

### **DEPARTMENT OF LABOUR INSPECTION**

### **ANNUAL REPORT 2019**

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### DEPARTMENT OF LABOUR INSPECTION (DLI)

### INTRODUCTION

The mission of the Department of Labour Inspection (DLI) of the Ministry of Labour, Welfare and Social Insurance is to safeguard suitable and sufficient levels of safety and health at work for all employed persons, the protection of the public from work activities, the preservation of air quality and its improvement when it is necessary, as well as the protection of the public and the environment by effectively controlling air industrial pollution, the safety of petroleum installations, the risks of major accidents and the risks arising from the use of chemical substances, ionizing radiation and offshore oil and gas activities.

In order to achieve the above mission, the DLI implements a specific strategy that includes the existence of an adequate and integrated legislative, institutional and organizational framework, the implementation of an appropriate licensing system, where applicable, inspection and enforcement of compliance, provision of continuous updating and information to workers and the public, training and education of DLI staff, use of economic and voluntary tools, participation in european and / or international organizations, the integration of its competences into other policy areas, such as education, employment, agriculture, the environment, etc., encouraging progress and research, as well as cooperation with the social partners and other stakeholders.

The DLI's vision is to become an excellent organization of prestige that will provide citizens and the country with quality services with a very high level of efficiency and productivity.

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, 86 posts in 2019, of which 23 (25%) 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.** of the **Appendix.** 

The DLI in 2019, was entrusted with the implementation of the 347 pieces of legislation, for which it was the competent authority, having 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, limb and health 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 4 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, 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 Services and Chemical Industry Section oversees the implementation of legislation on the safety and health at work of employees and other affected persons in the chemical and pharmaceutical industry, chemical storage, private sector services, including state and private hospitals, education, transport, commerce, as well as municipalities and communities. Additionally, the Section deals with issues related to the 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 Section is also involved in the inspection, control and licensing of liquid petroleum storage facilities. In the Services and Chemical Industry Section, there is a dedicated Unit dealing with issues related to the prevention of major accidents that could be caused due to the storage or use of hazardous chemicals in installations. Also, in this Section there is a special Unit dealing with the safety of offshore oil and gas operations in order to prevent serious accidents and dangerous incidents during offshore oil and gas operations and to limit their consequences.

### 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.

#### A.4. Chemical Substances Section

The Chemical Substances Section is responsible for 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. This Section aims to safeguard the conformity of the chemicals produced, distributed, placed on the market or used at work or in a domestic environment and also to protect the environment. The Officers of the Chemical Substances Section participate to various activities of the European Chemicals Agency (ECHA) in order to promote the harmonised and effective implementation of the chemicals legislation throughout the European Union.

### 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. 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 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 safety and health 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 Pollution Control Section

The Section of Industrial Pollution Control deals with the permitting of industrial installations which they 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.

### **WORK CONDUCTED DURING 2019**

#### 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** of the **Appendix** inspections in various economic sectors, as well as specific activities and focused campaigns were carried out during 2019.

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 2019, the Inspectors carried out 3.696 inspections in 2.731 different undertakings for safety and health matters at workplaces whereas during 2018, 3.228 such inspections were carried out in 2.394 different undertakings. **Table 3.2** of the **Appendix**, contains the inspections carried out in 2019 analytically, by economic activity and district. Furthermore, during 2019, 430 letters were sent to employers, self-employed persons or other persons requiring them to take measures against contraventions of the legislation that were found during inspections, in contrast to 392 which were sent during 2018. In addition, in 2019, 106 Improvement Notices and 130 Prohibition Notices were issued while in 2018, 110 Improvement Notices and 116 Prohibition Notices were issued by Inspectors.

### 1.1.1. Issue of Factories Registration Certificates

During 2019, following the examination of relevant applications and on the spot inspections, the DLI issued 49 Certificates of Factory Registration under the Factories Law, Cap. 134, and 12 Attestations. It is noted that during 2018, 33 Certificates of Factory Registration and 9 Attestations were issued. Also in 2019, 67 Certificates to Private Hospitals / Clinics were issued / renewed after inspection.

## 1.1.2. New Legislation for the Issue of Certificate of Registration of Premises, Installations, Enterprises and Work Places

In December 2019, the Safety and Health at Work (Registration of Premises, Installations, Enterprises and Work Places) Regulations of 2019 (K.D.P. 418/2019) and the Factory (Amendment) Law of 2019 (Law 167(I)/2019) were approved by the House of Representatives, voted and enacted. According to the provisions of this legislation, the "Factory Registration Certificate" has been replaced by the "Certificate of Registration", which is issued on the basis of the Safety and Health at Work legislation.

### 1.1.3. Measurements of Physical and Chemical Agents

The Services and Chemical Industry Section maintains a laboratory with instruments for the direct or indirect measurement of physical and chemical agents. In 2019, in the framework of surveillance of health and safety legislation, a total of 203 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: Measurements per physical or chemical agent in 2019

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	2	0	0	20	12	31	2	20	20

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	2	20	12	14	12	12	2	2	20

### 1.2. Prosecutions

In 2019, the trials of 12 cases concerning 41 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 2019 totalled to €87.050, compared to €88.600 in 2018 concerning the trials of 15 cases.

The number of penal cases, the relevant legislation breached by the offenders, as well as the fines imposed by the Courts in year 2019 in comparison to years 2016-2018, are illustrated in **Table 3.3** of the **Appendix**. Additionally, in 2019, a total of 12 new penal cases were compiled by DLI and sent to the Legal Service of the Republic for approval and submission.

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

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

During 2019 a total of 2.168 accidents which occurred to employed persons during their work were notified to the DLI. **Table 3.4 on page 37** 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** of the **Appendix** accidents are categorized by sector of economic activity. As shown in the figure, the biggest number of accidents during 2019 occurred in the sector of Accommodation and Food Services (Hotels & Restaurants) with a percentage of 26,38%, followed by the sector of Manufacturing Industries with a percentage of 17,44%, the Construction sector with a percentage of 15,36% and the sector of Wholesale and Retail Trade with a percentage of 14,39%. **Figure 3.2** of the **Appendix** presents the annual number of notified work accidents for the period 2008 – 2019. In **Figure 3.3** of the **Appendix** accidents at work during 2019 are analyzed by cause and are categorized in five basic categories (buildings/installations, machinery/equipment, transport means, materials/substances and other causes).

**Tables 3.5 to 3.8** of the **Appendix** present analysis of the fatal accidents, which occurred during 2019, by district, economic activity and cause. These tables present the accidents occurred to employed persons (**Table 3.5**) and self-employed persons (**Table 3.6**) during the course of their work. Additionally, they present accidents occurred to third persons (not employed), but arose out of work activities (**Table 3.7**) as well as accidents during the normal journey between home and the place of work (commuting accidents) (**Table 3.8**). During 2019 a total of 13 fatal accidents occurred to employed persons and 2 to self-employed persons during the course of their work, as well as 2 fatal accidents to persons out of work (not employed), but arose out of work activities and 1 commuting accident to employed person. In **Figure 3.4 of the Appendix** the annual number of fatal accidents to employed persons during their work which were notified during the period 2008-2019 is shown.

As it is shown in the **Appendix** (**Figure 3.5**), the Average of the Frequency Index (number of accidents per 100.000 employed persons) for accidents which occurred to employed persons during the course of their work for year 2019, was 605,46. This Figure presents also the average of the Frequency Index 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 Frequency Index, 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 Frequency Index of Accidents at Work for year 2018 (Mean Value) was 620,17.

In **Figure 3.6** of the **Appendix**, the change in the frequency index (Annual Mean) is presented for the period 2008 - 2019, as well as the number of accidents and employed persons for the same period. Conclusively, the frequency index during the period 2008 - 2019 decreased by 21,6% and the number of accidents by 8,4%, while during the period 2018 - 2019 the frequency index decreased by 2,4% and the number of accidents increased by 0,6%.

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 2018 was 22 compared to 23 in the year 2017 and 23 in the year 2016. The relevant data concerning the accidents of the year 2019 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 2020. 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 2: Average days of victim's absence from work (employees)

Economic activity	2016	2017	2018
Construction	26	28	26
Manufacturing	24	26	24
Wholesale and Retail Trade	24	24	22
Transportation and Storage	22	21	22
Hotels & Restaurants	19	17	18

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

During 2019, additional, 135 accidents were notified to the DLI, according to the relevant legislation [6 to self-employed persons, 2 to persons out of work and 127 during the normal journey between home, and the place of work (commuting accidents)].

### 1.3.3. Analysis of Notified Dangerous Occurrences

In 2019, 11 dangerous occurrences regarding work place incidents were notified to the DLI as follows: 4 fire / explosion, 2 collapse of buildings / structures, 2 electrical short circuit, 2 contact with an overhead electric line and 1 collapse / overturning / failure of load-bearing part of a lifting equipment.

### 1.4. Occupational Diseases Prevention Unit

During 2019, two cases of occupational diseases were notified to the DLI. These cases were related with one case of tendinitis of the left shoulder and one case of carpal tunnel syndrome bilaterally. Additionally, the Occupational Physician Councelor in close collaboration with Labour Inspectors investigated other 7 cases of diseases possibly related with working conditions and working environment of affected persons. These diseases were related with 4 cases of disc diseases of the spine, one case of cervical syndrome and impingement syndrome of the left shoulder, one case of injury of the left meniscus and one case of anxiety disorder. In addition to the above cases, during 2019, 8 new cases of mesothelioma registered by the Cancer Registry of the Ministry of Health and 3 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 24 existing providers according to procedures applied by the DLI.

#### 1.6. Surveillance of Workers' Health

Enforcement of two Ministerial Ordinances related to medical examinations of workers, issued under Health Surveillance Regulations has been started. Companies that perform certain activities at ports and companies that have license to perform activities related to insulation and coating of asbestos, have been contracted with occupational physician for medical examinations required. During 2019, legislative control by the Law Office of the two new draft Ministerial Ordinances related to medical examinations for climbers at mast and poles and for workers at mines and quarries, has been finished. The provision of services by doctor specialist in occupational medicine (occupation physician) continues to apply in Cyprus companies. Based on the information and data held by the DLI until 2019,

more than 30 companies contracted occupational physician for the provision of health surveillance services to employees. This number is expected to be increased with the introduction of more Ministerial Ordinances for medical examinations of workers and the rise of awareness of employers on the benefits of the provision of services by occupational physician in companies.

### 1.7. External Services for Protection and Prevention

During 2019, based on the prescribed Minimum Required Qualifications, the Chief Inspector granted 2 initial approvals and rejected one other application. The DLI requested that 3 additional candidates provide further proof of possession of all the prescribed Required Qualifications. Also, during the course of the year, the approval of 2 Approved Persons was terminated due to infractions of their Terms of Approval and /or the relevant legislation that governs to External Services of Prevention and Protection.

On 31.12.2019, the relevant Register contained a total of 90 Approved Persons for provision of External Services of Protection and Prevention. Finally, during 2019, 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.

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 is carrying out changes to the External Services framework, aiming to ensure improved compliance of these Services with the relevant legislation.

### 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 implemented since 2013 a specific Action Plan. In this context, workshops and seminars were held in cooperation with the social partners and other professional bodies in 2019, where the provisions of the legislation regulating safety and health issues in construction works and the management and treatment of heat stress of workers, were presented.

In addition, an Action Plan is being implemented to reduce accidents, which was drafted by the Pancyprian Safety Council (PSC) and includes actions based on suggestions from social partners and other members of the PSC.

