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Government Water and Sewage Authority

The Actions of Local Authorities and Water Suppliers to Assure Drinking Water Quality
Follow-up Audit

**Abstract** 



# The Actions of Local Authorities and Water Suppliers to Assure Drinking Water Quality – follow-up audit

#### **Abstract**

### **Background**

Drinking water is a basic existential need and a critical and strategic national resource. Most of the drinking water for Israel's residents is supplied by the Mekorot Water Company Ltd. (Mekorot) up to the connection to the main consumer, while the water supply to end-consumers within a Local authority's jurisdiction is provided by the local supplier (the water corporation) and in settlement that have not established a water corporation, the water supply to end-consumers is provided by the local authority or the local water association (the water supplier or the local supplier). In order to assure that the water is fit to drink, the water supplier is required: to ensure that the drillings under its responsibility are protected against contamination; to treat the water using various means, such as filters and chlorination; to ensure that the water collection and water supply systems are intact and disinfected; to regularly sample the water and verify that it contains no microbial or chemical contaminants; and to prevent any connections between drinking water systems and water systems for agriculture, businesses and industry.

## Key figures

# 1.29 billion m<sup>3</sup>

of freshwater were supplied by the various water suppliers in 2018<sup>1</sup>

# 56 water corporations

supply water to 6.6 million residents of 155 local authorities in the municipal sector

# 1,351 other water suppliers

which are unincorporated local authorities, kibbutzim, moshavim, community settlements and others

# 0.58%

average percentage of contaminated samples found during testing in 2014 – 2019 (580 out of 100,000 tests performed annually), which detected coliforms and fecal coliforms in drinking water

<sup>1</sup> Corporations, unincorporated local authorities, community settlements, kibbutzes and moshavs; not including the supply of 140 million m3 to Jordan and to the Palestinian Authority and about 20 million m3 of water for Nature.



#### **Audit actions**

In 2015, the Office of the State Comptroller published a report about the local authorities' and water suppliers' actions to assure the quality of drinking water <sup>2</sup>(the previous report or the previous audit). From January to March 2020, the Office of the State Comptroller audited the actions of the water suppliers and the local authorities to rectify the main deficiencies relating to quality assurance of drinking water that were specified in the previous report. The current report presents the findings of the follow-up on the rectification of the main deficiencies specified in the previous report. The follow-up was conducted in several water corporations, in local authorities, in Mekorot, in other water suppliers and in the Ministry of Health.

# Key findings



- Suppliers' assurance of drinking water quality it was found that the extent of the rectification of deficiencies at three suppliers - the Municipality of Nesher, the local water supplier in Moshav Ahihud and the local committee of Kibbutz Tel Yosef – requires re improvement. These suppliers failed to comply with Ministry of Health directives:
  - The previous audit found that the Municipality of Nesher had not been cleaning and disinfecting the drinking water reservoirs under its responsibility since 2008 and for six subsequent years, but did do so during the previous audit. The followup audit found that in 2017 - 2019, the Municipality failed to clean or disinfect the reservoirs, but did do so during the follow-up audit, in January 2020.
  - The previous audit found that the local committee of Kibbutz Tel Yosef, where testing repeatedly found contaminated samples, failed to fully comply with the Ministry of Health's requirements to resolve the contamination problem and to prevent its recurrence.
  - The previous audit found that the local water supplier of Moshav Ahihud failed to comply with the Ministry of Health's requirements, which led to contamination of the drinking water supply and made it necessary to boil the water.

The follow-up audit found that these suppliers are persisting in their noncompliance with Ministry of Health directives, the purpose of which is to assure the quality of the drinking water that they are supplying.

The State Comptroller, Annual Report 66A (2015), "Local Authorities" and Water Suppliers' Actions to Assure Drinking Water Quality," p. 609

- Compliance with the sampling program the previous audit found 28 water suppliers that failed to comply with the annual sampling program for conducting microbial and chemical testing of the water supply system. The follow-up audit found that 11 of them failed to comply with the sampling program, mainly in relation to tests to detect harmful metals in drinking water.
- Rectification of deficiencies found by the Ministry of Health during the previous audit, the Office of the State Comptroller found that in four instances, the Ministry of Health had conducted repeat inspections at water suppliers and found recurring deficiencies that the suppliers had not taken action to rectify. During the follow-up audit, the Office of the State Comptroller found that three of the suppliers had still not completely rectified the deficiencies.
- Information about backflow prevention devices the Ministry of Health does not have up-to-date information about the suppliers' actions to rectify the deficiencies found in relation in the installation of backflow prevention devices in several settlements in the agricultural sector.



**Regulation of drinking water drillings** – the previous audit found that 48 drinking water drilling rigs were operating without Ministry of Health certification or a business license and that there were hazards within the bounds of the protective areas around most of the drill rigs, which are liable to cause contamination of the well water. The follow-up audit found that only two drill rigs were operating without approval on the audit completion date.

