

Requirements and monitoring of comprehensive schools and educational institutions

These instructions set out the requirements and recommendations the Environmental Services of the City of Helsinki will consider when monitoring the conditions of comprehensive schools, upper secondary schools, vocational institutes, institutes of higher education and other educational institutes. When designing the facilities, the operator or designer should contact Environmental Services at as early a stage as possible. Environmental Services can provide a statement and guidance on the designs of the new premises or the changes needed in existing premises.

The action limits of these instructions are based on, for example, the Health Protection Act, the Housing Health degree and the instructions for applying the Housing Health degree by Valvira, the National Supervisory Authority for Welfare and Health. The instructions on in-house control and hygienic conditions in accordance with the Health Protection Act are based on the instructions of Valvira on the condition monitoring of schools and day-care centres, prevention of health hazards and their review. The Ministry of Social Affairs and Health's manual, 'Reducing the risks of infection in day-care centres' was also applied to the section on hygiene. Additionally, the instructions briefly explain the requirements set forth in the Food Act.

In addition to Environmental Services, special requirements for school and educational institute operations and premises are set by parties such as the Regional State Administrative Agency, the Education Division, the Building Control Services, and the Rescue Department.

The City of Helsinki Environmental Services' instructions, updated in April 2021
The changes and updates have been presented at the end of these instructions

Contents

PROCESSING OF MATTERS RELATED TO COMPREHENSIVE SCHOOLS AND EDUCATIONAL INSTITUTES BY THE	
ENVIRONMENTAL SERVICES	3
Notification in accordance with the Health Protection Act and inspections according to health protection control plan	3
Notification in accordance with the Food Act and inspections in accordance with the foodstuff monitoring plan	4
IN-HOUSE CONTROL	5
In-house control in accordance with the Health Protection Act	5
In-house control in accordance with the Food Act	6
REQUIREMENTS RELATED TO THE FACILITIES, THEIR OPERATIONS AND THE ENVIRONMENT	7
Surroundings and yard areas	7
Spatial planning	9
Indoor climate	9
Soundproofing and noise	10
Toilet, washing and cleaning facilities	10
Hygienic conditions	11
Kitchen	12
Household water and fresh water	13
Pool water and pool facilities	14
Waste management	14
CARBON-NEUTRAL HELSINKI AND ENVIRONMENTALLY RESPONSIBLE ACTIONS	15
MORE INFORMATION	15
Guidance	15
Instructions and regulations	16
Revisions and updates	17

Processing of matters related to comprehensive schools and educational institutes by the Environmental Services

Notification in accordance with the Health Protection Act and inspections according to health protection control plan

Comprehensive schools and educational institutions are establishments subject to a notification based on section 13 of the Health Protection Act, and monitoring their health-related conditions is the responsibility of the municipal health protection authority. The purpose of the notification obligation is to make authorities aware of operations the safety of which must be assessed and monitored in order to protect health, and the safe organisation of which may require issuing instructions or regulations.

The operators must submit a notification to the Environmental Services at least 30 days before starting operations in accordance with section 13 of the Health Protection Act. In addition to comprehensive schools, this notification obligation applies to upper secondary schools, vocational institutes and institutes of higher education.

The notification should primarily be submitted through the environmental health services' electronic notification service at ilppa.fi. A private entrepreneur or a company's authorised representative can log in to the ilppa.fi service directly with their Suomi.fi credentials. Other users of the ilppa.fi service require an authorisation granted by their company's authorised representative through the Suomi.fi service. The website of the Finnish Food Authority has more detailed instructions on how to use the ilppa.fi service.

Submitting the notification is also possible with a notification form available on the Environmental Services' website. In such cases, the notification is sent by email to ymk@hel.fi (or by post to City of Helsinki, Urban Environment Division, Services and Permits, Environmental Services, Environmental Health Unit, P.O. Box 58235, FI-00099 CITY OF HELSINKI).

Processing (registering) a notification in accordance with the Health Protection Act includes recording the data in a monitoring database maintained by the supervisory authority as well as a preliminary risk assessment of the operations. The supervisory authority will send the operator a certificate confirming that the notification has been processed and an estimate of the timing of the inspection. A fee will be charged for processing the notification in accordance with the approved price list of the Urban Environment Committee's Environment and Permits Sub-committee. The establishment and its operations will be inspected after registration. The Environmental Services will request the establishment's layout plan and a review of its ventilation to be delivered to it for the purposes of the inspection.

A notification must also be submitted to Environmental Services if any substantial changes in the operations occur. Such changes may include, for example, a substantial change in the number of pupils or students and taking a facility that was previously used for other purposes into teaching use (such as a residential apartment connected to the school). The procedure is the same as

above. A fee will be charged of processing the notification of change in accordance with the approved price list of the Urban Environment Committee's Environment and Permits Sub-committee.