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

Within 2019, a Technical Committee was set up from representatives of the members of PSC and other interested bodies. The purpose of this Technical Committee is to set minimum requirements for the training of workers working at height.

### 1.8.3. Working Group for Metal Constructions Works

Within 2019, a Working Group was set up and coordinated by DLI in order 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.

### 1.8.4. Special Terms for High Rise Buildings

Within 2019, special terms for High Rise Buildings were prepared and posted on the TEE website. These terms were prepared in order to help the prevention of accidents and occupational diseases during the execution of projects and during future maintenance and modifications of buildings, throughout the lifecycle of the buildings.

### 1.8.5. Collaboration with University Institutions in order to inform students about health and Safety at work

Within 2019, Cyprus University of Technology students in the field of Civil Engineering were trained about health and safety issues. The trainings were carried out by Labour Inspection Officers of the DLI.

### 1.9. Asbestos works

In 2019, after appraisal of applications, 3 companies were approved to carry out works concerning removal of asbestos insulation or coating. Also, in 2019, a total of 78 specific Work Plans were approved prior to commencement of asbestos work.

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

During 2019, 756 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.

### 1.11. Safety Officers

During 2019, 29 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 2019 was 173. At the same time, within the year, the evaluation

of the work carried out by Safety Officers was continued through examination of the Annual Reports prepared for their activities and submitted to DLI, as well as through on-site inspections that were conducted by Inspectors.

### 1.12. Occupational Safety and Health Training Centre

The activities of the Occupational Safety and Health Training Centre during 2019 included the organization or co-organization with other interested parties training and informative programs, seminars and lectures addressed to members of Safety Committees in the Public Service and the private sector, members of Professional Associations, Primary and Technical Education school students, chemistry teachers of Secondary Education, students of the Technical University of Cyprus and the University of Cyprus, employees in the Public Service, Semi-Governmental Organizations and private companies, Safety Officers, External Services for Protection and Prevention, as well as employees of the DLI.

In total, during 2019, Inspectors of the DLI gave lectures lasting 60 hours on the DLI's competencies, in 30 training programs / seminars / informative sessions, which were attended approximately by 1.960 people.

Furthermore, the Occupational Safety and Health Training Centre:

- on the 3<sup>rd</sup> of October 2019, organized the National Information Network meeting, and
- on the 25<sup>th</sup> of October 2019, organised the Closing Ceremony within the framework of the activities of the European Week for Safety and Health at Work. During the Closing Ceremony, the awarding of the four competitions which were organized in the field of health and safety at work took place.

### 1.13. Competitions

The DLI, with the co-operation of the Ministry of Education, Culture, Sports and Youth, organized for the seventeenth consecutive year the Poster Competition 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 from the Pancyprian High School of Nicosia, the second prize was awarded to a student of the First Technical and Vocational School of Education and Training of Nicosia and the third prize was awarded to a student from the High School Archbishop Makarios of Aglantzia.

Also, a Competition of Good Practice Examples in Schools was organized by DLI, for the tenth time among all schools, in collaboration with the Ministry of Education, Culture, Sports and Youth. The

prizes were awarded to the Third Primary School of Deryneia, the District High School of Akaki and the District Lyceum of Paliometoxo.

Furthermore, DLI organized the Good Practice Competition on health and safety at work for the companies/organizations. As part of the Competition 30 nominations were submitted. The 1st prize was given to CSP JV for a good practice example on the time management of the use of hand tools that create vibrations. The 2nd prize was given to Lefkaritis Bros Ltd, while the 3rd prize was given to both Hermes Airport Ltd and Iacovou Brothers (Constructions) Ltd. Special praise for their nominations was given to Bank of Cyprus Public Company Ltd, VTT Vasiliko Ltd and Paradeisiotis Ltd.

The Cyprus Safety and Health Association in cooperation with the Department of Labour Inspection and the Association of Cypriot Cartoonists announced a Cartoon Competition with theme "Management of Dangerous Substances at Workplaces". The theme of the competition derived from the European Campaign 2018-2019 "Healthy Workplaces – Manage Dangerous Substances" run by the European Agency for Safety and Health at Work.

As part of the Competition, 12 nominations were submitted and the prizes were awarded to Kyriakos Moesis (1st prize), Aristos Kakoutas (2nd prize), Loizos Kallenos (3rd prize), George Christou (4th prize) and Stavros Panayiotou (4th prize).

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

During 2019, the printing or reprinting with changes, of several information leaflets concerning issues within the competence of the Department, was completed in collaboration with the Press and Information Office. Also, the poster of the student who received the first prize in the Poster Competition among the students was printed. It is mentioned that all the informative leaflets, either in hard copy or in electronic form, are posted on the website of the DLI and available to any interested party. On the webpage of the DLI, there is also a lot of information regarding the legislation for which the Department has the competence, as well as different reports and statistical data.

### 1.15. European Campaign for Safety and Health at Work

Within the framework of the European Campaign for Safety and Health at Work, the European Week for Safety and Health at Work 2018 – 2019 was organized between the 21st and 25th of October 2019, and the theme adopted was "Healthy Workplaces – Manage Dangerous Substances".

On the 25th of October 2019 the closing ceremony of the European Week for Safety and Health at Work 2019 was held, during which the awards for Good Practice Competition, Schools Good Practice Competition, Poster Competition and Cartoons Competition were granted. Moreover, during the closing ceremony, presentations were given concerning the European Campaign, while EU-OSHA

representative presented the results of EU-OSHA's survey on the cost of occupational accidents and diseases.

In addition, under the framework of the European Week for Safety and Health at Work 2019, Inspectors of DLI developed and implemented specific programme with events attended by 2.265 persons that included 99 visits at workplaces, participation in meetings of various Safety Committees, discussions with employees and distribution of informative material.

Finally, under the framework of the European Campaign, a special message was broadcasted by several TV stations and Inspectors of the Department gave interviews and participated in awareness programs.

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

During 2019, the Control of Major Accident Hazards Special Unit conducted inspections of the 37 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 2019, the Unit received 3 new Notifications of establishments, 2 Major Accident Prevention Policy Documents and 7 Safety Cases. The Unit evaluated 2 Notifications of establishments, 2 Major Accident Prevention Policy Documents and 9 Safety Cases.

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

In 2019 two drilling operations were completed, one of which started in 2018. In December 2019, 3 well notifications and 2 Reports on Major Hazards were submitted. For the above mentioned, in 2019, 1 Major Hazard Report was assessed and accepted and 3 well notifications along with 63 daily drilling reports were assessed. One inspection was carried out on the offshore drilling rig and 2 inspection reports were prepared (one of which reported the finding from an inspection that took place in 2018).

In 2019, Inspectors of the Control of Offshore Oil and Gas Operations Hazards Unit participated in several meetings with companies operating in offshore oil exploration activities in the Cyprus Exclusive Economic Zone (EEZ) and discussed their obligations on the basis of the existing legislation. Inspectors of the Unit also submitted opinions as members of the Environmental Impact Assessment Board and the Offshore Protocol for one Offshore License.

### 1.18. Safety of Petroleum Installations

During 2019, Inspectors inspected 1,011 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, 94 were conducted at liquid petroleum storage

facilities, 130 at liquid petroleum and LPG facilities and the rest (787) were conducted at LPG facilities.

### 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 2019, DLI checked a total of 65.043 working days, of which 59.703 days at the premises of the enterprises and 5.340 days on the roadside. The following table shows in detail the audits carried out in 2019 and the target coverage rates, per case.

Table 3: Drivers' working days examined

	Minimum requirement as per E.U.	Number of examinations carried out in 2018	Percentage coverage of the E.U. requirements (%)
Total number of examinations of working days	70.497 (3% of working days)	65.043	92.3
Examination of working days at the road side	21.149 (30% of 70.497)	5.340	25.2
Examination of working days at the premises of the enterprises	35.249 (50% of 70.497)	59.703	169.4

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 the TISPOL (Traffic Information System for the Police) and the Department of Road Transport. The said campaigns took place in January, February, March, June, July, September and October of 2019.

### 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 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. In 2019 three (3) Council meetings took place in which issues of its competence were discussed, while special attention was paid to the actions of all Social Partners to reduce work accidents.

### 1.21.2. District Advisory Committees

The Committees convened twice during 2019 at the District Labour Inspection Offices. In these Committees representatives of the social partners at local level participated and discussed issues concerning the implementation of legislation on safety and health at work.

### 1.22. New Safety and Health at Work Legislation

By the end of 2019, the surveillance of the implementation of 157 pieces of legislation concerning safety and health at work issues were under the competency of the DLI.

### 1.23. Announcements on Safety and Health at Work

During 2019, 29 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, as well as the announcement and results of the competitions organized by the Department.

### 1.24. Chemical Substances

### 1.24.1. 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 up to date support to stakeholders and all other interested parties. During 2019, 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 addition, a number of questions were received in relation to the provisions of Article 45 of CLP Regulation and the submission of information to the National Chemicals Registry. In total, the National Helpdesks responded to 152 questions related to REACH and 205 questions on CLP Regulations.

In relation to the provisions of Article 45 of CLP Regulation, there were some new and important developments in European level, in relation to the obligation for the submission of information for the Poison Centers. A Central Database has been developed and will be maintained by the European Chemicals Agency (ECHA). This Database will contain information for possible use by the Poison Centres, in case of emergency health response requirements. The DLI, as the Appointed Body for collecting this information, has actively participated in the European consultations in order to proceed to all necessary amendments to the national procedures applied related to the National Chemicals Registry.

In 2019, the Chemicals Section updated 4 leaflets related to REACH provisions (REACH Registration Obligations, Obligation to register Charcoal, Restrictions in jewellery, Safety Data Sheets). One new leaflet was also prepared concerning the restrictions related to Polyaromatic Hydrocarbons (PAHs)

In addition, 41 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.

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

In 2019, a total of 298 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 of

chemical products, suppliers of toys, textiles, jewellery, stationery, industries producing and storing of chemical products, suppliers / distributors of other chemicals of consumer or professional use.

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 for their Benzene, Toluene and Chloroform content, toys and child care articles for certain Phthalates which are toxic to reproduction, stationery articles (markers) for Benzene, Toluene and Chloroform, metallic articles for their Nickel, Cadmium or Lead content, leather articles for their Chromium content and bleaching or other cleansing products for their classification, labelling and packaging compliance in relation to their pH value / corrosivity. In addition, samples with plastic parts were analysed for their Polycyclic Aromatic Hydrocarbons (PAHs) content. All non-compliant products were effectively 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** of the **Appendix**.

The DLI participated in two European campaigns of the FORUM Committee. During the REF7 campaign, special provisions related to REACH registration were checked for 31 chemical substances imported by 15 companies. In a 2<sup>nd</sup> pilot campaign and in collaboration with Customs, 36 articles were checked for their content and for the presence of substances for which specific restrictions apply. During this campaign, the Registration numbers, the labelling and the Safety Data Sheets were checked for 18 chemical mixtures placed on the Cyprus market.

In 2019, one company was prosecuted for breaching the national chemicals legislation for placing non-compliant chemical products on the Cyprus market.

### 1.24.3. Collaboration with the Customs Department

In the frame of the close collaboration with the Customs Department 35 cases of chemical imports were further investigated in 2019, 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 some hours per week, at the Limassol Port.

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

In 2019, the works of the European Project LIFE+ (LIFE CHEREE: Chemicals Regulations Enforcement & Inspections Building Authority Capacity for REACH/CLP and SEVESO III

Compliance) which started in 2016 continued as planned. The coordinating beneficiary is the Technical University of Crete (Greece) and the associated beneficiaries are 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 aims 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 is for 3,5 years. The project actions/ goals were carried out as planned.

