



DUBAI AVIATION CITY CORPORATION OHSE CODE OF PRACTICES



DATE: 28.10.2019

DACC CODE OF PRACTICE – GENERAL ENVIRONMENTAL
GUIDELINES FOR OPERATIONAL FACILITY



GENERAL ENVIRONMENTAL GUIDELINES FOR OPERATIONAL FACILITY
DACC (DUBAI SOUTH) Code of Practice
Document Reference No.: DACC.DS.OPS.OHSE.ENV.02.EG

1.0	INTRODUCTION	4
2.0	TRAINING AND AWARENESS	5
3.0	REQUIREMENTS	6
4.0	RECORD KEEPING	11
5.0	REFERENCES	11
6.0	ANNEXURES	12



GENERAL ENVIRONMENTAL GUIDELINES FOR OPERATIONAL FACILITY

DACC (DUBAI SOUTH) Code of Practice

Document Reference No.: DACC.DS.OPS.OHSE.ENV.02.EG

1.0 INTRODUCTION

- (i) This Code of Practice (CoP) is mandatory to all Operational Facilities within the Dubai South jurisdiction. This CoP is designed to incorporate requirements set by UAE and other relevant Regulatory Authorities. If requirements of this document conflict with requirements set by another regulatory authority, Duty Holder are required to follow the more stringent requirement.
- (ii) Operational facilities means the business units such as Factories, Logistics and Warehouse Facilities, Recreational Facilities, Multi Store Apartments, Retail Facilities, Offices, Educational Institutions, Medical Facilities, etc. and all other facilities which are registered under Dubai South Licensing and Registration Department and operating in Dubai South Jurisdiction.
- (iii) A duty Holder is defined as;
 - a) the person(s) who owns or is in control, through contact or tenancy, of non-domestic premises;
 - b) With regard to multiple tenanted premises, the duty holder shall be the person who owns or is in control of the building, including access and egress
 - c) All other persons shall cooperate with the with the duty holder to allow them to comply with their duties requirements under this CoP.
- (iv) This CoP establishes the minimum requirements and standards for the development and implementation of an Environmental Requirements for Operational Facilities. The environmental requirements helps to ensure that Operational Facilities consider all Environmental aspects and impacts, in accordance with the requirements of all applicable legislation within United Arab Emirates in particular within Dubai South and those outlined in the Dubai aviation City Corporation (DACC) OHSERF.
- (v) This is developed to ensure that appropriate environmental management practices are developed, implemented and monitored during the Operational phase of a project.

1.1 Objectives

- (i) Ensure that environmental studies that have been previously submitted to and approved by Dubai aviation City Corporation (DACC) OHSE Department (e.g., Environment Impact Assessment [EIA], Initial Environment Report [IER], Operations Environmental Management Plan [OEMP]) have been properly implemented, including each plan's conditions for approval or consent. If no EIA or IER was completed for the Operational Facility, the stand alone OEMP or Environment Management Plan incorporated with OHSE Plan should describe in further detail the extent to which environmental effects, impacts, and risks exist;



GENERAL ENVIRONMENTAL GUIDELINES FOR OPERATIONAL FACILITY

DACC (DUBAI SOUTH) Code of Practice

Document Reference No.: DACC.DS.OPS.OHSE.ENV.02.EG

- (ii) Provide effective, Operational- Specific, and implementable procedures to monitor and control environmental impacts throughout the Operational Phase of the Facility;
- (iii) Ensure that events, processes, or activities do not adversely impact health, safety, amenity, traffic, or the environment in the surrounding area;
- (iv) Implement Practical effect the commitment for environment and set the initial framework for Environment Management System;
- (v) Ensure compliance with the relevant standards and legislation requirements;
- (vi) Avoid negative impacts on environment;
- (vii) Establish training programs for all staff and operatives appropriate to task, role and the Operational Facility requirements;
- (viii) Provide a guidance of environmental practices to improve and protect the environment;
- (ix) Ensure appropriate control and co-ordination of all parties to the Operational phase of the facility with regard to the environment;
- (x) Generate a culture where everyone, irrespective of their position, understands that they have a part to play in ensuring that impact on the environment can be minimized.

