



Exploration & Production

GENERAL SPECIFICATION

Medical

GS EP MED 062

Hygiene in bases and living quarters

03	08/2009	General review
02	10/2006	Addition of the standard ISO 22000 reference, table § 4.4.4 modification
01	10/2005	Addition of E&P root to the document
00	11/2004	First issue. Translation of the first version
Rev.	Date	Notes



Contents

1. Scope	3
2. Reference documents.....	3
3. Health, safety and hygiene on bases and in living quarters – procedure	5
3.1 Collective catering: the complete food chain	5
3.2 Collective catering: essential practices.....	11
3.3 Collective catering: personnel.....	13
3.4 General hygiene in living quarters	15
4. Hygiene on bases and living quarters – construction and layout	15
4.1 Living quarters (offshore) – Dwellings (onshore)	15
4.2 Collective catering: layout and equipping premises.....	16
4.3 Air Quality	19
4.4 Water quality for domestic use	19
4.5 Waste management.....	21
Appendix 1 Layout characteristics of living quarters (offshore) and dwellings (onshore)	22
Appendix 2 Canteen equipment	24
Appendix 3 Catering personnel changing rooms and toilets.....	25
Appendix 4 Minimum requirements for lighting.....	26
Appendix 5 Minimum requirements for acoustic performances	27
Appendix 6 Characteristics of waste management installations	28



1. Scope

The aim of this General Specification is to define the necessary requirements in terms of health, safety and hygiene for the construction, layout and operation of bases and living quarters.

2. Reference documents

The reference documents listed below form an integral part of this General Specification. Unless otherwise stipulated, the applicable version of these documents, including relevant appendices and supplements, is the latest revision published at the EFFECTIVE DATE of the CONTRACT.

Standards

Reference	Title
ISO 22000:2005	Food safety management systems – Requirements for any organisation in the food chain

Professional Documents

Reference	Title
CAC/RCP 8 - 1973	Codex Alimentarius – Recommended international code of practice for the processing and handling of quick frozen foods, FAO-WHO, and subsequent amendments Codex Alimentarius – Code of hygienic practice for precooked and cooked food in mass catering , FAO-WHO, and subsequent amendments Managing health for field operations in oil & gas activities, OGP, May 2003 Guidelines for environmental health for offshore installations, UKOOA, January 2007
CAC/RCP 39 - 1993	
Report N° 343	
Report EHS23	

Regulations

Reference	Title
Code du travail français (édition 2008) (French legislation)	Titre I: Obligations du maître d'ouvrage pour la conception des lieux de travail (article R 4211 et suivants) Titre II: Obligations de l'employeur pour l'installation des lieux de travail. Chapitre 1 ^{er} : Dispositions générales (article R 4221)
Copenhagen Protocol	Amendment to the Montreal Protocol on substances that deplete the ozone layer (Copenhagen, 23-25 November 1992)
Montreal Protocol	The Montreal Protocol on substances that deplete the ozone layer, September 1987 and subsequent amendments
SI 1976/1019	The offshore installations (operational safety, health and welfare) Regulations 1976 (amendment of regulations 4&5, 14&15, schedule 1, schedule 4 in SI 1998/2306)
SI 1999/3242	The management of health and safety at work Regulations 1999 (amendment of regulation 22 in SI 2006/438)

Codes

Reference	Title
Not applicable	

Other documents

Reference	Title
FDA OBM 0910-0578	Managing Food Safety : A Manual for the Voluntary Use of HACCP principles for Operators of Food Service and Retail Establishments, April 2006 and subsequent amendments
ISBN 9789241547611	Guidelines for drinking-water quality, 3 rd edition incorporating the 1 st and 2 nd adenda, Vol. 1, Recommendations – WHO

Total General Specifications

Reference	Title
GS EP CIV 403	Temporary construction camps and associated facilities (onshore)
GS EP ENV 001	Environmental requirements for projects design and E&P activities
GS EP ENV 421	Landfill design and operation for E&P sites
GS EP HVA 100	Basis of design
GS EP HVA 202	Air Handling Unit(s) (AHU)
GS EP HVA 211	Electrical heaters
GS EP MED 060	Onsite medical structures
GS EP MED 061	Medical support for E&P sites
GS EP MED 063	Specific risks : Clinical and therapeutic elements
GS EP SAF 221	Safety rules for buildings

3. Health, safety and hygiene on bases and in living quarters – procedure

This section explains the practices to be implemented in terms of hygiene on bases and in living quarters.

The person in charge of catering and hygiene in living quarters onsite is called the Camp Boss.