### 1.24.5. 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.

### 1.24.6. 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 Council for the registration and authorisation of Plant Protective Products and Biocides, 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.

### 1.24.7. Participation to European and International Meetings

During 2019, DLI officers actively participated to the majority of the European Chemicals Agency (ECHA) Committee meetings, as well as to the meetings of the Competent Authorities for Regulations REACH and CLP. Through these activities the DLI is informed on all new developments concerning chemicals management and control and subsequently transfers this information to all importers, producers and users of chemicals in Cyprus helping them to fulfil their obligations. During these meetings there was close collaboration with other Member States in order to achieve a better and more harmonized implementation of the European Chemicals Legislation. Also, the DLI followed all the international efforts undertaken by the United Nations to control and manage chemicals. Additionally, during 2019, 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.

### 2. RADIATION PROTECTION, ENVIRONMENTAL ISSUES AND EQUIPMENT SECTOR

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

The Machinery and 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** of the **Appendix** shows an analysis of the 1.140 machinery inspections carried out by the Inspectors, per District and category of IM for 2019. **Table 3.12** of the **Appendix** shows the maximum legal interval between two consecutive inspections and the corresponding number of inspections for 2019 for each category of IM in comparison with those for 2018.

The DLI, exercising its supervisory role, in 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), carried out a total of 23 inspections. Specifically, in 2019, 7 Lifts Maintenance Persons were inspected at their premises including lifts for which they provide maintenance and 14 Authorised Lifts Auditors. The DLI assessed one request from a lift owner, who requested an Exemption from the application of certain technical provisions of the Regulations on his lift and initiated 14 complaint investigations. One Prohibition Notice was issued for a dangerous lift. 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.

Furthermore, the DLI completed a draft piece of legislation to amend the above Regulations, which was put to public consultation and then discussed with the members of the Cyprus Association of Lifts Installers, Lifts Suppliers and Lifts Maintenance Persons.

Since 29.11.2019 with the Safety and Health at Work (Prescribed Fees) Order of 2019 (R.A.A. 335/2019), the fees for the inspection of the IM were modified in order to correctly reflect the cost of the inspections. Also, since 18.12.2019 with the Factories (Amending) Law of 2019 (Law 167(I)/2019), the examination of chains, ropes and slings is carried out by competent persons of the private sector.

### 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, 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. During 2019, 89 market surveillance activities were carried out including inspections at undertakings, investigation of complaints and inspections during the product clearing procedure at the Customs Offices.

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 2019, 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-conforming equipment was identified, and measures were taken to prohibit the clearing through the customs of non-compliant products such as sunglasses, electric bicycles, machinery, etc. Moreover, measures were taken for compliance or prohibition of placement on the local market of machinery and pressure equipment, following information received from the Consumers Protection Association. Also, an administrative fine was imposed on a lift installer who placed a non-compliant lift on the market and in another case a Compliance Notice was issued for a non-compliant lifting machine.

The DLI participated in a program funded entirely by the European Commission, which included sampling and laboratory testing at an accredited laboratory of electric bicycles and electric scooters, as well as exchanging experiences for market surveillance actions between Member States.

Also, a Labour Inspection Officer, who chairs the Lifts Administrative Cooperation Group (AdCo) at EU level, organized in 2019 a-European wide campaign to monitor the market for lifts, in which 9 Member States participated.

Additionally, the DLI informed the general public for a total of 100 cases of non-compliant products for public use, which were identified on the European market and posted on the Rapid Alert System (RAPEX) for non-food dangerous products, by issuing a total of 34 Announcements.

### 2.3. Storage and Installations LPG Unit

Within the process of License granting for storage of LPG, 787 inspections were carried out by the DLI Inspectors at undertakings where LPG is stored. The Inspectors also examined complaints from the general public concerning LPG installations. Furthermore, several catering vehicles, that use LPG, were inspected. The number of inspections per District is shown on **Table 3.13** of the **Appendix**.

In 2019 the Compliance Inspection and Control System of the LPG Refueling Stations operated with two Officers dispatched to the DLI from other Departments / Services. Also, workshops, where the LPG-powered vehicles are maintained and repaired and other vehicles undergo conversion to run on LPG fuel, were inspected.

### 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 2019, 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 2019, the following documents were approved and/or published:

- a) The Protection against Ionising Radiation and Nuclear and Radiological Safety and Security (Specifications for practices, procedures and requirements of regulatory control relating to the notification or the granting of authorization through registration or licensing) Notification of 2019 (R.A.A. 153/2019),
- b) The Protection against Ionising Radiation and Nuclear and Radiological Safety and Security (Specifications for the Recognition of Services and Experts in the field of Radiation Protection and Nuclear Safety and Security) Notification of 2019 (R.A.A. 154/2019),
- c) The Protection against Ionising Radiation and Nuclear and Radiological Safety and Security (Standards for Education and Training in Radiation Protection and Nuclear and Radiological

Safety and Security) Notification of 2019 (R.A.A. 327/2019),

- d) The Protection against Ionising Radiation and Nuclear and Radiological Safety and Security (Standards for the Control and Recovery of Orphan Radioactive Sources and for Responding to Emergencies due to Orphan Sources) Notification of 2019 (R.A.A. 328/2019),
- e) The Protection against Ionising Radiation and Nuclear and Radiological Safety and Security (Specifications for setting out and implementing a monitoring programme of the quality from radiological point of view of the water intended for human consumption) Notification of 2019 (R.A.A. 365/2019),
- f) The Protection against Ionising Radiation and Nuclear and Radiological Safety and Security (Specifications, requirements and obligations for building materials and classes or types of practice involving naturally-occurring radioactive material that lead to exposure which cannot be disregarded from a radiation protection point of view) Notification of 2019 (R.A.A. 392/2019),
- g) The National Policy and Strategy on Nuclear Safety and Radiation Protection,
- h) The National Strategy on the Management of Existing Exposure Situations,
- i) The System for the Management of Radiation Emergencies, and
- j) The National Action Plan on the Management of the Long-Term Risks due to Exposure to Radon.

### RICS additionally published:

- a) A list of recognized Service Providers and Experts in RP&NS,
- b) An application form for the abovementioned recognitions,
- c) An application form for authorisation (through registration or licensing), and
- d) A document for the notification of RICS in accordance to R.A.A. 153/2019.

In addition, in December 2019, RICS has initiated the process of public consulation on the draft text of five Codes of Practice with respect to personal dosimetry monitoring, the designation of controlled and supervised areas, the role and the responsibilities of the Radiation Protection Officer, the determination of diagnostic reference levels for radiodiagnostic procedures and the estimation of doses received by the public.

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

In 2019, RICS personnel performed 180 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 deficiency found is that a number of radiology centers 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 19 licenses for practices with ionising radiation. 48 authorisations to enterprises for the import / export / shipment of radioactive sources or radioisotopes were also granted. Additionally, 275 certificates for radioactivity levels in recyclable metals, plastics, batteries, feed, foodstuff and beverages, for the purpose of exportation, were issued. Finally, there was one approval for RP&NS services.

RICS in 2019 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, aiming for the re-assessment of the system in 2-3 years.

Additionally, in cooperation with other involved Services, a self-assessment questionnaire on the national infrastructure and capability in nuclear and radiological security, the IAEA "Integrated Nuclear Security Support Plan" (INSSP) was completed. In the framework of the abovementioned process, IAEA experts came to Cyprus in May 2019 and discussed the questionnaire with the involved Services. During that meeting, a National Action Plan for 2019-2022 was agreed, based on the needs identified by the self-assessment.

In 2019, the national profile of Cyprus was updated in the IAEA "Emergency Preparedness and Response Information Management System" (EPRIMS) and the updating of the 6 thematic areas in the IAEA "Radiation Safety Information System" (RASIMS-2) begun.

Finally, in November 2019, the proposals of Cyprus for 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 were approved by the IAEA Board of

Governors.

### 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 2019, in collaboration with the State General Laboratory.

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 September 2019, RICS began the digital mapping of radon concentration in buildings, schools and workplace environments in Cyprus, which will be completed through a 3-year project by an external contractor.

In June 2019, Cyprus sent the results of the environmental monitoring for 2018 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 2019, the implementation of actions to upgrade the emergency preparedness framework for dealing with radiological / nuclear incidents continued through the implementation of the ELECTRA National Plan. In 2019, RICS was further equipped with 2 new instruments for measuring ionising radiation dose and identifying radioactive sources. In November 2019, a field exercise of the plan was performed, for the first time, with the participation of several involved services. The conclusions drawn from the exercise were shared with the involved services for improvement actions.

In 2019, RICS participated in IAEA (ConvEx) and EU (ECUREX) Preparedness and Response exercises and related meetings. RICS also organised in May 2019, in cooperation with the IAEA, a regional workshop on medical response to nuclear or radiological emergencies.

### 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 2019. The National Register of Radioactive Waste and Disused Sources is updated on a continuous basis, whenever there is a change. RICS continued in 2019 its activities for (a) the repatriation of a number of legacy Disused Sealed Radioactive Sources stored in Cyprus, (b) finding solutions for the final disposal of these sources and any possible new such sources. Additionally, the preparations for the peer review on radioactive waste management, ARTEMIS, set for October 2020, continued.

### 2.4.7. Radiation Protection and Nuclear Safety Council

During 2019, the Radiation Protection and Nuclear Safety council convened twice and discussed the criteria for the recognition of experts and service providers in radiation protection and the processes and practices that should be notified, approved through registration and approved through licensing. In parallel, the Council was consulted regarding draft legislature and other documents mentioned in section 2.4.1.

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

RICS participated in various Committees of EURATOM and other European bodies (ENSREG, Euratom Art. 31 and Art. 35/36 GoE, ECURIE/EURDEP, HERCA, WENRA) and of the IAEA (IEC, ITDB, TC). It also participated in the IAEA General Conference, where a statement was read, and in 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 August 2019, RICS submitted to the IAEA a National Report on the application of the Convention on Nuclear Safety, in preparation of the 8<sup>th</sup> review meeting of the Convention. RICS also posed questions to other parties of the Convention regarding their national reports and relevant obligations.

In 2019, RICS participated in various IAEA Technical Cooperation Programmes aiming at strengthening the RP & NS system, as well as at upgrading the relevant infrastructure and capabilities of Cyprus. Within the framework of the above programmes, 100 officers from RICS and other agencies and organisations participated in meetings of the IAEA and were trained on relevant subjects. The economic benefit to Cyprus from the participation of Cypriot officers in the above meetings in 2019 is

estimated at around €165,000. Also, in cooperation with the IAEA, RICS organised in 2019 three IAEA meetings in Cyprus, including the National Liaison Officers meeting of the Department of Technical Cooperation, Europe Region.

Finally, in 2019, 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 Pollution

### 2.5.1. Permitting

During 2019, 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, Welfare and Social Insurance, five other co-authoritative 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 a MLWSI officer, examined 7 applications for Air Emission Permits and 5 applications for Industrial Emissions Permits.