2.0 TRAINING AND AWARENESS

- (i) Duty holder shall ensure that OHSE training complies with the requirements of:
 - a) *Dubai Aviation City Corporation (DACC) OHSERF* - Regulations 6 – Competence Management, Training and Awareness;
- (ii) Duty Holders shall ensure that employees and other persons required to implement the requirements of this CoP or those who have a direct role in the management, supervision or monitoring of the requirement of this CoP are trained and competent to fully understand the requirements
- (iii) Duty Holder shall maintain a record of the required training that contains the following:
 - a) Company, name and company employee ID number;
 - b) Emirates ID number / Dubai South ID Pass;
 - c) Topic / subject of training;
 - d) Training provider;
 - e) Date of training; and
 - f) Person conducting the training.

3.0 REQUIREMENTS

- (i) Duty Holder shall undertake their roles and responsibilities in accordance with the general requirements of *Dubai Aviation City Corporation (DACC) OHSERF* – Regulation 5 – Leadership, Roles, Responsibility and Self-Regulation.
- (ii) Duty Holder shall ensure that the activities of the Operational Facility does not directly or indirectly cause pollution of the Land, Water and Air Environments, in accordance with the requirements outlined in Federal Law No. 24 of 1999 for the Protection and Development of the Environment.



GENERAL ENVIRONMENTAL GUIDELINES FOR OPERATIONAL FACILITY
DACC (DUBAI SOUTH) Code of Practice
Document Reference No.: DACC.DS.OPS.OHSE.ENV.02.EG

3.1 Environmental Representative

- a) Duty Holder shall appoint a competent OHSE Representative who represent the Operational Facility for any environmental matters;
- b) The appointed person shall be employed as full-time and be available by telephone 24 hours a day and 7 days a week in case of any environment emergencies;
- c) The appointed person shall be responsible for the below, but not limited to:
 - (i) Development of Operational Environmental Management Plan (OEMP), as incorporated with OHSE Plan or as stand-alone documents and its Implementation;
 - (ii) Monitoring environmental compliance;
 - (iii) Conducting environmental risk assessments and preparation of aspect and impact of project to the environment;
 - (iv) Conducting environmental inspections and trainings;
 - (v) Responding to any environmental incidents, complaints and investigating the incidents ; and
 - (vi) Reporting environmental performance to management.

3.2 Environmental Resources

- a) Duty Holder shall provide the below requirements such as, but not limited to;
 - (i) Develop, maintain, implement and review of Environmental Policy, as incorporated with OHSE Plan or as stand-alone policy;
 - (ii) Develop, maintain, implement and review of an OEMP, as incorporated with OHSE Plan or as stand-alone document;
 - (iii) Environmental inspection, Audit and compliance action;
 - (iv) Environmental reporting requirements as required by Dubai Aviation City Corporation (DACC) OHSE Department;
 - (v) Environmental Incident and Emergency response and notification;
 - (vi) Implementation of corrective and preventive action;
 - (vii) Environmental training and awareness programs as per Dubai Aviation City Corporation (DACC) OHSERF - Regulations 6 – Competence Management, Training and Awareness, and
 - (viii) Control of Supplier/Contractors or relevant stakeholder.

3.3 Environment Impact Assessment/Initial Environment Report/Operational Environmental Management Plan

- a) Duty Holder shall conduct Environment Impact Assessment/ Initial Environment Report for the activities/process or Industrial expansion which has the potential to cause significant adverse environment impacts as per Environment Impact Assessment CoP – DACC.DS.OPS.OHSE.ENV.03.EI
- b) Duty Holder shall develop and implement an stand-alone Operational Environmental Management Plan(OEMP) or incorporated in OHSE Plan and be reviewed and approved



GENERAL ENVIRONMENTAL GUIDELINES FOR OPERATIONAL FACILITY

DACC (DUBAI SOUTH) Code of Practice

Document Reference No.: DACC.DS.OPS.OHSE.ENV.02.EG

by the Dubai Aviation City Corporation (DACC) OHSE Department, the content of OEMP shall include but not limited to;

- (i) Identify all environmental impacts of the Operational Facilities;
- (ii) Determine appropriate control measures to reduce the impacts to the environment;
- (iii) In reference with Federal and Dubai Environmental Laws and Regulation;
- (iv) Responsibilities' of Key Personnel's;
- (v) Environmental training and awareness program;
- (vi) Environmental inspections and audits;
- (vii) Environmental Incident Management, Monitoring, Investigation and Reporting as per *Dubai Aviation City Corporation (DACC) OHSERF* – Regulation 15 – Incident Management.
- (viii) Environmental Performance Reporting.