3.1 Collective catering: the complete food chain

An important reference document is the [Report EHS23](#). Although dedicated to offshore installations, this report reiterates the essential principles applicable to all types of installations, notably the “Hazard Analysis and Critical Control Points” (HACCP) principle.

The Camp Boss is responsible for implementing and continuously monitoring the HACCP procedure.

From production to consumption and waste management, a complete food chain is formed. The essential points are:

- Production / Purchasing
- Storage / Packaging / Transport onsite
- Reception
- Dry / refrigerated / frozen storage
- Hot / cold preparation
- Cooking
- Keeping food hot
- Refrigeration



- Reheating
- Serving
- Washing-up
- Waste management

Each one of these points is the source of a potential incident which could affect the quality of foodstuffs and lead to a health problem.

The workflow for this chain is shown below:

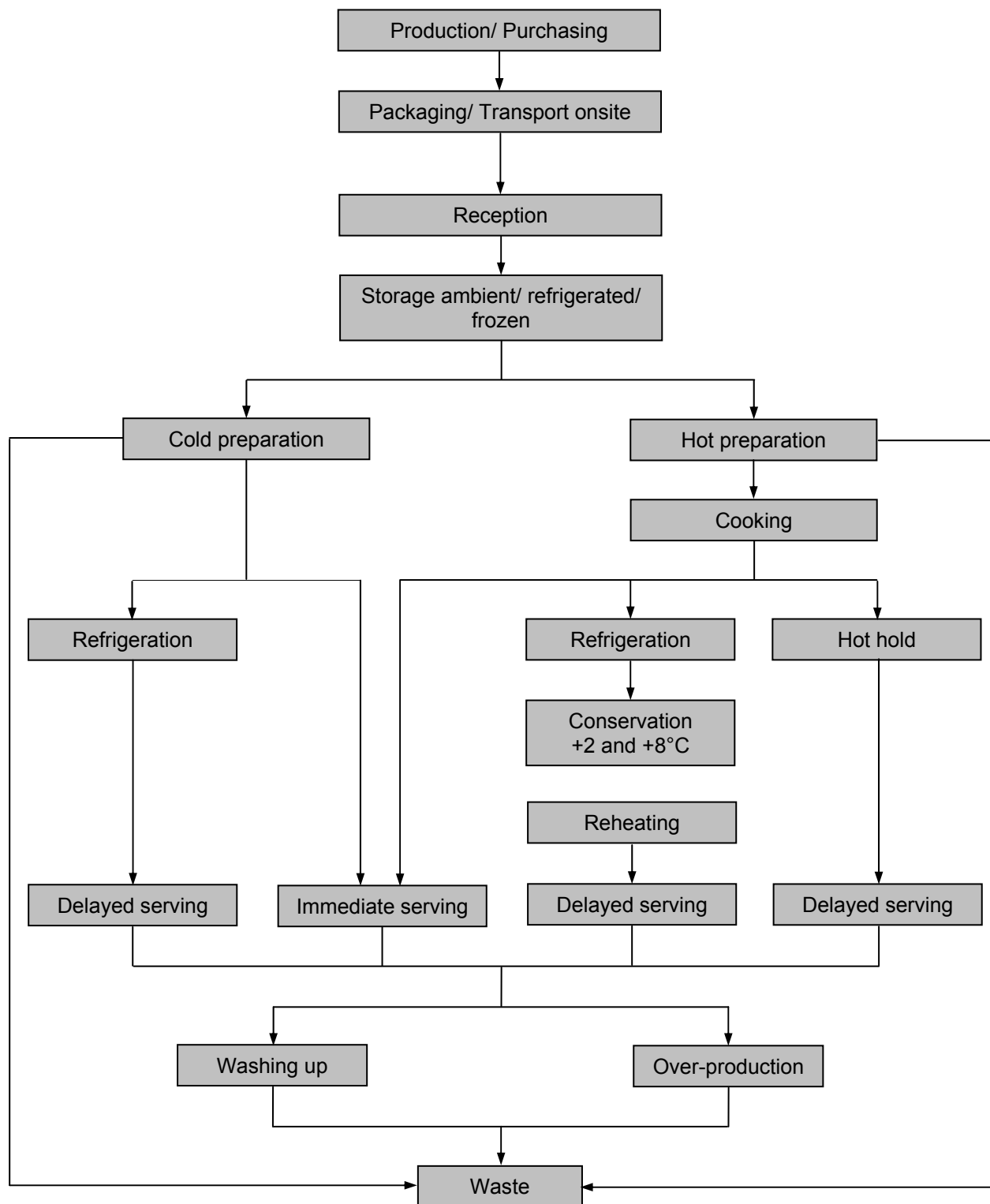


Fig. 1: complete food chain

3.1.1 Production/ Purchasing

The Camp Boss shall order from suppliers recognised by a competent authority. This is usually the local health authority. If the latter does not provide sufficient guarantees, the affiliate health officer can instigate a verification of the suppliers' premises and work methods.

