

Environmental Health Legislation, Law 12 of 1995

Environmental and Public Health and Safety Legislation

Several laws address the protection of environment and public health with direct relevance to water.

The Protection of Environment Law, Law No. 12 of 1995

The applicable environmental Law in Jordan is the “Protection of Environment Law”.

Five regulations were issued pursuant to the Law, none of which deals specifically with water and wastewater.

Three instructions were also issued pursuant to the Law, none of which deals with water and wastewater.

The following articles of the Protection of Environment Law deal with water and wastewater:

Article (6):

provides that the Secretary General of the Ministry of Water and Irrigation shall be a member in the Council for the Protection of Environment.

Article (16):

provides that the Corporation (the General Corporation for the Protection of Environment) shall, in cooperation and coordination with the competent authorities in matters relating to environmental issues locally, regionally and internationally, protect the environment from pollution in relation to the water, air, soil, plants, animals and the naval environment sectors in the manner specified in the Law.

Article (17):

provides that the Corporation shall, in coordination with the competent authorities, undertake the following with respect to the water sector:

- Issuance of general standards for water in all its usages.
- Examination of water sources with respect to pollution.

Article (26):

prohibits the dumping, disposal of and piling up of any substances that are detrimental to the environment whether solid, liquid, gaseous, radial, or heat in water sources, or the storage of any of these substances in close proximity to the water sources and within a distance to be specified by the Minister (the Minister of Municipal, Rural and Environmental Affairs) in accordance with the recommendations of the General Manager of the Corporation.

The Article further provides that certain substances shall be excluded from the above provision subject to the instructions issued by the Minister in accordance with the recommendations of the General Manager.

The substances are as follows:

- Substances that are used to treat other substances to render the latter compliant with the set standards, specifications and criteria.
- Substances that are used to fight epidemics including weeds, flies, and rodents all within the approved specifications.
- Substances that are used in experiments and scientific research, after treating them in accordance with the approved specifications.

The Article also provides that a person who commits any of the acts (specified in the Article) shall be liable to a fine of not less than JD (2000) and not exceeding JD(10000) or to imprisonment for a period of not less than 3 months and not exceeding two years or both, and it shall be ruled that the causes of violation be removed within the period specified by the court. Should the culprit fail to adhere to the said ruling the

Corporation shall remove the cause of violation at the culprit's expense with (25%) administrative expenses to be added. The Culprit shall also be liable to a fine of not less than JD (50) and not exceeding JD (200) for each day of non adherence as of the date set by the court for the removal of the cause of violation.

The Standards and Specifications Law No. (22) of 2000.

By virtue of Article (5) of the relevant Law, the Standards and Specifications Corporation is charged with the duty of issuing standard specifications and technical rules, and adopting, revising, amending, and supervising the application of the said standard specifications with respect to all services and products except for pharmaceutical products, human and veterinary medications, vaccines and serums.

With respect to water, the following standard specifications have been issued and are currently in force.⁽⁴⁾ The Industrial Wastewater Standard Specification, **Jordanian Standard**, No.202 of 1991, Second Edition. The standard specification at issue is in the process of being amended.

The Reclaimed Domestic Wastewater Standard Specification, Jordanian Standard, No.893 of 2002
The standard specification is replacing the standard specification JS/ 893 of 1995. This standard is purposely prepared to specify the conditions to be met by effluent discharged from wastewater treatment plants which can be used in the various fields appearing in this standard.
In contrast to the previous specification, Article 5 distinguishes the quality standards of effluents

- to be recharged to wadis,
- the reuse in agriculture, industry etc.,
- to be used for artificial groundwater recharge.

It is allowed to discharge reclaimed water to streams or wadis or water bodies when its quality complies with the properties and defined quality standards. It is prohibited to discharge into wadis draining to the Gulf of Aqaba.

Precaution measures have to be applied in order to prevent leakage of reclaimed water to the aquifers. Whenever there is a danger of direct contact of the public with reclaimed water is anticipated disinfecting measures must be taken to conserve the public health.

Natural treatment plants are permitted to exceed the values of the E Coli when discharging to wadis leading to storage dams where the stored water is used totally for irrigation.

Reuse of reclaimed water for the purpose of artificial groundwater replenishment is allowed if its quality agrees with the defined quality standards.