3.4 Chemicals Storage (Dangerous and Non Dangerous Goods)

- a) Duty Holder shall follow the requirement as per Control of Substance Hazardous to Health CoP – DACC.DS.OPS.OHSE.CGF.01.SH & Chemical Storage Permit System – DS.OPS.OHSE.OPA.02.CS

3.5 Air Quality

- a) Duty Holder shall ensure that all Operational activities are in a such way that air quality is not affected and dust nuisance are prevented;
- b) The Duty Holder shall comply with the emissions limits specified in **Table- 1**;
- c) The Duty Holder shall ensure that ambient air conditions are not compromised, concentration of contaminants measured immediately outside the Operational Facility boundary shall not exceed the limits shown in Table 2;
- d) Monitoring equipment's must be Calibrated by DAC approved 3rd party and shall be monitoring the Air Quality sufficiently frequent to demonstrate the Compliance with Environment Rules and Regulations and Submission of monitoring data to Dubai Aviation City Corporation (DACC) OHSE or authorized staff of Dubai South is required.
- e) Dark smoke shall not be emitted from a chimney of any Operational Facilities.

3.6 Indoor Ventilation and Air Quality

- a) All new and existing air conditioned buildings must be mechanically or mixed mode ventilated and must comply with the minimum requirements of ASHRAE Standard 62-2007.
- b) All ventilation system outdoor air intakes, including doors and operable windows, that are part of a mixed mode ventilation system, must be located at suitable distance from potential sources of contamination to reduce the possibility of odor, smoke or other air contaminants entering the ventilation system. Exhausted air must be discharged in a manner to avoid it being drawn back into the building or the building ventilation system and to ensure that it does not become a nuisance to the building occupants or other buildings occupants or pedestrians.



GENERAL ENVIRONMENTAL GUIDELINES FOR OPERATIONAL FACILITY

DACC (DUBAI SOUTH) Code of Practice

Document Reference No.: DACC.DS.OPS.OHSE.ENV.02.EG

- c) For all new and existing buildings, where activities produce hazardous fumes or chemicals, spaces must be provided with separate air extraction systems to create negative pressure and exhaust the fumes or chemicals to ensure they do not enter adjacent rooms.
- d) Indoor air quality testing must be carried out prior to occupancy. The maximum limit for indoor air contaminants included in **Table 3** must not be exceeded.
- e) Duty Holder shall ensure that the mechanical ventilation must be provided in enclosed parking area so that Carbon Monoxide (CO) concentration is maintained below fifty (50) PPM by;
 - I. Providing a minimum of six (6) outside air changes per hour, or
 - II. Installing a variable volume ventilation system controlled in response to input from a minimum of one CO sensor per four hundred square meters (400 m²) floor area of parking.

3.7 Sewage, Industrial Effluents and Leachate Discharge or Release

- a) Discharge or release of Sewage, Industrial effluents, contaminated storm water, leachate or any other contaminated effluents from Operational Facility, to any land or any marine waters or any sewage line, either directly or indirectly, shall be prohibited without prior approval from the Asset Management & Energy Department of Dubai South.
- b) Duty Holder shall be prohibited to construct on any land, building or facility designed or used for a purpose that may cause the land or Operational Facility to result in a new source of discharge of Industrial effluent or mixed effluent, without prior approval from Land Planning & Zoning Department of Dubai South.
- c) Process wastewater, domestic sewage and contaminated storm water and runoff must meet the maximum limits shown in **Table -4**, before being discharged to surface waters.

3.8 Noise

- a) Duty Holder shall adopt the best practicable means of ensuring that the emission of noise from Operational Facilities does not exceed a reasonable level. Noise level at the Facility boundary does not exceed 55 decibel during the period 7 a.m. to 8p.m and 45 decibel during the period 8 p.m. to 7 a.m.
- b) Duty Holder shall initiate reasonably practical measures to prevent or reduce noise that are hazardous to the health of the worker according to the permitted levels mentioned in **Table – 5**.
- c) Duty Holder shall conduct a Noise Environment and Performance Testing inside the operational facility and at the boundary fence line on a case-by-case basis or annual noise level testing as required by Dubai Aviation City Corporation (DACC) OHSE. Noise Performance Testing shall be conducted by a competent personnel with calibrated testing equipment's.

