meetings and preparations for a Mediterranean EPR exercise in Cyprus, under the auspices of the IAEA, took place.

# 2.4.6. Implementation of an Integrated Radioactive Waste Management System in Cyprus

The implementation of actions under the National Programme for the Safe and Responsible Management of Radioactive Waste, approved by the Minister of Labour, Welfare and Social Insurance in 2015, continued in 2020. The National Register of Radioactive Waste and Disused Sources is updated on a continuous basis, whenever there is a change. Additionally, the preparations for the peer review on radioactive waste management, ARTEMIS, set for May 2022, continued.

# 2.4.7. Radiation Protection and Nuclear Safety Council

Because of the pandemic the Radiation Protection and Nuclear Safety council did not convene in 2021. The Council was consulted electronically for all legislative documents approved in 2021.

# 2.4.8. Strengthening International Cooperation on RP&NS (EURATOM, IAEA, International Organisations or other countries) – IAEA Regional Programmes

RICS participated virtually in various Committees of EURATOM and other European bodies and organisations (ENSREG, Euratom Art. 31 and Art. 35/36 GoE, ECURIE/EURDEP, HERCA, WENRA, F4E) and of the IAEA (IEC, ITDB, TC). It also participated virtually or physically in various meetings including the IAEA General Conference, where a statement was read, various other IAEA meetings and activities, as well as in counter-terrorism meetings and activities. RICS provided requested information and replied to questionnaires to the EU, the IAEA and the UN (UNSCEAR) on RP&NS issues.

In 2021, RICS participated in various IAEA Technical Cooperation Programmes aimed at building up the capacity of the RP & NS system, as well as at upgrading the relevant infrastructure and capabilities of Cyprus. Within the framework of the above programmes, officers from RICS and other agencies and

organisations participated in mainly virtual meetings of the IAEA and were trained on relevant subjects. There was also significant free technical assistance provided to Cyprus in the form of equipment, software and consumables. For the two National Programmes this assistance came to €350.000 and €65.000 accordingly. Finally, in 2021, in the framework of the implementation of the bilateral agreement signed in 2008, the cooperation of RICS with the Greek Atomic Energy Commission (EEAE) continued.

# 2.5. Control of Industrial Air Pollution

The competence for the Control of Industrial Air Pollution was transferred from the Labour Inspection Department of the Ministry of Labour and Social Insurance to the Department of Environment of the Ministry of Agriculture, Rural Development and Environment on 4.10.2021, according to the Laws L. 126(I)/2021, L. 127(I)/2021 and the Regulations R.A.A. 412/2021.

Therefore, the following data concern only the period from 1.1.2021 to 3.10.2021.

#### 2.5.1. Permitting

During 2021, within the framework of the implementation of the provisions of the Atmospheric Pollution Control Laws and the Industrial Emissions Laws that refer to the permitting of industrial installations, the competent Technical Committees (for the Protection of the Atmosphere and the Environment respectively) in which, apart from the Ministry of Labour and Social Insurance, five other Ministries, the Cyprus Scientific and Technical Chamber and the Cyprus Federation of Environmental Organizations participate, continued to be active. These Committees, which are chaired by an MLSI Inspector, examined 1 general binding rules draft and 10 applications for Industrial Emissions Permits.

The Director of the Labour Inspection Department granted 40 Air Emission Permits on the basis of general binding rules. The categories and number of installations for which Air Emission Permits and Industrial Emissions Permits were granted in 2021, are shown in **Table 3.14 and Table 3.15 on page 53** of the **Appendix**.

# 2.5.2. Inspections and Measurements

Regarding the implementation and enforcement of the legislation, particular emphasis was given on checking the compliance of installations which due to their specified operating conditions and positioning, they might cause negative effects to the human health and the environment. During 2021, 91 inspections were carried out at permitted installations in order to check the compliance with the operating conditions, which are specified in the corresponding permits (Air Emission Permits), 14 inspections were carried out at non-licensable installations (e.g. combustion plants, crushing plants, ready-mix concrete plants etc.) in order to check the compliance with the conditions which are specified in the relevant Regulations, 29 inspections were carried out at installations under the Industrial Emissions

Law, 5 inspections were carried out at installations under the Medium Combustion Plants Regulations and 1 inspection was carried out for the investigation of complaints addressed by the public related to the operation of neighboring factories.

In addition, 3 questions from Members of the House of Representatives, the public and the Ombudsman were answered.

No emission measurements were carried out in 2021. The monitoring of the operation of large-scale industrial installations was achieved by competent Inspectors through the data validation and control of the air emission measurements obtained from instruments installed by the operators at the stacks of the aforementioned installations. A total of 348 annual reports submitted were checked.

During 2021, no new penal case for violation of the provisions of the legislation was registered with the Court. However, 32 public information Announcements were issued regarding the submission of applications for the granting of Air Emission Permits and Industrial Emissions Permits and the publication of new legislation.

## 2.5.3. European Pollutant Release and Transfer Register (E-PRTR)

According to the European requirements on the Cyprus Republic concerning the establishment of a European Pollutant Release and Transfer Register (E-PRTR Regulation), Cyprus is required to annually submit key environmental data from industrial activities. In 2021, the DLI submitted to the European Commission and the European Environment Agency, the report of 2020 with the relevant data for Cyprus. The Cyprus Pollutant Release and Transfer Register consists of a website (<a href="http://www.prtr.dli.mlsi.gov.cy">http://www.prtr.dli.mlsi.gov.cy</a>) and a specialized database, on which environmental data from industrial facilities that fall within the scope of the Regulation E-PRTR Regulation are uploaded. The Register enables the public to have access to environmental information and also contributes to transparency and more effective participation by the public in environmental decision-making. In addition, the objectives of reducing bureaucracy and administrative burden have been met, since the operators of industrial facilities are able to upload on the website one report providing the required environmental data to both the DLI and the Department of Environment simultaneously.

## 2.5.4. New Legislation for Industrial Air Pollution

Within the framework of the implementation of the provisions of the Atmospheric Pollution Control Laws the following legislation was issued:

- (a) The Control of Atmospheric Pollution (Amendment) Law of 2021 (Law 126(I)/2021).
- (b) The Control of Atmospheric Pollution (Non-Licensable Installations) (Amendment)

Regulations of 2021 (R.A.A. 108/2021).

- (c) The Control of Atmospheric Pollution (Prevention and Reduction of Atmospheric Pollution by Asbestos) Regulations of 2021 (R.A.A. 412/2021).
- (d) The Air Pollution Control (Annex II Law Amendment) Order of 2021 (R.A.A. 114/2021).

Within the framework of the implementation of the provisions of the Industrial Emissions Laws the following Law was issued:

(a) The Industrial Emissions (Integrated Pollution Prevention and Control) (Amendment) Law of 2021 (Law 127(I)/2021).

## 2.6. Air Quality

### 2.6.1. Ambient Air Quality Monitoring

During 2021, DLI continued the measurements for monitoring of ambient air quality in various points of Cyprus, as shown in the map of **Picture 3.1** of the **Appendix**. The aforementioned measurements were carried out using nine Stations, fully equipped with automatic real time instruments measuring the following pollutants: Nitric Oxide, Nitrogen Dioxide and Nitrogen Oxides (NO, NO<sub>2</sub> and NO<sub>x</sub>), Ozone (O<sub>3</sub>), Sulphur Dioxide (SO<sub>2</sub>), Carbon Monoxide (CO), Suspended Particles (PM-Particulate Matter) (dust) and Benzene (C<sub>6</sub>H<sub>6</sub>). In addition, the most important meteorological parameters are monitored such as Wind Direction, Wind Speed, Ambient Temperature, Relative Humidity, Atmospheric Pressure and Solar Radiation. A photo of a representative station is shown in **Picture 3.2** of the **Appendix**.

The results of the measurements as well as other relevant information are presented on-line, through the specialized website www.airquality.gov.cy. In addition, informing the public for the air quality is carried out with indoor panels installed in 3 Municipalities' Offices, as well as through 4 island-wide TV stations during the central news bulletin. Also, the air quality bulletin is published by the daily newspaper Cyprus Mail in English language.

It is noted that, since 2017 the Department of Labour Inspection operates a mobile phone application with the aim to directly inform the public, especially the vulnerable population groups, the employees and other interested people. Through this application, the visitor has access to the information for the air quality, in real time, based on the different colors of pollution levels on Cyprus map, as well as based on the concentrations of pollutants per station.

#### 2.6.2. Dust Events

During 2021, dust events were observed due to dust transport from the dry regions (deserts) of North

Africa and Middle East areas. In 2021, 20 announcements were issued for high concentrations of Particulate Matter (PM) in the atmosphere of Cyprus to warn the public and especially the vulnerable groups (children, the elderly and patients) and the workers working in open spaces.

