

## **Case Study**

# **The Situation of Gas and Petrol Stations in the Gaza Strip, related Hazards, and Workers' Rights**

**Prepared by:**

**Adv. Ali Sa'adi Al-Jerjawi**

**Gaza Strip 2020**

# Table of Contents

<b>Executive Summary</b>	<b>3</b>
<b>Introduction</b>	<b>4</b>
<b>Study framework (study problem, goal, importance, methodology, community)</b>	<b>5</b>
<b>Situation of petrol and gas stations in the Gaza Strip and their distribution</b>	<b>8</b>
<b>International and domestic legal framework related to the licensing of petrol and gas stations implemented in the Gaza Strip</b>	<b>21</b>
<b>Level of abidance with international standards for petrol and gas stations in terms of location surrounding environment, safety, preventive measures and avoiding risks</b>	<b>23</b>
<b>Potential risks related to gas and petrol stations, reasons of accidents and mechanisms to reduce them</b>	<b>33</b>
<b>The role of competent authorities in issuing licenses, inspecting and monitoring gas and petrol stations</b>	<b>36</b>
<b>The situation of workers' rights in gas and petrol station and its connection with public safety and occupational safety</b>	<b>46</b>
<b>Interventions by competent authorities and non-governmental bodies to reduce risks associated to this sector</b>	<b>49</b>
<b>Conclusions</b>	<b>51</b>
<b>Recommendations</b>	<b>52</b>

## Executive Summary:

This study aims to contribute in determining the hazards presented by random gas and petrol stations, in addition to identifying the criteria that must be met for the establishment of a petrol station or a gas storage facility, and required distances to ensure the safety and avoid danger to workers and citizens. It reviews the situation of gas and petrol stations in the Gaza Strip and their geographical distribution, as well as the international and domestic legal framework related to the licensing of gas and petrol stations, which is implemented in the Gaza Strip. It examines to which extent international and domestic standards are respected by gas and petrol stations in terms of location, surrounding environment, safety and preventive measures, and risk prevention. It focuses on the most prominent risks expected in petrol and gas stations, the reasons behind the occurrence of these risks, mechanisms for reducing them, the role of the relevant official and unofficial parties, and the responsibility of each party in licensing, control and inspection, rights of employees in gas and petrol stations and their connection with public safety and occupational safety. Finally, it focuses on the interventions undertaken by all official and unofficial bodies to reduce risks of this important sector.

To achieve the goals, the researcher used a descriptive and analytical approach to describe the problem and analyze all its dimensions, as well as a historical approach that defined the historical dimension of laws, legislation and the administrative system, and a deductive approach that contributes to reaching appropriate solutions, using geographic information systems technology, field visits, direct observation and interviews with specialists, and workshops.

Main findings of the study are that there is no unified system for determining the potential risks arising from the spread of petrol and gas stations, and that the geographical impact of the risks of explosion in gas and petrol stations differs from the risks of ignition and leakage of gas and fuel. Weather factors, temperatures and urban density all play a role in the spread of risks. The distribution of petrol and gas stations is subject to Palestinian laws that were updated after the establishment of the Palestinian National Authority, and the distribution of first aid and civil defense centers is subject to the provision of available government land without considering community needs or urban development, which is defined by local authorities

The study recommended increasing prevention and safety measures in stations that are outside the scope of service for civil defense and ambulance centers, and updating national laws and legislation for planning the selection of petrol and gas stations distribution locations, regulatory conditions and design standards.

## Introduction:

The fuel sector is one of the most important and dangerous sectors in the world. There are certain specificities concerning this sector in the Palestinian territories, in particular in the Gaza Strip, which is a small and densely populated area of 365 km<sup>2</sup>, in which about 2 million people live.

The imposition of a continuous blockade on the Gaza Strip for years has affected this important economic sector in terms of how this dangerous sector is managed. Repeated Israeli military attacks on the Gaza Strip have also affected important economic sectors, including the gas and petrol sector, and caused the destruction of the economic infrastructure.

Therefore, this study focuses on risk management at gas and petrol stations in the Gaza Strip, given that risks in these facilities can materialize at any time, that there is a lack of expert personnel, and that more than one party is involved in risk management at gas and petrol stations. Furthermore, those working nowadays in these sectors have not undergone any vocational training, or training related to occupational safety and health and fire management to preserve their own lives and prevent material damages.

Good risk management is one of the most important pillars for avoiding issues that can lead to disasters. Working to establish the foundations and determinants of risk management in each field helps in improving the quality of risk management at the time of its occurrence. Therefore, a culture of prevention should be implanted in everyone, who is responsible for managing this sector<sup>1</sup>.

Risks are no less important for fuel transport vehicles (for gasoline, diesel, kerosene), which are licensed and approved by the General Directorate of Civil Defense, the General Administration of Petroleum and the Ministry of Transport and Communications. The same is true for gas transport vehicles, which transport liquefied petroleum gas in large quantities in tanks with special specifications, which must be approved by the General Directorate for Civil Defense, the General Petroleum Administration, and the Ministry of Transportation.

At the same time, just and satisfactory terms and conditions of work must be guaranteed for workers in this dangerous sector as stipulated in Article 7 of the International Covenant on Economic, Social and Cultural Rights. They must include fair wages, equal remuneration for work of equal value without any discrimination, and working conditions that guarantee safety and health, rest and leisure, reasonable limitation of working hours, paid periodic vacations, as well as remuneration for official holidays, and in accordance with what is stipulated in the Palestinian Basic Law in the section on rights and freedoms, and the provisions of Labor Law No. 7 of 2000 and its by-laws.

---

<sup>1</sup> Global Facility for Disaster Reduction and Recovery, 2013

## **Study framework:**

### **\* Study problem:**

The phenomenon of the spread of random gas depots and fuel stations amongst the homes of citizens in the Gaza Strip poses a great danger to the lives of employees, and the lives of citizens and their properties. They present great danger, as these stations, stores and tanks may explode at any moment in the absence of enforcement of best standards for their safeguarding. They lack the minimum security and safety requirements set by specialized official authorities. Furthermore, they operate in flagrant violation of the Palestinian legislation that regulates the work of these stations. During the past five years, several big explosions were recorded in the Gaza Strip, in several refugee camps and areas, which left dozens of persons dead and injured. The last accident was caused by the explosion of a big tank belonging to a bakery owner in Al-Nuseirat refugee camp, in the Middle Gaza governorate, in a densely populated area. This accident was preceded by the explosion of a Gaza tank in Khan Younis in 2017, but it was located in an agricultural area and workers managed to escape without coming to harm.

The Al-Nuseirat fire cause the death of 25 citizens until now, in addition to dozens of injuries among women and children. Some of the injured are still in a critical condition and suffer from extremely serious burns. Furthermore, a number of commercial shops and vehicles were destroyed. A legal investigation committee was formed to follow-up on the Al-Nuseirat accident. The committee concluded that the fire was caused by a gas leakage inside the bakery, followed by the explosion of gas cylinders and the spread of the fire to adjoined facilities and shops.

In 2009, the explosion of a gas cylinder in a gas storage facility located between citizens' homes in the Jora Al-Aqad area in Khan Younis in the southern Gaza Strip caused the death of several citizens and injuries among others, and the destruction of a number of houses.

In view of these fatal accidents and other incidents that have occurred in past years, citizens are still wondering about the lack of serious action from competent authorities to remove these facilities from the vicinity of their homes, although this is a violation of the occupational safety and health conditions based on Article No. 90 of Labor Law No. 7 of 2000.

From the beginning of March 2020, competent authorities actually initiated procedures to remove gas filling storages from refugee camps and populated areas, in order to prevent fatal accidents among citizens and to find a designated place for them away from the place of residence.

### **\* Study aim:**

This study aims to contribute in identifying the risks of random gas and petrol stations, in addition to identifying the criteria that must be met to establish a petrol station or a gas storage facility, and the customary distances that must be observed to ensure safety and prevent risks to workers and citizens alike, through:

1. Identifying the situation of gas and petrol stations in the Gaza Strip and their geographical distribution.

2. Familiarization with the international and domestic legal framework related to licensing gas and petrol stations, which is in force in the Gaza Strip.
3. Researching the extent to which international and local standards are achieved in petrol and gas stations in terms of location, surrounding environment, safety, preventive measures and avoidance of risks.
4. Highlighting the most prominent risks expected in petrol and gas stations, their causes, and the mechanisms for reducing them.
5. Listing the relevant official and unofficial bodies and the role and responsibility of each party in licensing, monitoring and inspection.
6. Examining the situation of employees' rights in gas and petrol stations, and the link between these rights and public safety and occupational safety.
7. Interventions undertaken by official and unofficial bodies to reduce risks in this important sector
8. Issuing recommendation to concerned parties

## **Importance of the study**

### **1. Theoretical and scientific importance:**

The importance of the case study stems from the presence of a large group of petrol and gas stations randomly scattered on the ground, and the high rates of fatal accidents caused by these stations, in addition to the weakness of the system for control and inspection at these stations, and mitigation of the risks they cause, which are often disastrous for everyone.

### **2. Practical and applied importance:**

1. Ensuring the observance of legal standards, when licensing this dangerous sector
2. Placing competent authorities and non-governmental institutions before their responsibilities to reduce the risks of this sector, improve the professional situation, and achieve adequate work conditions and circumstances for employees.
3. Activating the role of workers' and employers' organizations towards organizing this labor sector into a union body that defends their rights and protects their lives from the certain dangers facing them.
4. Monitoring employers' abidance with the minimum standards related to workers' rights as stipulated by Labor Law No. 7 of 2000 and its by-laws, especially with regard to occupational safety and health.

## **Study methodology:**

The researcher relied on an analytical approach based on quantitative and qualitative data, by addressing the case in its temporal, geographic and legal context, through direct interviews with individual workers and employers, or through focus groups, as well as through available documents resulting from previous investigations of serious accidents in this sector. The methodology of data collection and analysis depended on the analysis of the aim of the study.

### **Study community:**

1. Gas and petrol station employees
2. Owners of gas and petrol companies in the Gaza Strip
3. Competent authorities
4. Union activists

### **Study methods:**

1. The temporal and geographical context.
2. The international standards for licensing gas and petrol stations and relevant domestic laws.
3. Qualitative and quantitative analysis and description.

### **Study tools:**

1. Individual interviews.
2. Focus groups
3. Previous studies and research by specialists
4. Results of investigations into previous incidents
5. Workshops and awareness meetings for workers
6. Media reporting about the issue

### **The temporal and geographical scope of the case study:**

This study was conducted in 2020, and its geographical scope are the five governorates of the Gaza Strip.

## 1. The situation of gas and petrol stations in the Gaza Strip and their geographical dissemination

The study aimed at analyzing the distribution pattern of gas and petrol stations within the borders of the Gaza Strip, and comparing the locations of these stations with criteria and planning conditions for choosing their sites. In addition, it aimed at building a geographical database for the gas and petrol stations that could be developed to serve competent authorities in making decisions related to these stations.

Until about five years ago (prior to 2015), gas and petrol stations in the Gaza Strip were not similar to those that can be found worldwide, neither in terms of shape nor the services they provided. Gazans were accustomed to seeing two rickety machines with a tin roof attached to two large columns and a free space that allows for the movement of vehicles. Nowadays, gas and petrol stations have attractive architectural patterns, and contains grocery stores and shops that sell car oils, toiletries and other goods.

Gas and petrol stations operating in the sector are witnessing a remarkable development in their work, as modern digital machines have been introduced to fill fuel for vehicles, which encouraged station owners to compete to acquire the latest devices and the most beautiful decorations, so that the stations appear comparable to those found in neighboring countries. This competition reflected a noticeable increase in the number of gas and petrol stations in the Gaza governorates despite the difficult economic reality, which was interpreted by government agencies as being linked to a political rather than a professional factor.

Fuel is an essential commodity. While people living in poverty and facing unemployment might be forced to reduce their consumption of essential goods, or buy them on credit, it continues to be in high demand. This explains businessmen's tendency towards the establishment of these stations.

By May 2014, there were 19 petrol stations registered and licensed in Gaza city, whereas the number of stations has exceeded 50 nowadays. There were more than 173 gas and petrol stations in the Gaza Strip by 2018.

Number of petrol stations established between 2007 and 2018

Governorate	Year 2007	Year 2018	Stations under establishment	Number of stations established after 2007
North	20	24	2	6
Gaza	36	59	2	25
Middle	19	31	0	12
Khan Younis	29	32	3	6
Rafah	16	27	2	12
Total	120	173	9	61

Source: General Administration for Petroleum, 2018

In light of the collapse of commercial activity in the Gaza Strip, some people abandoned

investment in the real estate market and turned to investing in the petroleum sector. They established gas and petrol stations on vital plots of land in central Gaza City, at a financial cost of more than half a million dollars.