It is not permitted to use ground water replenishment for aquifers used for drinking purposes. Technical studies must be performed before using reclaimed water for the purpose of replenishment of groundwater aquifers used for irrigation to determine that there is no effect on groundwater aquifers used for drinking purposes.

The specification defined three different quality standards/classes for reclaimed water to be used in irrigation according to different irrigation purposes:

- Class A: field crops, industrial crops and forest trees,
- Class B: fruit trees, sides of roads outside city limits, and green areas,
- Class C: cooked vegetables, parks, playgrounds and sides of roads within city limits
Reclaimed water are prohibited in irrigating vegetables eaten uncooked (raw).

Sprinkler irrigation is prohibited excluding golf course that should be irrigated at night.

Irrigating fruit trees with reclaimed water must be stopped two weeks prior to harvesting fruits. Any falling fruits in contact with the soil must be removed.

The Sewage Sludge Use in Agriculture Specification, Jordanian Standard, No1145 of 1996
The Natural Mineral Water Standard Specification, Jordanian Standard, No.200 of 2001, Second Edition.
The drinking water Standard Specification, Jordanian Standard, No.286 of 2001, Fourth Edition.
The Bottled Drinking Water Standard Specification, Jordanian Standard, No.1214 of 2001, First Edition.
The standard specification is currently being amended and is expected to be issued in after June 2002.

The Water Authority Law, Law No. 18 of 1988

Of relevance in respect to environmental and public health protection are the following articles of the Water Authority Law:

Article (6) of the abovementioned law provides that:

“In order to realise the objectives of this Law, the Authority shall exercise the following duties and authorities: To set the conditions, specifications and requirements pertaining to the preservation of water and water basins, protecting same from pollution, providing security for the constructions, water and wastewater projects, public and private distribution networks and to carry out supervisory works over them and to administer the tests required for that.”

Article (30):

of the same Law provides the following:

“a) A person who commits any of the following acts shall be liable to imprisonment for a period of not less than six months and not exceeding two years or to a fine of not less than JD (1000) and not more than JD (5000) or both:

- Putting up any construction or building of whatever kind on state land within the belt specified in Article (24) of this Law.(5)
- Trespassing on any of the Authority’s projects, water sources and wastewater that falls within the Authority’s management or supervisory authorities in a manner that would lead to inflicting detriment on any of the Authority’s constructions, machines, equipment and materials or those of any of the said projects, water sources or wastewater or in a manner that leads to disabling same.
- Polluting any water source that fall within the management and supervisory authorities of the Authority whether directly or indirectly or causing the pollution and failing to remove same within the period specified by the Authority.
- Digging underground wells without a licence, or violating the conditions of the granted licence.

b) Any person who commits any of the following acts shall be liable to imprisonment for a period of not less than one month and not exceeding six months and to a fine of not less than JD (100) and not exceeding JD (1000):

- To carry out any work or perform any act on state land within the belt specified in Article (24) of this Law without obtaining the prior written consent of the Authority even if such work or act is not detrimental to water source or wastewater.
- Carrying out any of the works or duties that, pursuant to this Law, no entity other than the Authority is authorised to carry out without the latter’s prior written consent.
- Dealing with water sources, water, the projects related thereto or to the wastewater in a manner that is in contravention of this Law or the regulations issued pursuant thereto including selling,

giving as a gift, transferring, using or exploiting the water or carrying out any such work or taking any such action that might cause damage to the said sources, water, projects related thereto, or using the wastewater system in any manner that violates this Law.

- Doing any work related to water or wastewater without obtaining the licences, authorisations or approvals required by this Law or doing any of these works in violation of the regulations issued pursuant to the Law.

c) A person attempting to commit any of the offences specified in this Article shall be penalised.

d) If a person was convicted for committing any of the acts provided in paragraphs (a) and (b) of this Article, the Court should, at the same time, rule that the said person pay the amount of damages resulting from his act and oblige him to remove the cause of offence and the effects thereof and restore the status of things to what they were prior to committing the offence within the period specified by the Court. If the person failed to comply with the above, the Authority may carry out the works and claim back the expenses from the person convicted with a 50% addition in costs.