## 2.6.3. Suspended Particulate Matter Measurements

The measurements of concentrations of the Suspended Particles (PM) using special filters with dedicated samplers in all towns of Cyprus continued during 2021. From these samplings, firstly the concentrations of PM<sub>10</sub> and PM<sub>2.5</sub> are calculated and then chemical analyses of these filters are carried out in specialised analytical laboratories for the determination of the concentrations of heavy metals (As, Cd, Ni, Hg, Pb), other metals (Al, Fe, Cu, Zn, Mn, Ti, Cr, V), ions (Cl<sup>-</sup>, Br<sup>-</sup>, SO<sub>4</sub><sup>2-</sup>, PO<sub>4</sub><sup>3-</sup>, NO<sub>3</sub><sup>-</sup>, Na<sup>+</sup>, K<sup>+</sup>, NH<sub>4</sub><sup>+</sup>, Mg<sup>2+</sup>, Ca<sup>2+</sup>) and Polycyclic Aromatic Hydrocarbons (PAH's) included in the PM.

#### 2.6.4. Evaluation of the Results of Measurements

This report refers to the results of the measurements of 2020, because the measurements' validation procedure (hourly, daily) and the chemical analyses of the filters for PM are difficult and time-consuming procedures so the processing of measurements of 2020 was completed in 2021.

The results of the measurements of the major atmospheric pollutants at the areas which measurements are carried out show that the concentrations of most pollutants, like Sulphur Dioxide (SO<sub>2</sub>), Carbon Monoxide (CO), Nitrogen Monoxide, Nitrogen Dioxide and Nitrogen Oxides (NO, NO<sub>2</sub> and NO<sub>x</sub>), Benzene (C<sub>6</sub>H<sub>6</sub>), heavy metals and benzo(a)pyrene are below the corresponding limit values, specified in the Cyprus and European Legislation. Exception exists in cases of Ozone (O<sub>3</sub>) and Particulate Matter (PM<sub>10</sub>) where exceedances of the limit values are observed.

The results of the measurements are presented from Figure 3. 8 (on page 55) to Figure 3. 12 (on page 58on page 55) on page 55of the Appendix. Specifically, in Figure 3. 8, the annual mean values of various pollutants at the Nicosia Traffic Station are presented, from 2000 to 2020, where a constant decline of the concentration of the pollutants NO<sub>2</sub>, CO and SO<sub>2</sub> is observed. This decline is mainly due to the improvement of fuel quality, the introduction of modern technology vehicles equipped with catalyst and the routine technical inspection of all vehicles.

Figure 3. 9 on page 55 of the Appendix, shows the annual mean concentrations of  $O_3$  at three representative areas (background, residential area and increased traffic area). The relevant exceedances of the target value are mostly due to the climatic conditions prevalent in Cyprus, where high ambient temperatures and high solar radiation contribute to the production of  $O_3$ , as well as due to the transboundary pollution of the  $O_3$  and  $O_3$  precursor's transportation from the East Mediterranean and other neighboring countries.

Figure 3. 10 on page 56 of the Appendix, shows the annual average values of Particulate Matter ( $PM_{10}$ ) at the Traffic Stations of Nicosia (NICTRA), Limassol (LIMTRA), Larnaca (LARTRA) Pafos (PAFTRA) and Paralimni (PARTRA) and at the Rural Background Station of Ayia Marina Xyliatou (EMEP) for the years 2010 to 2020. Despite the exceedances, during the last years there is a small reduction in the  $PM_{10}$  concentration. The exceedances of the limit value of  $PM_{10}$  observed are due to anthropogenic and natural sources. The anthropogenic sources are the emissions from combustion (vehicles, industry and heating) and natural sources are dust transportation from the deserts of North Africa, Middle East and the sea salt.

**Figure 3. 11 on page 57** of the **Appendix,** shows the number of exceedances of the daily limit value of  $PM_{10}(50 \mu g/m^3)$  at the traffic stations. In 2020, at the Nicosia, Larnaca and Paralimni traffic stations the number of exceedances exceeds the maximum allowed number of 35 per year. It is noted that, after the subtraction of the number of the exceedances due to natural sources (sea salt, dust from Sahara and Asia) the final number of exceedances is below 35 in all traffic stations.

**Figure 3. 12 on page 58** of the **Appendix,** shows the annual average values of  $PM_{2.5}$  at the Residential Stations and EMEP Background Station at Ayia Marina Xyliatou. The measurements in the Residential Stations for the last three years (2018-2020), were used to calculate the Average Exposure Index (AEI). The AEI calculated is 14,4  $\mu$ g/m<sup>3</sup>. Based on the relevant legislation, the national exposure reduction target for  $PM_{2.5}$  for the protection of human health, for 2020, is defined to be 18  $\mu$ g/m<sup>3</sup>.

In order to handle the problem of the exceedances, especially for the PM<sub>10</sub>, and to improve air quality concerning the other pollutants, the DLI prepared an Action Plan for the Improvement of Air Quality, which was approved by the Council of Ministers in 2008 and was submitted to the European Commission. The progress of implementing the measures of the Action Plan is monitored by the DLI, as the Competent Authority, through a Technical Committee, which is prescribed in the relevant legislation and where representatives from five Ministries, the Cyprus Scientific and Technical Chamber and the Federation of Environmental Organisations of Cyprus. Due to the pandemic, the Technical Committee did not meet in 2021. DLI contacted the members of the Technical Committee and received information on the progress of the implementation of the measures of the Action Plan. Therefore, the table of measures was revised with the new information. At the same time, the study for the identification of sources of PM<sub>10</sub> with chemical analyses was continued, to determine the percentage of natural sources contribution so that realistic measures can be applied for the reduction of anthropogenic sources.

### 2.6.5. National Air Quality Reference Laboratory (NRL)

The NRL was accredited by the Cyprus Organization for the Promotion of Quality (CYS-CYSAB) according to the CYS EN ISO/IEC 17025 standard from 6.6.2013 for four years. The inspection of conformity to the standard is done annually. On 19 and 20.6.2017 the reassessment of the entire Quality

Assurance System by the CYS-CYSAB was successfully carried out and the Accreditation of the Laboratory and the Air Quality Monitoring Network was renewed for the next four years with annual surveys. In addition, in 2 and 3.12.2019 the NRL and the Air Quality Monitoring Network were inspected successfully with the revised standard CYS EN ISO/IEC 17025:2017. Also, on 25 and 26.10.2021, the entire Quality Assurance System was successfully re-evaluated by the CYS-CYSAB and the accreditation of the Laboratory and the Air Quality Monitoring Network was renewed for another four years with annual supervision.

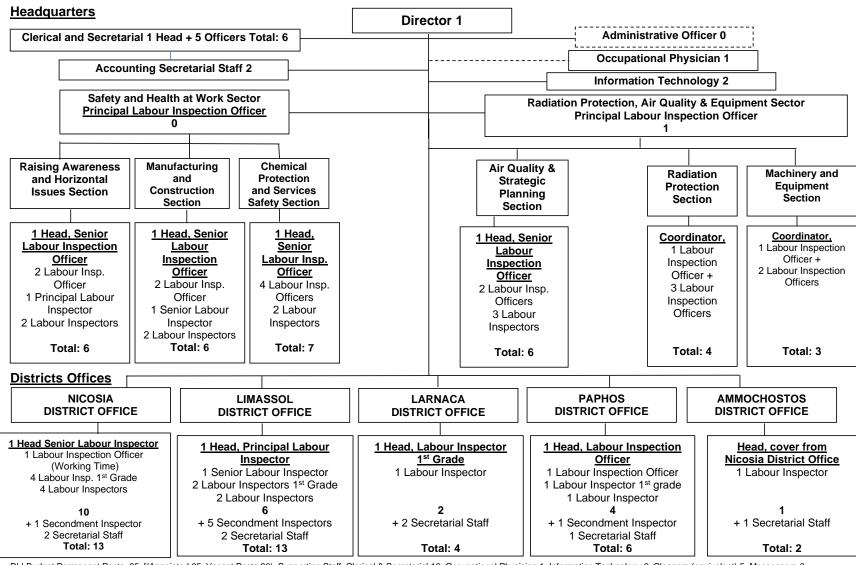
The NRL participates in mandatory Laboratory Intercomparisons at the Joint Research Center (Ispra - Italy) of the European Union every three years, as obliged by the relevant EU Directive for the Air Quality. These intercomparisons concern all methods of measurement with the instruments of the NRL of the various atmospheric pollutants for which measurements are made.

## 2.6.6. Annual National Air Pollutant Emissions

The DLI, acting as the National Focal Point for the 1979 Convention on Long-Range Transboundary Air Pollution, was actively involved in the Convention's activities and its Protocols in 2021. Within this framework, during 2021 the annual emissions of the air pollutants of Cyprus were calculated for the year 2019 and were forwarded to the Executive Body of the Convention and to the European Environment Agency. These data have been included in the relative reports published by the Executive Body of the Convention. In **Table 3.16 (page 59) and in Figure 3. 13** to **Figure 3. 19 (pages 60 on page 60 - 61)** of the **Appendix,** the total annual air pollutant emissions per activity for the year 2019 are shown.