If the operator changes, the new operator's contact information must be reported to the Environmental Services. The notification can be submitted via the ilppa.fi service or with the same form used for submitting a notification about starting operations. Furthermore, a notification to the Environmental Services must be submitted when the operations end.

Systematic monitoring refers to inspections of health-related conditions in the facility in accordance with the Environmental Health Service's monitoring plan. The systematic monitoring inspections are charged from the operator in accordance with the price list confirmed by the Environment Committee. The aim of this monitoring is to prevent health hazards and identify them at an early stage.

Notification in accordance with the Food Act and inspections in accordance with the foodstuff monitoring plan

A food industry operator must submit a written or an electronic notification to the Environmental Services in accordance with section 13 of the Food Act about any food establishment, such as a school's kitchen, at least four weeks before the operations are started or substantially changed or before the operator changes. Attaching the kitchen's layout plan with fixtures and a list of equipment to the notification is recommended.

The notification should primarily be submitted through the environmental health services' electronic notification service at ilppa.fi. A private entrepreneur or a company's authorised representative can log in to the ilppa.fi service directly with their Suomi.fi credentials. Other users of the ilppa.fi service require an authorisation granted by their company's authorised representative through the Suomi.fi service. The website of the Finnish Food Authority has more detailed instructions on how to use the ilppa.fi service.

A food establishment notification can also be made with a written form. The notification form is available on the Environmental Services' website. The form must be delivered to: City of Helsinki, Environmental Services, Food Safety Unit, P.O. Box 58235, FI-00099 City of Helsinki, or by email to: elintarviketurvallisuus@hel.fi.

The processing (registering) of a food premises notification includes the registration of the premises' information in a monitoring database maintained by the food monitoring authority and a preliminary risk-assessment of the food premises. The supervisory authority will send the operator a certificate confirming that the notification has been processed. A planned inspection based on the Food Act will be carried out in the establishment after the registration.

The costs accrued due to the inspections, sampling and examinations carried out in accordance with the foodstuff monitoring plan will be charged to the operator. The fees are determined based on the approved price list of the Urban Environment Committee's Environment and Permits Sub-committee.

The number of inspections and sampling are based on the risk assessment of the operation and the efficiency of in-house control. Interrupting or ending the operations of a food establishment must be reported to the Environmental Services without delay.

In-house control

In-house control in accordance with the Health Protection Act

The operator has an obligation to identify the health risks of their operations and to arrange their operations in a way that prevents these health hazards to the extent possible. The operator must be able to show how the potential health risks affecting the operations have been identified, how their severity has been assessed and what risk management methods the operator and the employees have adopted. For this purpose, it is recommended that the operator compiles an in-house control plan.

The property owner's actions for monitoring and maintaining the building's state are especially important to maintaining the conditions and preventing health hazards. An operator must arrange their operations in a manner that prevents any health hazards that could occur affecting the users of the premises, for example when allowing too many people to use the premises or when neglecting cleanliness and hygiene. An efficient in-house control plan can prevent health hazards by highlighting any deficiencies in the indoor environment or operational methods and by allowing the operator to rectify any deficiencies they themselves have observed. Functional in-house control is a process of continuous improvement.

It is recommended that the operator draws up a written in-house control plan so that everyone can read it and use it in maintaining and developing the operations. Even though in-house control is required by the law, the purpose of the in-house control plan drawn up to support this is primarily to help the operator to arrange their operations. A written in-house control plan is an excellent tool for employee orientation, for example.

Recording and keeping the notifications and measures concerning health-related conditions is also part of in-house control. Recording these matters is also a prerequisite for developing in-house control. When a party in charge of teaching operations and the owner of the building overseeing the healthiness of indoor air independently take care of actions during problematic situations and record the issue, they are taking care of their in-house control duties. All health and safety-related measures at a school or educational institute, for example notification related to indoor air and consequential rectification of a fault with maintenance measures and informing the users after the repairs, must be documented. If necessary, the operator must be able to present the documented measures to the health protection authority and the indoor air working group.