3.9 Global Warming

- a) Duty Holders shall take all reasonably practical measures to reduce the greenhouse gas concentrations such as water vapor, carbon dioxide, Nitrogen Oxide, Methane and Ozone by reduce the usage of electrical appliances which emits greenhouse gases, using energy from renewable resources, taking power saving initiatives, energy efficient appliances, Periodic maintenance of Plant and equipment's etc.



GENERAL ENVIRONMENTAL GUIDELINES FOR OPERATIONAL FACILITY

DACC (DUBAI SOUTH) Code of Practice

Document Reference No.: DACC.DS.OPS.OHSE.ENV.02.EG

3.10 Waste Management

- a) Duty Holders shall dispose, identify and classify the waste stream based on Dubai Municipality Waste Management Department Technical Guideline No -1, 2009 & Disposal of Hazardous Wastes, 2011.
- b) Duty Holder shall take all effort to minimize waste generation at the source, by preventing the generation of waste and introducing source segregation. Duty Holder shall ensure that all wastes are stored on site appropriately to minimize adverse impact to environment and human health.
- c) Duty Holders shall follow RRR – **Reduce, Reuse, Recycle** methods where possible, if recycling or reclamation is not practical, wastes must be disposed of in an environmentally acceptable manner and in compliance with Dubai Municipality/Dubai South regulations.
- d) Operational Facilities shall, whenever possible, use non-hazardous materials instead of hazardous materials.
- e) Operational Facility remains the owner of the waste and is thus responsible for the correct handling/disposal/reuse/ recycling of the waste within its premises until it leaves the generation point and is handed over to a permitted waste management company to be taken to a Waste disposal Facility of Dubai Municipality for further treatment/disposal.

3.11 Pest Control Management

- a) Duty Holder shall ensure that pest infestation are prevented throughout the whole duration of Operational Phases and Duty Holder shall have Annual Maintenance Contract for Pest Control Management.
- b) Duty Holder shall ensure to comply with, but not limited to:
 - (i) Conduct environmental impact assessment and implement any recommendations or conditions related to pest and the adversely effect on public health, environment and properties;
 - (ii) Waste management
 - (iii) Control measure to prevent stagnant water in shallow excavations / pits to prevent evolution of aquatic insects;
 - (iv) Block off any potential hiding places for pest, e.g. gaps around septic tank;
 - (v) Preventive measure for bad / foul odors;
 - (vi) Regular Housekeeping on the Operational Facilities;
 - (vii) Periodic application of pesticides or inspection of pest control equipment's, considering the chemicals use are harmless to people and environment and the person to apply is authorized and trained.

3.12 Energy Conservation & Management

- a) Duty Holder shall do a systematic analysis of energy efficiency improvements and cost reduction opportunities should include a hierarchical examination of opportunities to:
 - (i) Demand/Load side management by reducing loads on the energy system.
 - (ii) Supply side Management by:
 - Reduce losses in energy distribution
 - Improve energy conservation efficiency



GENERAL ENVIRONMENTAL GUIDELINES FOR OPERATIONAL FACILITY

DACC (DUBAI SOUTH) Code of Practice

Document Reference No.: DACC.DS.OPS.OHSE.ENV.02.EG

- Exploit energy purchasing opportunities
 - Use Lower- Carbon Fuels.
- b) Duty Holder shall;
- (i) identify, regular measurement and reporting of principal energy flows within a facility at unit process level;
 - (ii) Regular review of energy performance targets, which are adjusted to account for changes in major influencing factors on energy use;
 - (iii) Regular comparison and monitoring of energy flows with performance targets to identify where action should be taken to reduce energy use.