# 3. APPENDIX

Chart 3. 1: Organizational Chart and Personnel of the Department of Labour Inspection (DLI) 2021



DLI Budget Permanent Posts: 85, [(Appointed 65, Vacant Posts 20), Supporting Staff: Clerical & Secretarial 16, Occupational Physician 1, Information Technology 2, Cleaners (equivalent) 5, Messengers 3 (equivalent), Provisional Additional staff: 2, Secondment Inspectors from other Public Services including the Occupational Physician 8. Displaced persons from DLI to MLSI 3. Total servicing in DLI: Grand Total 100

## Table 3.1: Inspection Program for Safety and Health at Work for the Year 2021 – Yearly and Monthly Inspection Activities

S/N	INSPECTION ACTIVITIES	JUN	FEB	MAR	APR	MAY	JUNE	JULY	AUG	SEP	ост	NOV	DEC
	PART A – THROUGHOUT THE YEAR		1										
1	Re-inspection of work places at which a Contravention Letter has been sent or an Improvement Notice has been issued either in the previous or current year.												
2	Audit of Safety issues management (External and Internal Protection and Prevention Services, Safety Officers)												
3	Examination of applications for the issue of a Planning Permit / Building Permit / Certificates of Final Approval.												
4	Examination of applications and inspection for the issue of a Factory Registration Certificate												
5	Inspection in Nursing Activities (Hospitals, Private clinics, P8610)												
6	Inspections for the Safe Storage of Petroleum Products												
7	Control of Smoking at Workplaces												
8	Control at workplaces where foreign workers are employed, upon information received by the Labour Department												
9	Inspections at units where dangerous chemical substances of "Seveso" category are stored/ used.												
10	Inspections of Manual handling of loads / Prevention of musculoskeletal disorders												
11	Inspections at the Constructor Sector (F41- 43)												
12	Inspections at premises of the Mining and Quarrying Industry												
	PART B – ON A MONTHLY BASIS												
13	Inspection of Covid-19 prevention measures at workplaces												
14	Warehouses (H52) and whole sale trade (G46)												
15	Manufacture and Storage of Chemicals substances, [(pesticides, basic pharmaceutical products, plastics and rubber) (C19-22)]												
16	Campaign in processing facilities that have not been inspected in the last 5 years												
17	Protection of workers from Heat stress [Work sites (F41- 43)												

Table 3.2: Inspections of Undertakings for the Year 2021 for Safety and Health at Work Issues

			DISTRICT															
S/N	ECONOMIC ACTIVITY		NICOSIA			LIMASSOI	_	F	AMAGUST	ГА		LARNAC	4		PAPHOS		TO	ΓAL
		No.	%(1)	%(2)	No.	%(1)	%(2)	No.	%(1)	%(2)	No.	%(1)	%(2)	No.	%(1)	%(2)	No.	%(3)
1	SECTION A — AGRICULTURE, FORESTRY AND FISHING	14	0,2%	26,9%	20	0,6%	38,5%	3	0,3%	5,8%	14	0,6%	26,9%	1	0,0%	1,9%	52	0,3%
2	SECTION B — MINING AND QUARRYING	9	0,1%	50,0%	6	0,2%	33,3%	0	0,0%	0,0%	3	0,1%	16,7%	0	0,0%	0,0%	18	0,1%
3	SECTION C — MANUFACTURING	873	12,8%	26,4%	1153	33,1%	34,9%	245	27,8%	7,4%	728	29,8%	22,0%	307	10,2%	9,3%	3306	19,9%
4	SECTION D — ELECTRICITY, GAS, STEAM AND AIR CONDITIONING SUPPLY	4	0,1%	25,0%	5	0,1%	31,3%	0	0,0%	0,0%	6	0,2%	37,5%	1	0,0%	6,3%	16	0,1%
5	SECTION E — WATER SUPPLY; SEWERAGE, WASTE MANAGEMENT AND REMEDIATION ACTIVITIES	17	0,2%	19,8%	26	0,7%	30,2%	2	0,2%	2,3%	27	1,1%	31,4%	14	0,5%	16,3%	86	0,5%
6	SECTION F — CONSTRUCTION	1218	17,9%	39,1%	505	14,5%	16,2%	48	5,4%	1,5%	167	6,8%	5,4%	1179	39,3%	37,8%	3117	18,8%
7	SECTION G — WHOLESALE AND RETAIL TRADE; REPAIR OF MOTOR VEHICLES AND MOTORCYCLES	3569	52,5%	45,3%	1420	40,7%	18,0%	433	49,1%	5,5%	1130	46,2%	14,3%	1333	44,5%	16,9%	7885	47,5%
8	SECTION H — TRANSPORTATION AND STORAGE	113	1,7%	33,6%	66	1,9%	19,6%	9	1,0%	2,7%	114	4,7%	33,9%	34	1,1%	10,1%	336	2,0%
9	SECTION I — ACCOMMODATION AND FOOD SERVICE ACTIVITIES	147	2,2%	56,3%	14	0,4%	5,4%	30	3,4%	11,5%	27	1,1%	10,3%	43	1,4%	16,5%	261	1,6%
10	SECTION J — INFORMATION AND COMMUNICATION	23	0,3%	88,5%	1	0,0%	3,8%	0	0,0%	0,0%	2	0,1%	7,7%	0	0,0%	0,0%	26	0,2%
11	SECTION K — FINANCIAL AND INSURANCE ACTIVITIES	6	0,1%	50,0%	5	0,1%	41,7%	0	0,0%	0,0%	0	0,0%	0,0%	1	0,0%	8,3%	12	0,1%
12	SECTION L — REAL ESTATE ACTIVITIES	5	0,1%	12,2%	2	0,1%	4,9%	0	0,0%	0,0%	34	1,4%	82,9%	0	0,0%	0,0%	41	0,2%
13	SECTION M — PROFESSIONAL, SCIENTIFIC AND TECHNICAL ACTIVITIES	113	1,7%	39,0%	61	1,8%	21,0%	12	1,4%	4,1%	73	3,0%	25,2%	31	1,0%	10,7%	290	1,7%
14	SECTION N — ADMINISTRATIVE AND SUPPORT SERVICE ACTIVITIES	37	0,5%	42,5%	16	0,5%	18,4%	9	1,0%	10,3%	22	0,9%	25,3%	3	0,1%	3,4%	87	0,5%
15	SECTION O — PUBLIC ADMINISTRATION AND DEFENCE; COMPULSORY SOCIAL SECURITY	48	0,7%	64,0%	8	0,2%	10,7%	6	0,7%	8,0%	10	0,4%	13,3%	3	0,1%	4,0%	75	0,5%
16	SECTION P — EDUCATION	20	0,3%	51,3%	7	0,2%	17,9%	8	0,9%	20,5%	3	0,1%	7,7%	1	0,0%	2,6%	39	0,2%
17	SECTION Q — HUMAN HEALTH AND SOCIAL WORK ACTIVITIES	191	2,8%	46,6%	109	3,1%	26,6%	24	2,7%	5,9%	50	2,0%	12,2%	36	1,2%	8,8%	410	2,5%
18	SECTION R — ARTS, ENTERTAINMENT AND RECREATION	72	1,1%	68,6%	7	0,2%	6,7%	17	1,9%	16,2%	5	0,2%	4,8%	4	0,1%	3,8%	105	0,6%
19	SECTION S — OTHER SERVICE ACTIVITIES	309	4,5%	72,5%	54	1,5%	12,7%	28	3,2%	6,6%	29	1,2%	6,8%	6	0,2%	1,4%	426	2,6%
20	SECTION T — ACTIVITIES OF HOUSEHOLDS AS EMPLOYERS; UNDIFFERENTIATED GOODS- AND SERVICES-PRODUCING ACTIVITIES OF HOUSEHOLDS FOR OWN USE	15	0,2%	65,2%	0	0,0%	0,0%	8	0,9%	34,8%	0	0,0%	0,0%	0	0,0%	0,0%	23	0,1%
21	SECTION U — ACTIVITIES OF EXTRATERRITORIAL ORGANISATIONS AND BODIES	1	0,0%	100,0%	0	0,0%	0,0%	0	0,0%	0,0%	0	0,0%	0,0%	0	0,0%	0,0%	1	0,0%
	TOTAL NO. OF INSPECTIONS 6804		41,0	%	3485	21,0	%	882	5,3%	%	2444	14,7	%	2997	18,09	%	160	612
			(%4	1)		(%4	)		(%4	.)		(%4	<b>!</b> )		(%4)	)		

<sup>%1:</sup> Percentage contribution of District Inspections for the specific Economic Activity, on the total number of District Inspections.

<sup>%2:</sup> Percentage contribution of District Inspections for the specific Economic Activity, on the Cyprus wide total number of Inspections of the same Economic Activity.

<sup>%3:</sup> Percentage contribution of Cyprus wide Inspections for the specific Economic Activity, on the total number of Inspections.

<sup>%4:</sup> Percentage contribution of District Inspections on the total number of Inspections Cyprus wide.