3.1.2 Packaging/ Transport on site

All containers and packaging for foodstuffs shall protect the contents from any contamination or deterioration during storage and transport for the normal expected delivery times on site. Containers and packaging shall be labelled "FOOD" so that they can be identified and handled first when unloading. They shall be meticulously cleaned after usage before being sent back to the warehouse.

Refrigerated containers shall keep foodstuffs at a temperature less than +5°C for refrigerated foodstuffs and less than – 18°C for frozen foodstuffs. To do so, they shall:

- include insulating materials;
- be painted in a light colour to reduce absorption of heat from the sun;
- include eutectic plates;
- have been loaded according to the logic plan: frozen foodstuffs at the rear, piled up to 10 cm from the roof, then the same procedure for refrigerated foodstuffs, then the foodstuffs stored at ambient temperature. This should be done in such a way that there is as little empty space as possible. The only large empty space should be next to the doors. The best type of refrigerated container is the container with 3 separate compartments (frozen/ refrigerated/ ambient temperature);
- have been loaded as quickly as possible, only opening the doors when loading;
- be fitted with a panel which protects the foodstuffs in case the door-closing system fails;
- be fitted with a refrigeration system which can be supplied with electricity during transportation (lorry/train/boat) and a system for recording the interior temperature, but which is visible from the exterior (mini-maxi thermometer or continuous recording).

These containers shall be loaded in premises where the temperature is controlled.

Foodstuffs stored at ambient temperature shall be protected from contamination during handling and transportation operations. This is particularly critical when chemical products are being transported in the same container.

Fruit and vegetables are extremely fragile; they should be carefully packed and processed separately.

3.1.3 Reception

When the delivery arrives onsite, the medical personnel and the Camp Boss shall carry out periodic inspections to detect any signs of deterioration or contamination. Any foodstuffs deemed unfit for human consumption shall be withdrawn and a report submitted to the RSES who decides on the measures to be taken. A sample of the damaged foodstuffs may be taken as proof or be sent to the local health authorities.

The main aspects to be inspected are:

- Meats and poultry: fresh appearance and colour, consistency and odour; temperature less than +5° C.
- Eggs: date should not exceed more than 2 weeks after the date they were laid; temperature less than +5° C.
- Fish and shellfish: temperature between 0°C and +5°C. Packaged in refrigerant packaging; gills red and moist; weak odour.
- Frozen foodstuffs: no signs of re-freezing (ice crystals, sheets of ice). Temperature less than – 18°C
- Refrigerated prepared meals: temperature less than +3°C.
- Foodstuffs at ambient temperature: dry and undamaged.
- Canned food: absence of rust, leakage, cans should not be swollen or blown.

3.1.4 Storage methods

- The rotation principle for foodstuffs is: “first in – first out”. Expiry dates shall be regularly checked (by the catering manager and by medical personnel each time an inspection is performed).
- Fresh meats and dairy products shall be separated.
- Frozen meats, fish and shellfish shall be separated.
- All frozen foodstuffs shall be preserved in packaging, certified for foodstuffs. Plastic dustbin bags are not acceptable. Packaging shall be clearly labelled (indicating the contents) and dated.
- All refrigerated foodstuffs shall be:
 - o either preserved in suitable packaging, certified for foodstuffs, particularly for offal, fish and shellfish;
 - o or stored in a closed recipient.
- Packaging shall be clearly labelled (indicating the contents) and dated. A tray shall be put underneath the foodstuffs to catch any juices which may leak from them.
- Nothing shall be stored in direct contact with the ground (recipients for foodstuffs, cooking utensils, etc.).
- Foodstuffs delivered in bulk (rice, flour, sugar, beans etc.) shall be stored in a plastic recipient with a cover, as soon as their original packaging is opened.
- As specified above, raw foodstuffs shall be separated from cooked, refrigerated foods. Never store raw foodstuffs (to be cooked) and foodstuffs ready for consumption in the same recipient. If exceptionally, these two types of foodstuffs are in the same cold store, the raw food shall be stored underneath the cooked food.
- Ice creams shall not be exposed to temperatures above – 2.2° C. If they have been, they shall be destroyed. At this temperature, they can only be stored for a limited period (one to two days) in a freezer or in a machine specially adapted for storing ice creams. For longer storage periods of up to one week, the recommended temperature is less than – 12°C.