3.13 Plants, Animal and Habitats

- (a) Duty Holder shall ensure that all Operational activities are in a manner that plants, animals and their habitats are protected throughout the Operational Phases;
- (b) Duty Holder shall ensure that all mitigated measures relating to ecological assets are implemented, in accordance with all legislation and project environmental impact assessment.
- (c) List of requirements that Duty Holder shall ensure to comply with, but not limited to:
 - (i) Conduct environmental impact Risk Assessment and implement any recommendations or conditions related to plants, animals and their habitats;
 - (ii) That permits and No Objection Certificate (NOC) have been obtained from relevant authority prior clearing a site. (e.g. removal of trees / plants or planned to relocate vegetation and fauna)
 - (iii) Not to carry out activity that could directly or indirectly harm any plants or animals, including native wildlife;
 - (iv) Not to handle or kill any native wildlife, including snakes;
 - (v) That where animals may be harmed or threatened, or are interfering with Operational activity or pose a safety risk to Employees ; Duty Holder shall contact Dubai Municipality wild life protection department, information must pass to Dubai Aviation City Corporation (DACC) OHSE Department; and
 - (vi) That in the event of injured or dead animals are encountered on site, information shall be given to Dubai Aviation City Corporation (DACC) OHSE Department and Dubai Municipality- Wild life Protection department.

4.0 RECORD KEEPING

- (a) Duty Holder shall ensure record keeping in accordance with the requirements of *Dubai Aviation City Corporation (DACC) OHSERF* – Regulation 8 – Document Control and Record Management for the purpose of performance review in accordance with the requirements of *Dubai Aviation City Corporation (DACC) OHSERF* – Regulation 14– Performance Management and *Dubai Aviation City Corporation (DACC)* – Regulation 19 – Management Review.
- (b) Duty Holder shall ensure records of the below but not limited to:
 - (i) Personnel training and awareness;
 - (ii) Competency of Environmental Representative;
 - (iii) Appointment letter for Environmental Representative and Emergency Team;
 - (iv) CEMP Stand alone or Incorporated with OHSE Plan;



GENERAL ENVIRONMENTAL GUIDELINES FOR OPERATIONAL FACILITY

DACC (DUBAI SOUTH) Code of Practice

Document Reference No.: DACC.DS.OPS.OHSE.ENV.02.EG

- (v) Environmental inspection, testing of air, noise and Environment & Energy saving Audit;
- (vi) Environment Aspect / Impact Assessment (Stand alone or incorporated with CEMP);
- (vii) Environmental report;
- (viii) Safety Data Sheet for chemicals;
- (ix) Approved plans, drawings for sewage holding tanks, concrete wash-out area; and
- (x) Hazardous waste disposal manifest;
- (xi) Annual Maintenance contract for Pest Control;

5.0 REFERENCES

NO.	DOCUMENT NAME	DOCUMENT NO.
1	Risk Management	DACC.DS-OHSERF – Regulation 2
2	Leadership, Roles, Responsibility and Self-Regulation	DACC.DS-OHSERF – Regulation 5
3	Competence Management, Training and Awareness	DACC.DS-OHSERF – Regulation 6
4	Communication, Consultation and Participation	DACC.DS-OHSERF – Regulation 7
5	Document Control and Record Management	DACC.DS-OHSERF – Regulation 8
6	Environmental Management	DACC.DS-OHSERF – Regulation 10
7	Emergency Management	DACC.DS-OHSERF – Regulation 13
8	Incident Management	DACC.DS-OHSERF – Regulation 15
9	Management Review	DACC.DS-OHSERF – Regulation 19
10	Waste Management	DACC.DS.OPS.OHSE.ENV.11.WM
11	Labour Law and its Amendments	Federal Law No. (8) of 1980
12	Determination of Preventive Methods and Measures for the Protection of Workers from the Risks of Work	Ministerial Order No. (32), of 1982
13	Environment Protection Regulations in Dubai	Local Order No. 61/1991
14	Personal protective equipment	DACC.DS.OPS.OHSE.OST.10.PP
15	Control of substance Hazardous to Health and Danger	DACC.DS.OPS.OHSE.CGF.01.SH
16	Conducting EIA Study	DACC.DS.OPS.OHSE.ENV.01.EI
17	Environmental Management Tools	DACC.DS.OPS.OHSE.ENV.04.EM
18	Dubai South OHSE Regulatory Framework	2018



GENERAL ENVIRONMENTAL GUIDELINES FOR OPERATIONAL FACILITY
DACC (DUBAI SOUTH) Code of Practice
Document Reference No.: DACC.DS.OPS.OHSE.ENV.02.EG