Table 3.3 Number of Contraventions and Fines imposed on 30 Legal Proceedings completed in 2021 for Safety and Health issues in comparison with previous years

No	Laws / Regulations	Numb	oer of Co	ontraven	tions <sup>1</sup>	Total amount of fines charged in €					
1,0		2018	2019	2020	2021	2018	2019	2020	2021		
1	The Safety and Health at Work Law of 1996 - 2015	17 <sup>2</sup>	11	13	28	36100	32500	14400	39650		
2	The Factory Law, Ch. 134	2	0	0	0	300	0	0	0		
3	The Safety and Health at Work (Accidents and Dangerous Occurrences Notification) Regulations of 2007	0	3	4	4	0	1600	1550	2350		
4	The Safety and Health (Minimum Requirements for Temporary or Mobile Construction Sites) Regulations of 2002 and 2015	17	6	7	33	20250	6250	22000	68300		
5	The Management of Safety and Health Issues at Work Regulations of 2002	20	5	19	33	12700	5250	12300	32100		
6	The Minimum Requirements for Safety and Health (Use of Work Equipment at Work) Regulations of 2001 and 2004	6	13	8	24 <sup>3</sup>	9000	39500	7600	33550		
7	The Minimum Requirements for Safety and Health at the Workplace Regulations of 2002 and 2004	4	2	5	1	5250	1450	2450	3450		
8	The Minimum Requirements for Safety and Health Signs at Work Regulations of 2000	0	0	0	0	0	0	0	0		
9	The Minimum Requirements for Safety and Health (Use of Personal Protective Equipment at Work) Regulations of 2001	24	0	0	3	2000	0	0	3750		
10	The Safety and Health at Work (Manual Handling of Loads) Regulations of 2001	2	0	0	0	3000	0	0	0		
11	The Employer's Liability (Compulsory Insurance) Laws of 1989 - 2011	0	0	2	5 <sup>5</sup>	0	0	1250	1850		
12	The Safety and Health at Work (Protection from Asbestos) Regulations of 2006 and 2015	0	0	0	2	0	0	0	3000		
13	The Safety and Health at Work (Biological Agents) Regulations of 2001	0	0	1	0	0	0	850	0		
14	The Safety and Health at Work (Chemical Agents) Regulations of 2001 - 2012	0	1	1	0	0	500	850	0		
15	The Safety Committees at Work Regulations of 1997	0	0	0	0	0	0	0	0		
16	The Essential Requirements (Machinery) Regulations of 2003 (abolished in 29/12/2009)	0	0	0	2	0	0	0	1550		
17	The Essential Requirements (Lifts) Regulations of 2003	0	0	0	0	0	0	0	0		
18	The Minimum Requirements for Safety and Health at Work (Surface and Underground Extractive Industries) Regulations of 2002	0	0	0	3	0	0	0	1050		
	TOTALS	70	41	60	138	88600	87050	63250	190600		

<sup>-</sup>

<sup>&</sup>lt;sup>1</sup> A complete case may involve more than one contravention.

<sup>&</sup>lt;sup>2</sup> The sentence for two of the contraventions was 1 year of imprisonment with three-year of suspension.

The sentence for one of the contraventions was 6 months of imprisonment with three-year of suspension.

<sup>&</sup>lt;sup>4</sup> The sentence for one of the contraventions was 3 months of imprisonment with two-year of suspension.

<sup>&</sup>lt;sup>5</sup> The sentence for one of the contraventions was 2 months of imprisonment with three-year of suspension.

Table 3.4: Analysis of Work Accidents for the Year 2021 by Economic Activity Sector, Gender, Age, Degree of Injury & Causation (Employed Persons only, during their work)

				GEN	DER	,	\GE		URY GREE		C/	AUSATI	ION	
S/N	ECONOMIC ACTIVITY (NACE 2)	NO. OF ACCIDENTS	%	Male	Female	Under 18	8 and Above	Fatal	Non Fatal	Buildings / Structures	Machinery / Equipment	Transportation Means	Materials / Substances	Other Causes
1	SECTION A — AGRICULTURE, FORESTRY AND FISHING	32	2,23%											
2	Crop and animal production, hunting and related service activities	19	1,33%	17	2	0	19	1	18	3	2	1	8	5
3	Forestry and logging Fishing and aquaculture	6 7	0,42% 0,49%	5 7	0	0	6 7	0	6 7	1 2	1	2	1 2	0
	SECTION B — MINING AND QUARRYING	11	0,77%	,			1	0	,					
6	Mining of coal and lignite	0	0,00%	0	0	0	0	0	0	0	0	0	0	0
7	Extraction of crude petroleum and natural gas	0	0,00%	0	0	0	0	0	0	0	0	0	0	0
8	Mining of metal ores	6	0,42%	5	1	0	6	0	6	1	3	1	1	0
9	Other mining and quarrying	5	0,35%	5	0	0	5	0	5 0	0	2	2	0	0
10	Mining support service activities	0	0,00%	0	U		0	U	U	J	0	0	U	0
11	SECTION C — MANUFACTURING	254	17,73%											
12	Manufacture of food products  Manufacture of hoveredge	98	6,84%	58	40	0	98	0	98	30	38	8	17 4	5 0
13	Manufacture of beverages  Manufacture of tobacco products	11 0	0,77%	7	4 0	0	11 0	0	11 0	5	0	0	0	0
15	Manufacture of textiles	0	0,00%	0	0	0	0	0	0	0	0	0	0	0
16	Manufacture of wearing apparel	0	0,00%	0	0	0	0	0	0	0	0	0	0	0
17	Manufacture of leather and related products	0	0,00%	0	0	0	0	0	0	0	0	0	0	0
18	Manufacture of wood and of products of wood and cork, except furniture; manufacture of articles of straw and plaiting materials	13	0,91%	13	0	0	13	0	13	2	8	0	3	0
19	Manufacture of paper and paper products	2	0,14%	1	1	0	2	0	2	1	1	0	0	0
20	Printing and reproduction of recorded media	1	0,07%	1	0	0	1	0	1	1	0	0	0	0
21	Manufacture of coke and refined petroleum products	0 2	0,00%	0	2	0	0	0	0	0	0	0	0	0
22	Manufacture of chemicals and chemical products  Manufacture of basic pharmaceutical products and		0,14%	0		0	2		2	0	0	1	1	
23	pharmaceutical preparations	13	0,91%	6	7	0	13	0	13	5	6	0	2	0
24 25	Manufacture of rubber and plastic products  Manufacture of other non-metallic mineral products	15 38	1,05% 2,65%	15 37	1	0	15 38	0	15 38	12	5 7	2	4 16	0
26	Manufacture of other non-metallic mineral products  Manufacture of basic metals	30	0,21%	2	1	0	36	0	3	0	0	0	3	0
27	Manufacture of fabricated metal products, except machinery and equipment	35	2,44%	35	0	1	34	0	35	11	9	0	14	1
28	Manufacture of computer, electronic and optical products	1	0,07%	1	0	0	1	0	1	0	1	0	0	0
29 30	Manufacture of electrical equipment  Manufacture of machinery and equipment n.e.c.	5 8	0,35% 0,56%	5 8	0	0	5 8	0	5 8	3	2	0	0	0
31	Manufacture of macrimery and equipment n.e.c.  Manufacture of motor vehicles, trailers and semi-trailers	1	0,07%	1	0	0	1	0	1	0	1	0	0	0
32	Manufacture of other transport equipment	0	0,00%	0	0	0	0	0	0	0	0	0	0	0
33	Manufacture of furniture	4	0,28%	4	0	0	4	0	4	2	1	0	1	0
34 35	Other manufacturing Repair and installation of machinery and equipment	2 2	0,14%	2	0	0	2	0	2	1	1	0	0	0
36	SECTION D — ELECTRICITY, GAS, STEAM AND AIR CONDITIONING SUPPLY	15	1,05%	2	0		2	0	2		ı	0		0
37	Electricity, gas, steam and air conditioning supply	15	1,05%	14	1	0	15	1	14	5	5	1	4	0
38	SECTION E — WATER SUPPLY SEWERAGE, WASTE MANAGEMENT AND REMEDIATION ACTIVITIES	33	2,30%											
39	Water collection, treatment and supply	10	0,70%	9	1	0	10	0	10	2	2	4	2	0
40	Sewerage	7	0,49%	7	0	0	7	0	7	3	0	3	0	1
41	Waste collection, treatment and disposal activities, materials recovery	13	0,91%	12	1	0	13	0	13	5	3	1	4	0
42	Remediation activities and other waste management services	3	0,21%	3	0	0	3	1	2	1	1	1	0	0
43	SECTION F — CONSTRUCTION Construction of buildings	279 193	<b>19,47%</b> 12,77%	182	1	0	183	1	182	92	32	1	52	6
44	Construction of buildings Civil engineering	183 14	0,98%	182	1	0	183	0	182	92	32	1	1	0
46	Specialised construction activities	82	5,72%	81	1	0	82	1	81	48	9	2	20	3
47	SECTION G — WHOLESALE AND RETAIL TRADE, REPAIR OF MOTOR VEHICLES AND MOTORCYCLES	191	13,33%											
48	Wholesale and retail trade and repair of motor vehicles and motorcycles	28	1,95%	27	1	0	28	0	28	4	6	8	10	0
49	Wholesale trade, except of motor vehicles and motorcycles	44	3,07%	35	9	0	44	0	44	14	13	7	8	2
50	Retail trade, except of motor vehicles and motorcycles	119	8,30%	53	66	0	119	0	119	37	48	10	21	3
<b>51</b> 52	SECTION H — TRANSPORTATION AND STORAGE  Land transport and transport via pipelines	<b>97</b>	<b>6,77%</b> 1,05%	14	1	0	15	0	15	7	2	5	1	0
53	Water transport	15 0	0,00%	0	0	0	0	0	0	0	0	0	0	0
54	Air transport	0	0,00%	0	0	0	0	0	0	0	0	0	0	0
55	Warehousing and support activities for transportation	73	5,09%	57	16	0	73	0	73	33	18	7	13	2
56 <b>57</b>	Postal and courier activities  SECTION I — ACCOMMODATION AND FOOD SERVICE  ACTIVITIES	9 <b>279</b>	0,63% <b>19,47%</b>	7	2	0	9	0	9	5	1	2	1	0
58	Accommodation	126	8,79%	66	60	2	124	0	126	67	30	2	23	4
	Food and beverage service activities	153	10,68%	118	35	0	153	0	153	70	14	54	10	5