The in-house control plan describes the operations, their risk factors and the prevention of risk factors, for example the following areas:

Actions

Description of operations and facilities

- Facilities and the operations or services practised, operating hours
- Number of people, e.g. customers, staff, highest number of people present at the same time
- Number and location of toilets and water points
- Cleaning and laundry operations

- Facility management
- Waste management
- Equipment used in the operations
- Cleaning and disinfection of equipment and surfaces

Health conditions of facilities

- Physical conditions, e.g. ventilation, thermal conditions, noise, lighting, water
- Chemical and biological conditions, e.g. chemical and microbiological effects of the structures and operations on indoor air, particle contaminants in indoor air

Risk factors in the operations

- Location and environment
- Functions involving health risks
- Sensitive population groups and risk groups, large number of people
- Changes in operations and facilities
- Need for repairs in the facilities
- Surfaces' and facilities' ease of cleaning
- Pests
- Household water and fresh water

Prevention of risk factors

- Operations and the sufficiency and suitability of the facilities
- Up-to-date review of the building's condition has been carried out
- Up-to-date user surveys (potential indoor air surveys)
- Staff orientation, up-to-date work and operational instructions, customer guidance
- Cooperation and communication between interest groups
- Maintaining the facilities, monitoring and documentation
 - Cleanliness, order and hygiene of facilities (e.g. a cleaning plan and monitoring its implementation; instructions for textile care; cleaning toys and sports equipment and similar)
 - Maintenance plans for the real estate and technical equipment (e.g. dust removal and cleaning of the ventilation system, facility repairs/functionality, monitoring and maintenance of the household water system's functionality)
 - Monitoring the functionality of equipment used in the operations
- Operating in instances of indoor air problems and when should you suspect indoor air problems
- Preparedness for epidemics and other disruptive situations
- Pest extermination

In-house control in accordance with the Food Act

All food business operators have an in-house control obligation. The more extensive or riskier the operations, the more comprehensive the operator's in-house control plan should be.

In-house control means that the operator is constantly monitoring and reviewing their own operations and ensuring that the foodstuffs are safe and adhere to the legislation related to foodstuffs. To support in-house control, a written in-house control plan must usually be drawn up, describing the factors related to operations that endanger food safety and their management. When compiling the in-house control plan, the operator can use the in-house control plan templates created by the City of Helsinki, for example. The template is introduced by filling in all the fields with the establishments information and practices.

A person overseeing the in-house control should always be appointed, and their duty is to develop and maintain the system and make sure that in-house control is implemented in day-to-day

work. Each employee must be inducted in in-house control and everyone must be aware of their role in implementing in-house control and be able to do their part.

The operator must keep a record of in-house control results. Such records include, for example, records related to the temperature monitoring of foodstuffs regarding their storage, serving and cooling temperatures.

Requirements related to the facilities, their operations and the environment

The following section presents the key requirements of environmental health and environmental protection when planning or renovating a school or educational institution facilities. More detailed instructions for construction, facility planning (such as cleaning equipment facilities, social facilities, coat rack and entrance halls), lighting, acoustics and outdoor play areas have been presented in, for example, in the Building Information Foundation's information cards and in the Finnish National Agency for Education's planning manuals (art, music and home economics classes).

The special characteristics of beauty schools and teaching facilities need to be considered when planning them. The City of Helsinki's requirements and monitoring of hygiene premises guidelines can be utilised to support the planning.

Surroundings and yard areas

When the location of school or educational institute is being planned, whether the noise level, air quality and soil in the area, amongst other factors, are suitable for the operations must be reviewed.

According to health impact studies, children, seniors and people suffering from heart and respiratory system diseases are the most vulnerable to traffic emissions. This means that schools are counted as 'sensitive' locations. If the school is located in an area with busy traffic, the location's suitability for the intended purpose must be reviewed case-specifically in cooperation with the City of Helsinki's Environmental Services. The plot cannot be considered suitable for school operations if it can be assumed that the air quality and noise level guidelines will be exceeded.

The guidelines concerning general ambient noise level both indoors and outdoors were determined in the Finnish Government decision (993/1992). According to the decision, the equivalent continuous sound pressure level (LAeq) of traffic and other noise sources in the local environment during the daytime (7 am–10 pm) cannot exceed 55 dB in outdoor areas where people spend time. In indoor areas, the maximum continuous sound pressure level allowed during the day is 35 dB.

If the location is located close to a traffic lane, the yard and play areas should be situated behind the building to protect them. If the noise level guidelines are exceeded, noise abatement measures may be required to protect the yard area, such as building a noise barrier, for example a noise abatement fence around the plot. Furthermore, improved sound-proofing can be required for the building's outer walls, windows and other structures. The plot cannot be considered suitable for school operations if the guidelines are exceeded despite the noise abatement measures.

In order to protect health, European Union legislation has set binding limit values for the content of sulphur dioxide, nitrogen dioxide, respirable particles, fine particles, lead, carbon monoxide and benzene in outdoor air, specifying the maximum content allowed for these air contaminants. In addition to these, the Finnish Government decision (480/1996) issued guideline values for air contaminants such as nitrogen dioxide and respirable particles. These express the air quality goals both in the short-term and in the long-term. The guidelines must be considered when planning land use and traffic, for example, and the location of operations that bear a risk of air contamination. The objective is to proactively prevent exceeding these guideline values.