Upon proposals of the Technical Committee for the Protection of the Atmosphere, 210 Air Emission Permits were granted by the Minister of Labour, Welfare and Social Insurance. Based on the recommendations of the Technical Committee for the Protection of the Environment, the Minister of Labour, Welfare and Social Insurance granted one Industrial Emissions Permit for a printing installation and 3 more Permits, for dry cleaning installations. Moreover, the Minister of Labour, Welfare and Social Insurance together with the Minister of Agriculture, Rural Development and Environment granted 2 Industrial Emissions Permits to other installations. The categories and number of installations for which Air Emission Permits and Industrial Emissions Permits were granted in 2019, are shown in **Table 3.14** 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 with the specified operating conditions and emission limit values of the Permits (Air Emission Permits and Industrial Emissions Permits). For this purpose, the inspections and the environmental measurements continued during 2019. During 2019, 29 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), 21 inspections were carried out at non-licensable installations (e.g. boilers, crushing plants, concrete producing

factories, asphalt plants etc.) in order to check the compliance with the conditions which are specified in the relevant Regulations, 37 inspections were carried out at installations under the Industrial Emissions Law, 8 inspections were carried out at installations under the Medium Combustion Plants Regulations and 8 inspections were carried out for the investigation of public complaints related to the operation of neighboring factories.

In addition 18 questions from Members of the House of Representatives, the public and the Ombudsman were answered.

In 2019 emission measurements were carried out by a private company on behalf of the Department of Labour Inspection at 17 installations. The monitoring of the operation of large-scale industrial installations was also 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 388 annual reports submitted were checked.

During 2019, 19 public information announcements were issued regarding the submission of applications for the granting of Air Emission Permits and Industrial Emissions Permits and the publishing of new legislation.

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

According to the requirements of the European Regulation (EC) No. 166/2006 concerning the establishment of a European Pollutant Release and Transfer Register (E-PRTR Regulation), Cyprus is required to submit on an annual basis key environmental data from industrial activities. In 2019, the DLI submitted to the European Commission and the European Environment Agency, the report 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 submit electronically on the website one report providing the required environmental data to both the DLI and the Department of Environment simultaneously.

### 2.5.4. Harmonization with the Acquis Communautaire and New Legislation

Within the framework of the implementation of the provisions of the Atmospheric Pollution Control Laws and the Industrial Emissions Laws the following Orders were issued:

(a) The Industrial Emissions (Prescription of requirements concerning the methods and procedures

to be applied during sampling, analysis and measurements) Order of 2019 (R.A.A. 35/2019).

- (b) The Industrial Emissions (Emission Permit Application Form) Order of 2019 (R.A.A. 314/2019).
- (c) The Air Pollution Control (Non Licensable Installations) (Annual Report) Order of 2019 (R.A.A. 326/2019).

A draft of the Control of Atmospheric Pollution (Amendment) Law of 201X was sent to the Legal Services of the Republic for legal vetting.

### 2.6. Air Quality

### 2.6.1. Ambient Air Quality Monitoring

The DLI continued in 2019 monitoring the air quality at various locations all over Cyprus, as it is shown in the map in **Picture 3.1** of the **Appendix**. The monitoring measurements were carried out with the use of 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 Speed, Wind Direction, Ambient Temperature, Relative Humidity, Barometric 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 to the public, through the specialized website <a href="www.airquality.gov.cy">www.airquality.gov.cy</a>. In addition, the information to the public for the air quality is carried out with indoor panels installed in three Municipalities' Offices, as well as through four 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 also noted that in 2016 the Department of Labour Inspection, proceeded with the preparation of a mobile phone application for mobile phones with "android" software and in 2017 for mobile phones with "iOS" software, for the immediate information of the public, especially the sensitive 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 2019, dust events were observed due to dust transport from the Sahara Desert and other North Africa and West Asia areas. For this reason, 17 announcements were issued to warn the public,

particularly the vulnerable groups such as children, the elderly and patients and to protect 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 2019. 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 dust.

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

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 ( $C_6H_6$ ), 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>) where exceedances of the target value are observed and Particulate Matter ( $PM_{10}$ ) where exceedances of the limit value are observed.

The results of the measurements are presented in **Figures 3.8** to **3.12** of the **Appendix.** Specifically, in **Figure 3.8**, the annual mean values of various pollutants at the Nicosia Traffic Station are presented, from 2000 to 2018, where a constant decline of the concentration of the pollutants NO, NO<sub>2</sub>, CO and SO<sub>2</sub> is observed. This decline was 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** 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** of the **Appendix** shows the annual average values of Particulate Matter ( $PM_{10}$ ) at the Traffic Stations of Nicosia (NICTRA), Limassol (LIMTRA), Larnaca (LARTRA) and Pafos (PAFTRA) and at the Rural Background Station of Ayia Marina-Xyliatou (EMEP) for the years 2005 to 2018. The annual average values in some towns continue to be higher than the annual limit value ( $40\mu g/m^3$ ). However, during the last three years there was 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, West Asia and the sea salt.

Figure 3.11 of the Appendix shows the number of exceedances of the daily limit value of  $PM_{10}$  (50  $\mu g/m^3$ ) at the same stations. At the Nicosia and Larnaca 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 the 35.

**Figure 3.12** of the **Appendix** shows the annual average values of PM<sub>2.5</sub> at the Residential Stations of Nicosia (NICRES), Limassol (LIMRES), Larnaca (LARRES), Pafos (PAFRES), Paralimni and EMEP Background Station Ayia Marina Xyliatou. The measurements in the above Residential Stations of the four cities for the three previous years (2016-2018), were used to calculate the Average Exposure Index (AEI) as determined by the legislation. The AEI calculated is 14.9 μg/m<sup>3</sup>. The national exposure reduction target for PM<sub>2.5</sub> for the protection of human health, is defined in the relevant legislation to 18 μg/m<sup>3</sup> by 2020. The annual average concentrations of PM<sub>2.5</sub> for 2018 decreased in some stations compared to 2017, while for some others there was an increase in the concentration of PM<sub>2.5</sub> measured.

In order to handle the problem of the exceedances, especially for the  $PM_{10}$ , 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, representatives of Local Authorities and other stakeholders participate. At the same time, the study for the identification of sources of  $PM_{10}$  with chemical analyses was continued in 2018, 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

The National Reference Laboratory (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 19-20.6.2017 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. 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

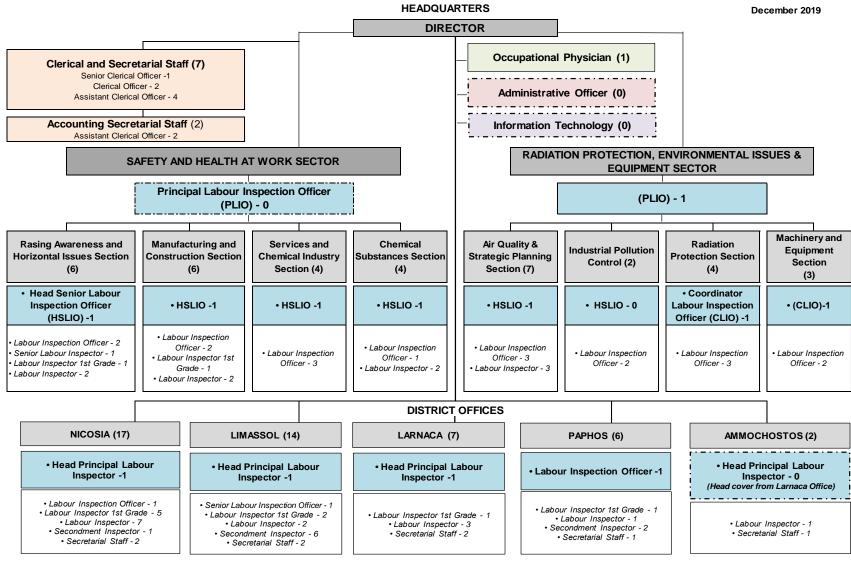
pollutants for which measurements are made.

### 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 2019. Within this framework, during 2019 the annual emissions of the air pollutants of Cyprus were calculated for the year 2017 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 3.15** and in **Figure 3.13 to Figure 3.19 on page 57** of the **Appendix**, the total annual air pollutant emissions per activity for the year 2017 are shown.

## 3. APPENDIX

Chart 3.1: Organizational Chart and Personnel of the Department of Labour Inspection (DLI) 2019



DLI Budget Permanent Posts: 86 (Appointed 63, Vacant Posts 23 and 1 on retirement leave). Supporting Staff: Secretarial - 17, Occupational Physician - 1, Information Technology - 0, Cleaners - 5 (equivalent), Messengers - 3 (equivalent). Provisional Additional staff: 4. Secondment Inspectors from other Public Services to DLI: 9. Moved from DLI to MLWSI: 1 Labour Inspector Officer, 1 Labour Inspector and 1 Messenger Total servicing in DLI: 102

Table 3.1: Inspection Program for Safety and Health at Work for the Year 2019 – Yearly and Monthly Inspection Activities

S/N	INSPECTION ACTIVITIES	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	ОСТ	NOV	DEC
	PART A – 1	HROU	GHOUT	THE YE	AR								
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												
11	Inspections at head offices of large enterprises of the private and public sector which operate in more than one premises or districts												
12	Inspections at the Constructor Sector (F41- 43)												
	PART B -	ON A I	иоитні	Y BASI	S								
13	Good practice competition												
14	Retail sale in non-specialized stores (groceries and super markets) (G47.11.1) and whole sale trade (G46)												
15	Construction sites (F41- 43)												
16	Manufacture and Storage of Chemicals substances, [(pesticides, basic pharmaceutical products, plastics and rubber) (C19-22)], painting workshops (e.g. of motor vehicles) (G45.20.3), Wholesale and Retail Trade of Chemical and Fuels (G46.12, G46.71, G46.75, G47.76).												
17	Hotels, Restaurants (I55, I56) and Fast Food Delivery premises (I56.10.2)												
18	Protection of workers from Heat stress [Work sites (F41- 43), Ports (H52.22)												
19	Food and Beverage Industry (bakeries, patisseries, wineries, breweries etc.) (C10,C11)												
20	Manufacture of Basic Metals (C24, C25, C28, C29)												

Table 3.2: Inspections of Undertakings for the Year 2019 for Safety and Health at Work Issues