				GEN	DER	A	AGE	INJURY CAUS			AUSATI	ON		
S/N	ECONOMIC ACTIVITY (NACE 2)	NO. OF ACCIDENTS	%	Male	Female	Under 18	8 and Above	Fatal	Non Fatal	Buildings / Structures	Machinery / Equipment	Transportation Means	Materials / Substances	Other Causes
<b>60</b>	SECTION J — INFORMATION AND COMMUNICATION Publishing activities	<b>8</b>	<b>0,56%</b> 0,00%	0	0	0	0	0	0	0	0	0	0	0
62	Motion picture, video and television programme production, sound	0	0,00%	0	0	0	0	0	0	0	0	0	0	0
63	recording and music publishing activities  Programming and broadcasting activities	0	0,00%	0	0	0	0	0	0	0	0	0	0	0
64	Telecommunications  Computer programming, consultancy and related activities	7 0	0,49% 0,00%	7	0	0	7	0	7	1 0	2	4	0	0
65 66	Information service activities	1	0,00%	1	0	0	1	0	1	0	0	1	0	0
67	SECTION K — FINANCIAL AND INSURANCE ACTIVITIES	8	0,56%											
68	Financial service activities, except insurance and pension funding	7	0,49%	3	4	0	7	0	7	4	1	1	1	0
69	Insurance, reinsurance and pension funding, except compulsory social security	0	0,00%	0	0	0	0	0	0	0	0	0	0	0
70	Activities auxiliary to financial services and insurance activities	1	0,07%	1	0	0	1	0	1	0	0	1	0	0
71	SECTION L — REAL ESTATE ACTIVITIES	1	0,07%											
72	Real estate activities	1	0,07%	1	0	0	1	0	1	1	0	0	0	0
70	SECTION M — PROFESSIONAL, SCIENTIFIC AND	44	0.770/											
73	TECHNICAL ACTIVITIES	0	<b>0,77%</b>	0	0	0	0	0	0	0	0	0	0	0
74 75	Legal and accounting activities Activities of head offices; management consultancy activities	3	0,00%	3	0	0	3	0	3	0	1	2	0	0
76	Architectural and engineering activities; technical testing and analysis	1	0,07%	0	1	0	1	0	1	1	0	0	0	0
77	Scientific research and development	0	0,00%	0	0	0	0	0	0	0	0	0	0	0
78	Advertising and market research	0	0,00%	0	0	0	0	0	0	0	0	0	0	0
79 80	Other professional, scientific and technical activities  Veterinary activities	5 2	0,35% 0,14%	5 2	0	0	5 2	0	5 2	2	2	1	0	0
81	SECTION N — ADMINISTRATIVE AND SUPPORT SERVICE ACTIVITIES	40	2,79%											
82	Rental and leasing activities	2	0,14%	2	0	0	2	0	2	1	0	0	1	0
83	Employment activities	0	0,00%	0	0	0	0	0	0	0	0	0	0	0
84	Travel agency, tour operator reservation service and related activities	0	0,00%	0	0	0	0	0	0	0	0	0	0	0
85 86	Security and investigation activities Services to buildings and landscape activities	8 7	0,56% 0,49%	6 5	2	0	7	0	8 7	3	2	1	4 1	0
87	Office administrative, office support and other business support activities	23	1,61%	20	3	0	23	0	23	10	4	4	5	0
88	SECTION O — PUBLIC ADMINISTRATION AND DEFENCE, COMPULSORY SOCIAL SECURITY	101	7,05%											
89	Public administration and defence; compulsory social security	101	7,05%	69	32	0	101	0	101	48	17	17	13	6
90	SECTION P — EDUCATION	16	1,12%											
91	Education	16	1,12%	4	12	0	16	0	16	12	2	0	0	2
92	SECTION Q — HUMAN HEALTH AND SOCIAL WORK	26	1,81%											
93	ACTIVITIES Human health activities	16	1,12%	3	13	0	16	0	16	8	1	2	3	2
94	Residential care activities	6	0,42%	0	6	0	6	0	6	3	0	1	1	1
95 <b>96</b>	Social work activities without accommodation  SECTION R — ARTS, ENTERTAINMENT AND RECREATION	11	0,28% <b>0,77%</b>	0	4	0	4	0	4	3	0	0	0	1
97	Creative, arts and entertainment activities	4	0,77%	4	0	0	4	0	4	2	1	0	1	0
98	Libraries, archives, museums and other cultural activities	0	0,26%	0	0	0	0	0	0	0	0	0	0	0
99	Gambling and betting activities	0	0,00%	0	0	0	0	0	7	0	0	0	0	0
100 101	Sports activities and amusement and recreation activities  SECTION S — OTHER SERVICE ACTIVITIES	7 10	0,49% <b>0,70%</b>	5	2	1	6	0	/	3	U	0	2	2
102	Activities of membership organisations	1	0,07%	0	1	0	1	0	1	1	0	0	0	0
	Repair of computers and personal and household goods	2	0,14%	2	0	0	2	0	2	0	0	0	2	0
104	Other personal service activities	7	0,49%	6	1	0	7	0	7	4	0	1	1	1
105	SECTION T — ACTIVITIES OF HOUSEHOLDS AS EMPLOYERS; UNDIFFERENTIATED GOODS- AND SERVICES PRODUCING ACTIVITIES OF HOUSEHOLDS FOR OWN USE	10	0,70%											
106	Activities of households as employers of domestic personnel	10	0,70%	3	7	0	10	0	10	8	1	0	1	0
107	Undifferentiated goods- and services-producing activities of private households for own use	0	0,00%	0	0	0	0	0	0	0	0	0	0	0
108	SECTION U — ACTIVITIES OF EXTRATERRITORIAL ORGANISATIONS AND BODIES	0	0,00%											
109			0,00%	0	0	0	0	0	0	0	0	0	0	0
	TOTAL		3	1086	347	4	1429	5	1428	605	317	171	287	53

Figure 3. 1 Analysis of Work Accidents by Economic Activity for the Year 2021 (Employed Persons only, during their work)

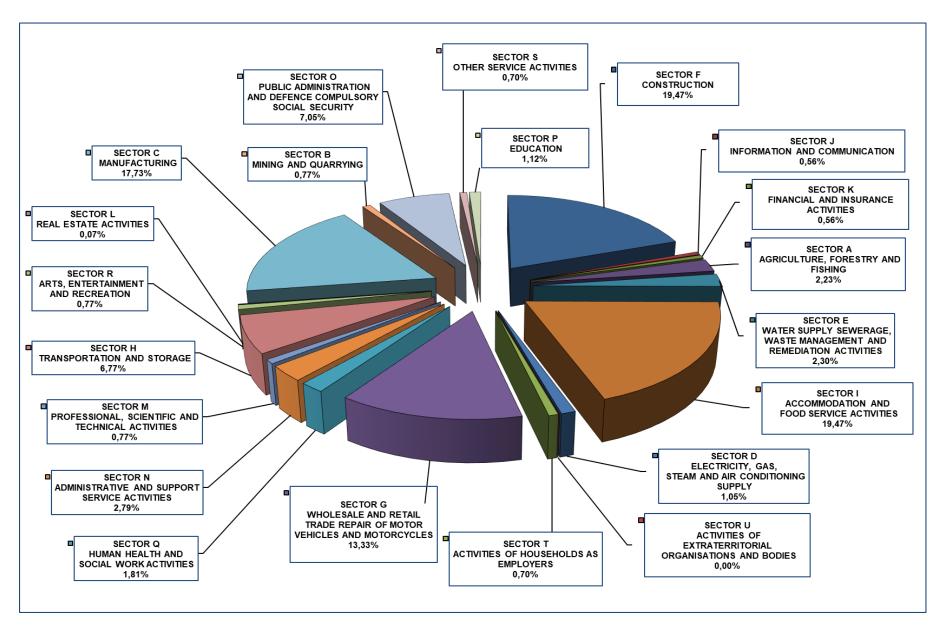


Figure 3. 2: Accidents Reported during 2010 – 2021 (Employed Persons only, during their work)