In urban areas, the major factors affecting air quality are traffic emissions and street dust. Furthermore, industrial plants near the location or other industrial or transport-related operations may affect air quality locally. Wood burning in areas with single family homes can also significantly decrease air quality.

The Centre for Economic Development, Transport and the Environment for Uusimaa's manual on air quality in land use planning defines the recommended distances of air quality zones, closer than which no residential areas or sensitive locations should be zoned in new areas. The minimum distance should be applied when zoning is changed in built areas and with urban infill. In special locations, such as junctions, at the mouth of tunnels and in poorly ventilated areas, the recommended distances are reviewed on a case-by-case basis. Information about the amount of traffic in the area is available from the Urban Environment Division's Transport System Unit.

Vehicles in a day	Distance of a sensitive location from the edge of the road (m)	Distance of a sensitive location from the edge of the road (m)
	minimum ¹	recommendation ²
5 000	10	20
10 000	20	40
20 000	40	80
30 000	60	120
40 000	80	160
50 000	100	200
60 000	120	200
70 000	140	200
80 000	150	200
90 000	150	200
100 000	150	200

Table 1. A sensitive location's, such as a school's and a recreational outdoor area's minimum distance from the edge of a road based on traffic. Applies to ¹existing areas and urban infill areas, ²new areas.

The air inlets of the building must always be placed in a location with as clean air as possible, away from any traffic lanes, waste collection points and lanes used by the building's maintenance traffic. Air is usually the cleanest at roof-level, on the side protected by the building. In environments with busy traffic, the level of filtering of the input air should also be considered.

When planning the location of the school or educational institute, whether the previous operations in the area (such as industrial, storage or depot areas) have caused soil contamination to the extent that the soil must be cleaned, must be reviewed. It must also be ensured that detrimental levels of radon cannot move from the soil to indoor air through the structures. More detailed instructions regarding the plans and requirements for a school's yard area can be requested from the Education Division.

Spatial planning

When planning the facilities and selecting materials, the spaces' ease of cleaning should be kept in mind. For example, level surfaces located up high that are difficult to clean should be avoided in planning.

Environmentally friendly materials with low emissions (M1 class materials) must be favoured in construction.

Lighting must be sufficient for the operations, and the premises used by the students must be equipped with windows to provide natural light.

Indoor climate

Good and healthy indoor air must be one important objective of building planning. This requires plans for ensuring protection during construction work, moisture management, material selection and cleanliness of ventilation equipment, among other factors.

Microbes, dust, gaseous compounds and other contaminants cannot occur in indoor air in amounts that would pose a health hazard.

In educational institutes and similar facilities, the temperatures must be in line with the action limits determined in the housing health degree:

- The indoor air temperature during the heating season must be +20 °C – +26 °C
- The indoor air temperature outside the heating season must be +20 °C – +32 °C
- The lowest average temperature of a wall surface +16 °C
- The lowest average temperature of a floor surface + 19 °C
- The lowest point surface temperature + 11 °C.

Surface temperatures are assessed using a temperature index when temperatures cannot be measured at - 5 °C ± 1 °C outdoor temperature and at + 21 °C ± 1 °C indoor temperature.

The outdoor air flow in teaching facilities must be at least 6 l/s per person during use. However, this can be reduced to 4 l/s, if it is ensured that the contaminant content of indoor air or its temperature do not become high enough to cause a health hazard or that indoor air moisture content does not increase to the point of causing a risk of microbe growth in the structures. Ventilation should not cause a draught, and the contaminants in input air must be filtered as well as

possible. One way of assessing the sufficiency of ventilation flow in relation to the premises' rate of use is by carrying out a carbon dioxide measurement of indoor air.

It is recommended that recreational or working facilities have at least one window that can be opened for ventilation. A vestibule or other technical solution for preventing draughts must be built in connection to exits (excluding emergency exits).

In special classrooms, such as arts and crafts, workshops, chemistry and physics, sufficiently efficient local extraction of dust and gaseous contaminants or heat must be ensured for workspaces requiring them. Chemical cabinets must be equipped with an outgoing air system.

The radon content of indoor air cannot exceed the guideline value set by the Radiation Act, 300 Bq/m³. If necessary, the radon concentration must be determined with appropriate measurements, if there is no prior measurement data on the premises available. Reviewing the radon concentration is the responsibility of the property owner/operator. The Radiation and Nuclear Safety Authority's website has instructions for how to carry out the measurements as well as advice for preventing radon.

Soundproofing and noise

The soundproofing and noise abatement of premises used for teaching activities must be planned and implemented in a way that makes it possible to achieve adequate sound conditions and so that the understandability of speech is guaranteed. Sound in premises must be dampened so that any echoing in the eating areas, hallways and similar areas does not cause any noise disruptions. In particular, sufficient soundproofing should be ensured in locations within a residential building, with respect to the surrounding apartments.