e) The employees of the Authority who are so authorised by the Minister or the Secretary General, as the case may be, shall be considered judicial police with regards to the detection of offences committed in violation of this Law, and the Secretary General may take decision whereby the violations and trespasses on the lands and constructions located within the Authority's jurisdiction are removed through administrative means. Where necessary, the Secretary General may seek the help of the Public Security Forces, he may also, and through the competent court that consider offences committed in violation of this Law in its capacity as a court of summary proceedings, claim that the trespasser or the violator to reimburse the expenses incurred by the Authority repairing the damage and restoring things into their original status. The employees of the Ministry and of the Authority who are named by the Minister or the Secretary General, as the case may be, shall be entitled to prosecute the criminal charges before the competent courts and to obtain an authenticated copy of the courts' decisions issued in the said proceedings and to follow through their execution."

The Criminal Code

Article (457):

of the Criminal Code provides the following in respect to environmental and public health protection:

"A person committing the following shall be liable to imprisonment for a period not exceeding one year and to a fine of not more than JD(20):

- To pour, spill into or dispose into public water (whether subject of a concession or not) of any liquids, health hazardous substances, substances that are detrimental to the public convenience, or substances that would prevent the proper utilisation of the said water.
- To carry out any act that would contaminate springs, or water that others drink from."

Furthermore,

Article (458):

of the Code reads as follows:

"A person who intentionally pollutes a spring or water from which others drink shall be liable to imprisonment for a period ranging between one to three years and to a fine of not less than JD (50)."

Law of Public Health, No.21 of 1971

The law of public health in force is the "Law of Public Health" No.21 of 1971" as amended (the " Law")
The relevant Articles in the Law are the following:

Article (3), which provides that:

“The Ministry (Ministry of Health) shall be responsible for all matters pertaining to health in the Kingdom including:

- The provision of preventive and curative health care.
- Prevention of contagious diseases.
- Promotion of health awareness and medical culture through available means.
- Establishment and management of all types and levels of educational institutions for medical professions and setting their curriculum, appointing their teaching staff, and issuing certificates for their graduates provided that educational institutions for medical professions that exist at the time of the enactment of this Law shall be deemed established in accordance with its provisions.”

Article (33):

which provides that:

“1) Setting up a wastewater network or a purification station or making any alterations to same outside the planned areas and outside the borders of the municipalities shall not be allowed unless such establishments are compliant with the health regulations that are set for that purpose.

2) Subject to the provision of the above paragraph, an approval shall not be issued until the Minister (Minister of Health) verifies that the drawings and specifications of such networks and the means of maintenance thereof are compliant with the appropriate health level taking into consideration the requirements of the Central Water Authority or any other relevant authority.”

Article (34):

which provides that:

“The Ministry shall be entitled to supervise all wastewater networks in accordance with the regulations enacted for that purpose, and to issue orders for the preservation of health.”

Article (35):

which provides that:

“External installations and the manner in which they are connected to the main wastewater system shall be subject to the rules set in the regulations to be enacted for that purpose. However, in the areas where there is no main wastewater system the rules should be in conformity with the public health requirements.”

Article (36):

which provides that:

“If it appears that the private or main wastewater system or the external installations are jeopardizing public health or are not compliant with the requirements of the regulations in force at the time, the Director (the Health Director in a Governate or province and who undertakes the duties and authorities of the Physician) or the Physician (a physician is an employee of the Ministry of Health and includes the municipality physician. The Municipality Physician is any physician who is an employee of the municipality or rural councils) may take all necessary measures in this regard and treat the situation as being a health hazard irrespective of any authorisation or previous license issued in its regard.”

Article (37):

which provides that:

“The owner of the wastewater system shall be liable for any violation of any provision hereto.”
Several regulations, instructions and orders have been issued pursuant to the Law, none of which deal with the water or wastewater sections.