Fuel is a commodity that has no expiry date - it does not spoil and its price does not decline - unlike food or clothing, and other commodities that suffer recession and whose prices have declined due to low demand. This encourages investment in petroleum.

In 2015, the Public Petroleum Commission in the Gaza Strip has issued a decision stopping the issuance of licenses for petrol stations. In July 2017, the Commission resumed granting licenses. The regulatory conditions for gas and petrol stations in the Gaza Strip imposes sharp disagreements between investors and the neighbors of the stations on the grounds that they may pose a danger to them, especially if they are established inside residential neighborhoods. However, their current dissemination seems to strongly indicate that they have become the only investment outlet in the Gaza Strip

Number of natural gas stations established between 2007 and 2018

Governorate	Year 2007	Year 2018	Stations under establishment	Number of stations established after 2007
North	5	7	0	2
Gaza	8	13	0	5
Middle	7	12	1	6
Khan Younis	4	7	0	3
Rafah	4	5	0	1
Total	28	44	1	17

Source: General Administration for Petroleum, 2018

Based on article 4 of the Urban Planning Law No. 28 of 1936 and its amendments, and taking into account considerations of public interest, the Central Committee for Building and Urban Planning in the Gaza Strip has issued a regulation regarding the organization and licensing of gas and petrol stations in the Gaza Strip. Article 2 of this regulation deals with classification of gas and petrol stations in 3 categories:

- **Category (a) petrol station:** A large station equipped to supply all types of machinery with all types of fuels and oils, lubrication services, car wash, emergency electrical maintenance, tire maintenance, and the provision of meals and snacks. Its licensing requirements include:

1. The area of the site shall not be less than 2500 square meters.
2. The main interface of the site should not be less than 60 meters
3. Establishing a fence around the site meeting the specifications and conditions of the competent committee.
4. Establishing an overhead canopy over the refueling site, so that the height of the lowest construction point in the roof of the canopy is not less than six meters calculated from the station's floor after paving.

5. The distance between the ventilation openings and the nearest public or private building or any facility of any kind shall not be less than 30 meters
6. The availability of parking space for a number of not less than 16 cars at a distance of no less than 15 meters from the fuel pumps
7. The availability of a backup generator sufficient to supply all the station's facilities with electricity. The location of the generator should be at a distance of no less than 15 meters from the ventilation openings and within a room prepared for this purpose.
8. Availability of a source of suitable water for various uses.
9. Availability of tire inflators and gauges and their maintenance.
10. Availability of a reasonable place to wash, lubricate and replace automobile oils and provide emergency maintenance for electrical faults.
11. Availability of two toilets for men and the same for women, with all the necessary sanitary equipment.
12. Availability of a suitable canteen to serve light meals and soft drinks.
13. Availability of a suitable place to provide first aid, equipped with all capabilities, tools and materials needed to provide such assistance when necessary.
14. Providing the site with a firefighting system, materials, tools and capabilities that are approved by the Civil Defense Directorate, or the device responsible for fighting fire.
15. Allocating a suitable place for the disposal of solid and liquid waste in a decent manner, which has been approved by the Ministry of Health.
16. The distance between the reservoir filling openings and the nearest facility on the site should not be less than 15 linear meters.
17. In determining the entry and exit points to or from the site, the station is subject to the specifications of the Ministry of Communications.
18. Availability of a public and private telephone communication system or an alternative communication system to secure emergency services at the station

**- Category (b) petrol station: A medium sized station equipped to supply all types of machinery with all types of fuels. Its licensing requirements include:**

1. The area of the site shall not be less than 1200 square meters.
2. The main interface of the site should not be less than 40 meters
3. Establishing a fence around the site meeting the specifications and conditions determined by the competent committee.
4. Establishing an overhead canopy over the refueling site, so that the height of the lowest construction point in the roof of the canopy is not less than six meters calculated from the station's floor after paving.
5. The distance between ventilation openings and the nearest public or private building or any facility of any kind shall not be less than 20 meters

6. The availability of a parking space for 6 cars at a distance of no less than 10 meters from the fuel pumps
7. The availability of a backup generator sufficient to supply all the station's facilities with electricity. The location of the generator should at a distance of no less than 15 meters from the ventilation openings and within a room prepared for this purpose.
8. Availability of a source of water suitable for various uses.
9. Availability of tire inflators and gauges
10. Availability of a toilet for men and another for women, with all the necessary sanitary equipment
11. The site may include a cafeteria to provide soft drinks and small services to visitors
12. There must be a cabinet for first aid supplies that includes all the materials recommended by the Ministry of Health
13. Availability of all equipment, tools, and capabilities needed for firefighting that are recommended by the Civil Defense Directorate or the agency responsible for firefighting.
14. An appropriate place must be allocated on the site for the collection and transfer of solid and liquid waste in a manner approved by the Ministry of Health.
15. The distance between the openings designated for filling the ground tanks and the nearest facility on the site should not be less than 10 meters.
16. Availability of a telephone system or any alternative system that ensures emergency services for the station
17. The station, in determining the entry and exit system to or from the site, is subject to the specifications of the Ministry of Communications.

**- Category (c) petrol station: A small sized station equipped to supply all types of vehicles that:**

1. The area of the site shall not be less than 600 square meters.
2. The main interface of the site should not be less than 20 meters
3. Establishing a fence around the site meeting the specifications and conditions determined by the competent committee.
4. Establishing an overhead canopy over the refueling site, so that the height of the lowest construction point in the roof of the canopy is not less than five meters calculated from the station's floor after paving.
5. The distance between ventilation openings and the nearest public or private building or any facility of any kind shall not be less than 15 meters
6. The availability of a backup generator sufficient to supply the station's facilities with electricity. The location of the generator should at a distance of no less than 15 meters from the ventilation openings and within a room prepared for this purpose.

7. Availability of a telephone system or any alternative system to provide emergency services to the station
8. Availability of tire inflators and gauges
9. Availability of a medical cabinet with first aid supplies
10. Availability of a suitable source of water for covering station uses
11. Availability of a toilet for men and another for women, with all the necessary sanitary equipment.
12. Availability of all equipment, tools, and capabilities needed for firefighting that are recommended by the Civil Defense Directorate or the agency responsible for firefighting.
13. An appropriate place must be allocated on the site for the collection and transfer of solid and liquid waste in a manner approved by the Ministry of Health.
14. The width of the path to enter or exit to from the site shall not be less than five meters
15. The turning radius of the entrance and exit shall not be less than ten meters.
16. The distance between the openings designated for filling ground tanks and the nearest facility on the site should not be less than 10 meters.

**Article (7) stipulates the longitudinal distances between stations as follows:**

- The distance between the location of two stations of category (a) located on a regional road shall not be less than 10,000 meters
- The distance between the location of two stations located on a main road shall be as follows:
  - a. If the two stations belong to category (a), the required distance shall be of 5000 meters
  - b. If one of the stations belongs to category (a) and the other to category (b) or (c), the required distance shall be of 2000 meters
  - c. If the two stations belong to category (b), the required distance shall be 2000 meters
  - d. If one station belongs to category (b) and the other to category (c), the required distance shall be of 1500 meters
  - e. If the two stations belong to category (c), the required distance shall be of 1000 meters

**The distance between two stations located on a local road shall be as follows:**

- a. If the two stations belong to category (a), the required distance shall be of 1000 meters
- b. If one of the stations belongs to category (b) and the other to category (c), the required distance shall be of 500 meters
- c. If the two stations belong to category (c), the required distance shall be of 500 meters

In addition, the regulation about safety conditions, fire prevention, protection methods, specifications of firefighting means and alarms that must be available in petrol stations

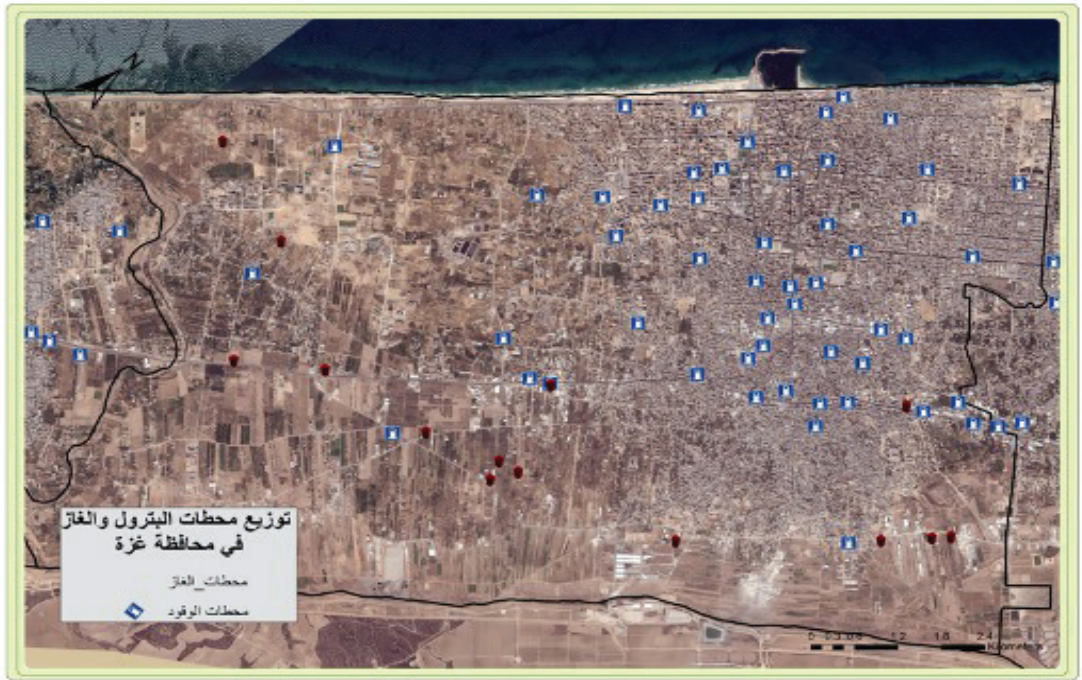
and transport vehicles, which has been issued by the Civil Defense, stipulates the specifications for fuel tanks in its article 36, the specifications for fuel pumps in its article 37 and electrical arrangements in its article 38, and conditions for fire prevention and control in its article 39.

The number of petrol stations in the Gaza Strip is currently more than 169 stations distributed within the five governorates of the Gaza Strip, while there are 48 gas stations distributed within the five governorates as well. Their geographical distribution is shown in the following maps:

### Distribution of petrol and gas stations in the North Governorate:



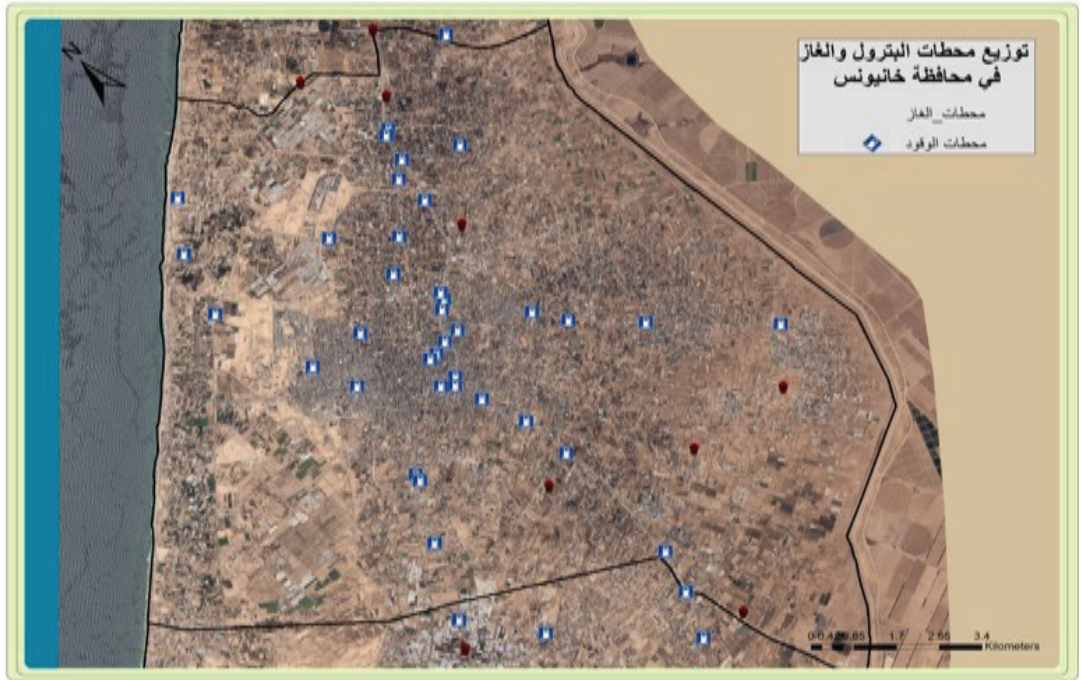
**Distribution of petrol and gas stations in the Gaza Governorate:**