The action limits of indoor noise's average level (LAeq) cannot be exceeded in living premises / indoor areas (35 dB during daytime). In premises used for teaching activities, the average noise level of sound made by ventilation equipment and other technical equipment in the building cannot exceed 35 dB during daytime (7 am–10 pm). The soundproofing of workshops, music classrooms and similar facilities must be adequate to keep the noise levels of surrounding classrooms below the action limit determined above.

Toilet, washing and cleaning facilities

Comprehensive schools must have at least one toilet and one hand-washing sink for every 20 pupils and educational institutes must have one toilet and one hand-washing sink for every 25 students. The personnel must have their own toilet facilities; this is supervised by the Regional State Administrative Agency's Occupational Safety and Health Administration. A water point should be located within each classroom or in the immediate vicinity for washing hands and getting water to drink. It is also recommended that a hand-washing point is included in entrance areas. The hand-washing points must be equipped with liquid soap dispensers and a hygienic method for drying hands (e.g. paper towels or a towel roll housed in a rack).

A separate space with a water point, a floor drain, a radiator for drying clothes and a stand for cleaning equipment must be reserved for cleaning equipment and detergents, with adequate shelf space. The cleaning equipment facility should be in a central location and, if necessary, there should be more than one. Access to the cleaning equipment facility must not be through

toilet facilities. Laundry and drying must be done mechanically. Textiles can also be washed by a laundry service.

Hygienic conditions

Maintaining hygienic conditions is one of the most essential aspects from the perspective of children's and young people's health in the supervision of schools and educational institutes. Poor hygiene increases the prevalence of illnesses and may also cause incorrect suspicions of poor indoor air. Hygienic practices have a significant effect on infection risk. Other factors affecting infection risk are, among others, the number of students, cramped spaces, sufficient cleaning, quality of cleaning, the condition of surface materials and the functionality and ease of cleaning of the facilities.

Microbes that naturally thrive inside the human body do not cause a healthy person to become sick, but rather act as important protective barrier against detrimental microbes. A human's digestive tracts cannot function without bacteria. These useful bacteria are called normal flora. Humans also always carry microbes that come from their living environment, for example from other people, surfaces and soil, especially on their hands.

Microbes carried by people can be transmitted to another person and cause them to become sick. The closer the people are physically to each other, the more likely it is that the microbes will be transmitted from one person to another, for example when sneezing towards another person or indirectly via items or surfaces. Poorly washed hands after a visit to the toilet can transmit intestinal microbes from place to place and person to person.

We are constantly exposed to infections, as our living environment is full of infectious agents. Infection means that a person's body is exposed to a microbe that is detrimental to it. The detrimental microbe must first access the mucous membrane of the exposed person, for example through their eye, nose or mouth, in order to infect the person. Being infected does not automatically mean falling ill; the person can just carry the disease without becoming ill themselves. Many diseases spread especially easily just before the typical symptoms of the illness start to appear.

When an infection occurs, the key factors are the person spreading the disease (carrier or a symptomatic person), the infection channel and the infection target (the person exposed to the infection). In school conditions, physically close contact helps microbes be transmitted easier from one child to another. All shared objects and equipment can act as infection agents. A microbe in infectious secretion can cause an illness if it reaches the mucous membrane of a healthy person, usually through their mouth, nose or eye. An infection cannot occur through skin contact alone, if the skin is healthy. A microbe can transmit from one person to another for example when shaking hands or when touching various surfaces, such as door handles or school equipment.

Decreasing the risk of infection is important. The most important aspect in spreading infection through contact are our hands, as they are constantly touching everything around us, such as door handles and other people. Washing hands is the most important individual action that can be taken. The cleanliness of school equipment, sports equipment, door handles, surfaces and items also affects the spreading of infections.

The level of cleaning and ease of cleaning of a facility affect the indoor air quality. When assessing the ease of cleaning, attention should be paid to factors that increase dust accumulation and make cleaning more difficult. The tops of cupboards, surfaces, floors and corners should be kept clear of any unnecessary items, closets with doors should be chosen over open shelves, the number of pieces of furniture should be kept reasonable and it should be possible to clean underneath/behind them. All surfaces should be intact and made of materials that are easy to keep clean.

Kitchen

A school kitchen can be a preparation kitchen, a re-heating kitchen or a service kitchen, for example. The kitchen's dimensions and equipment must suit the extent of its operations.

The kitchen surface materials must be easy to clean and tolerate washing with water and mechanical cleaning, if necessary to maintain food hygiene. The kitchen must have enough working surfaces and pantry and cold storage room in relation to the extent of its operations. The kitchen cannot be used as a pass-through area, and even a service kitchen should be separated from other areas to ensure a sufficient level of hygiene.