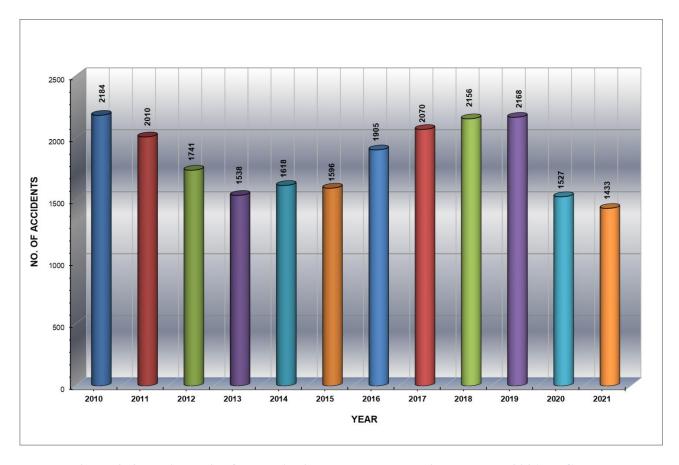


Figure 3. 3: Analysis of Work Accidents Reported during the Year 2021 by Cause (Employed Persons only, during their work)

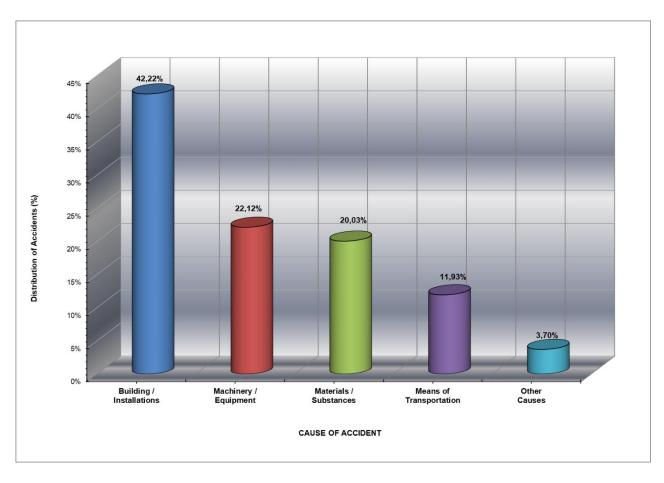


Table 3.5: Analysis of Fatal Accidents Occurred to Employed Persons During Work

## **A. EMPLOYED PERSONS** During Work (*Total No. of Accidents:* 6)

No.	District	Number of Victims	Economic Activity Sector of Employer	Accident Causation
1.	Ammochostos	1	Oil Painting Works Fall from a height (first floor terrace)	Fall from a height (first floor terrace)
2.	Nicosia	1	Garbage collection and disposal	Road Accident (garbage truck overturned)
3.	Nicosia	1	Metal constructions	Fall from a height (mezzanine)
4.	Nicosia	1	Animal production - cattle breeding	Attack - Beating by animal
5.	Nicosia	1	Production and distribution of electricity	Explosion - fire
6.	Nicosia	1	Construction - formwork works	Fall from a height (scaffolding)

## Table 3.6: Analysis of Fatal Accidents Occurred to Employed Persons on their Way to Work

## **B. EMPLOYED PERSONS** on their Way to Work (*Total No. of Accidents: 1*)

No.	District Number of Victims Economic Activity Sector of Employer		Accident Causation	
1	Nicosia	1	Public Administration	Road accident

## Table 3.7: Analysis of Fatal Accidents Occurred to Self-Employed Persons during Work

**C. SELF-EMPLOYEED PERSONS** During Work (*Total No. of Accidents: 1*)

**Total No. of Accidents: 1** (Accidents Reportable According to Legislation)

No.	District	Number of Victims	Economic Activity Sector of Employer	Accident Causation
1	Nicosia	1	Plumbing Works	Drop from height (fixed vertical metal scale)

## Table 3.8: Analysis of Fatal Accidents Occurred to Persons out of Work

**D. PERSONS** Out of Work (*Total No. of Accidents: 1*)

**Total No. of Accidents: 1** (Accidents Reportable According to Legislation)

No.	Victims Sector of Employer		Accident Causation	
1	Limassol	1	Formwork Work	Fall from a height (scaffolding)

Figure 3. 4: Fatal Accidents Reported during the Period 2010 – 2021 (Employed Persons only, during their Work)

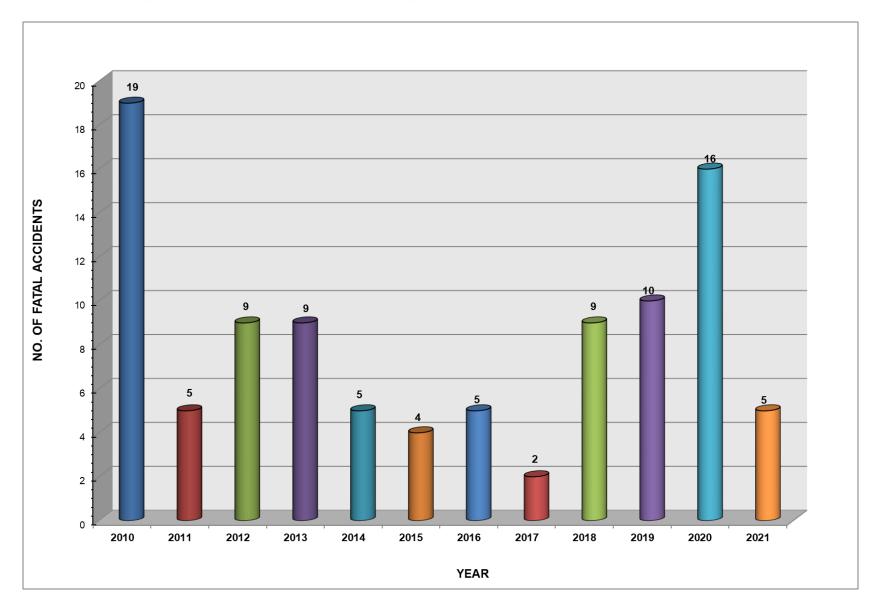


Figure 3. 5: Incidence Rate by Economic Activity for the Year 2021 (Preliminary Results)

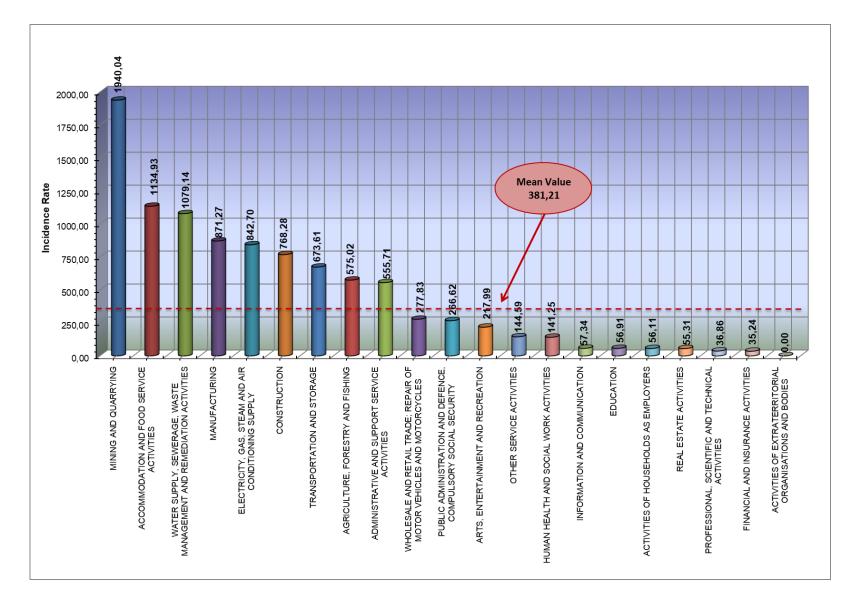


Figure 3. 6: Trend of Incidence Rate – No of Accidents, No of Employees, Totals – Averages for the Period 2010 – 2021



INCIDENCE RATE (2)	NUMBER OF ACCIDENTS(1)	NUMBER OF EMPLOYEES (2)
2010– 2021: - 43,8 %	2010– 2021: - 34,4%	2010 – 2021: 16,8%
678,5 – 381,21 V	2184 – 1433 🖖	321 886– 375 906 ^

Note 1: Number of accidents, refers to accidents that occurred to employees, during their work and reported to the Department of Labour Inspection.

Note 2: Data regarding the Incidence Rate and Number of Employees for the Year 2021 are <u>Preliminary and not Final</u>, as the number of Employed Persons is according the data of the Labour Force Survey of the Statistical Service for first, second and third quarter average and not the year average.