									D	ISTRIC	т							
S/N	ECONOMIC ACTIVITY		NICOSIA			LIMASSOL	-	ı	FAMAGUST	Ά		LARNACA			PAPHOS		тот	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	8	1880,9%	42,1%	4	1822,9%	21,1%	0	0,0%	0,0%	5	4277,8%	26,3%	2	1188,4%	10,5%	19	0%
2	SECTION B — MINING AND QUARRYING	4	940,5%	28,6%	1	455,7%	7,1%	0	0,0%	0,0%	1	855,6%	7,1%	8	4753,7%	57,1%	14	0%
3	SECTION C — MANUFACTURING	323	75942,0%	53,3%	115	52409,4%	19,0%	27	38529,7%	4,5%	61	52188,9%	10,1%	80	47537,0%	13,2%	606	0%
4	SECTION D — ELECTRICITY, GAS, STEAM AND AIR CONDITIONING SUPPLY	3	705,3%	42,9%	0	0,0%	0,0%	0	0,0%	0,0%	3	2566,7%	42,9%	1	594,2%	14,3%	7	0%
5	SECTION E — WATER SUPPLY; SEWERAGE, WASTE MANAGEMENT AND REMEDIATION ACTIVITIES	7	1645,8%	20,6%	6	2734,4%	17,6%	1	1427,0%	2,9%	14	11977,8%	41,2%	6	3565,3%	17,6%	34	0%
6	SECTION F — CONSTRUCTION	606	142479,4%	40,9%	365	166342,8%	24,6%	59	84194,6%	4,0%	137	117211,1%	9,2%	315	187176,8%	21,3%	1482	0%
7	SECTION G — WHOLESALE AND RETAIL TRADE; REPAIR OF MOTOR VEHICLES AND MOTORCYCLES	189	44436,6%	39,5%	108	49219,2%	22,6%	50	71351,4%	10,5%	83	71011,1%	17,4%	48	28522,2%	10,0%	478	0%
8	SECTION H — TRANSPORTATION AND STORAGE	59	13871,8%	56,2%	17	7747,5%	16,2%	0	0,0%	0,0%	24	20533,3%	22,9%	5	2971,1%	4,8%	105	0%
9	SECTION I — ACCOMMODATION AND FOOD SERVICE ACTIVITIES	119	27978,6%	24,0%	109	49675,0%	22,0%	86	122724,3%	17,4%	44	37644,4%	8,9%	137	81407,1%	27,7%	495	0%
10	SECTION J — INFORMATION AND COMMUNICATION	8	1880,9%	66,7%	2	911,5%	16,7%	1	1427,0%	8,3%	1	855,6%	8,3%	0	0,0%	0,0%	12	0%
11	SECTION K — FINANCIAL AND INSURANCE ACTIVITIES	17	3996,9%	70,8%	2	911,5%	8,3%	3	4281,1%	12,5%	2	1711,1%	8,3%	0	0,0%	0,0%	24	0%
12	SECTION L — REAL ESTATE ACTIVITIES	2	470,2%	15,4%	7	3190,1%	53,8%	0	0,0%	0,0%	4	3422,2%	30,8%	0	0,0%	0,0%	13	0%
13	SECTION M — PROFESSIONAL, SCIENTIFIC AND TECHNICAL ACTIVITIES	21	4937,4%	51,2%	9	4101,6%	22,0%	2	2854,1%	4,9%	9	7700,0%	22,0%	0	0,0%	0,0%	41	0%
14	SECTION N — ADMINISTRATIVE AND SUPPORT SERVICE ACTIVITIES	17	3996,9%	60,7%	1	455,7%	3,6%	0	0,0%	0,0%	9	7700,0%	32,1%	1	594,2%	3,6%	28	0%
15	SECTION O — PUBLIC ADMINISTRATION AND DEFENCE; COMPULSORY SOCIAL SECURITY	43	10109,9%	66,2%	7	3190,1%	10,8%	4	5708,1%	6,2%	10	8555,6%	15,4%	1	594,2%	1,5%	65	0%
16	SECTION P — EDUCATION	24	5642,7%	47,1%	18	8203,2%	35,3%	3	4281,1%	5,9%	4	3422,2%	7,8%	2	1188,4%	3,9%	51	0%
17	SECTION Q — HUMAN HEALTH AND SOCIAL WORK ACTIVITIES	50	11755,7%	43,5%	30	13672,0%	26,1%	12	17124,3%	10,4%	11	9411,1%	9,6%	12	7130,5%	10,4%	115	0%
18	SECTION R — ARTS, ENTERTAINMENT AND RECREATION	24	5642,7%	75,0%	1	455,7%	3,1%	4	5708,1%	12,5%	0	0,0%	0,0%	3	1782,6%	9,4%	32	0%
19	SECTION S — OTHER SERVICE ACTIVITIES	24	5642,7%	57,1%	8	3645,9%	19,0%	5	7135,1%	11,9%	4	3422,2%	9,5%	1	594,2%	2,4%	42	0%
20	SECTION T — ACTIVITIES OF HOUSEHOLDS AS EMPLOYERS; UNDIFFERENTIATED GOODS- AND SERVICES-PRODUCING ACTIVITIES OF HOUSEHOLDS FOR OWN USE	24	5642,7%	72,7%	1	455,7%	3,0%	2	2854,1%	6,1%	6	5133,3%	18,2%	0	0,0%	0,0%	33	0%
21	SECTION U — ACTIVITIES OF EXTRATERRITORIAL ORGANISATIONS AND BODIES $% \left( 1,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0$	0	0,0%	0%	0	0,0%	0%	0	0,0%	0%	0	0,0%	0%	0	0,0%	0%	0	0%
	TOTAL NO. OF INSPECTIONS	1572	42,59	%	811	21,99	%	259	7,0%	<u></u>	432	11,79	%	622	16,89	%	36	96
			(%4)	)		(%4	)		(%4)	)		(%4	)		(%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.

Number of Contraventions and Fines imposed on 12 Legal Proceedings completed in 2019 for **Table 3.3:** Safety and Health issues in comparison with previous years

No	Laws/Regulations	Numl	oer of C	ontrave	ntions <sup>1</sup>	Total a		fines char os €	rged in
		2016	2017	2018	2019	2016	2017	2018	2019
1	The Safety and Health at Work Law of 1996 - 2015	12	92	17 <sup>3</sup>	11	21800	12750	36100	32500
2	The Factories Law of 1956, Chap. 134	0	0	2	0	0	0	300	0
3	The Safety and Health at Work (Accidents and Dangerous Occurrences Notification) Regulations of 2007	0	5	0	3	0	3300	0	1600
4	The Safety and Health (Minimum Requirements for Temporary or Mobile Construction Sites) Regulations of 2002 and 2015	24	13 <sup>4</sup>	17	6	29750	45200	20250	6250
5	The Management of Safety and Health Issues at Work Regulations of 2002	12	12	20	5	18800	17000	12700	5250
6	The Minimum Requirements for Safety and Health (Use of Work Equipment at Work) Regulations of 2001 and 2004	3	5	6	13	2600	8750	9000	39500
7	The Minimum Requirements for Safety and Health at the Workplace Regulations of 2002 and 2004	13	2	4	2	9250	4500	5250	1450
8	The Minimum Requirements for Safety and Health Signs at Work Regulations of 2000	1	0	0	0	750	0	0	0
9	The Minimum Requirements for Safety and Health (Use of Personal Protective Equipment at Work) Regulations of 2001	0	1	2 <sup>5</sup>	0	0	750	2000	0
10	The Safety and Health at Work (Manual Handling of Loads) Regulations of 2001	0	0	2	0	0	0	3000	0
11	The Employer's Liability (Compulsory Insurance) Laws of 1989 - 2011	0	0	0	0	0	0	0	0
12	The Safety and Health at Work (Protection from Asbestos) Regulations of 2006 and 2015	2	0	0	0	1500	0	0	0
13	The Safety and Health at Work (Biological Agents) Regulations of 2001	0	0	0	0	0	0	0	0
14	The Safety and Health at Work (Chemical Agents) Regulations of 2001 - 2012	0	0	0	1	0	0	0	500
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	0	0	0	0
17	The Essential Requirements (Lifts) Regulations of 2003	2	0	0	0	1500	0	0	0
тот	'AL	69	47	70	41	85950	92250	88600	87050

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

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

<sup>&</sup>lt;sup>3</sup> The sentence for one of the contraventions was 1 year of imprisonment with a two-year of suspension.

<sup>4</sup> The sentence for two of the contraventions was 1 year of imprisonment with a three-year of suspension.

<sup>&</sup>lt;sup>5</sup> The sentence for one of the contraventions was 3 months with a two-year of suspension.

Table 3.4: Analysis of Work Accidents for the Year 2019 by Economic Activity Sector, Gender, Age, Degree of Injury & Causation (Employed Persons only, during their work)

				GEN	DER	P	\GE		URY		C	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
1	SECTION A — AGRICULTURE, FORESTRY AND FISHING	33	1,52%											
2	Crop and animal production, hunting and related service activities	21	0,97%	21	0	0	21	0	21	3	10	2	4	2
3	Forestry and logging	9	0,42%	7	2	0	9	0	9	4	0	3	0	2
4	Fishing and aquaculture	3	0,14%	2	1	U	3	0	3	1		U	1	0
5	SECTION B — MINING AND QUARRYING	6	0,28%											
7	Mining of coal and lignite  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	2	0,09%	2	0	0	2	0	2	2	0	0	0	0
9	Other mining and quarrying	4	0,18%	4	0	0	4	1	3	0	1	1	1	1
10	Mining support service activities	0	0,00%	0	0	0	0	0	0	0	0	0	0	0
11	SECTION C — MANUFACTURING	378	<b>17,44%</b> 7,10%	104	50	0	454	0	454	40	54	47	20	9
12	Manufacture of food products  Manufacture of beverages	154 18	0,83%	104	50 4	0	154 18	0	154 18	42	6	17 1	32 6	1
14	Manufacture of tobacco products	0	0,00%	0	0	0	0	0	0	0	0	0	0	0
15	Manufacture of textiles	0	0,00%	0	0	0	0	0	0	0	0	0	0	0
16 17	Manufacture of wearing apparel  Manufacture of leather and related products	1	0,05% 0,05%	0	0	0	1	0	1	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	19	0,88%	19	0	0	19	0	19	2	10	3	4	0
19	Manufacture of paper and paper products	4	0,18%	3	1	0	4	0	4	0	0	1	0	3
20	Printing and reproduction of recorded media	<u>3</u>	0,14%	3	0	0	3	0	3	0	2	0	0	0
21	Manufacture of coke and refined petroleum products  Manufacture of chemicals and chemical products	8	0,05%	1 6	2	0	1 8	0	8	0 4	1	1	2	0
23	Manufacture of basic pharmaceutical products and pharmaceutical preparations	18	0,83%	7	11	0	18	0	18	7	4	1	5	1
24	Manufacture of rubber and plastic products	16	0,74%	16	0	0	16	0	16	2	10	0	4	0
25	Manufacture of other non-metallic mineral products	38	1,75%	36	2	0	38	1	37	11	8	4	15	0
26 27	Manufacture of basic metals  Manufacture of fabricated metal products, except machinery and	5 51	0,23% 2,35%	5 51	0	1	5 50	0	5 51	10	1 15	5	21	0
28	equipment Manufacture of computer, electronic and optical products	0	0,00%	0	0	0	0	0	0	0	0	0	0	0
29	Manufacture of electrical equipment	4	0,18%	4	0	0	4	1	3	0	1	0	3	0
30	Manufacture of machinery and equipment n.e.c.  Manufacture of motor vehicles, trailers and semi-trailers	3	0,09%	0	3	0	3	0	3	0	0	0	1	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	18	0,83%	18	0	0	18	0	18	3	9	1	5	0
34 35	Other manufacturing Repair and installation of machinery and equipment	10 4	0,46% 0,18%	8	0	0	9	0	10	0	3 0	0	3	0
36	SECTION D — ELECTRICITY, GAS, STEAM AND AIR CONDITIONING SUPPLY	11	0,51%	_			-						3	
37	Electricity, gas, steam and air conditioning supply	11	0.51%	11	0	0	11	0	11	5	3	1	2	0
38	SECTION E — WATER SUPPLY SEWERAGE, WASTE	41	1,89%	•								·		
39	MANAGEMENT AND REMEDIATION ACTIVITIES  Water collection, treatment and supply	6	0,28%	6	0	0	6	0	6	2	0	3	0	1
40	Sewerage	13	0,60%	12	1	0	13	0	13	5	2	2	3	1
41	Waste collection, treatment and disposal activities, materials recovery	20	0,92%	17	3	0	20	0	20	6	6	7	1	0
42 43	Remediation activities and other waste management services	2 333	0,09%	2	0	0	2	0	2	0	0	0	1	1
44	SECTION F — CONSTRUCTION  Construction of buildings	204	<b>15,36%</b> 9,41%	203	1	0	204	2	202	104	32	7	47	14
45	Civil engineering	20	0,92%	19	1	0	20	0	20	7	3	4	5	1
46 <b>47</b>	Specialised construction activities SECTION G — WHOLESALE AND RETAIL TRADE, REPAIR	109 312	5,03% <b>14,39%</b>	106	3	0	109	1	108	54	16	6	27	6
48	OF MOTOR VEHICLES AND MOTORCYCLES Wholesale and retail trade and repair of motor vehicles and	32	1,48%	30	2	0	32	1	31	5	10	7	9	1
	motorcycles Wholesele trade, except of motor vehicles and motorcycles													
49 50	Wholesale trade, except of motor vehicles and motorcycles Retail trade, except of motor vehicles and motorcycles	69 211	3,18% 9,73%	61 94	8 117	0	69 211	0	69 211	28 61	16 99	15 3	9 36	1 12
51	SECTION H — TRANSPORTATION AND STORAGE	149	6,87%											
52 53	Land transport and transport via pipelines Water transport	25	1,15% 0,14%	24	1	0	25 3	0	25	5 1	5 1	13 1	0	0
53	Air transport	3 0	0,14%	0	0	0	0	0	0	0	0	0	0	0
55	Warehousing and support activities for transportation	112	5,17%	93	19	0	112	2	110	41	33	21	14	3
56 <b>57</b>	Postal and courier activities SECTION I — ACCOMMODATION AND FOOD SERVICE	9 <b>572</b>	0,42% <b>26,38%</b>	8	1	0	9	0	9	4	1	4	0	0
58	ACTIVITIES Accommodation	320	14,76%	138	182	1	319	0	320	141	85	4	71	19
59	Food and beverage service activities	252	11,62%	179	73	2	250	1	251	100	52	55 55	33	12

