3.5 FOOD SAFETY

Food control in Malta is that activity that ensures the safety and quality of foodstuffs, thereby protecting the consumer against fraudulent practices.

The Food Safety Commission (FSC) is an independent statutory body, set up under Part II of The Food Safety Act 2002 to co-ordinate the functions of all Competent Authorities responsible for food safety in Malta. The Commission is chaired by the Director General (Public Health Regulation Division) within the Ministry for Social Policy. Represented within the FSC are Directors of Authorities responsible for food safety throughout the food chain and covering the areas of risk management, risk communication and risk assessment. These include the Department for Environmental Health, Veterinary Affairs and Fisheries Division, Plant Health Directorate, Malta Environment and Planning Authority (MEPA), Malta Standards Authority (MSA), Consumer and Competition Division (CCD), and the Department for Health Promotion and Disease Prevention. The Minister responsible for Social Policy may further appoint up to three other members.

The Ministry for Social Policy, through the Directorate for Environmental Health (DEH), is primarily responsible for secondary production and processing of food, for all retail sale of food and for all catering outlets including accommodation outlets. It is also responsible for environmental hazards in Malta. The DEH is structured in two units: The Health Inspectorate Services and Public Health Laboratories. Through the Directorate for Health Promotion and Disease Prevention, the Ministry for Social Policy is also responsible for nutrition and the prevention of communicable disease.

The Ministry for Resources and Rural Affairs through the Animal Health and Welfare Directorate (AHWD) is responsible for animal health and animal welfare while through the Food Health and Diagnostics Directorate (FHDD) it is responsible for veterinary public health, feeding stuffs, veterinary medicines and residues, and for laboratory analysis. Coordination of international and local legislation, import controls, food of animal origin, and animals fall directly under the responsibility of the International and Legal Coordination Directorate.

The Malta Standards Authority through the Foodstuffs, Chemicals and Cosmetics Directorate, which is one of its four Directorates, plays a role in the technical evaluation of EU legislation prior to transposition and in facilitating the preparation of guides to Good Hygiene Practice. This Directorate also acts in an advisory capacity to the Ministry for Social Policy particularly on issues relating to labelling and chemical risk (additives, contact materials, contaminants). Since February 2008 this directorate is responsible also for Plant Protection Products.

In Malta, up to the year 2003, Salmonellosis was responsible for the majority of identified food-borne illness. However, as in the previous years, during 2007, the incidence of Campylobacter infections was higher than that for Salmonellosis. The Disease Surveillance Unit with the Department for Health Promotion and Disease Prevention investigates all cases of food borne illnesses including sporadic cases. During 2007 the unit investigated 92 cases of foodborne illnesses attributable to Campylobacter, 8 foodborne illnesses attributable to E. Coli, 80 cases of foodborne illnesses attributable to Salmonella, 8 related to Scombrotoxin and 68 cases of foodborne illnesses for which the contaminant was unspecified.

Following a serious outbreak in 1995 involving 225 cases of Brucellosis, which were been traced to the consumption of raw milk products, a new set of regulations were prepared to monitor the microbiological quality and production of these products.

The Department for Environmental Health annually runs several sampling programmes for the monitoring of chemicals and microbiological agents in food, including infant formula milk, and quality and hygiene of food services in educational and other institutions.

3.6 WASTE

The high population density in the Maltese islands with its highly consumerist society is resulting in ever increasing amounts of municipal waste, with each household creating approximately one tonne of this kind of waste annually. Municipal solid waste represents the second largest waste stream deposited in waste management facilities (comprising 8.4 % of total waste in 2006). There was a slight decrease (less than 1%) in municipal solid waste arriving at the main facilities between 2004 and 2006. In 2006, 240,606 tonnes of municipal solid waste were generated, compared to 242,116 tonnes in 2004[24].

The largest waste stream however, comprises that arising from the construction industry. Maghtab used to serve as the prime deposit site for this kind of waste up to 2004 when it was eventually closed for rehabilitation purposes. Disused quarries then started to be used for this waste stream and, in this manner, are being rehabilitated and turned into agricultural land. Some land was reclaimed in the building of the Freeport as well.

In order to achieve our targets for reducing and recovering excavation, construction and demolition wastes and to limit the use of landfill for such wastes, a system was introduced whereby prior to the granting of a development permit, a developer is obliged to assess and estimate the amounts and types of waste that will be generated by the development from commencement through to completion. These estimates, together with supporting calculations, and a statement indicating the proposed method of disposal to be adopted, form a mandatory component of any

[24] Source: Wasteserv Malta Ltd., NSO.

application to the Malta Environment and Planning Authority for a development permit.

The Ghallis landfill, which was subject to an IPPC permit, started operating in 2007 and has been used for the disposal of non-hazardous, non-inert waste and municipal solid waste including residues from the Sant'Antnin Solid Waste Treatment plant. Currently, the new engineered landfill for hazardous waste is pending an IPPC permit.

Another important waste stream is that related to commercial/industrial waste. The Thermal Waste Treatment Facility in Marsa was inaugurated in December 2007. This incinerator has been built so that it can treat abattoir waste, clinical waste, refused derived fuel (RDF) and other wastes including solvents and industrial sludges. The commissioning of this facility has made it possible to decommission the old non-compliant incinerators at St. Luke's Hospital and Gozo General Hospital[25].