**Installation of an automatic disinfection system** – the previous audit found that a controlled automatic disinfection system was not installed during the drillings performed by the Mei Ono, Mei Avivim and Ma'ayanot Hameshulash water corporations. The follow-up audit found that this deficiency has been rectified and that such automatic disinfection systems have been installed at the drilling sites being operated by these water corporations.

Cleaning and disinfecting of drinking water reservoirs in Tirat HaCarmel – the previous audit found that the Municipality of Tirat HaCarmel failed to clean the drinking water reservoirs under its responsibility for about seven years. The follow-up audit found that Tirat HaCarmel had joined the Ma'ayanot Hahof Water Corporation in September 2016 and that, since 2017, the corporation has been cleaning these reservoirs annually.

Compliance with the microbial sampling program – the previous audit found that 28 water suppliers were failing to comply with the annual sampling program for conducting microbial tests. The follow-up audit found that all of the suppliers, apart from one, are properly complying with the microbial sampling program<sup>3</sup>.

<sup>3</sup> Although it was found that some of them are not testing for metals as is required.



Rectifying the deficiency pertaining to backflow prevention devices – the previous audit found that nine suppliers failed to compile a list of businesses under their responsibility that are obligated to install a backflow prevention device, failed to supervise the installation of backflow prevention devices in these businesses and failed to verify that the backflow prevention devices are working properly by monitoring and enforcement measures as is required. The follow-up audit found that eight suppliers made progress in handling this issue.

## Key recommendations

- It is recommended that the Mateh Asher Regional Council should take action to regulate the approval of drillings in Kibbutz Saar, including by delegating authority to Kibbutz Saar's local committee, insofar as it shall deem this appropriate.
- It is recommended that the Municipality of Nesher, the Gilbo'a Regional Council, Kibbutz Tel Yosef's local committee and the Mateh Asher Regional Council should take action including by authorizing Moshav Ahihud's local committee (insofar as it shall deem this appropriate) to assure drinking water quality in each of their respective supply systems in compliance with Ministry of Health directives.
- It is recommended that the Ministry of Health should accelerate its handling of the matter of water drilling rigs that are operating without certification or not in compliance with its directives, and should take enforcement measures against suppliers that are failing to comply with the provisions of the law and the Ministry's directives
- It is recommended that the Ministry of Health should notify the local authorities about water suppliers that are failing to operate in compliance with the Ministry of Health's directives, in order to enable them to take action and fulfill their responsibility for verifying that suppliers of water to the communities within their jurisdiction will take all measures necessary to assure the quality of the drinking water.

# Quality assurance of drinking water – key findings of the follow-up audit

Audit item	Deficiencies reported in	Extent of rectification of the deficiency found in the follow-up audit				
Audit itelli	the audit report	Not rectified	Somewhat rectified	Considerably rectified	Fully rectified	
certification and licensing of drillings	Operation of drilling rigs by Mekorot and several water companies without Ministry of Health approval					
	Operation of drilling rigs by several local committees without Ministry of Health approval					
Installation of a continuous chlorine meter on drill rigs	Operation of drilling rigs without installing a controlled and automatic disinfection system					
Cleaning and disinfecting water reservoirs	Water reservoirs are not being cleaned at the required frequency					
	Water samples are not being taken after disinfection					
Compliance with the sampling program	Failure to comply with the microbial sampling program					
Recurring deficiencies in drinking water facilities	Failure to rectify recurring deficiencies found in the water corporations					
	Failure to rectify recurring deficiencies found in local committees					
Water contamination and investigative reviews	Resolving problems causing incidents of water contamination			,		
	Failure to publish irregular results of tests showing contamination and the handling of them, and a failure to conduct investigative reviews					
	Local committees failed to install backflow prevention devices in several agricultural settlements					
	Water corporations failed to supervise the installation of backflow prevention devices in the business-industrial sector					



## Summary

Contamination of drinking water is liable to cause grave and extensive harm to the public's health. Meticulous compliance with the provisions of the law and the Ministry of Health's directives is essential in order to prevent contamination of the drinking water supply. The previous report specified numerous instances in which water suppliers weren't complying with the provisions of the law and Ministry of Health directives and jeopardized the health of the residents to whom they are supplying water. The current audit found that most of the deficiencies have been rectified and that the vast majority of the audited suppliers are being diligent about performing the requisite actions to assure drinking water quality. However, the follow-up audit found that some water suppliers are still not being strict about complying with the law and the directives and are not performing the aforesaid actions, thereby jeopardizing the health of their water consumers. The water suppliers, local authorities and the Ministry of Health should take action to rectify the deficiencies specified in this report in order to ensure that drinking water is being supplied to the public at the requisite quality, and that the public will receive a full and accurate report about the quality of the drinking water being supplied to it.