**Distribution of petrol and gas stations in the Middle Governorate:**



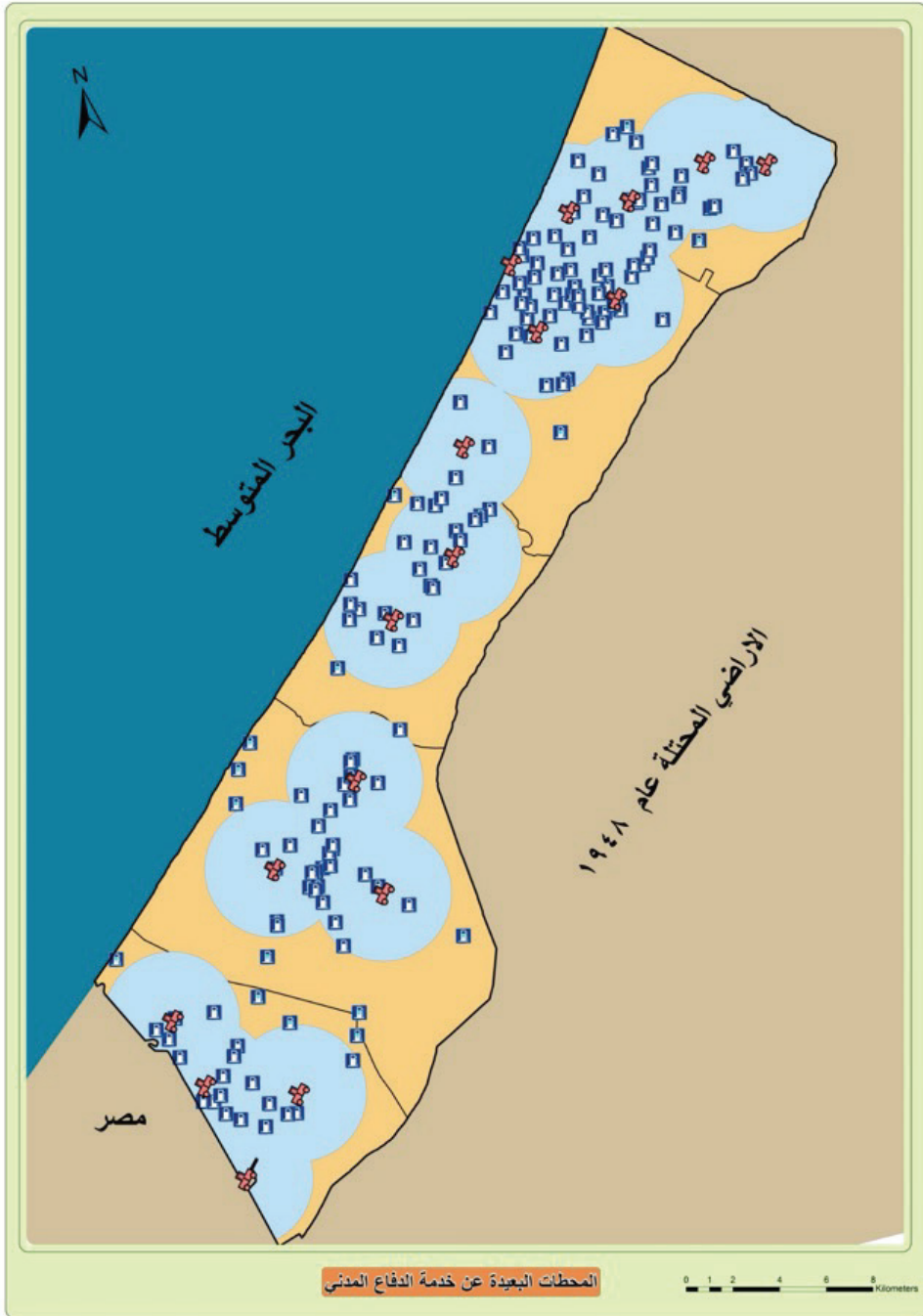
Distribution of petrol and gas stations in the Khan Younis Governorate:



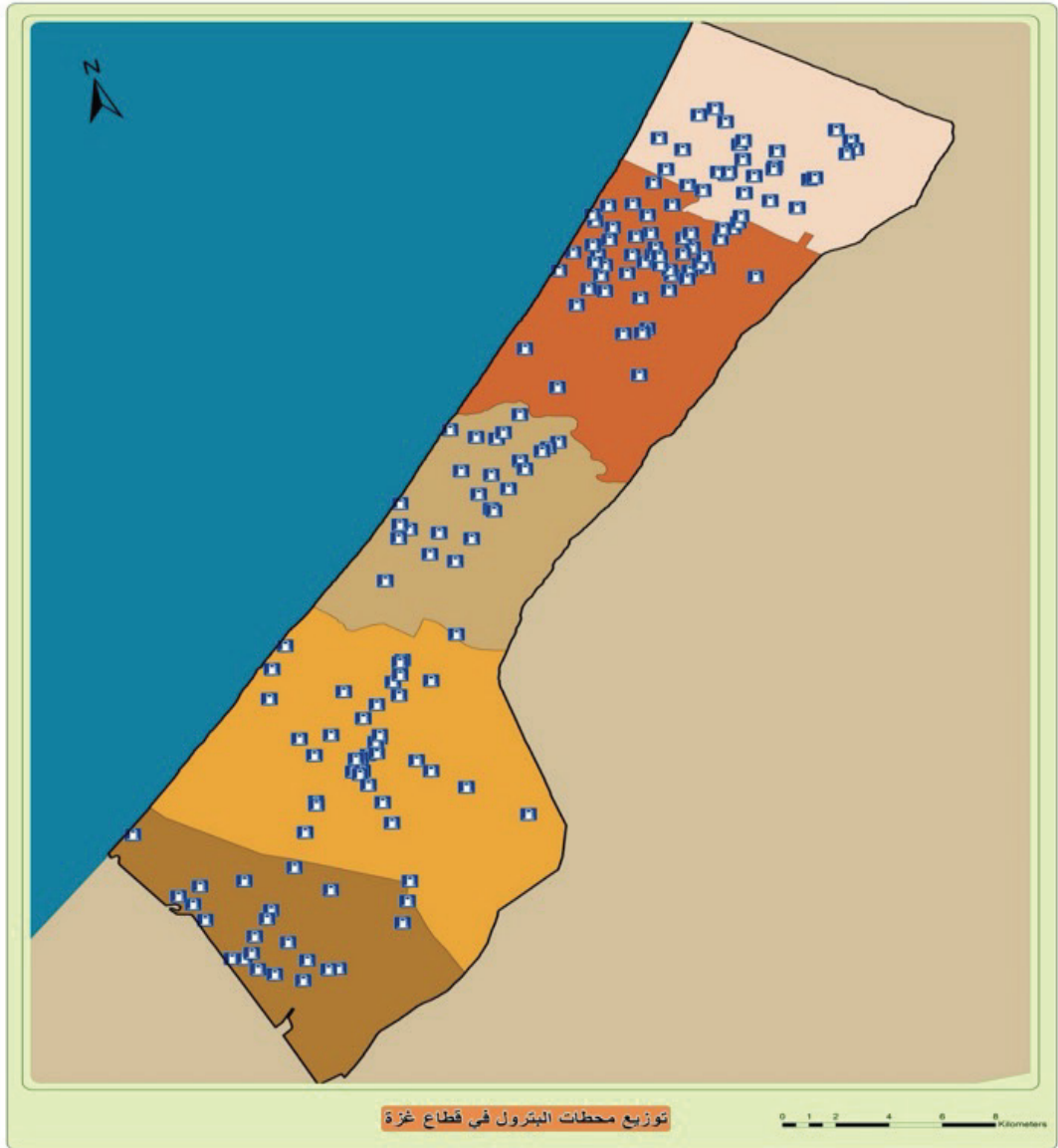
Distribution of petrol and gas stations in the Rafah Governorate:



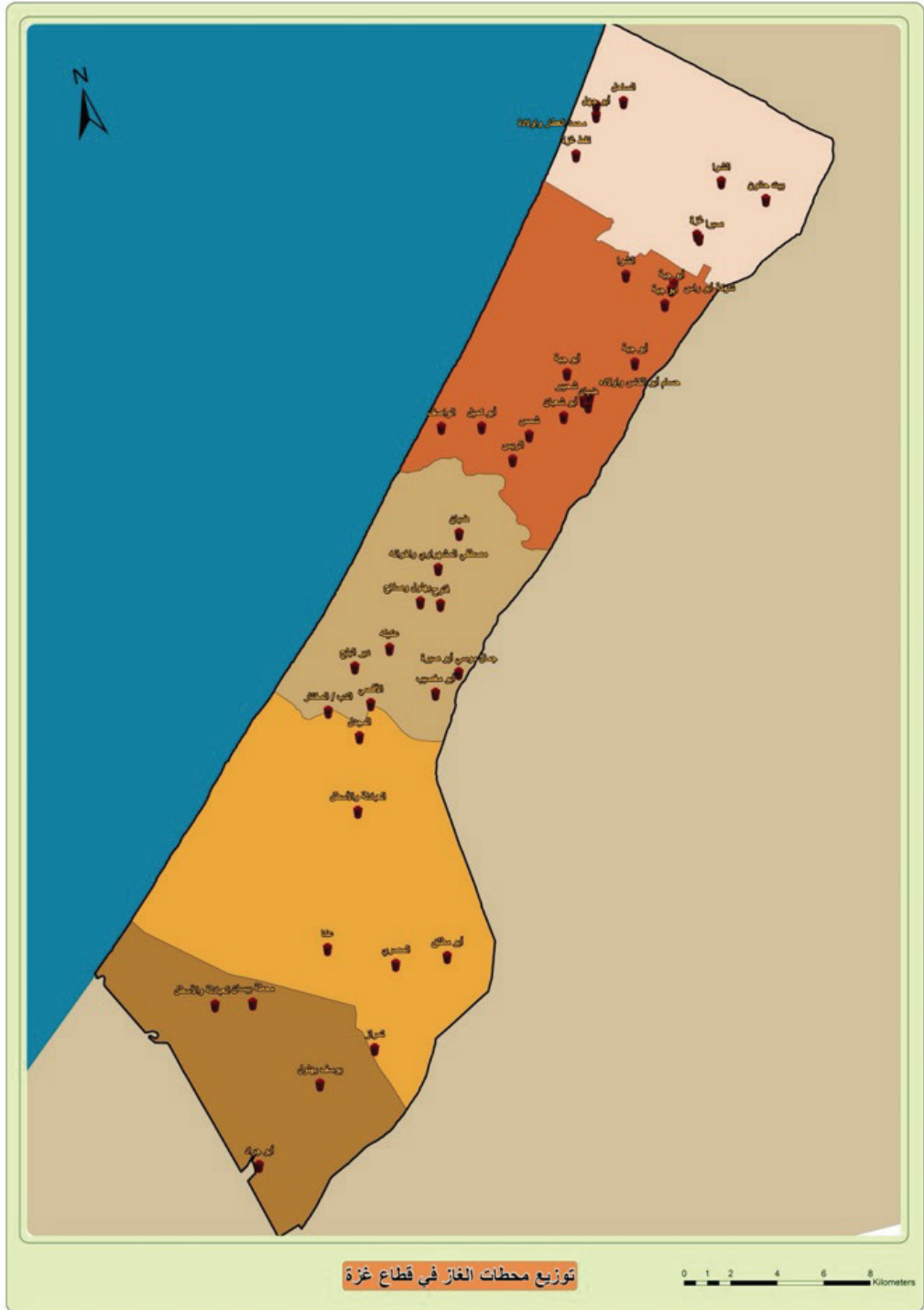
### Stations that are far away from services of the Civil Defense



### Distribution of petrol stations in the Gaza Strip



### Distribution of gas stations in the Gaza Strip



### Distribution of Civil Defense stations in the Gaza Strip



## 2. International and domestic legal framework related to the licensing of gas and petrol stations implemented in the Gaza Strip:

When issuing licenses for gas and petrol stations, countries worldwide rely on several standards aiming at protecting society, and in order to apply public safety standards and occupational health and safety standards in work sites and avoid the occurrence of serious disasters and accidents that may claim the lives of citizens and workers. Global protocols are signed between countries through organizations concerned with these risks and working to avoid them in order to preserve the national product and financial returns from this important sector, which is part of these countries' budgets and their local and international investments, in addition to the need to preserve nature, reduce environmental pollution and prevent the spread of deadly diseases among the populations. They also aim to put in place tight systems to protect workers inside these stations.