				GEN	IDER	,	AGE		URY		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
<b>60</b>	SECTION J — INFORMATION AND COMMUNICATION Publishing activities	<b>21</b> 0	<b>0,97%</b>	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	3	0,14%	2	1	0	3	0	3	1	0	0	2	0
64 65	Telecommunications  Computer programming, consultancy and related activities	16 1	0,74%	14 0	2	0	16 1	0	16 1	7	0	4 0	2	3
66	Information service activities	1	0,05%	1	0	0	1	0	1	0	0	1	0	0
67	SECTION K — FINANCIAL AND INSURANCE ACTIVITIES	18	0,83%											
68	Financial service activities, except insurance and pension funding	14	0,65%	3	11	0	14	0	14	8	0	2	3	1
69	Insurance, reinsurance and pension funding, except compulsory social security	3	0,14%	1	2	0	3	0	3	1	0	2	0	0
70	Activities auxiliary to financial services and insurance activities	1	0,05%	0	1	0	1	0	1	0	0	1	0	0
71	SECTION L — REAL ESTATE ACTIVITIES	4	0,18%											
72	Real estate activities	4	0,18%	3	1	0	4	0	4	2	1	1	0	0
73	SECTION M — PROFESSIONAL, SCIENTIFIC AND TECHNICAL ACTIVITIES	23	1,06%											
74 75	Legal and accounting activities Activities of head offices; management consultancy activities	4 8	0,18% 0,37%	1 8	3	0	4 8	0	4 8	3	0	1 4	0	0
76	Architectural and engineering activities; technical testing and	4	0,37 %	3	1	0	4	0	4	2	1	1	0	0
77	analysis Scientific research and development	0	0,00%	0	0	0	0	0	0	0	0	0	0	0
78	Advertising and market research	1 4	0,05%	1	0	0	1	0	1 4	0	1	0	0	0
79 80	Other professional, scientific and technical activities Veterinary activities	2	0,18% 0,09%	2	0	0	2	0	2	0	0	0	1	1
81	SECTION N — ADMINISTRATIVE AND SUPPORT SERVICE ACTIVITIES	57	2,63%											
82 83	Rental and leasing activities 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	0	0,00%	0	0	0	0	0	0	0	0	0	0	0
85	activities Security and investigation activities	6	0,28%	4	2	0	6	0	6	1	1	2	2	0
86 87	Services to buildings and landscape activities  Office administrative, office support and other business support	22 28	1,01%	13 21	9 7	0	22	0	22	12	6	4	3	2
	activities SECTION O — PUBLIC ADMINISTRATION AND DEFENCE,	110		21	,	0	20	0	20	12	0	4	4	2
<b>88</b>	COMPULSORY SOCIAL SECURITY  Public administration and defence; compulsory social security	110	<b>5,07%</b> 5,07%	85	25	0	110	0	110	52	21	13	17	7
90	SECTION P — EDUCATION	23	1,06%	00	23	U	110	U	110	52	21	13	17	,
						_		_			_			_
91	Education SECTION Q — HUMAN HEALTH AND SOCIAL WORK	23	1,06%	4	19	0	23	0	23	13	3	1	1	5
92	ACTIVITIES	39	1,80%											
93	Human health activities Residential care activities	25 3	1,15% 0,14%	8	17	0	25 3	0	25 3	10	0	4 0	5 0	2
95	Social work activities without accommodation	11	0,51%	2	9	0	11	0	11	3	5	2	0	1
96	SECTION R — ARTS, ENTERTAINMENT AND RECREATION	10	0,46%											
97 98	Creative, arts and entertainment activities  Libraries, archives, museums and other cultural activities	0	0,00% 0,14%	0	0	0	3	0	3	0	0	0	0	0
99	Gambling and betting activities	0	0,00%	0	0	0	0	0	0	0	0	0	0	0
100 101	Sports activities and amusement and recreation activities  SECTION S — OTHER SERVICE ACTIVITIES	7 19	0,32%	1	6	0	7	0	7	3	1	0	3	0
	Activities of membership organisations	1	0,05%	0	1	0	1	0	1	1	0	0	0	0
103	Repair of computers and personal and household goods	5	0,23%	5	0	0	5	0	5	2	2	1	0	0
104	Other personal service activities  SECTION T — ACTIVITIES OF HOUSEHOLDS AS  EMPLOYERS; UNDIFFERENTIATED GOODS- AND SERVICES  PRODUCING ACTIVITIES OF HOUSEHOLDS FOR OWN USE	13 <b>6</b>	0,60%	13	0	0	13	0	13	6	2	3	1	1
106	Activities of households as employers of domestic personnel	6	0,28%	1	5	0	6	0	6	3	1	1	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	PINVALE HOUSE HOUSE OF EXTRATERRITORIAL ORGANISATIONS AND BODIES	3	0,14%											
109	Activities of extraterritorial organisations and bodies	3	0,14%	1	2	0	3	0	3	1	2	0	0	0
	TOTAL	2168		1540	620	5	2462	40	2450	819	FC4	240	420	120
	TOTAL	2168		1548	0∠0	5	2163	10	2158	619	561	248	420	120

Figure 3.1: Analysis of Work Accidents by Economic Activity for the Year 2019 (Employed Persons only, during their work)

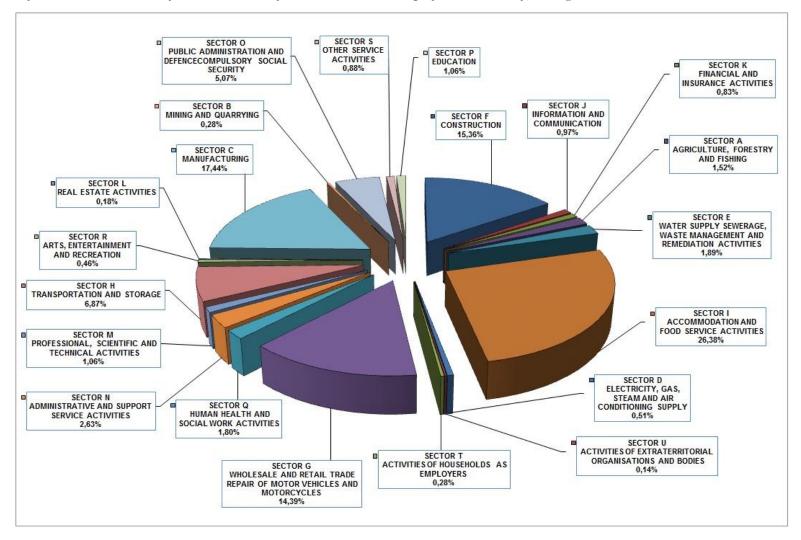


Figure 3.2: Accidents Reported during 2008 – 2019 (Employed Persons only, during their work)

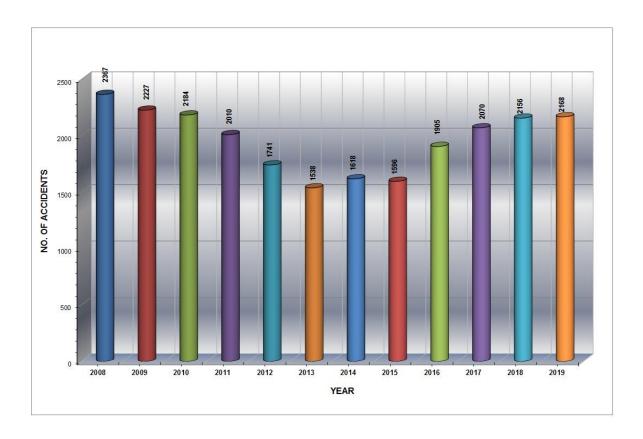


Figure 3.3: Analysis of Work Accidents Reported during the Year 2019 by Cause (Employed Persons only, during their work)

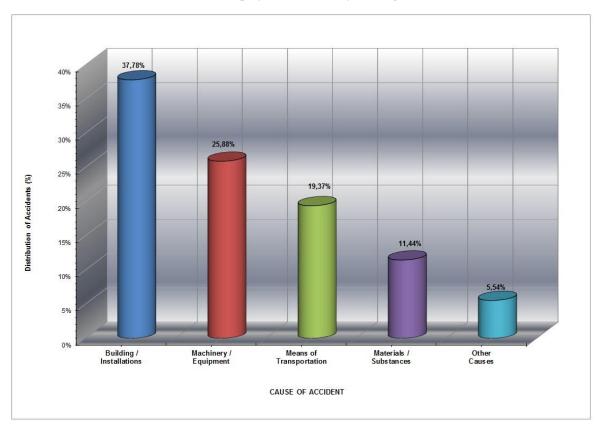


Table 3.5: Analysis of Fatal Accidents Occurred to employed person during work

**Total No. of Accidents: 13** (Accidents Reportable According to Legislation)

No.	District	Number of Victims	Economic Activity Sector of Employer	Accident Causation
1.	Nicosia	1	Storage of electrical products	Fall from a height
2.	Limassol	1	Restaurant / Food delivery service	Road accident
3.	Pafos	1	Quarrying works	Buried from bulk of earthling materials
4.	Larnaca	1	Manufacture of ready-mixed concrete	Contact with overhead electrical lines
5.	Larnaca	1	Painting of buildings	Fall from a height
6.	Limassol	1	Construction	Fall from a height
7.	Limassol	1	Repair of heavy vehicles	Crushed by the open-bed of a tipper lorry
8.	Nicosia	1	Manufacture of electric distribution and control apparatus	Fire - explosion - entrapment
9.	Limassol	1	Construction	Fall from a height
10.	Pafos	1	Newspaper distribution	Road accident
11.	Limassol	1	Construction	Fall from a height
12.	Limassol	1	Construction	Buried under a mound of soil
13.	Larnaca	1	Steel construction	Hit by a crane hook

Table 3.6: Analysis of Fatal Accidents Occurred to Self Employed Persons during Work

Total No. of Accidents: 2 (Accidents Reportable According to Legislation)

No.	District	Number of Victims	Economic Activity Sector of Employer	Accident Causation
1	Limassol	1	Construction	Fall from a height
2	Pafos	1	Construction	Fall from a height