By default, a kitchen where easily perishable foodstuffs are processed should have a separate hand-washing sink with a liquid soap dispenser and a paper towel rack as well as separate water points for preparing food and pre-washing dishes. In small units to which food is delivered ready-made (service kitchen) and where no easily perishable foodstuffs are processed, the kitchen can have fewer amenities (such as a regular kitchen). In such facilities, one half of the sink divided into two parts can be used for washing hands and the other for pre-washing dishes, in addition to the dishwasher. The sink area must be equipped with a liquid soap dispenser and a paper towel rack.

It must be possible to clean, maintain and store the kitchen cleaning equipment in a hygienic manner. In general, it is recommended that a separate space for cleaning equipment is reserved, equipped with a water point, a sink for pouring out dirty water and a radiator for drying cleaning cloths, shelf space for cleaning equipment, a rack for cleaning equipment with long handles and adequate ventilation. Separate cleaning equipment should be reserved for food preparation spaces and other facilities, and this must be stored/maintained as separately as possible.

In smaller units with lower risks, such as small service kitchens in school, storing the cleaning equipment in the same storage space as the other cleaning equipment in the school is possible, but the tools must be marked with their specific purpose of use and kept as separate from each other as possible. Shelf space must be reserved in the kitchen for equipment and detergents needed frequently in the kitchen. It is recommended that disposable cleaning equipment is used to maintain cleanliness in the kitchen, when there is no separate space reserved for cleaning equipment maintenance (with, for example, a water point and a sink for pouring dirty water).

A toilet and changing room facilities must be reserved for kitchen staff near the kitchen. These can be shared with other members of personnel. Larger food preparing kitchens should have their own toilet facilities for kitchen staff near the kitchen. Toilet facilities cannot have doors that open directly into premises where easily perishable foodstuffs are processed.

Premises that are protected against rain and pests must be arranged for food transport crates, such as milk crates and bread crates.

Sufficiently efficient ingoing and outgoing air ventilation must be arranged for the kitchen, as required by the type of the kitchen. There must be a hood with a grease filter above the kitchen stove and oven and a steam hood above the dishwasher. Any noisy equipment, such as compressors of cooling equipment, must be located outside the kitchen, if possible, in order to reduce noise disruptions.

The kitchen should also have a space reserved for the staff's office equipment. In larger kitchens, this should preferably be a separate office workspace.

Waste generated in the kitchen should be removed daily following the appropriate municipal waste management regulations and guidelines and the Waste Act. The kitchen should have separate containers for biowaste and mixed waste. Space for several waste containers should be reserved in the kitchen premises to allow for more extensive sorting (carboard, paperboard, metal, glass, etc.).

It is recommended that a hand-washing sink with a liquid soap dispenser and paper towel rack is installed in the eating area or in its immediate vicinity for the diners or other purposes.

When planning the kitchen, the City of Helsinki's guidelines for establishing a café or restaurant or the Finnish Food Authority's instructions for founding a café, restaurant or industrial kitchen can be used to facilitate the process. The City of Helsinki's Food Safety Unit also offers guidance and instructions concerning the suitability of the premises and the intended operations.

Household water and fresh water

The water plant is responsible for the quality of the mains water supplied. The property owner is responsible for the property's water quality and the condition of its pipes. Water should not be used if any suspicious odour, taste or scent is detected or if it is suspected that the water is causing any symptoms. If such deviations in water quality are detected, the property manager must be contacted as well as the water plant and the health protection authority, if necessary (City of Helsinki, food safety control). Allowing water to run from the tap for a while before using it for drinking or cooking is recommended. This is especially important when the water has been standing in the pipes for several hours or when the water fixtures in the building, such as the tap or the pipes, are new.

Warm water from the pipes is intended for washing. It should not be drunk or used for cooking. Water quality deteriorates in the property's warm water system, as higher temperatures increase the dissolution of metals and chemicals and sometimes also substances causing odour or taste changes from the water system and fixtures. Over time, deposits that decrease water quality may accumulate in water heaters.

Water temperature is an important factor affecting the growth of legionella bacteria. Legionella bacteria can breed in water at temperatures of + 20 °C – + 45 °C. In new and renovated properties, the temperature of warm household water should be at least + 55 °C and in old properties at least + 50 °C throughout the system. To prevent legionella bacteria, warm household water

should be kept at approximately + 55 °C – + 60 °C, regardless of the system's age. The temperature of cold water should remain below + 20 °C to prevent legionella bacteria from growing. Water systems that are not used much or sometimes not at all are potential growth spots for legionella bacteria. All water points in the property must be used regularly to prevent water stagnating in the property's water system. The good condition and functionality of the property's water pipes and water fixtures must be ensured.