After its establishment in 1993, the Palestinian Authority adopted a scientific and practical approach in line with global practices, international standards, protocols and regulations when licensing gas and petroleum stations. It also corrected the conditions of a large number of these facilities operational prior to its establishment, as the Gaza Strip was subjected in previous decades to Egyptian administration then to the Israeli occupation administration. These administrations applied the laws in force in those countries at that time. Then, the legal framework evolved to reflect the Palestinian reality, the nature of society with its various components, the economic, social and political situation, and its connection with the international community. Therefore, the Palestinian Authority worked on issuing a set of laws and rules governing licenses for gas and petrol stations, which are in line with international standards and applicable global regulations. This later became the domestic legal system that must be implemented and resorted to when issuing licenses. The laws have assigned responsibilities to several official bodies to set their own conditions for obtaining licenses, monitoring, inspection and taking action against those found in contravention of laws and regulations. The most important of these laws and decisions is the **Regulation for the Licensing of Domestic Gas Filling Stations' Construction of the Year 2005**.

In its session No. 17/2004 on 22/12/2004, the Central Regulatory Committee in Gaza Strip governorates issued a special licensing regulation. This regulation determines the conditions and organizational conditions that must be met at the project site, and the constructions that it shall consists of. This regulation does not exempt the license applicant from implementing any technical, preventive, environmental or health conditions stipulated in any other laws or regulations. Any construction related to any such project may be undertaken only after obtaining a license from the committee. The regulatory license for constructions shall be issued by the committee on whose organizational boundaries the agricultural or industrial land for the project to be established is located, after paying the fees specified in the Building Permits Fees Regulation No. 2 of 1998, without prejudice to the committee's right to levy any taxes or other fees stipulated in any other law or regulation.

The distance between any of the components of the project or its extensions located

under or above the surface of the earth and the boundaries of the residential, commercial or tourist areas approved in the organizational project must not be less than 30 meters, with the exception of the constructions designated for the administrative work of the project. The general rules in force regarding regulatory distances shall be applied to them.

The project's land area must be determined by an official survey prepared by the Public Survey Department, or approved by it. As for the lands not covered by the settlement, or those that are under settlement procedures, the public and private location of the project must be certified by the land settlement officer. The site shall be connected to a public road or it shall have a special right of way connected to a public road according to the width shown in Table No. (1) of Article (12).

The project site must be surrounded by a concrete fence with a height of not less than two meters, with the exception of the facade overlooking the road. This fence must be built according to the determined by the Ministry, and the internal fence must be surrounded by the types of trees specified by the Ministry of Agriculture. The Ministry determines the engineering and other technical terms and conditions for the construction of the project, in particular:

- 1 - The heights of the ceilings
- 2- Ground construction for each category of the project.
- 3- Infrastructure for each category of the project.
- 4- Dimensions of internal construction for each project separately.
- 5- Any other technical, professional or preventive conditions or specifications.
- 6- Paths and dimensions of sewage and rainwater drainage lines.

The license applicant must submit an initial request to the committee expressing his/her desire to obtain a license to build the project, accompanied by the property deed or an equivalent document and the general location, in which he requests permission to submit project maps. The committee must decide within 30 days if the request is approved or rejected, providing due justifications. In case of approval, the license applicant must submit to the committee a portfolio of documents containing: (A) The property deed or its equivalent. (B) Map of the general site. (C) Engineering maps for the project at a scale of 1/100 approved by the following authorities: 1- The Ministry of Labor. 2- The Ministry of Transportation. 3- Ministry of Health. 4- Ministry of Interior (Civil Defense). 5- Environmental Quality Authority. 6- Syndicate of Engineers (details about the regulations are provided in annex).

Table of classification of stations and standards for each category

No.	Station category	Tanks capacity	Minimum area of station land	Minimum area of interface space	Minimum of road width on which the project is located
1	Category (a)	Bigger than 141 tons	5000 m <sup>2</sup>	50 meters	16 meters
2	Category (b)	From 50 tons to 141 tons	4000 m <sup>2</sup>	50 meters	16 meters
3	Category (c)	Up to 50 tons	3000 m <sup>2</sup>	40 meters	12 meters

Source: Ministry of Local Government, 2002

There are additional conditions imposed by competent authorities, when submitting a request for obtaining certifications to complete the licensing process. The role of each authority and their responsibilities will be detailed later on in this study.

### **3. Level of abidance with international standards for petrol and gas stations in terms of location, surrounding environment, safety, preventive measures and avoiding risks**

After reviewing Law No. 3 of 1998 regarding Civil Defense, especially Article 30 thereof, and upon obtaining the approval of the Supreme Council of Civil Defense in its session held on 12/24/1998, the Civil Defense decided to adopt a regulation for safety conditions, fire prevention, protection methods, specifications of fire extinguishing means and warning. This regulation, which must be applied in gas filling stations, transportation and distribution vehicles, and storage places for LPG cylinders, should be reviewed taking into account its harmonization with international standards and its reflection on the surrounding environment of the stations, given that this regulation is part of a unified international system adopted by the Palestinian Authority and stipulated in the domestic legal framework.

The provisions of this regulations can be summarized as follows:

#### Article (1) Definitions and general provisions

- [1] Liquefied petroleum gas: It is a group of gases with different natural chemical properties and characteristics. They are subjected to specific degrees of pressure inside closed vessels to convert them from a gaseous state to a liquid state.
- [2] Gas filling and selling stations: They are the places designated and licensed to engage in the activity of selling and filling gas cylinders, whether they are privately owned or affiliated with a government agency, authority or facility.
- [3] Gas transport vehicles: They are the vehicles transporting liquefied petroleum gas in large quantities (tanks).
- [4] Gas cylinders distribution vehicles: They are the vehicles transporting gas in the form of cylinders.
- [5] Gas cylinders storage places: They are the places designated for storing liquefied petroleum gas cylinders, whether they are filled or empty.
- [6] Shops selling liquefied petroleum gas cylinders: They are the places designated for selling liquefied petroleum gas cylinders, whether they are empty or filled with nothing else.
- [7] The Regulations for Inspection, Seizure, Investigation and Penalties: It is the regulation issued by the Minister of Interior and the Chairman of the Supreme Civil Defense Council to determine the procedures for inspection, seizure and investigation of violations and abuses related to civil defense work and the penalties and fines prescribed for them.
- [8] Civil Defense delegate: He is the person or persons authorized by the General Directorate of Civil Defense or one of its centers to carry out inspections of facilities for filling and storing liquefied petroleum gas, as well as vehicles for its transportation, distribution, circulation and its employees, and to seize and investigate violations and abuses related to civil defense work in accordance with the procedures specified for the relevant regulation for the purpose of ensuring the safety of the facility or

vehicle, safety equipment and tools, firefighting, and imposing the penalties and fines specified for each of them.

[9] The Competent Authorities: The Ministry of Local Government, the Ministry of Transport and Communications, the General Directorate of Civil Defense and other bodies related to licensing.

[10] Person Responsible for Safety: The person appointed or assigned to be responsible for all matters relating to safety and security work in the places related to filling and storing liquefied petroleum gas, as well as vehicles for transporting, distributing and handling gas cylinders, and the person in whose name the license is issued or his representative is considered responsible for safety in all cases.

[11] Specifications:

a- Palestinian Standard Specifications, in accordance with the Palestinian Standards and Metrology Law No. (6) of the Year 2000.

b- International specifications: these are the American and European specifications, and they are the ones to be reviewed. If the material or machine to be used has been manufactured in another country, its safety specifications must be approved by the competent government agencies, and in all cases a document must be submitted proving the availability of all safety rules and requirements in the material or machine in question "when Palestinian specifications are not available".

Article (2) It is necessary to provide safety and fire prevention requirements in the design and construction of gas filling stations and places for storing gas cylinders in accordance with the requirements stipulated in this regulation.

Article (3) It is not permissible to start construction works before obtaining an initial permit from the General Directorate of Civil Defense.

Article (4) The application to obtain the permit stipulated in the previous article shall be submitted on the form prepared for this purpose to the General Directorate of Civil Defense. It shall be signed by the owner of the permit and plans and documents shown in the form shall be attached after obtaining the approval of the competent authority for granting the license.

Article (5) The declaration shall be issued on the form prepared for this, signed by the Director General or his legal representative.

- In the event that the request is rejected, the decision of rejection must be justified.

- The permit is issued for a period of one year to meet the safety and prevention requirements set forth in the regulation, provided that the renewal is done annually, unless it conflicts with the preventive conditions in effect at the time of renewal.

Article (6) In order to achieve public safety, it is not permissible to practice any activity that does not correspond to the purpose designated for its establishment without the approval of the General Directorate of Civil Defense.

Article (7) The station must be equipped with all means related to the conditions of prevention and public safety in accordance with these regulations.

Article (8) The owner of the station or his representative must undertake maintenance of the safety and fire protection devices, so that they remain in good condition and fit for use when necessary. No obstacles may be placed that prevent their use.

Article (9) It is necessary to have the guaranteed roads and means to facilitate the arrival of firefighting vehicles to the station to which the firefighting or rescue teams are called, in accordance with the conditions set forth in the regulation, and it is absolutely forbidden to disrupt these roads and means or to put obstacles that prevent their continued validity at all times.

Article (10) The owner of the station is obligated to post the safety and fire prevention guideline signs in Arabic and English. It is prohibited to remove or change their location, and it is forbidden to smoke inside the station.

Article (11) The personnel working at the station must have a certificate of prevention and public safety approved by the General Directorate of Civil Defense.

Article (12) It is prohibited to store in places near gas tanks or filling places. Storage shall be carried out in the places designated for them, taking into account the safety and prevention conditions for storage in accordance with the regulation.

Article (13) The gas stations existing before the issuance of the law that obtained a license from the competent authorities are granted the time limit specified in the regulation to complete the prevention and safety requirements, unless this contradicts the danger of the site on which it is established.

Article (14): Vehicles transporting and distributing gas must have a permit regarding extinguishing arrangements from the General Directorate of Civil Defense, in addition to their license from the competent authorities.

Article (15) The permit regarding the extinguishing arrangements for gas filling stations, transportation and distribution vehicles, storage places, and stores selling LPG cylinders must be renewed annually by the General Directorate of Civil Defense.

Article (16) Gas distribution vehicles must be equipped with extinguishing means for prevention and public safety.

Article (17) Guidance signs indicating the type, quantity and danger of the gas transported, shall be placed on the vehicles of transport and distribution of gas.

Article (18) Gas transport and distribution vehicles must be equipped with means of discharging the electrostatic charge.

Article (19) The driver of the gas transport and distribution vehicle must have completed a course of prevention and public safety approved by the General Directorate of Civil Defense.

Article (20) The General Directorate of Civil Defense shall notify the owner of the station or the responsible director in writing of the amendments or arrangements that must be undertaken to prevent the outbreak of fire or to prevent its spread and

to facilitate the operations of combating it to eliminate the danger threatening the safety of lives and property. The notification shall be made on the form prepared for this, and the General Directorate of Civil Defense determines an appropriate period for implementing the required amendments or arrangements by the persons notified.

Article (21) The concerned person must place the permit for firefighting arrangements in a prominent place, so that the Civil Defense representative can view it upon inspection.

Article (22) It is not permissible to license and establish any gas filling station or to expand it before the license applicant submits a technical study prepared by one of the technical offices specialized in safety work approved by the General Directorate of Civil Defense that shows the extent of compliance with the specifications and requirements mentioned in the regulation. The stations existing before the law was issued are granted a time limit not exceeding one year, which can be extended from six months to another year by decision of the Director General in accordance with what is determined by the General Directorate of Civil Defense and the nature of the work to be carried out to comply with the requirements and instructions. The competent authorities in municipalities shall grant the license according to what is stated in this regulation. In the event that the site is not suitable for the continued establishment of the station due to the danger it poses, the Director General of Civil Defense may refuse to issue a permit for its establishment.

Article (23) The office that prepared the study mentioned in the previous article shall be accountable to the General Directorate of Civil Defense and other relevant bodies and shall submit a final certificate confirming that the facility conforms to the instructions and requirements contained in this bylaw.