 Table 3.7:
 Analysis of Fatal Accidents Occurred to Persons out of Work

**Total No. of Accidents: 2** (Accidents Reportable According to Legislation)

No.	District	Number of Victims	Economic Activity Sector of Employer	Accident Causation
1	Larnaca	1	Provision of Internet services	Fall from a height
2	Ammochostos	1	Home for aged	Charring due to fire

Table 3.8: Analysis of Fatal Accidents Occurred to Persons on their way to work

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

No.	District	Number of Victims	Economic Activity Sector of Employer	Accident Causation
1	Limassol	1	Retail sale of food and beverage	Road accident

Figure 3.4: Fatal Accidents Reported during the Period 2008 – 2019 (Employed Persons only, during their Work)

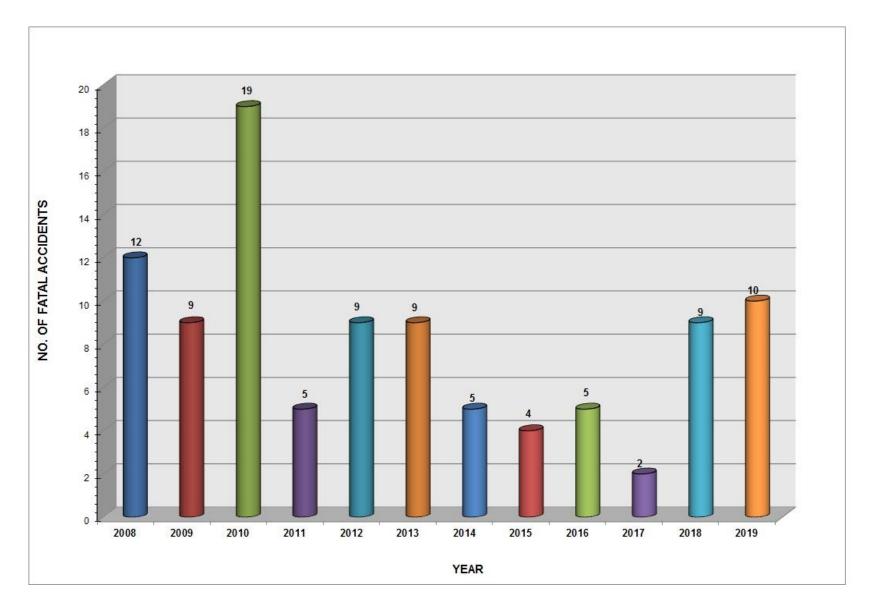


Figure 3.5: Frequency Index by Economic Activity for the Year 2019 (Preliminary Results)

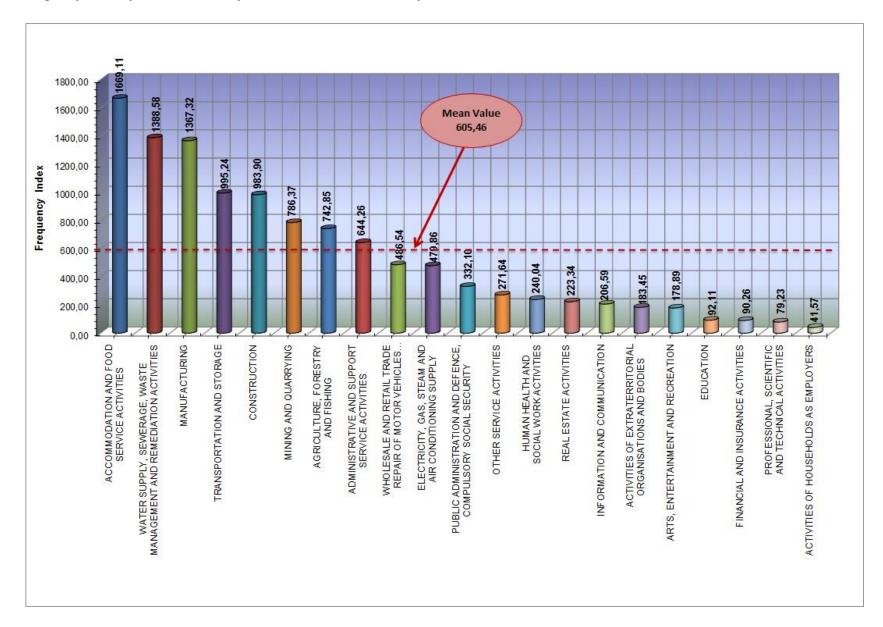
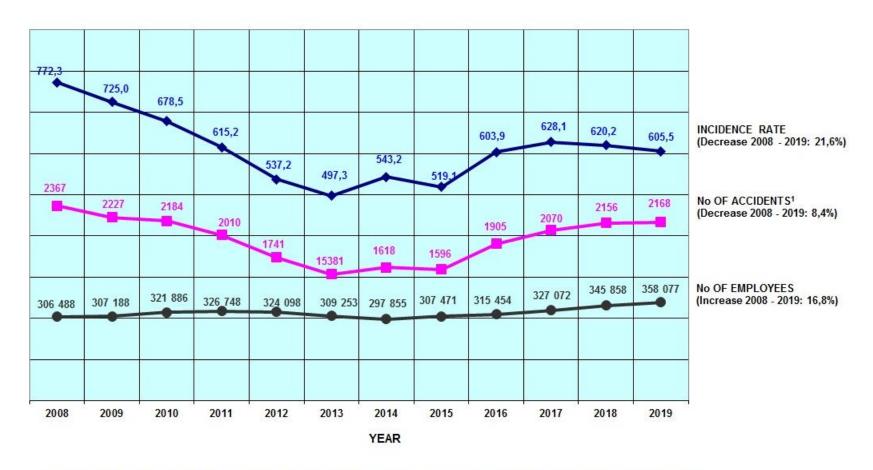


Figure 3.6: Trend of Frequency Index – No of Accidents, No of Employees, Totals – Averages for the Period 2008 – 2019



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

■ Classification, Labelling, Packaging and SDS control of chemicals ■ RAPEX (non ■ REACH Registration compliant products). ■ Complaints ■ Sampling (toys, stationary, 1% 4% ■ Authorization of superglues) ■ Sampling (toys, substances stationary, 1% superglues) 14% ■ REACH Registration 8%

Figure 3.7: Inspections of the Chemical Substances Section in 2019

Table 3.9: Number of Inspections for Chemicals per subject in 2019

Classification, Labelling, Packaging and SDS control of chemicals...

Subject	Number of Inspections *
Classification, Labelling, Packaging and SDS control of chemicals	214
REACH Registration	24
Sampling (toys, stationary, superglues)	43
RAPEX (non compliant products)	3
Complaints	12
Authorization of substances	2

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

Table 3.10: Number of samples analysed and number of non-compliant products in 2019

Analysis of:	Samples analysed	Non – Compliant Products
Superglues or other professional glues for Benzene, Toluene and Chloroform	29	7
Toys and child care articles for phthalates content (phthalates are toxic for reproduction)	66	28
Stationary articles (color markets) for Benzene, Toluene and Chloroform	27	0
Metallic articles (faux bijoux, pens, optical frames)	19	Not yet completed
Bleaching and other cleansing products for classification, labelling and packaging	10	2
Plastic floors for PAHs	7	5

**Table 3.11:** Machinery Inspections in 2019

										DISTRIC	т							
No	TYPE OF MACHINERY		NICOSI	A	ı	LIMASSO	DL		LARNAC	CA	F	AMAGU	STA	PAPHOS			TOTAL	
		No.	%(1)	%(2)	No.	%(1)	%(2)	No.	%(1)	%(2)	No.	%(1)	%(2)	No.	%(1)	%(2)	No.	%(3)
1	LIFTING MACHINERY AND DEVICES	107	22,25%	41,31%	56	21,37%	21,62%	91	32,85%	35,14%	3	4,35%	1,16%	2	3,92%	0,77%	259	22,72%
2	CRANES	104	21,62%	28,49%	137	52,29%	37,53%	82	29,60%	22,47%	27	39,13%	7,40%	15	29,41%	4,11%	365	32,02%
3	TOWER 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	109	22,66%	34,82%	67	25,57%	21,41%	65	23,47%	20,77%	39	56,52%	12,46%	33	64,71%	10,54%	313	27,46%
5	STEAM RECEIVERS	18	3,74%	100,00%	0	0,00%	0,00%	0	0,00%	0,00%	0	0,00%	0,00%	0	0,00%	0,00%	18	1,58%
6	AIR RECEIVERS	143	29,73%	77,30%	2	0,76%	1,08%	39	14,08%	21,08%	0	0,00%	0,00%	1	1,96%	0,54%	185	16,23%
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%
тот	AL No. OF MACHINERY INSPECTIONS	481	42,	19%	262	22,	98%	277	24,	30%	69	6,0	)5%	51	4,4	7%	1	140
			%	(4)		%	(4)		%	5(4)		%	(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.
- Percentage conribution on the Total Number of Inspections Cyprus wide.
   Percentage conribution of District Inspections on the Total Number of Inspections Cyprus wide.

## <u>Inspections of Inspectable Machinery and LPG Installations</u>

**Table 3.12:** Inspections of Inspectable Machinery

Machinery Type	1 (0222)	ber of ctions	Maximum Prescribed Period between		
	2018	2019	Inspections		
Cranes and other Lifting Devices	489	624	14 months		
Steam Boilers	390	313	14 - 18 months		
Steam Receivers	5	18	26 months		
Air Receivers	126	185	26 months		
Ropes	0	0	6 months		
TOTAL	1.010	1.140			

Table 3.13: LPG Inspection Analysis per District in 2019

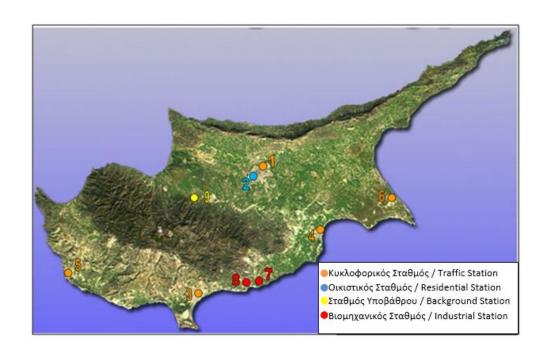
Inspection reason	Nicosia Limassol Larnaca Pafos Ammoch		Ammochostos	Total		
	Nr	Nr	Nr	Nr	Nr	Nr
Examination report of LPG installation on a vehicle	11	2	1	2	0	16
Complaint Investigation	13	7	0	2	0	22
Licensing of LPG Storage	190	226	50	234	18	718
LPG Storage Inspection (without Licensing)	6	16	0	2	0	24
Autogas Workshops or MOT Inspection	0	0	0	1	0	1
Autogas Refuelling Stations Inspection	4	1	0	1	0	6
Inspection Total	224	252	51	242	18	787