Figure 3. 7: Inspections of the Chemical Substances Section in 2021

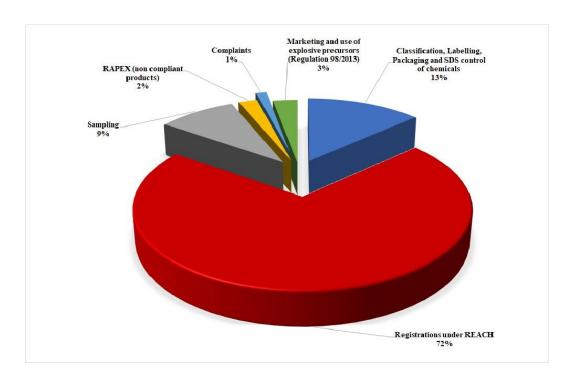


Table 3.9: Number of Inspections for Chemicals per subject in 2021

Subject	Number of Inspections *
Classification, Labelling, Packaging and SDS control of chemicals	75
REACH Registration	404
Sampling (toys, stationary, superglues)	51
RAPEX (non compliant products)	12
Complaints	7
Marketing and use of explosive precursors (Regulation 98/2013)	16

<sup>\*</sup> Some inspections covered more than one subjects

Table 3.10: Number of samples analysed and number of non-compliant products in 2021

Analysis of:	Samples analysed	Non – Compliant Products
Superglues or other professional glues for Benzene, Toluene and Chloroform	9	0
Toys and child care articles for phthalates content (phthalates are toxic for reproduction)	31	11
Phthalates in plastic articles	8	4
Leather articles for Chromium VI	8	0
Azoclolours in textiles	15	0
Classification, labelling and packaging of cleansing products	39	4
Thermal paper for Bisphenol A (BPA)	7	0

**Table 3.11:** Machinery Inspections in 2021

	TYPE OF MACHINERY	DISTRICT																
No		NICOSIA		LIMASSOL		LARNACA		FAMAGUSTA		PAPHOS		TOTAL						
		No.	%(1)	%(2)	No.	%(1)	%(2)	No.	%(1)	%(2)	No.	%(1)	%(2)	No.	%(1)	%(2)	No.	%(3)
1	LIFTING MACHINERY AND DEVICES	63	17,60%	28,00%	56	24,78%	24,89%	87	36,40%	38,67%	10	13,51%	4,44%	9	11,54%	4,00%	225	23,08%
2	CRANES (MOBILE & TOWER)	127	35,47%	35,77%	112	49,56%	31,55%	78	32,64%	21,97%	32	43,24%	9,01%	6	7,69%	1,69%	355	36,41%
3	BUILDING CRANES	0	0,00%	0,00%	0	0,00%	0,00%	0	0,00%	0,00%	0	0,00%	0,00%	0	0,00%	0,00%	0	0,00%
4	STEAM BOILERS	97	27,09%	34,89%	56	24,78%	20,14%	55	23,01%	19,78%	32	43,24%	11,51%	38	48,72%	13,67%	278	28,51%
5	STEAM RECEIVERS	3	0,84%	100,00%	0	0,00%	0,00%	0	0,00%	0,00%	0	0,00%	0,00%	0	0,00%	0,00%	3	0,31%
6	AIR RECEIVERS	68	18,99%	59,65%	2	0,88%	1,75%	19	7,95%	16,67%	0	0,00%	0,00%	25	32,05%	21,93%	114	11,69%
7	CHAINS	0	0,00%	0,00%	0	0,00%	0,00%	0	0,00%	0,00%	0	0,00%	0,00%	0	0,00%	0,00%	0	0,00%
8	ROPES	0	0,00%	0,00%	0	0,00%	0,00%	0	0,00%	0,00%	0	0,00%	0,00%	0	0,00%	0,00%	0	0,00%
9	LIFTING TACKLES	0	0,00%	0,00%	0	0,00%	0,00%	0	0,00%	0,00%	0	0,00%	0,00%	0	0,00%	0,00%	0	0,00%
ГОТА	TOTAL No. OF MACHINERY INSPECTIONS		36,	72%	226	23,	18%	239	24,	51%	74	7,5	59%	78	8,0	0%	9	75
			%	5(4)		%	(4)	•	%	6(4)		%	o(4)		%	(4)		

## Table Notes:

- 1. Percentage conribution on the Total Number of Inspections for the same District.
- 2. Percentage conribution on the Total Number of Inspections for the same Machinery Type Cyprus wide.
- 3. Percentage conribution on the Total Number of Inspections Cyprus wide.
- 4. Percentage conribution of District Inspections on the Total Number of Inspections Cyprus wide.

## **Inspections of Inspectable Machinery and LPG Installations**

**Table 3.12: Inspections of Inspectable Machinery** 

Machinery Type	1 (62227	ber of ctions	Maximum Prescribed Period between
	2020	2021	Inspections
Cranes and other Lifting Devices	529	580	14 months
Steam Boilers	368	278	14 - 18 months
Steam Receivers	0	3	26 months
Air Receivers	105	114	26 months
Ropes	0	0	6 months
TOTAL	1.002	975	

Table 3.13: LPG Inspection Analysis per District in 2021

		T 1					
Inspection reason	Nicosia Limassol		Larnaca	Paphos	Ammochostos	Total	
	Nr	Nr	Nr	Nr	Nr	Nr	
Licensing of LPG Storage	111	132	69	126	82	520	
LPG Storage Inspection (without Licensing)	,		0	6	0	19	
Examination report of LPG installation on a vehicle	12	2	1	2	0	17	
Autogas Refuelling Stations Inspection	0	2	1	2	2	7	
Complaint Investigation	9	8	7	1	4	29	
Inspection Total	134	155	78	137	88	592	

## <u>Installations for which Air Emission Permits</u> <u>and Industrial Emissions Permits were issued in 2021</u>

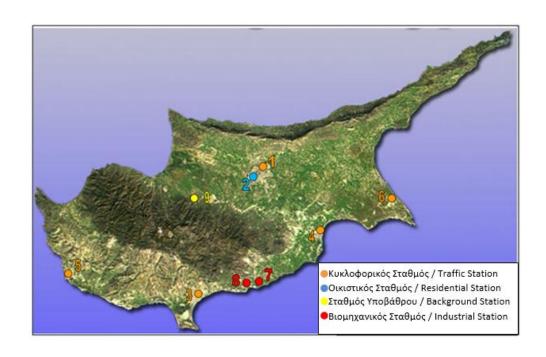
**Table 3.14: Air Emission Permits** 

Installation Category	Number of Air Emission Permits granted in 2021
Petrol Stations	33
Petroleum Storage	1
Oil storage	3
Wood Treatment	2
Production and/or package of Pharmaceuticals	1
Production and/or package of pesticides	1
Total	41

**Table 3.15: Industrial Emission Permits** 

Industrial Emissions Permits granted by the Minister of Labour and Social Insurance for installations using organic solvents									
Installation Category	Number of Industrial Emission Permits granted in 2021								
Intensive rearing of pigs	1								
Intensive rearing of poultry	5								
Total	6								

Picture 3.1: Ambient Air Quality Monitoring Network



Picture 3.2: Photo of Atmospheric Air Quality Monitoring Station



Figure 3. 8: Annual average values of NO<sub>2</sub>, SO<sub>2</sub>, PM<sub>10</sub>, O<sub>3</sub>, CO at the Nicosia Traffic Station

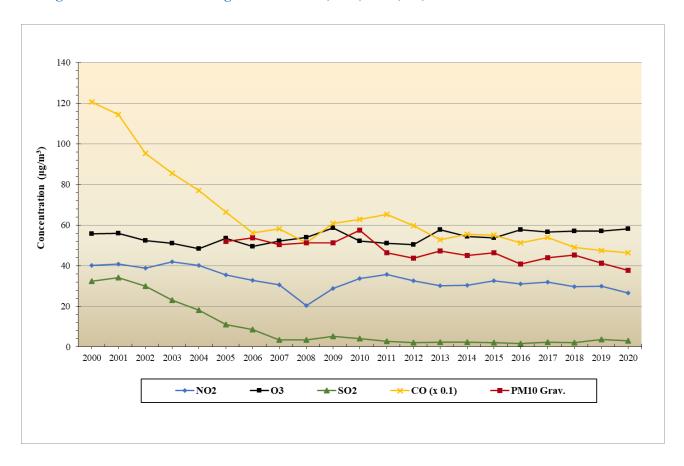


Figure 3. 9: Annual average values of Ozone (O<sub>3</sub>) at the Stations of the Air Quality Monitoring Network

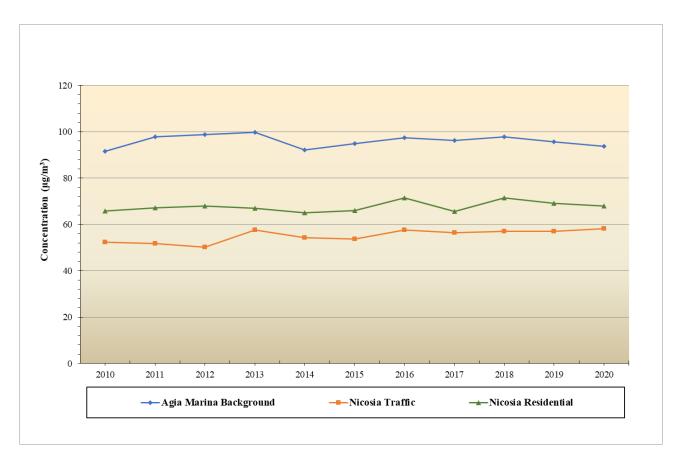


Figure 3. 10: Annual average values of PM<sub>10</sub> at the Traffic Stations of the Air Quality Monitoring Network