Article (24):

- a. It is not permissible for the owner of the station to start operating it, except after obtaining the final approval of the General Directorate of Civil Defense.
- b. The granted permit is renewed annually for the purpose of verifying the availability and validity of extinguishing equipment and firefighting means.

Article (25) The person responsible for safety at the station is directly responsible for performing the monthly checks and tests every three months for the facility itself, all electrical and mechanical equipment and installations, as well as all safety and firefighting equipment.

Article (26) The person responsible for safety is obligated, in the event of a malfunction or defect involving a high degree of danger that threatens the safety of life and property, to immediately close the station or the part that presents a risk, if this is within his job competence, or to raise the matter immediately with the specialist, who shall take necessary actions.

The owner of the station must immediately notify the closest Civil Defense center.

Article (27) The owner of the station must inform the General Directorate of Civil Defense, when changing the safety and prevention official at the station.

Article (28) The person responsible for safety at the station may coordinate with the specialist in the General Directorate of Civil Defense to determine the date of periodic tests.

Article (29) The person responsible for safety at the station must be qualified and must have completed the necessary training to assume this position, and agree to his appointment by the Director General of Civil Defense after confirming his qualifications.

Article (30) Warning and indicative signs must be placed in accordance with the design approved by the General Directorate of Civil Defense, which clarify that safety instructions strictly prohibit smoking, or causing sparks or fires inside the station.

Article (31): When setting up a gas filling station near a fuel station (petrol-solar-kerosene), the safety distance between the two stations should not be less than a 100 meters.

Article (32) All entrances and exits of gas filling stations must be completely separate from the entrances and exits of petrol stations [petrol - solar - kerosene].

Article (33) It is required that the administrative offices be set up inside the station at a distance of not less than 20 meters from the filling places and gas tanks.

Article (34) The municipality and the concerned authorities shall undertake the issuance of licenses for gas filling stations, gas storage, transportation and distribution vehicles, and places of sale of filled and empty gas cylinders after they fulfill the safety and prevention requirements issued by the General Directorate of Civil Defense in accordance with this regulation.

Article (35) Safety, prevention and firefighting requirements:

a. Gas filling stations

[1] A gas filling station is required to be located in uninhabited areas.

[2] The owner of the station is obligated to build a fence surrounding the station in accordance with the preventive and safety conditions specified by the competent Civil Defense representative.

[3] It is required that all electrical installations and extensions inside the station be of the safe and non-sparking type.

[4] It is stipulated that the safety distance between the gas filling areas and the gas tank should not be less than 20 meters.

[5] The gas tank must be placed on a concrete base, whose height is not less than one meter.

[6] It is required to install a network of cooling pipes with a diameter (1 inch) over the tanks, so that the diameter of one hole is (4 mm) and the distance of one is (4 cm).

[7] It is required to secure each tank with a safety device, so that it opens automatically in the event that the tank is exposed to overheating.

- [8] It is required to install a lightning arrester for the gas tank to discharge the electrostatic charge.
- [9] It is required to paint the gas tank with an anti-rust, anti-moisture and anti-corrosion material.
- [10] Care must be taken to avoid the accumulation of static charges by making a ground connection to the tank.
- [11] The gas tank must not be exposed to direct sunlight, to avoid overheating
- [12] Areas close to the gas tanks must be free from dry weeds and flammable accumulations. Smoking and setting fires or causing any sparks near the tanks is also prohibited.
- [13] The electricity generator room must be far from filling areas and gas tanks.
- [14] The provision of emergency lighting is required in the event of a main power failure.
- [15] The storage areas of the filled and empty gas cylinders must be far from filling areas and gas tanks.
- [16] Gas cylinders must not be filled under a closed roof, and it is preferable that there is adequate natural or mechanical ventilation.
- [17] Warning signs must be posted on which (No smoking - highly flammable gas) is written in English and Arabic
- [18] The necessary precautions must be taken to secure water is available at the appropriate pressure to extinguish fires from an upper tank or the city's firefighting network, and that the volume of the water tank is sufficient and proportional to the size of the station.
- [19] The number of fire hydrants estimated by the specialist at the General Directorate of Civil Defense must be installed according to the size of the station.
- [20] Water hoses must be secured, so that their lengths are sufficient for the area of the station and they are provided with the necessary thrusters, provided that the hoses are placed in boxes prepared for this purpose.
- [21] A number of fire stops commensurate with the size of the station and with a diameter of [3 inches] must be provided.
- [22] The station must be equipped with an automatic alarm device linked with special detector devices, in the places specified by the competent person at the General Directorate of Civil Defense.
- [23] The tanks field must be surrounded alongside its internal wall by a road for the movement of fire trucks, corridors, connections and other crossings, with a width of not less than (3 meters).
- [24] The electricity generator must be placed in a separate and well-ventilated room, with an automatic fire extinguisher.
- [25] A number of asbestos gloves, asbestos fire blankets and rubber shoes must be provided for the personnel working at the station.
- [26] It is prohibited to fill gas in cylinders that do not conform to Palestinian specifications and standards, or that have bruises, are welded and or are agricultural cylinders. If such

cylinders are found to be in use, they will be seized by the legally authorized representative of the General Directorate of Civil Defense.

[27] It is prohibited to circulate any type or size of gas cylinders that are not approved by the Palestinian Standards Institution. If such cylinders are found to be in use, they will be seized by the legally authorized representative of the General Directorate of Civil Defense.

[28] Ensuring that the gas cylinder is emptied before filling it is a requirement.

b. Gas transportation means

[1] Gas transport vehicles (tankers)

a. Gas must be transported in vehicles that meet the Palestinian standards for prevention and safety.

b. The vehicles must be equipped with means of discharging static electricity to prevent the dangers of explosion.

c. The vehicles must be equipped with fire extinguishing means as determined by the specialist at the General Directorate of Civil Defense

d. The vehicles must be marked with lines indicating the dangerous nature of transported materials and warning not to approach them while traveling at a distance of not less than 100 meters.

e. A warning sign must be placed on the vehicles written in Arabic and English (highly flammable gas), as well as specifying the quantity and type of gas transported.

f. The vehicles must be provided with the phone numbers of the General Directorate of Civil Defense; they must be written in clear handwriting to make it easy to read from a distance.

g. The driver of the vehicle must have completed a course in prevention and safety and have proof of that.

h. The driver of the vehicle must not smoke, while undertaking his/her work.

i. The gas transport vehicle must have obtained a license from the Ministry of Transport that qualifies it to do so.

j. The gas transport vehicle must have obtained a permit regarding extinguishing arrangements from the General Directorate of Civil Defense.

k. The granted permit must be renewed annually for the purpose of verifying that firefighting equipment, means of protection and safety in the vehicle are available and have not expired their valid date

[2] Gas cylinders distribution vehicles:

a. The gas cylinders distribution vehicles must be of the open and non-closed type.

b. Gas cylinders distribution vehicles must be equipped with spacers to prevent collision and stresses on the cylinders.

c. Gas cylinders must not be transported and distributed by public trucks that do not have

a permit from the General Directorate of Civil Defense that qualifies them to do so.

d. A sign should be placed at the front and rear of the vehicle, on which (Danger of highly flammable materials and no smoking) is written

e. The driver or assistant must not smoke during loading and unloading.

f. Gas cylinders should be placed in rows in an upright position, and there should be a barrier between each row made of wood panels.

g. Drivers of gas distribution vehicles must comply with the cargo permitted by the General Directorate of Civil Defense.

h. Vehicles carrying gas cylinders should always be under the supervision of the driver or the assistant; they should not be parked near the shops for welding oxygen and electric welding.

i. It is forbidden to leave or place filled or empty gas cylinders in the streets, squares, public places, or on the sidewalks of streets. They will be seized by the legally authorized representative of the General Directorate of Civil Defense.

j. Gas cylinders should not be sold to grocery stores in large or small quantities, but only to agents specialized in selling gas cylinders.

k. The driver of the gas distribution vehicle must have completed a course in prevention and public safety and have proof of it.

l. The gas cylinder must not be rolled on the ground during the loading and unloading process.

m. The driver of the gas cylinder distribution vehicle must stop the vehicle's engine during the loading and unloading period.

n. It is not necessary to trade or sell any type of gas cylinders of any size that are not approved by the Palestinian Authority for Standardization and Metrology.

o. Any type and any size of welded, agricultural, or dented gas cylinders must not be traded or sold. In the event that such cylinders are seized, they shall be seized by the legally authorized representative of the General Directorate of Defense.

p. It is prohibited for gas distributors to fill in small gas cylinders from those of large size or vice versa. Such cylinders are shall be seized by the legally authorized representative of the General Directorate of Civil Defense.

q. Any vehicle that does not fulfill gas transportation and distribution specifications shall be seized in coordination with the competent authorities.

r. Manual fire extinguishing devices of powder type must be provided with different capacities, according to the requirement from the representative of the General Directorate of Civil Defense.

s. A gallon of water with a capacity not less than 12 liters, an asbestos fire blanket, asbestos gloves and a first aid box must be provided.

t. The gas cylinder distribution vehicle must have obtained a permit regarding extinguishing arrangements from the General Directorate of Civil Defense.

u. The granted permit must be renewed annually for the purpose of verifying the availability and non-expiry of firefighting equipment, means of protection and safety in

the vehicle.

Article (36) Places to store liquefied petroleum gas cylinders, safety conditions, protection and firefighting methods that must be met are:

[1] The warehouse must be composed of one floor and conform to Palestinian specifications.

[2] The storage of gas cylinders must be located in places that are empty of residents.

[3] There must be continuous natural or mechanical ventilation in the storeroom.

[4] The roof of the storeroom must be made of a non-combustible material, and its thickness should not exceed 5 cm.

[5] Upper and lower air vents must be opened.

[6] All electrical connections and installations inside the storeroom shall be of the safe, non-sparking type.

[7] The storeroom must be equipped with emergency exits (escape doors), according to the size of the storeroom.

[8] The storage of gas cylinders should not be located near welding and electric workshops.

[9] The yard surrounding the gas cylinders' storeroom must be free of dry weeds and flammable materials.

[10] Warning signs written in Arabic and English must be placed (flammable gas - no smoking)

[11] Internal corridors must be provided, separating each row from the other, and must be not less than one meter wide.

[12] The storeroom must be exclusively used for gas cylinders.

[13] A fence must be built around the gas cylinder storeroom.

[14] There should be a designated place for filled cylinders and another for empty cylinders with signs indicating this.

[15] The storeroom must be provided with a number of fire extinguishers commensurate with its area and in accordance with the opinion of the representative of the General Directorate of Civil Defense.

[16] The storeroom must be equipped with hose reels for firefighting, as required by the representative of the General Directorate of Civil Defense.

[17] An asbestos fire blanket, asbestos gloves, and plastic fire boots must be provided.

[18] It is forbidden to fill gas cylinders in storage places, whether from big cylinders to small ones or vice-versa.

[19] It is prohibited to store gas cylinders outside the warehouse.

[20] Gas cylinders must be stored in a closed building in accordance with the specifications for the LPG cylinders storage areas.

[21] It is forbidden to use petroleum lamps during power cuts in the gas cylinder storehouse.

Article (37) The activities, trades and industries that use gas cylinders and that obtain a permit regarding fire extinguishing arrangements are required to adhere to the notes and recommendations that the representative of the General Directorate of Civil Defense deems necessary for the sake of prevention and public safety regarding the determination of the amount of gas used for the purpose of the practiced activity in a manner that does not conflict with related regulations. Whoever violates these conditions shall be sanctioned with the penalty stipulated by law.

#### **4. Potential risks related to gas and petrol stations, reasons of accidents and mechanisms to reduce them**

Good risk management is of outmost importance for preventing issues that could lead to serious incidents. Gas and petrol stations are considered a main source of danger due the flammable substances they store and sell. However, an increase of preventive measures in line with safety regulations can reduce these risks significantly. Most important risks entailed include explosions, fires, leakages, pollution and noise due to the movement of vehicles. These risks can be heightened by operational shortcomings, including negligence, not using protective tools and equipment, lack of periodical maintenance and electrical problems.

##### **Risks to lives:**

At the outset, we confirm that the licensing system for petrol stations stipulated that there must be a distance of only two meters between the boundaries of the project and any neighboring establishment, whether above or below ground. The law and regulation about the conditions and standards, when applying for a license, only introduced stricter conditions for gas stations, according to the station classification as an a, b or c facility as detailed earlier in this study.