## <u>Installations for which Air Emission Permits and Industrial Emissions Permits</u> <u>were issued in 2019</u>

**Table 3.14:** Air Emission Permits and Industrial Emission Permits

Industrial Emissions Permits granted by the Minister of Labour, Welfare and Social Insurance for general use							
Installation Category	Number of Air Emission Permits granted in 2019						
Petrol Stations	200						
Petroleum Storage	4						
Smoked meet	3						
Wood Treatment	1						
Production of pharmaceuticals	1						
Crushing plants	1						
Total	210						
Industrial Emissions Permits granted by the Minister of Labour, Welfare and Social Insurance for installations using organic solvents							
Installation Category	Number of Air Emission Permits granted in 2019						
	granted in 2019						
Dry Cleaning	granted in 2019  3						
Dry Cleaning	3						
Dry Cleaning Use of Organic Solvents	3 1 4 by the Minister of Labour, Welfare of Agriculture, Rural Development						
Dry Cleaning Use of Organic Solvents  Total  Industrial Emissions Permits granted to and Social Insurance and the Minister of	3 1 4 by the Minister of Labour, Welfare of Agriculture, Rural Development						
Dry Cleaning Use of Organic Solvents  Total  Industrial Emissions Permits granted to and Social Insurance and the Minister and Environment of the Control of	3  1  4  by the Minister of Labour, Welfare of Agriculture, Rural Development onment  Number of industrial Emissions						
Dry Cleaning Use of Organic Solvents  Total  Industrial Emissions Permits granted by and Social Insurance and the Minister of and Environment of the Control	3  1  4  by the Minister of Labour, Welfare of Agriculture, Rural Development onment  Number of industrial Emissions Permits granted in 2019						

**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

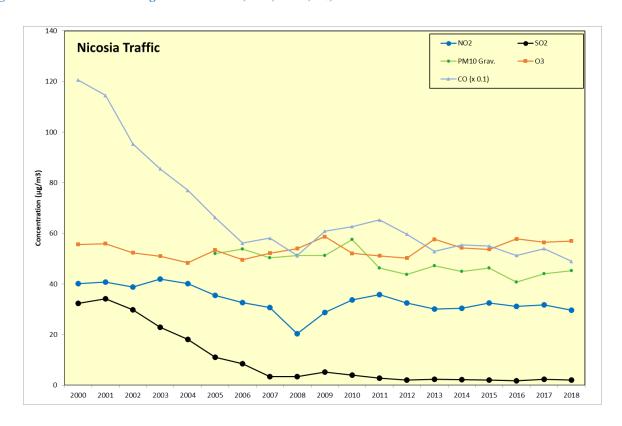


Figure 3.9: Annual average values of Ozone at Background Station at Ayia Marina (EMEP), Nicosia Traffic Station and Limassol Residential Station

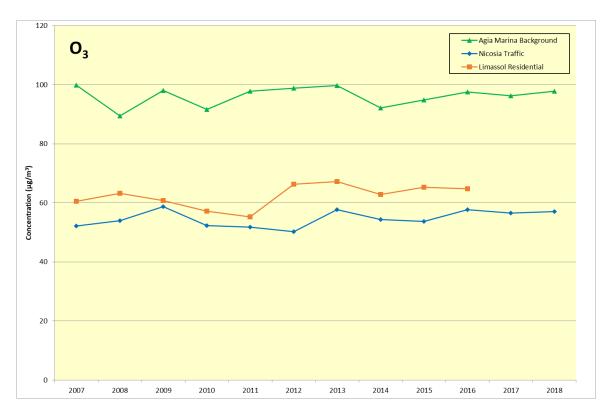


Figure 3.10: Annual average values of PM<sub>10</sub> at various locations in Cyprus

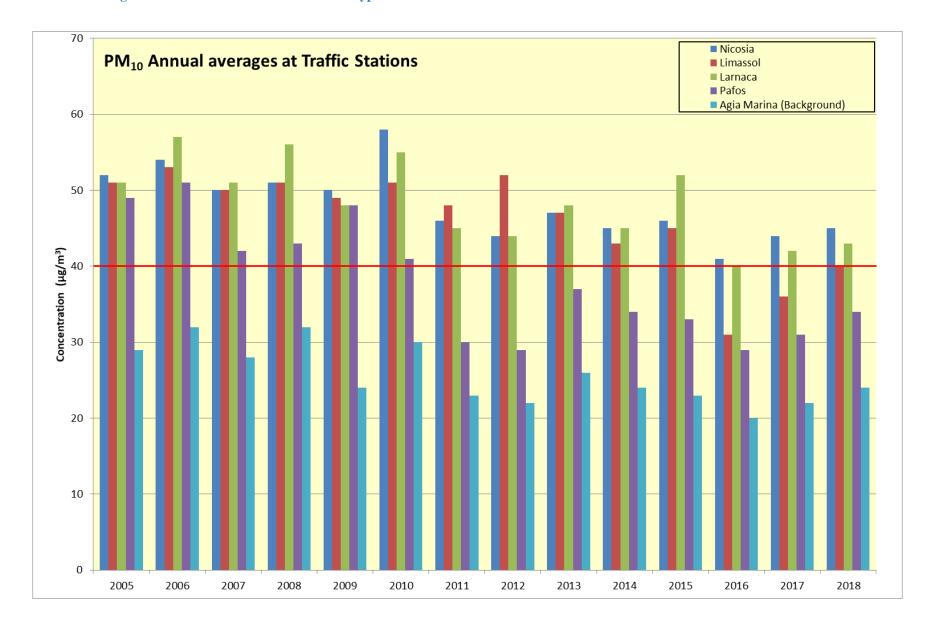


Figure 3.11: Number of exceedances of the 24hr limit value of PM<sub>10</sub> (50μg/m³) at various locations in Cyprus

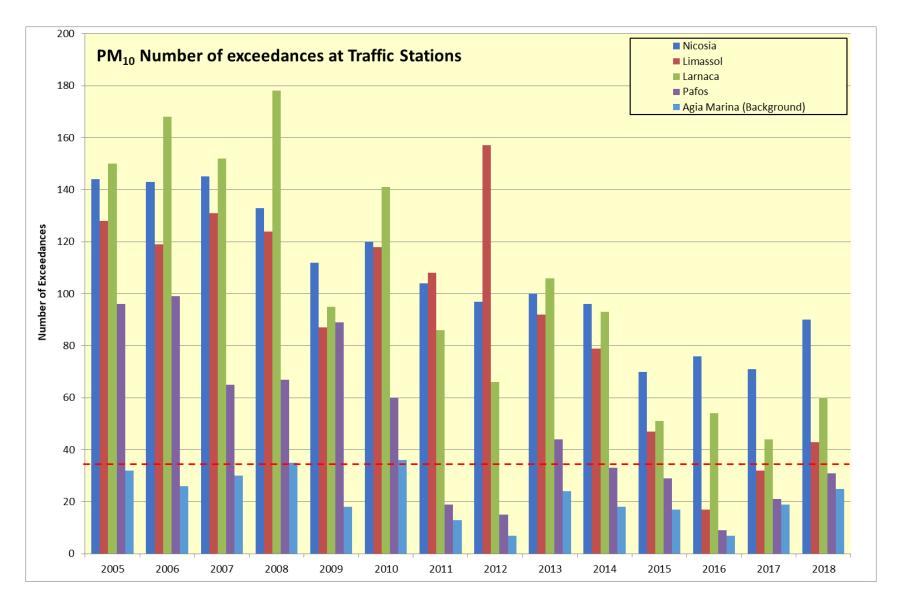
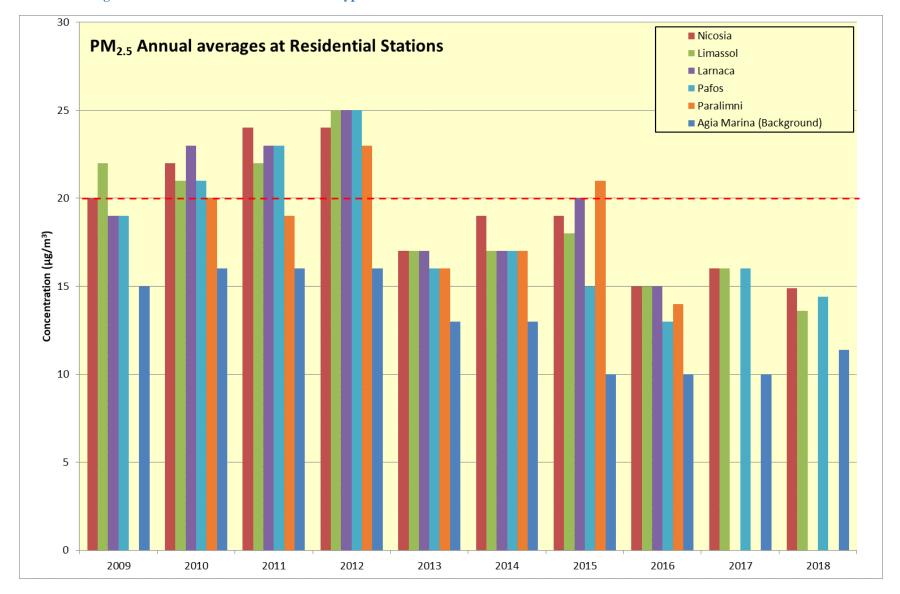


Figure 3.12: Annual average values of PM<sub>2.5</sub> at various locations in Cyprus



**Table 3.15:** National Annual Emissions per category (Year 2017)

Economic Activity	NOx	NMVOC	SO <sub>x</sub>	NH <sub>3</sub>	PM <sub>2.5</sub>	PM <sub>10</sub>	TSP	СО	Pb	Cd	Hg	DIOX
	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	3.66	0.08	14.72	NE	0.22	0.32	0.41	0.37	0.10	0.03	0.01	0.09
Manufacturing Industry & Construction	2.89	0.09	1.25	0.00	0.39	0.53	0.89	2.67	0.04	0.00	0.02	0.01
Aviation	0.47	0.03	0.03	NA	0.00	0.00	0.00	0.27	NA	NA	NA	NA
Road Transport	6.27	2.45	0.01	0.19	0.40	0.52	0.65	9.52	18.18	0.01	0.00	0.22
Navigation	0.19	0.01	0.20	NA	0.03	0.03	0.03	NA	NA	NA	NA	NA
Residential (Central Heating)	0.32	0.07	0.13	0.01	0.09	0.09	0.10	0.71	0.00	0.00	0.00	0.11
Agriculture (Combustion and Mobile)	0.48	0.04	0.05	0.00	0.02	0.02	0.02	0.12	0.00	0.00	0.00	0.00
Distribution /Storage of Oil Products	NO	0.59	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO
<b>Cement Production</b>	ΙE	IE	IE	NE	0.00	0.00	0.00	NE	NE	NE	NE	NE
Lime Production	ΙE	IE	IE	NA	0.00	0.01	0.04	NE	NE	NE	NE	NA
Asphalt	NA	0.01	NA	NA	0.00	0.02	0.11	0.00	NE	NE	NE	NE
Quarries	NA	NA	NA	NA	0.02	0.12	0.23	NA	NA	NA	NA	NA
Production of Food & Drink	NA	0.15	NA	NA	NE	NE	NE	NA	NA	NA	NA	NA
Paint Application	NA	2.03	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Dry Cleaning	NA	0.05	NA	NA	NE	NE	NE	NA	NA	NA	NA	NA
Solvents	0.00	1.32	0.00	0.01	0.03	0.03	0.03	0.07	0.00	0.00	0.00	0.00
Manure Management	0.02	0.96	0.00	4.92	0.05	0.29	0.47	0.00	0.00	0.00	0.00	0.00
Fertilizers	0.24	NO	NA	0.19	NA	NA	NA	NA	NA	NA	NA	NA
Reeds Burning	0.00	0.00	0.00	0.00	0.01	0.01	0.01	0.08	0.00	0.00	0.00	0.00
Waste Management	0.00	0.65	0.00	0.01	0.02	0.02	0.02	0.04	0.00	0.00	0.00	0.22
<b>Total Emissions</b>	14.54	8.55	16.39	5.33	1.29	2.02	3.02	13.85	18.32	0.04	0.03	0.66

Note:

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