However, of relevance is the **Wastewater Regulation No. 66** of 1994. Following is a summary of its pertinent provisions:

- According to the Regulation, no person is allowed to dispose of waste and liquids other than the Refuse (defined in the Regulation as being the wastewater, liquid waste and unbound waste which results from the different usages of water and the sewage) into the public wastewater course. Otherwise the Water Authority may take any of the following measures:
 - o Block the private course in order to stop the above-described disposal.
 - o Charging the owner of the estate or the lessee thereof extra fees to cover the purification expenses incurred by the Authority as a result of such disposal.
- The Water Authority is entitled to subject waste and flowing liquids in any public or private courses, from time to time, to standard laboratorial tests.
- No person is allowed to dispose, into water sources, any natural course or any open place, of liquid waste, polluted water or ordinary water until after treating same and acquiring a written approval in that respect from the Water Authority. For this purpose the relevant Jordanian standard shall be observed.
- No person is allowed to dispose of rainwater and surface water into the wastewater project
- If it was impractical to connect the private wastewater course to the public course for any reason, the owner should, at his/her own expense and within the boundaries of his/her estate, dig a suction pit and/or a dissolving pit in accordance with the instructions and standards set by the local council. If it is decided, thereafter, to connect the estate to the public wastewater course, the owner should fill up the pits at his/her own expense with suitable material that would not cause detriment to public health. Otherwise the owner could use the pits for any other purpose, except for drinking water, after cleaning same.

The Regulation deals with the obligation of the owner of the estate to connect the private wastewater course to the public course, the consequences of his/her failure to do so, connection fees, the application for connection fees, and the fees for benefiting from the wastewater system.

The Regulation also deals with the Authority's right to extend and maintain the public and private wastewater courses.

According to the Regulation, the owner of the estate is obliged to install a pump in order to raise the level of the sewage to that of the public wastewater course, if it proved impractical to drain the sewage or part thereof through the normal outflow of the connection to the public wastewater in front of the estate or through a neighboring estate. The installation of the pump should be carried out in a manner approved by the Authority.

No person is allowed to do any of the following, subject to civil and criminal liability:

- To connect a private wastewater course to the public course or to the rainwater course or do any other work in relation to the wastewater project without an authorisation from the Authority.
- To intrude, in any manner, on the public wastewater project, obstruct the connection of the private wastewater course to the public course, commit any act that will obstruct or disable the private of public wastewater systems, or cause damage to the to the purification works and the wastewater project.

The manner and purposes of reusing the water that generates from the purification stations in a manner that does not contravene with the provisions of the Public Health law shall be determined by instructions to be issued by the Authority to be published in the legal gazette. (Hitherto no such instructions have been issued).

What about the legal situation in drinking water quality monitoring The present procedures?
Administrative Organisation Regulation for the Ministry of Water and Irrigation No. (54) of 1992

Art. 10: (a) strategies, plans and programs (c) water resources studies, protection, (g) establishment of data bank

Art. 19: coordination

Natural Resources's Affairs Regulation No. (12) of 1968

Subterranean Water Inspection System Regulation No. (26) of 1977

Groundwater Monitoring Regulations, No. () of 2002

Article (9) provides the legal basis for restricting the yearly abstractions from wells to quantities defined in the licences.

Article (38):

elaborates on tariffs for agricultural wells:

Licensed agricultural wells

Quantity of Water [m ³]	Charge [fils/m ³]
0-150,000	No charge
151,000 – 200,000	25
> 200,000	60

Different charges apply to Azraq area. Wells with limited quantities are not charged, quantities exceeding these limited quantities up to 100,000 m³ are charged by 20 fils/m³, above 100,000 m³ the cost of water is 60 fils/m³.

Unlicensed agricultural wells

Quantity of Water [m ³]	Charge [fils/m ³]
0-100,000	25
101,000 – 150,000	30
151,000 – 200,000	30
> 200,000	70

By which means can well owner be forced to reduce pumping, as to insure a groundwater abstraction on the save yield level

Official Gazette No. 3540 of 17 March 1988.*

As amended by Law No. 62 of 2001 Official Gazette No. 4515 dated 1/11/2001.*

* As amended by Law 62 of 2001.

As amended by Laws No. 16 of 1998 and No. 62 of 2001.*

As added by Law No. 62 of 2001.*

As amended by Law No. 62 of 2001 Official Gazette No. 4515 dated 1/11/2001.*

Attached are copies of the standards. (Attachment No. 1)(4)

Article (24) reads as follows:” The state lands situated within a belt of one thousand meters (5) width on each side starting from the middle of the water lines and the major irrigation channels shall be allocated for the social and economic development of governmental irrigation projects, and these lands shall not be disposed of or used in any manner except with the approval of the Council of Ministers after taking the opinion of the Minister