After reviewing the dispositions of the regulation for licensing fuel stations in the governorates of the Gaza Strip, approved by the Central Committee for Urban Regulation and Building for the year 2000, it has become clear that there is no clause opposing the construction of gas stations in the midst of residential areas. Article 6 of paragraph 5 of this regulation is what comes closest to addressing the issue of "neighbors of the station", particularly as it stipulated "providing a two-meter setback from the project boundaries and any station facility, whether it is above or below the ground".

Despite the potential dangers presented by stations built inside residential neighborhoods, the neighbors of those stations do not want to submit complaints to avoid any personal disputes with the owners of the stations. However, there are families that have stood in solidarity with each other and submitted complaints to the competent authorities to remove the health and environmental damages they cause for residents, in addition to the constant disturbances and disruption of traffic, and the danger of cars to children.

A group of residents affected by the presence of one of the stations, who refused to disclose their names, believe that the danger of operating gas stations is due to violations of safety requirements. Citizens wonder if it is safe to have gas stations in residential neighborhoods, about security and safety conditions, and most importantly, about what would happen if a disaster occurs.

The regulatory conditions of petrol stations and their suitability to the situation of the ground is a complex issue. Even when the two-meter distance requirement is met, this does not negate the existence of a risk to surrounding facilities.

The biggest concern of neighbors of the stations concerns the fuel tanks, although they are buried underground. Security and safety measures cannot be relaxed, and there is no margin for error whatsoever. The most common petrol stations in the Gaza Strip are of category (c), whose site area is not less than 600 square meters. The licensing regulation

for petrol stations pays special attention to tanks, as article (36) of the Civil Defense regulation stipulates that tanks must be placed on a concrete base in the ground, and its sides in the pit must be surrounded by concrete, sand, or any other material that prevents corrosion, provided that the tanks are within the boundaries of the station. Owners of stations that have been visited indicate that the capacity of tanks vary from one station to another, between 30 to 50 cubic meters, depending on the area of the station.

### **Risk to public health:**

Exposure to fuel gases inhalation is the second risk to public health to which neighbors of a station may be exposed due to its presence in residential neighborhoods. In addition, they may also be exposed to disturbances and traffic disruptions that often occur in times of fuel crises, which force drivers to park their cars in front of the homes of the neighbors of the stations for hundreds of meters, in complete contradiction with article (934), item (1) of the Civil Code, that states that "an owner should not seek to exercise his right to an extent that harms the property of his neighbor".

We found a scientific research published online by a Saudi researcher that assessed the changes induced in the liver and lungs of male white rats affected by car fuel (gasoline 91). This scientific research - which was published on the Saudi website (Al-Watan Online) dated 7/14/2011) - concluded that gasoline is dangerous for workers at petrol stations, its clients, and those who live around them, and stated that inhaling it leads to poisoning and pulmonary fibrosis.

The research recommended establishing petrol stations in unpopulated areas, and not allowing places to sell food and beverages next to filling stations "due to the rapid volatilization of hydrocarbons, which in turn leads to indirect contamination of the food ingested with fuel," as stated in the research. This scientific research also added the Ministry of Health to the list of competent authorities for the safety of "neighbors of the stations", and indicated that ventilation openings - intended to empty the air while filling the tank with fuel - should be very far from the population, and the station should be open to the wind from all directions. It should be mentioned that the Palestinian Civil Defense regulation on safety conditions stipulated that the distance between ventilation openings and the nearest public and private building or any other facility of any kind shall be 15 meters, and the length of the ventilation pipe for the tank should be higher than that of any neighboring building.

Experts believe that an explosion of a fuel tank with a capacity of 30 cubic meters would lead to the destruction of a residential area with a length of 100 meters in each direction. They request amendments to the regulation with regard to increasing the distances from the borders of neighbors' properties, as well as the area of the station, especially since the most common stations in the Gaza Strip, according to the classification of the fuel station licensing system, are of category C, with a site area of not less than 600 square meters, and equipped to supply fuel to all types of vehicles weighing no more than 15 tons. They asked: "The 600-meter area of the station is not enough, why not 1000 square meters? Why not distances of 5 meters from the neighbors?"

It is worth noting that our research confirms that the damage represented by the presence of gas stations in the midst of residential neighborhoods is about to reach the level of a

phenomenon. Consequently, it is necessary to make amendments to the licensing system of gas stations based on the “worst-of-the-worst rule” regarding distances in particular, in order to protect the population from the hazards of accidental ignition.

There is also a necessity for reconsidering the licensing of new stations until competent authorities undertake a study to determine the extent to which the Gaza Strip needs more stations, as well as arranging the conditions of the existing stations and reviewing their security and safety procedures, especially if these stations are for gas distribution.

There has been a succession of explosions and fires, which suddenly broke out in many homes and shops in the Gaza Strip, especially after the huge Nuseirat fire that occurred on March 05, 2020. However, the Civil Defense and the Ministry of Economy in Gaza have denied that these fires in Gaza are caused by Egyptian gas.

During an interview with “Amad Media”, the Civil Defense confirmed that March is one of the months that registers the highest number of fire outbreaks. There were 109 fires in March 2017, 110 in March 2018, 121 in March 2019 and 110 in March 2020. The Civil Defense clarified that it handled 321 incidents in 2020, 321 in 2019, 320 in 2018 and 396 in 2017, stressing that electricity causes 40% of the fires in the Gaza Strip, and advised citizens to follow several preventive instructions.

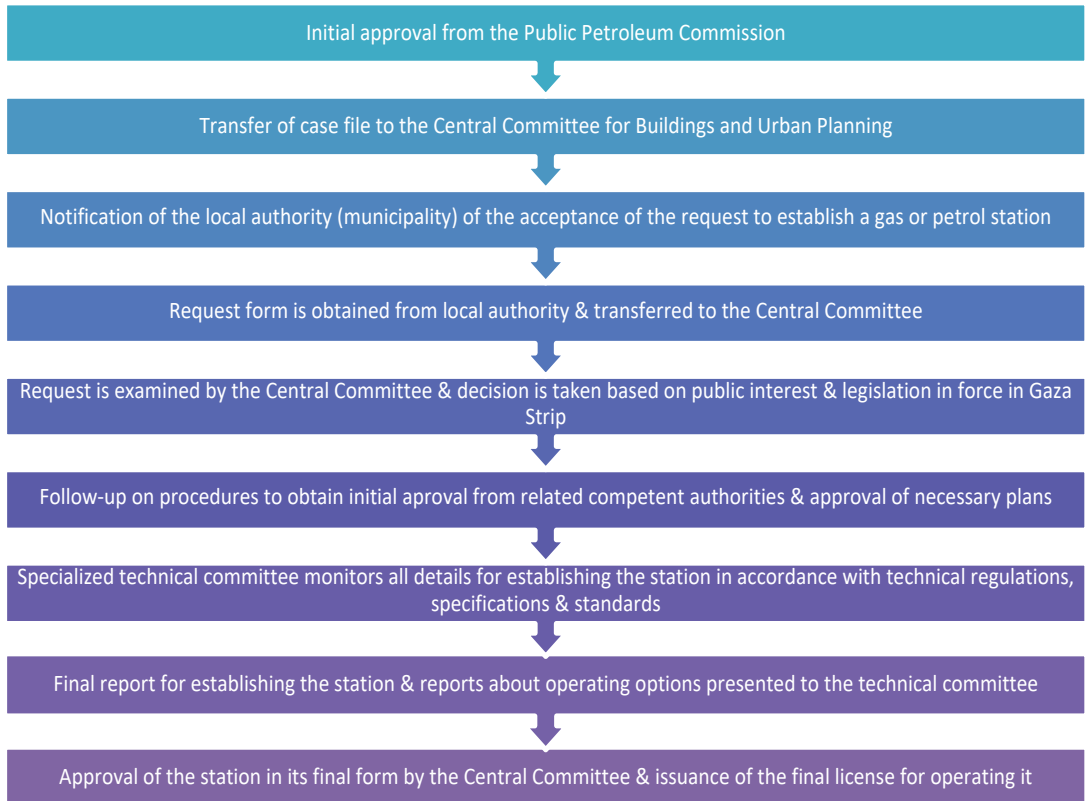
Regarding human and material losses, fires in the Gaza Strip led to the loss of dozens of lives and countless injuries, in addition to damages to properties. The most catastrophic fire since the beginning of the year 2020, the Nuseirat fire, has cost the lives of 25 persons. During a press conference on the findings of the investigation of the Ministry of Interior and the committee formed for this purpose, the Minister of Justice of the Gaza de-facto government, Dr. Mohammed Nahal, declared that “the Nuseirat fire caused the loss of 25 lives, injured 59 persons, destroyed 30 shops, 40 street vending carts and 18 vehicles”. He also said that “the Nuseirat fire was caused by a gas leakage from a tank that was converted from a stationary tank to a mobile tank, without adhering to security and safety standards”, noting that “there are shortcomings from the municipality and civil defense in granting licenses and field visits.”

A number of gas and oil stations employees in the Gaza Strip, who were interviewed during field visits and individual meetings, confirmed that they do not undergo training at the beginning of employment, and do not participate in most basic courses on standards, conditions and risks at work, or even receive any information about public safety and occupational safety procedures that must be available at work sites. In fact, many of them did not undergo primary or periodic medical examinations before and during their employment, and workers had no knowledge on how to use fire extinguishing materials, put out fires and use extinguishers.

## 5. The role of competent authorities in issuing licenses, inspecting and monitoring gas and petrol stations

First of all, there is complementary, community-based solidarity role towards this ever-present danger, which would not spare anyone should a disaster occur inside any fuel or gas station in the Gaza Strip.

The mechanisms through which gas and petrol stations obtain a license to operate and the authorities responsible for the issuance of these licenses are detailed below.



Initial approvals have to be obtained from several bodies before a license can be granted, such as the Civil Defense, the municipality and the Public Petroleum Commission. Therefore, it is necessary to examine the role of each of those bodies and the regulations that they implement.

- The Public Petroleum Commission supervises the petroleum sector and represents the Energy Authority for all affairs that concern this sector
- The Civil Defense governed by the Civil Defense Law No. 3 of the Year 1998
- Local Governments (municipalities) supervise, provide guidance and monitor owners of gas and petrol stations before the station is established and until its building is

completed. Then they monitor stations on a yearly basis and issue an annual license if the station is in compliance with standards

- The General Directorate for Crossings and Borders: it works to manage the fuel stored in the stations and warehouses that transport fuel from the Egyptian or Israeli side to the Palestinian side. It works on the necessary coordination to open the crossings and the necessary provision of security forces to protect financial resources, administrative employees and customs.
- The Ministry of Transportation is in charge of studying all movement paths, entrances, exits and safe distances for parking cars, as well as determining parking spaces for unloading fuel for underground tanks. Gas and petrol station and the implementation of works therein cannot be approved, except if the approval of the engineering departments in the Ministry of Transport has been granted and the accreditation has been submitted to the Central Committee.
- The Central Committee for Buildings and Urban Planning checks the plans and implementation, and the extent of compliance with building laws and regulations for each station from the beginning of their construction until its completion.
- The Ministry of Labor monitors gas and petrol sector employees, the suitability of workers for that profession, and the provision of a safe work environment. It follows-up on occupational safety and health procedures for workers.
- The Ministry of Health supervises the presence of health services in the gas and petrol stations, and follows-up on the preliminary medical examination that must be performed for gas and petrol station workers
- Environmental Quality Authority: it supervises the presence of the necessary safety measures to prevent fuel leakage from underground tanks, such as placing tanks in a concrete basin.

Each of these authorities has its own conditions for granting approval, completing licensing procedures and completing the file. Within the framework of this study, we will focus on the main parties that have the right to monitor and inspect gas and petrol stations, which are:

### **1- The General Petroleum Corporation:**

It is the authority supervising the fuel sector and the representative of the Palestinian National Authority (PNA) with regard to all matters related to this important sector. This authority was established by a decision of the Council of Ministers on 10/6/1994 as an independent public commission that directly reports to the office of the PNA president. According to the decision concerning its establishment, the corporation assumed the task of managing and supervising the fuel sector with all its branches in the Palestinian territories, and began exercising its functions and activities in the regions of Gaza and Jericho. The decision restricted the right to import and export oil and its derivatives to the corporation. The corporation started working in the entire Palestinian territories by decision of the Council of Ministers on 11/12/1994, after the deployment of the PNA in the rest of the West Bank. Nearly three years after the establishment of the Commission, the Legislative Council approved the draft law of the General Petroleum Commission in its second reading on 11/25/97 and referred it to the PNA President on 7/12/1997 for ratification, but the draft law was rejected by the President at the time.