Pool water and pool facilities

Pool water quality must be ensured by such means as a water treatment system, in-house control and regular control samples taken by the party maintaining the pool. To facilitate appropriate use of chemicals in pool water and water quality control, the person carrying out the measures that affect water quality must have a certificate that proves their plant engineering and pool water hygiene competence, i.e. a water hygiene licence. Their supervisor must also have a water hygiene licence. The Environmental Services monitor the pool facilities through inspections and regular water sampling. More information about the quality of pool water is presented in the application guide of the Swimming Pool Water decree, for example.

Swimming pool facilities and operations arranged in them must be planned and implemented in a way that allows for minimisation of the occurrence of situations causing health hazards. Factors that may cause health hazards in swimming pool facilities include the pool water, dirty surfaces and indoor air, for example. More information about the structural and functional requirements of swimming pool facilities is available from the Environmental Services.

Waste management

From the perspective of health protection, waste management must be arranged in such a way that the waste does not pose a health hazard at any stage of waste management. Waste management refers to waste collection, transport and storage and the utilisation, final treatment or disposal of the collected waste.

Among other factors, properties must consider the location and maintenance of waste collection containers so that they do not pose an odour nuisance or other health hazard. The access of pests to the waste containers must also be prevented by ensuring that the waste containers are undamaged and that they are emptied often enough that the container lids can always be closed.

Glass containers, cardboard and paperboard, scrap metal and biowaste should be sorted separately at the property, if at least 25 kg of them are generated on a weekly basis, as well as plastic waste, if at least 15 kg of it is generated on a weekly basis. Any hazardous waste must be delivered to authorised collection point, for example a Sortti station.

When planning the premises, preparing for more efficient sorting in the future is recommended. Fire safety should be considered when choosing the location of the collection equipment, as well as sufficient distance from buildings' windows and air inlets. More detailed instructions for planning a waste collection facility and organising waste management can be found in the general waste management regulations of the Helsinki Metropolitan Area and Kirkkonummi, for example.

Carbon-neutral Helsinki and environmentally responsible actions

The City of Helsinki is aiming to become carbon-neutral by 2035. The most significant sources of greenhouse gas emissions in Helsinki include the heating of buildings, electricity consumption and traffic. The climate goals affect not only the City organisation, but also the residents and the organisations operating in Helsinki. There are many great tools available to an organisation for promoting and constantly improving the environmental responsibility of operations.

The sustainability programme of day-care centres, schools, educational institutes and recreational operations for children and young people, Eco-Schools, is a comprehensive operating model of environmental education. Once the operator meets the programme criteria, they are awarded with a certificate.

The certification of educational institutes' sustainable development is a system maintained by the OKKA foundation, which provides tools, guidance and training to support the sustainable development work of schools and educational institutes. The system is based on the criteria of sustainable development, which enable external evaluation and certification.

EcoCompass is a practical environmental management system that focuses on concrete measures. EcoCompass is suitable for all sectors and it is customised to support the operations together with an advisor. The system features ten criteria, which the organisation commits to. The system is also audited, and a certificate is granted to those who meet the criteria.

Eco-support activity is an operating model developed to promote environmental awareness in the workplace. Trained eco-supporters in work communities promote responsible operating methods in cooperation with the other employees. The website of the eco-support activity features plenty of useful materials available to all. The objective of the City of Helsinki's organisation is to build an EcoCompass environmental management system for all sectors, either at the level of the divisions or the service units. Another goal of the City's environmental policy is that a trained eco-supporter is available in every work community.

More information

Guidance

Advice for planning the facilities, ventilation, toilet and cleaning facilities and hygiene of schools and educational institutes as well as for processing the notification as defined in the Health Protection Act and organising in-house control is available from the environmental inspectors of the Environmental Services' Environmental Health Unit who monitor schools and educational institutes, tel. (09) 310 2611 or via email to kymp.ytynposti@hel.fi.

Advice for planning kitchen facilities, submitting a notification according to the Food Act and organising a kitchen's in-house control activities is available from the service number of the Environmental Services' Food Safety Unit, tel. (09) 310 14000 and via email from elintarviketurvalisuus@hel.fi.

Advice on matters related to noise abatement, air protection and land use environmental impact assessment is available from the Environmental Services' Environmental Protection and Guidance Unit's environmental impact teams via email, kymp.ymparistovaikutukset@hel.fi.