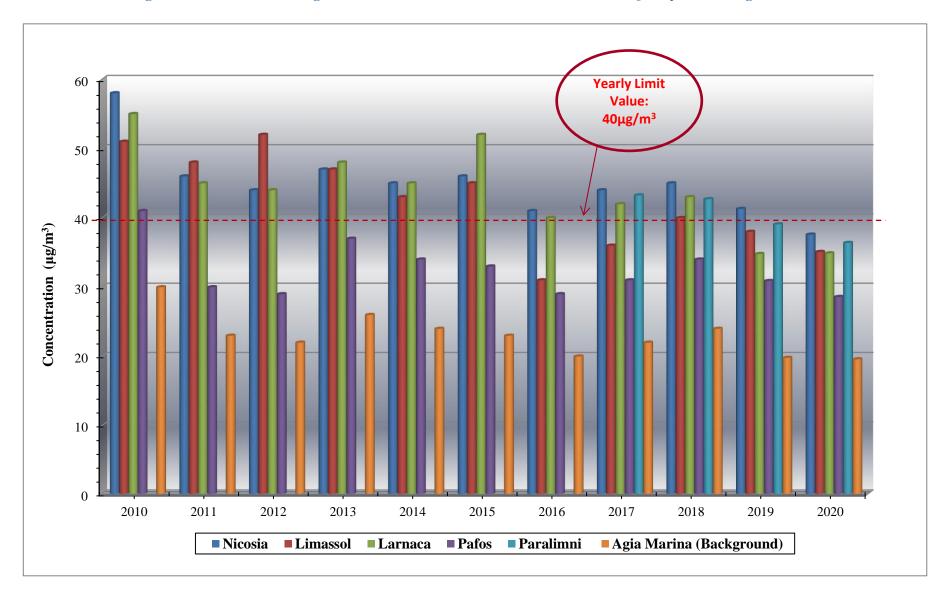


Figure 3. 11 Number of exceedances of the daily limit value of  $PM_{10}$  ( $50\mu g/m^3$ ) at the traffic stations of the Air Quality Monitoring Network

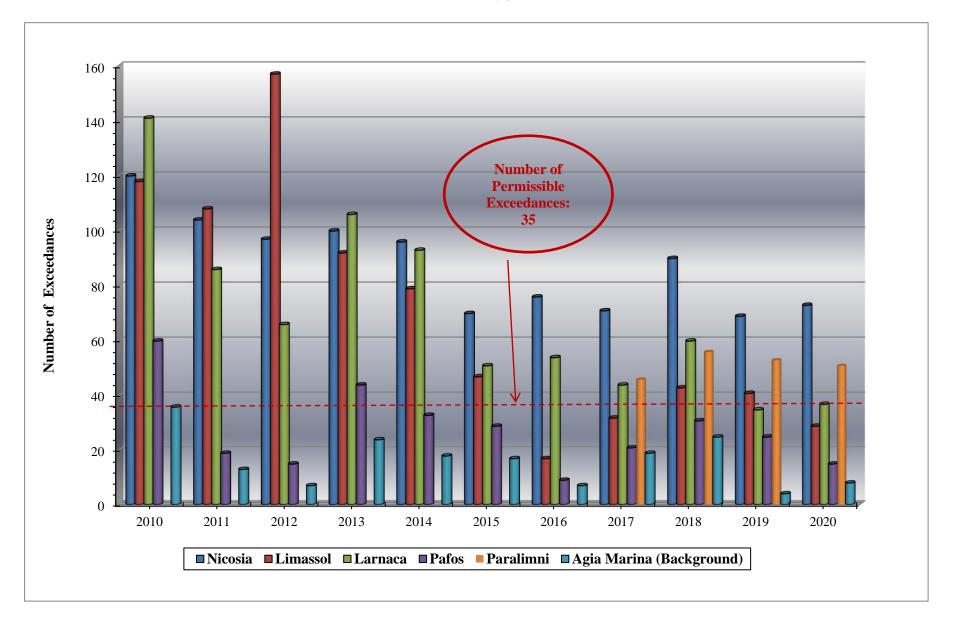
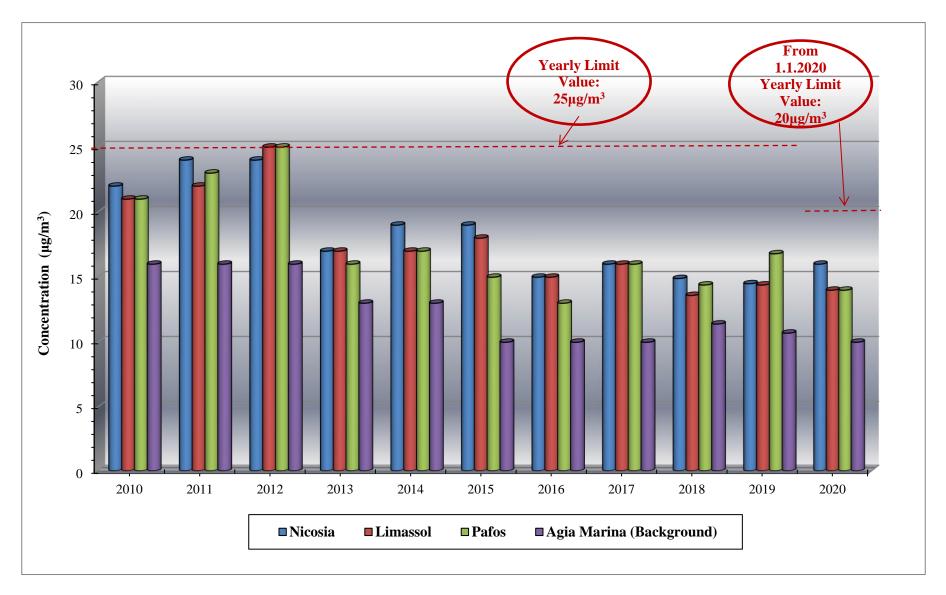


Figure 3. 12 Annual average values of PM<sub>2.5</sub> at the residential stations of the Air Quality Monitoring Network



**Table 3.16: National Annual Emissions per category (Year 2019)** 

Farmania Astinita	NOx	NMVOC	SO <sub>x</sub>	NH <sub>3</sub>	PM <sub>2.5</sub>	PM <sub>10</sub>	TSP	CO	Pb	Cd	Hg	DIOX
Economic Activity	Gg NO <sub>2</sub>	Gg	Gg SO <sub>2</sub>	Gg	Gg	Gg	Gg	Gg	Mg	Mg	Mg	g I-Teq
Public Electricity and heat production	3.91	0.08	14.19	NE	0.24	0.35	0.46	0.38	0.09	0.02	0.01	0.09
Manufacturing Industry & Construction	1.79	0.10	1.27	0.00	0.17	0.17	0.17	2.41	0.03	0.00	0.01	0.01
Aviation	0.47	0.03	0.03	NE	0.00	0.00	0.00	0.28	NE	NE	NE	NE
Road Transport	5.68	2.21	0.01	0.16	0.31	0.44	0.57	6.81	0.26	0.00	0.00	0.17
Navigation	0.09	0.01	0.08	NE	0.01	0.01	0.01	NE	NE	NE	NE	NE
Residential (Central Heating)	0.33	0.04	0.13	0.00	0.04	0.06	0.06	0.53	0.00	0.00	0.00	0.06
Agriculture (Combustion and Mobile)	0.70	0.05	0.07	0.00	0.04	0.04	0.04	0.20	0.01	0.00	0.00	0.01
Distribution /Storage of Oil Products	NA	0.43	NE	NA	NA	NA	NA	NA	NA	NA	NA	NE
<b>Cement Production</b>	ΙE	IE	ΙE	NE	0.05	0.08	0.08	NE	NE	NE	NE	NE
Lime Production	ΙE	IE	ΙE	NA	0.00	0.02	0.05	NE	NE	NE	NE	NA
Asphalt	ΙE	IE	ΙE	ΙE	ΙE	ΙE	ΙE	ΙE	ΙE	ΙE	ΙE	ΙE
Quarries	NA	NA	NA	NA	0.06	0.49	1.27	NA	NA	NA	NA	NA
Production of Food & Drink	NA	0.17	NA	NA	NE	NE	NE	NA	NA	NA	NA	NA
Paint Application	NA	2.30	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Dry Cleaning	NA	0.03	NA	NA	NE	NE	NE	NA	NA	NA	NA	NA
Solvents	0.00	2.16	0.00	0.00	0.04	0.07	0.22	0.06	0.01	0.00	0.00	0.00
Manure Management	0.84	1.43	0.00	6.20	0.07	0.34	0.54	0.00	0.00	0.00	0.00	0.00
Fertilizers	0.23	NA	NA	0.36	NA	NA	NA	NA	NA	NA	NA	NA
Reeds Burning	0.00	0.00	0.00	0.00	0.01	0.01	0.01	0.09	0.00	0.00	0.00	0.00
Waste Management	0.00	0.32	0.00	0.09	0.02	0.03	0.03	0.04	0.00	0.00	0.00	0.23
<b>Total Emissions</b>	14.042	9.345	15.789	6.816	1.068	2.115	3.522	10.803	0.403	0.033	0.028	0.573

Note:

Gg=kt (thousands of tones) and Mg=t (tones) NA: Not Applicable, NE: Not Estimated, NO: Not Occurring, IE: Included Elsewhere