The circumstances and mechanisms of establishment of the General Petroleum Corporation, without took place without issuance of a special law, also contributed to the absence of the basic principles related to its performance, commitment to transparency, oversight and accountability on various matters related to its work. This made it a subject of controversy and an easy target for allegations and accusations from different parties on the subject of supervision and follow-up of the fuel sector in the Palestinian territories. From the establishment of the corporation in 1994 until its transfer to the Ministry of Finance in June 2003, the corporation's management of its affairs and working mechanisms were not subjected to any specific law or regulations, and it was not affiliated with any of the PNA ministries. Its subordination to the office of the president meant that it was not subjected to public and legislative oversight, which raised many questions about its proper management in general, and its finances in particular, and left its activities widely open for corruption, as it appeared in the reports of the Legislative Council at the time, after the head of the corporation, Mr. Harbi Sarsour, refused to appear before the Legislative Council<sup>2</sup>.

As for the fuel transportation mechanism and the role of the General Petroleum Corporation, gas and petrol used to be exclusively transported through Al-Shuja'iya

<sup>2</sup> Report of the Independent Commission of Human Rights, April 2009

crossing (known by the Israeli name Nahal Oz), which is located in the Al-Shuja'iya neighborhood, east of Gaza City, and is under direct Israeli control. The crossing was run by an Israeli company that supplied fuel and gas to the Gaza Strip, and it was outfitted with a network of large pipelines from which fuel coming from Israel was emptied and then transferred to the tanks stored at the crossing. In 2013, the General Petroleum Administration allowed the transfer of tanks to other places due to the closure of the crossing and benefiting from them in areas that could provide fuel and gas stores in the Gaza Strip. Then, Kerem Abu Salem crossing became the main crossing for the passage of goods, fuel and gas for the Gaza Strip. The main departments in charge of administrating fuel and gas in the Gaza Strip are as follows<sup>3</sup>:

1- Accounts department: The accounts department at the General Petroleum Administration requests the quantities of fuel and gas that the Gaza Strip needs on a daily basis, which is estimated at 200-250 tons per day. It is sent to the company supplying the fuel and gas, and the amounts owed by the companies receiving the fuel are collected and paid to the supplying company.

2- Technical department: The technical department at the General Petroleum Administration determines the required specifications of fuel and gas, and inspects fuel and gas on a daily basis according to available devices and methods for testing. It also supervises and implements works at the crossings to prepare them to receive fuel, and supervises the maintenance of equipment. The technical department also monitors the licenses of stations and vehicles.

3- The Crossings department: The Crossings Department at the General Petroleum Administration coordinates between the fuel supplier and the fuel receiving entity on the Palestinian side. Fuel is received, unloaded and loaded into Palestinian vehicles through the crossings, and the consignments and documents needed to receive fuel and gas are released. The fuel is then transported the fuel to stations within the sector according to the requests submitted to the Authority in advance.

Also, in accordance with Cabinet Resolution No. (17) for the year 2008 regarding the licensing regulation issued by the General Petroleum Corporation for the purposes of obtaining the licenses and permissions mentioned in Article (2) of this regulation, the concerned party must submit a written request in this regard according to the approved form based on the instructions issued by the director, and pay the following fees:

- a. Licensing of a petrol station: 200 shekels
- b. Approval of licensing a fuel tanker and a vehicle for transporting gas cylinders: 100 shekels
- c. Licensing of a gas cylinders distribution agent: 100 shekels
- d. Approval for the location of gas tanks in residential and industrial buildings: 100 shekels

In order to obtain a license for petrol stations, the following documents must be enclosed with the application:

---

<sup>3</sup> General Petroleum Administration

- a. A detailed area plan approved by a licensed survey office specifying the location and its relationship to the public road and the dimensions of the adjacent buildings and existing structures.
- b. A proof of ownership of the land or its lease contract, provided that the lease period is not less than fifteen years.
- c. A brief economic feasibility study for a gas filling station project.
- d. A copy of personal identification.
- e. A copy of the company's articles of incorporation and bylaws and a copy of the ID of the authorized signatory.
- f. A letter issued by either the Ministry of Local Government or the competent municipality stating that there is no objection to the establishment of the station.
- g. A certificate of good conduct and behavior and the absence of precedents.

For the purposes of obtaining approval for the locations of gas tanks in residential and industrial constructions and their extensions, a written request is submitted according to the approved form in accordance with the instructions, accompanied by a construction plan showing the location of the tank in relation to the neighborhood and the existing building, provided that it is approved by a licensed engineering office.

For the purpose of obtaining permission to license fuel tankers and gas cylinder distribution vehicles, the applicant must do the following:

- a. Register the vehicle with the licensing authority
- b. Contract a comprehensive insurance for the vehicle
- c. Submit a certificate stating that the fuel tank loaded on the vehicle and the back box of the gas cylinders distribution vehicle conform to the Palestinian specifications and standards issued by a competent authority and approved by the corporation for this purpose.
- d. Present a driver's license that allows the driver to drive vehicles transporting dangerous substances

## 2- The Civil Defense

According to Law No. 3 of 1998 regarding the formation of civil defense, civil defense means a set of necessary measures to protect civilians and their property, ensure the safety of all kinds of transportation, ensure the regular functioning of public facilities, and protect public and private buildings, facilities, and institutions, whether from the dangers of air raids and other acts of war or from the dangers of natural disasters, fires, marine rescue, or any other dangers.

According to this law, the General Directorate of Civil Defense is affiliated with the Ministry of Interior and National Security. The Directorate is administered by a General Director, who is responsible to the Minister for all technical, financial and administrative civil defense works, and directly supervises the implementation orders, decisions and instructions of the Minister and the High Council for Civil Defense, within the limits of the

laws and regulations in effect. **The General Directorate of Civil Defense is responsible for the following:**

1. All civil defense work, including preparing projects and work plans, supervising their implementation, procuring the necessary tools and missions, studying the latest civil defense methods and methods for educating the public about them.
2. Take the necessary measures with relevant committees to deal with disasters and emergencies, in the cases decided by the President of the National Authority.
3. Educating citizens about the work of civil defense, cooperating with its teams, and distributing flyers and advertisements related to its work in times of peace and war

In order to achieve its objectives, the General Directorate of Civil Defense performs the following actions, in coordination with the designated authorities, without prejudice to the powers stated in the law:

1. All civil defense work, including preparing projects and work plans, supervising their implementation, procuring the necessary tools and missions, studying the latest civil defense methods and methods for educating the public about them.
2. Take the necessary measures with relevant committees to deal with disasters and emergencies, in the cases decided by the President of the National Authority.
3. Educating citizens about the work of civil defense, cooperating with its teams, and distributing flyers and advertisements related to its work in times of peace and war

In order to achieve its objectives, the General Directorate of Civil Defense performs the following actions, in coordination with the designated authorities, without prejudice to the powers stated in the law:

1. Organization of warnings of air strikes
2. Supervising the organization of cooperation between cities and villages with regard to civil defense work, and the establishment of rapid civilian battalions to help affected areas.
3. Organizing the means for extinguishing fires
4. Establishing and preparing a civil defense operations' room
5. Organizing operations for detecting unexploded bombs and mines, and removing them
6. Restricting lighting and turning off the lights to prevent damage that may occur from air strikes
7. Storage of equipment, medicines and disinfectants needed for civil defense work
8. Forming teams to detect atomic radiation, toxic gases and germs.
9. Establishing public trenches and shelters, and preparing shelters for buildings and facilities
10. Contribute in preparing places suitable for receiving casualties from air strikes and natural disasters
11. Preparing rescue teams, rubble removal teams, air raids and fire watchers teams.
12. Educating and training civilians on methods of civil defense by various means

13. Regulating and defining conditions for transporting and storing dangerous chemicals on the roads of areas controlled by the Palestinian National Authority.

In order to enable the Civil Defense to implement the law, Resolution No. 19 of 2000 was issued granting the status of judicial officer to the Director General of Civil Defense and to certain categories of employees of the General Directorate of Civil Defense to implement the provisions of Civil Defense Law No. 3 of 1998 and related regulations and decisions:

- (1) Leaders of the Centers at the General Directorate of Civil Defense
- (2) Directors of directorates at the General Directorate of Civil Defense
- (3) Heads of Industrial Safety departments at the General Directorate of Civil Defense
- (4) Engineers working in industrial safety departments at the General Directorate of Civil Defense
- (5) Legal personnel working for the General Directorate of Civil Defense
- (6) Industrial safety inspection and monitoring officers working at the General Directorate of Civil Defense

Based on the applicable legislation, there is an administrative structure for Civil Defense to facilitate work and distribute tasks, as follows:

Source: translated from table on the structure of the Civil Defense published by the Public Relations and Media Unit of the Civil Defense, [www.pcd.gov.ps](http://www.pcd.gov.ps)

**In addition, the Civil Defense is entrusted with the enforcement of a number of executive regulations that were defined by Decision No. 27 of 2000, as follows:**

1. Regulation on the safety conditions, fire prevention, and means of protection that must be available in industrial establishments.



2. Regulation on the safety conditions, fire protection methods, alarm and fire extinguishing equipment that must be available in tall buildings and public and private facilities.
3. Regulation on the safety conditions, fire prevention, means of protection, specifications of the means of extinguishing and warning that must be available in petrol stations and transport vehicles
4. Regulation on safety conditions, means of protection and firefighting, specifications of the fire extinguishing means that must be available in gas filling stations, transport and distribution vehicles, and storage places for liquefied petroleum gas cylinders.

The General Directorate of Civil Defense shall implement and follow-up on the implementation of these regulations and ensure that their dispositions and articles are strictly applied.

### 3. Municipalities

Local authorities and municipalities play an important and vital role in building society in various walks of life, whether cultural, economic, sports or organizational, and that they work hard to meet the various needs of the local community, and work to define these needs according to certain standards and standards. Therefore, municipalities must have the planning, implementation, follow-up and control abilities at the human or financial levels, and the capacity to develop services provided to the population.

After the Palestinian National Authority was established, the Ministry of Local Government was formed. It worked on filling the legal vacuums left by the Israeli occupation and issued two laws:

1. Local Authorities Electoral Law No. 5 of the Year 1996
2. Palestinian Local Authorities Law No. 1 of the Year 1997

After that, new local authorities were created as well alongside existing local authorities. The local government sector witnessed a significant quantitative expansion, with the number of municipalities being multiplied by six. The local government sector in the Gaza Strip is the second largest sector after the governmental sector in terms of the number of employees.

The Gaza Strip is divided into 5 governorates, and each governorate includes a group of municipalities. There are currently 25 municipalities in the Gaza Strip that provide services to all citizens in their areas. Most of the municipalities are concentrated in the southern part of the Gaza Strip.

**Table clarifying the number of municipalities operating in the Gaza Strip**

Governorate	Number of municipalities	Municipal councils
North Gaza	4	Beit Hanoun, Beit Lahia, Jabalia, Um Al-Nasser
Gaza	4	Gaza, Al-Mughraqa, Al-Zahra, Wadi Gaza
Deir Al-Balah	7	Al-Nuseirat, Al-Breij, Al-Maghazi, Deir Al-Balah, Al-Zuweida, Wadi Al-Salqa, Al-Masdar
Khan Younis	7	Khan Younis, Bani Suheila, Big Abasan, Small Abasan, Khuza'a, Al-Qarara, Al-Fukhari
Rafah	3	Rafah, Al-Naser, Al-Shoka
Total	25 municipalities	

Source: Palestinian Federation for Local Authorities

One of the most important tasks of municipalities in the Gaza Strip is planning and organizing. Licensing petrol and gas stations forms an integral part of this task, and the role of the municipality in this regard is determined by applicable laws and regulations, the most important of which is the Urban Planning Law No. 28 of 1936 and its amendments, which was previously discussed in this study.

It should be noted that the municipality usually approves the request to establish a fuel or gas station, which is submitted to the Public Petroleum Commission, after it makes sure that the general legal conditions are met in the construction plan of the gas station, like any other building plan, such as ensuring the availability of legal distances, the availability of sufficient space for the petrol station, providing a proper entrance and exit according to the legal procedures for the required area of petrol stations. The approval is only given after the establishing license for the petrol or gas station has been granted by all the other competent authorities, which are: the Public Petroleum Commission, the Ministries of Local Government, Transport, Labor and Health. This means that municipalities have the right to supervise, provide guidance to and monitor station owners before the station starts being established and until it has been completed. Then, they should undertake yearly monitoring and issue a yearly license if the station is still in compliance with standards.