Instructions and regulations

- Health Protection Act (763/1994) and degree (1280/1994)
- Decree of the Ministry of Social Affairs and Health on Health-related Conditions of Housing and Other Residential Buildings and Qualification Requirements for Third-party Experts (545/2015)
- Instructions on the application of the Housing Health Decree (Guideline 8/2016, sections I–V, National Supervisory Authority for Welfare and Health), in Finnish
- Decree of the Ministry of Social Affairs and Health on ionising radiation (1044/2018)
- Radiation Act (859/2018)
- Instructions on condition monitoring and prevention and review of health hazard in schools and day-care centres (National Supervisory Authority for Welfare and Health, instructions 12/2018), in Finnish
- Healthy and safe educational institute, Manual for multiciliary review of the environment and the community (Finnish Institute for Health and Welfare, 2015), in Finnish
- Reducing the infection risk at day-care centres (the Ministry of Social Affairs and Health's guides, 2005:28), in Finnish
- In-house control in health protection, the City of Helsinki's Environmental Services, <https://www.hel.fi/static/liitteet-2019/Kymp/asuminen-ja-ymparisto/ymparistoterveys/In-house%20control.pdf>
- Requirements and monitoring of hygiene premises, the City of Helsinki's Environmental Services, <https://www.hel.fi/static/liitteet-2019/Kymp/asuminen-ja-ymparisto/ymparistoterveys/Hygiene-premises-instructions.pdf>
- Food Act (23/2006)
- Ministerial decree by the Ministry of Agriculture and Forestry on the food hygiene of food premises subject to a reporting obligation (1367/2011)
- Regulation (EC) No 852/2004 of the European Parliament and of the Council on the hygiene of foodstuffs
- The Ministry of Agriculture and Forestry Decree on the Provision of Food Information to Consumers (834/2014)
- Regulation (EU) No 1169/2011 of the European Parliament and of the Council on the Provision of Food Information to Consumers
- Government Decree on foodstuff monitoring (72/2020)
- Establishing a café or a restaurant, instructions from the City of Helsinki building control services, https://www.hel.fi/static/rakvv/ohjeet/Ravintola_kahvila.pdf (in Finnish)
- Setting up a café or a restaurant, Finnish Food Authority, <https://www.ruokavirasto.fi/en/companies/food-sector/setting-up-a-food-business/setting-up-a-restaurant/>
- In-house control models from the Food Safety Unit, the City of Helsinki's Environmental Services, <https://www.hel.fi/helsinki/en/housing/foodstuff/food-handling/self-regulated>
- The Ministry of Social Affairs and Health's decree on quality requirements and control inspections of household water (1352/2015)
- Decree of the Ministry of the Environment on water supply and sewerage equipment of properties (1047/2017), in Finnish
- The Ministry of Social Affairs and Health's decree on quality requirements and monitoring inspections of pool water quality at swimming halls and spas (315/2002)

- Application guide of the pool water decree, Quality and monitoring of swimming pool water (National Supervisory Authority for Welfare and Health, instructions 2/2017)
- The Ministry of Social Affairs and Health's decree on plant engineering competence and pool water hygiene competence required from a person working at a swimming hall, spa or similar facility and on testing this competence (1350/2006), in Finnish
- Environmental Protection Act (527/2014)
- Government decision on guideline values of noise levels (993/1992), in Finnish
- Government decision on the guideline values of air quality and the goal value of sulfur deposition (480/1996), in Finnish
- Government Decree on air quality (79/2017)
- Government Decree on arsenic, cadmium, mercury, nickel and polycyclic aromatic hydrocarbons in ambient air (113/2017), in Finnish
- The European Union's directives on ambient air quality and its control (EC), No 50/2008 and 107/2004
- Air quality in land use planning (Uusimaa Centre for Economic Development, Transport and the Environment, 2015)
- Sound environment (the Ministry of the Environment's instructions on a building's sound environment, 2018), in Finnish
- Waste Act (646/2011)
- General waste management regulations of Kirkkonummi and the Helsinki Metropolitan Area, in Finnish
- The City of Helsinki's strategy
- Environmental Policy of the City of Helsinki
- Environmental health control plan and price list of Environmental Health, <https://www.hel.fi/helsinki/en/housing/foodstuff/health-control>

Revisions and updates

The changes implemented in the latest update of the instructions were related to the following topics:

- ilppa.fi notification service was added as a notification channel
- the instructions related to in-house control according to the Health Protection Act were specified
- instructions for in-house control in accordance with Food Act were added
- a reference to the Environmental Services' requirements and monitoring of hygiene premises guide as a tool for planning beauty schools and teaching facilities was added
- instructions for reviewing the radon content of indoor air were added
- guidelines for average noise levels indoors were specified
- instructions related to hand-washing points, cleaning equipment facilities and staff toilets were specified
- new topics were added for Household water and fresh water and Pool water and pool facilities
- sorting requirements for waste were updated.

Environmental Services
 tel. +358 9 310 2611
ymk@hel.fi
www.hel.fi/kaupunkiymparisto/en