The production of compost derived from separated municipal solid waste started years ago, and the existing plant is earmarked for upgrading in a few months time. The rehabilitation of the Maghtab officially started in January 2005. In the mean time, new sustainable waste management practices, including voluntary waste separation of paper, glass, plastic and metal have been initiated and are on the increase. The introduction of civic amenity sites that cater for other waste streams, namely waste tyres, old refrigerators, waste electronic and electrical equipment, waste from DIY activities and garden waste, allow for the increase in recovery. This is implemented in the context of a *Solid Waste Management Strategy for the Maltese Islands*, which was formulated and endorsed by Government in October 2001.

[25] http://www.wasteservmalta.com (accessed 12th August 2008).

3.7 IONIZING AND NON-IONIZING RADIATION

Radiation may be ionising or non-ionising. Radiation may be defined as energy travelling through space .Non-ionizing radiation is essential to life, however, excessive exposure will cause tissue damage. All forms of ionizing radiation have sufficient energy to ionize atoms that may destabilise molecules within cells and lead to tissue damage.

One of the main issues in this area is ultraviolet (UV) radiation, which is a component of solar radiation, progressively filtered as sunlight passes through the atmosphere, in particular by the ozone layer. As the ozone layer is depleted, the protective filter activity of the atmosphere is reduced and more UV radiation, in particular the more harmful UVB, reaches the earth's surface. UV radiation causes sunburn and skin cancer and accelerates skin ageing. Overexposure to UV radiation can lead to inflammations of the cornea and the conjunctiva in the eye, and causes or accelerates cataract development. A health issue of growing concern is that UV radiation can reduce the effectiveness of the human immune system. Consequently, sun exposure may enhance the risk of infection and could limit the efficacy of immunization against disease. People's behaviour in the sun is the main cause for the rise in skin cancer rates in recent decades. An increase in popular outdoor activities and changed sunbathing habits often result in excessive UV exposure.

Children require special protection as they are at a higher risk of suffering damage from exposure to UV radiation than adults:

- Epidemiological studies demonstrate that frequent sun exposure and sunburn in childhood set the stage for high rates of melanoma later in life
- Children have more time to develop diseases with long latency, more years of life to be lost and more suffering to be endured as a result of impaired health
- Children are more exposed to the sun. Estimates suggest that up to 80 per cent of a person's lifetime exposure to UV is received before the age of 18
- Children enjoy playing outdoors but usually are not aware of the harmful effects of UV radiation[26]

Sources of exposure to electromagnetic fields (EMFs) are ubiquitous in houses and public buildings and are common outdoors. They include high-voltage, long-distance transmission lines, distribution lines that bring electricity to homes and a wide variety of electrical appliances, including television monitors, computer games, radios and other electrical equipment. A possible association has been determined between exposure to extremely low frequency (ELF) electromagnetic fields (EMF) and childhood leukemia[27], however, the causal nature is questionable. The results of studies on the potential effects of ELF fields have been largely negative and in general the data is considered of insufficient strength to justify firm conclusions on a causal relationship

Less is known about EMFs in the radio-frequency part of the radiation spectrum and these gaps in knowledge justify a precautionary approach to the prolonged use of mobile phones by children, particularly because extended exposure produces greater possible risk.

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[26] Protecting Children from Ultraviolet Radiation, WHO Fact sheet 261,July 2001

[27] International Agency for Research on Cancer (2002)

Foodstuffs may also contain radiation with levels of contamination detrimental to human health. However, foodstuffs are screened regularly by the Public Health department for the presence of radionuclides to ensure that they are in line with international accepted guidelines and regulations. Other ad hoc sampling programmes, for example to monitor radioisotopes in a typical school breakfast, or radiation in herbs and spices, gamma emitters in grains and cereals are carried out from time to time. Local regulations to limit radiation doses in foodstuffs include water for human consumption[28].

Workplaces where any radioactive sources and x-ray equipment are in use or stored may pose risks for occupational health, such as health care workers in radiology or radiotherapy departments (Radiation Protection Board reported that 80% of sites at which ionising radiation was used in Malta in 2007 were related to medical activities). Ionising radiation through medical exposure is legally controlled by the Ionising Radiation Medical Exposure Regulations. The Protection of Young Persons at Work Places Regulations[29] restrict exposure of young persons to ionising radiation.

The Nuclear Safety and Radiation Protection Regulations[30] provide a legislative framework for protection from the risks and harmful effects of ionising radiation and physical protection of nuclear material. The Radiation Protection Board (RPB), governed by this legislation, is responsible for all regulatory aspects of the Euratom Treaty, which provides the legal framework for all EU states on ionising radiation protection and nuclear issues as well as being responsible for Malta's commitments to the International Atomic Agency.

Radiation monitoring in the environment (surface air, coastal waters, soil) is performed by MEPA according to the National Environment Radioactivity Surveillance Plan for Malta (2006) and allows alerts to be made in case of emergencies. The Plan is operational for air sampling; gamma radiation monitoring; soil and coastal water monitoring.

A national indoor radon survey is planned by the Department for Environmental Health for 2010.

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[28] LN 23 of 2004
[29] LN 91 of 2000
[30] LN 44 of 2003, as amended by LN 173 of 2004 and 425 of 2007