## **6. The situation of workers' rights in gas and petrol station and its connection with public safety and occupational safety**

The Ministry of Labor is one of the competent authorities that must monitor the situation of workers in the petrol and gas sector, and the aptness of workers for exercising this profession, the provision of an adequate work environment, and follow up on occupational safety and health procedures for workers. Therefore, the Labor Law conferred the status of judicial officers to labor inspectors in its chapter eight related to labor inspection.

The Labor Law No. 7 of the Year 2000 stipulated that the Minister of Labor shall form a labor inspection commission with a suitable number of inspectors, with required academic and professional qualifications, to monitor the implementation of the law's provision and its by-laws. These inspectors enjoy, in the exercise of their duties, the powers of judicial officers. The most important competences of the labor inspector are:

1. Monitor the implementation of labor legislation, especially with regard to terms and conditions of work, by all legitimate means, including receiving complaints and reports.
2. Providing employers and workers with information and technical guidance that help them in implementing the provisions of this law.
3. Inform the competent authorities of deficiencies and irregularities that he/she discovers during his work.

### **Labor inspectors exercise broad powers and are entitled to:**

1. Enter the workplace subject to inspection completely freely during working hours without prior notice, with the obligation to notify the employer or his representative upon entering the facility
2. Inquire with the employer or workers collectively or individually or in the presence of witnesses about the application of Labor Law provisions
3. Review the records, notebooks and any other documents related to work conditions, and take copies or extracts from them
4. Take samples of materials used for the purpose of analysis to ensure their suitability for the safety and health of workers, while notifying the employer or his representative, and this shall be in accordance with special regulations set by the Ministry
5. Issue orders and instructions to remove deficiencies in devices and equipment that are being used, or to remove the harm for the health and safety of workers resulting from their use; an inspector may request the immediate implementation of the procedures he deems necessary to prevent an imminent danger.
6. Employers or their representatives must submit all the information requested by a labor inspector on an inspection mission
7. The labor inspector shall prepare a report about the infraction he observed and he may

take any of the following measures against the party found in infraction of the law, in a manner consistent with the nature of the infraction and its severity (providing advice and guidance, directing a verbal warning to remove the infraction within a specified period, recommending to the labor inspection authority to issue a written warning regarding the violation).

8. Labor inspectors submit to the Labor Inspection Authority periodic monthly and annual reports on the results of their inspection activities, according to forms approved by the Ministry
9. The Ministry publishes a periodical general report about the activities of the Labor Inspection Authority

Labor inspectors are also required to monitor the implementation of all provisions of the Labor Law, whether in relation to work conditions (contracts, wages, working hours, leaves of all kinds, payment of end-of-service indemnities), as well as with regard to safety and health conditions and standards (insurance against work injuries, periodical medical examinations, provision of first aid boxes, the provision of occupational safety tools, the application of occupational health and safety requirements in accordance with the by-laws to the Labor Law, especially with regard to the requirements for places for eating and drinking, toilets and places to change clothes).

Through numerous visits of gas and petrol stations carried out by the Democracy and Workers' Rights Center in cooperation with labor inspectors during the years 2019-2020 (about 15 gas and petrol stations), and by following up the extent of employers' commitment to providing safety requirements and the provisions of the Palestinian Labor Law No. 7 of 2000 and its by-laws, many violations of basic rights were recorded through workers' interviews, as follows:

1. Some workers are paid below the minimum wage
2. Employees work about 12 to 14 hours per day, without consenting to overtime hours and without pay for overtime hours. Any increase of working hours increases the risks, as workers, who continuously work longer hours, are more exposed to making mistakes and suffer injuries due to accumulated tiredness and exhaustion.
3. There are no paid leaves (daily, annual, holidays, bereavement, etc).
4. Employees have no written work contracts, recorded by the Labor Ministry
5. No preliminary and periodical medical examinations are conducted for employees, nor do they have vaccinations
6. There is no protective and occupational safety equipment for a number of workers
7. Employees have not been provided any occupational training, or training on first aid and how to address disasters and fires

8. A large number of employees have no insurance against work injuries
9. There is a lack of interest in training drivers about risks related to dealing with the transport of fuel and gas in the Gaza Strip (they need a program for rehabilitating drivers of gas and fuel trucks)
10. Employees are not registered with the labor office to facilitate the resolution of any labor dispute that may arise in the future between workers and employers
11. Employers refuse that employees participate in training courses on occupational safety, receive information about their labor rights and affiliate to trade unions that may represent them

**Discussions of the causes of labor rights violations with employees and competent authorities indicate that they can be traced back to several factors:**

1. Employees' lack of awareness and experience about the importance of the legal framework and the occupational health and safety framework, and low awareness about risks at work in the gas and petrol sector.
2. Some employers exploit workers' need for employment in light of the increase of poverty and unemployment rates in the Gaza Strip; a large number of workers in gas and petrol stations hold university degrees in various specializations, and were forced to work in this sector despite its dangers.
3. The weakness of the role of trade unions; there is no recruitment of workers to affiliate with unions, they are not included in union programs, unions do not represent them and defend their rights. Trade unions have come under the domination of political parties, far from the rights-based struggles of workers.
4. The weakness of the labor inspection system, due to the lack of human resources in the inspection departments. There are only about 10 labor inspectors for the entire Gaza Strip, and there is a lack of measuring devices and equipment for labor inspectors
5. Lack of coordination between the authorities authorized to inspect, as each agency conducts its own independent inspection.
6. Weakness of the media's role in highlighting workers' issues and their situation in this dangerous sector; the media only follows-up on incidents when they occur without taking into account the principles of media awareness, and public and private prevention rules.
7. The political division that weakened the labor movement in general, and increased poverty and unemployment rates among workers and graduates, and led to a lack of prospects for them to work in governmental jobs, which prompted them to work in these dangerous sectors.
8. The absence of a shared responsibility between all parties to confront these violations.

## 7. Interventions by competent authorities and non-governmental bodies to reduce risks associated to this sector

From the onset, it must be emphasized that responsibilities for ensuring safety and health are shared by several entities within the scope of the law that governs the relationship of these entities, whether formal or informal, with the gas and petroleum sector and its workers. It is a national societal responsibility. The interventions that have been carried out or are being implemented by a number of governmental and non-governmental institutions are as follows:

1. **Civil Defense:** The Civil Defense works according to the Law No. 3 of 1998 regarding the formation of civil defense, and within a set of necessary measures to protect civilians and their property, ensure the safety of all kinds of means of transportation, and ensure the regular flow of work in public facilities, and the protection of public and private buildings, facilities and institutions, whether from the dangers of air strikes and other acts of war, or from the dangers of natural disasters, fires, maritime rescue, or any other dangers. The annual report of the Civil Defense for the year 2019 and the interventions it has undertaken has already been presented in this report.
2. **Municipalities:** As mentioned, the role of municipalities is to supervise, direct and follow up with gas and petrol station owners before the construction of the station starts and its completion. Then, municipalities undertake an annual follow-up and issue an annual license, if the station is still in conformity with the specifications. Recently, after the Nuseirat fire, some of the Gaza Strip municipalities began a campaign to remove random gas sale points in cooperation with the municipal police, in order to ensure compliance with occupational safety standards as they pose a risk to citizens and harm public interest. Many random gas sale points have been monitored in the city, and dozens of them have been informed of the need for immediate removal. Municipalities monitor the process of closing gas sale points, and following all legal mechanisms to remove the danger of these sale points. They confirm that the existence of such places violates the trades, professions and industries regulation and the urban planning law, and that they will not give any license to a gas sale point that may pose a threat to the lives and property of citizens. They requested owners of random sale points to cooperate with the municipality and immediately remove these sale points. They called on citizens to report any gas sales points that might pose any danger to them in order to enable municipalities to take appropriate measures against them. As part of their campaign, they asked owners of bakeries and restaurants not to store gas in quantities greater than their need, stressing the need to abide with procedures for safe storage.

3. **Ministry of Labor:** Through its labor inspection program implemented throughout the year, which targets more specifically gas and petrol stations and restaurants in summer, the Labor Ministry works to implement all procedures and Within the framework of the labor inspection program that it implements throughout the year, which is active on gas and oil stations and restaurants during the summer season, the Ministry of Labor implements all procedures and instructions given by the law to the labor inspector, as described earlier. Through field visits implemented by DWRC in partnership with the Ministry of Labor, a number of measures have been taken by the Ministry (such as issuing notifications and warnings, as well as closure of some stations) based on degree of severity of the hazard presented. Labor inspectors asked gas and petrol station representatives to abide with legal requirements within a week from the date of the visit and report back to the inspection department. They informed them that in case of non-compliance, legal steps will be taken against those in contravention of the law, which can lead to referring their cases to the Public Prosecution.
4. **DWRC:** DWRC visited several gas and petrol stations in cooperation with the Ministries of Labor and Health, and municipalities. The Center recorded a number of violations of workers' rights in these workplaces. It also provided awareness about legal rights to gas and petrol station employees and stressed the necessity for employers to provide protective tools and equipment for workers. DWRC also demanded that work contracts be established and documented by the Labor Ministry as required by law, as well as implementation of the minimum wage, provision of insurance against work injuries to workers and subjecting workers to primary and periodic medical examinations at the expense of employers. It also requested that employers respect workers' right to participate in specialized training courses on the labor law and occupational safety that the center implements. DWRC coordinated with the National Committee for Occupational Safety and Health to provide labor rights and occupational awareness for workers and employers, and stressed the need for workers to be trained in the use of firefighting measures and first aid.

## **Conclusions:**

This important, vital and dangerous sector is still in need for organization, effective review and protection for the rights of employees, based on the conclusions of this case study. Thus, the study provides competent authorities and decision-makers with a set of findings and recommendations that should be taken into account, as should the lessons drawn from previous incidents. International standards and laws governing the licensing of gas and petrol stations should be enforced so that this sector reaches required standards for mitigating risks and provides better service, taking into consideration the preservation of the minimum rights of workers in this sector.

## **Findings:**

- The study concluded that there are fundamental differences between the legal framework applied in the Gaza Strip and the one applied in the West Bank due to differences in the geographical context and surface area, and especially with regard to the regulatory requirements related to distances
- There are serious problems with licensing mechanisms and the absence of coordination between authorities concerned with granting licenses. Each party implements a set of complex requirements, which represents a real burden for owners of gas and petrol stations, and pushes them to establish the stations before completing the licensing procedures.
- Workers in gas and petrol stations are exposed to violations of their rights due to the lack of enforcement of occupational health and safety requirements, and other provisions of the labor law
- There is a problem with the role of labor inspection, the lack of human resources, the lack of measuring devices to determine risks, in addition to the weakness of the sanctions system of Labor Law No. 7 of the year 2000
- It is necessary to reconsider the number of gas and fuel stations scattered between homes that cause diseases to citizens and endanger their lives
- Workers at the gas and fuel stations lack awareness of labor laws and principles of occupational health and safety, and are in need for awareness-raising
- There is a failure to document the violations of workers' rights in gas and petrol stations, and a failure to record work injuries and accidents, which are problematic

## Recommendations:

1. Activating the periodic monitoring role of competent authorities on petrol stations without excluding any of them, applying all penalties stipulated in the relevant laws to all those found in contravention of the law and closing gas and petrol stations that do not meet applicable standards, and random points of gas sale.
2. It is necessary to work on implementing clear professional standards for all new and already established petrol stations when licenses are issued or reissued
3. The necessity to take all necessary measures to raise awareness of all matters that may occur in gas and petrol stations; first of all, there is a need to educate workers in fuel stations of the dangers, and for the Civil defense to provide training programs for workers in gas and petrol stations to prevent various risks
4. Undertaking a comprehensive awareness campaign through local audiovisual media and written press to enhance awareness in dealing with gas and petrol stations, whether for their owners, employees, or the public in general
5. Applying all provisions of the Labor Law No. 7 of 2000, ministerial decisions, and safety, health and professional requirements, and not underestimating any violation, no matter how small its size.
6. Implementing clear and approved licensing regulations for licensing petrol stations, with the aim of preventing the interference of entities not authorized to grant licenses, and applying sound principles that are clear, transparent and fair in their implementation.
7. Drawing lessons from previous incidents and expediting the implementation of the findings of investigations issued by the competent authorities, and compensating the families of the victims according to the law.
8. Reconsidering the legislation and laws regarding safety distances between gas and petrol stations, and between gas and petrol stations and buildings for residential or other purposes
9. Tightening penalties for violating the prevention and safety measures at petrol and gas stations, due to its great impact on the lives of workers and citizens in the Gaza Strip.
10. Adopting a specific schedule for the circulation of petrol and gas transport vehicles from the crossing to the gas and petrol stations, outside heavy traffic hours, to reduce the risks they may present for citizens.