6.0 ANNEXURES

TABLE – 1: Emission Criteria

Substance	Symbol	Sources	Max Allowable Emission Limits (Mg/Nm ³)
Visible Emissions		Combustion Sources	Ringleman 1 or 20% Opacity or 250
Carbon Monoxide	CO	All Sources	500
Nitrogen Oxides	NO _x	Material Producing Industries	1500
		Other Sources	200
Sulfur Dioxide	SO ₂	Combustion Sources	500
		Material Producing Industries	2000
		Other Sources	1000
Sulfur Trioxide including sulfuric acid mist	SO ₃	Material Producing Industries	150
		Other Sources	50
Total Suspended Particles	TSP	Combustion sources	250
		Cement Industry	50
		Other sources	150
Ammonia and Ammonium Compounds	NH ₃	Material Producing Industries	50
		Other Sources	10
Benzene	C ₆ H ₆	All Sources	5
Iron	Fe	Iron and Steel Foundries	100
Zinc and its Compounds	Zn	Electroplating/Galvanizing Industries	10
Lead and its Compounds	Pb	All Sources	5
Antimony and its Compounds	Sb	Material Producing Industries	5
		Other Sources	1
Arsenic and its Compounds	As	All sources	1
Cadmium and its Compounds	Cd	All Sources	1
Mercury and its Compounds	Hg	All Sources	0.5
Nickel and its Compounds	Ni	All Sources	1



GENERAL ENVIRONMENTAL GUIDELINES FOR OPERATIONAL FACILITY

DACC (DUBAI SOUTH) Code of Practice

Document Reference No.: DACC.DS.OPS.OHSE.ENV.02.EG

Copper and its Compounds	Cu	All Sources	5
Hydrogen Sulfide	H ₂ S	All Sources	5
Chloride	Cl ⁻	Chlorine Works	200
		Other Sources	20
Hydrogen Chloride	HCl	Chlorine Works	200
		Other Sources	20
Hydrogen Fluoride	HF	All Sources	2
Silicon Fluoride	SiF ₄	All Sources	10
Fluoride and its Compound Including HF and SiF ₄	F ⁻	Aluminum Smelters	20
		Other Sources	50
Formaldehyde	CH ₂ O	Material Producing Industries	20
		Other Sources	2
Carbon	C	Odes Production	250
		Waste Incineration	50
Total Volatile Organic Compounds	VOC	All Sources	20
Dioxins and Furans		All Sources	1 (ng TEQ/ m ³)

Notes:

1. The concentration of any substance specified in the first column emitted from any source specified in the third column shall not at any point before admixture with air, smoke or other gases, exceed the limits specified in the fourth column.
2. "mg" means milligram.
3. "ng" means Nanogram.
4. "Nm³" means normal cubic meter, being that amount of gas which when dry, occupies a cubic meter at a temperature of 25 degree Centigrade and at an absolute pressure of 760 millimeters of mercury (1 atmosphere).
5. The limit of "Visible Emission" does not apply to emission of water vapour and a reasonable period for cold start-up, shutdown or emergency operation.
6. The measurement for "Total Suspended Particles (TSP)" emitted from combustion sources should be @ 12% reference CO₂.
7. The total concentration of the heavy metals (Pb, Cd, Ni, Hg, Cu, As & Sb) must not exceed 5 mg/Nm³.
8. VOC limit is for unburned hydrocarbons (uncontrolled).
9. The emission limits for all the substances excluding "Dioxins and Furans" are conducted as a daily average value.
10. TEQ means "Total Equivalent Quantity." Dioxins and Furans Average values shall be measured over a sample period of a minimum of 6 hours and a maximum of 8 hours. The emission limit value refers to the total concentration of dioxins and furans.
11. With respect to point source standards for waste incinerators refer to DM or FEA relevant standards / regulations.



GENERAL ENVIRONMENTAL GUIDELINES FOR OPERATIONAL FACILITY

DACC (DUBAI SOUTH) Code of Practice

Document Reference No.: DACC.DS.OPS.OHSE.ENV.02.EG

Table – 2: Ambient Air Quality Standards

Substance	Symbol	Maximum Allowable Limits ($\mu\text{g}/\text{m}^3$)	Average Time
Sulfur Dioxide	SO_2	350	1 hour
		150	24 hour
		50	1 Year
Carbon Monoxide	CO	23 (mg)	1 hour
		10 (mg)	8 hour
Nitrogen Dioxide	NO_2	290	1 hour
		110	24 hour
Ozone	O_3	160	1 hour
		120	8 hour
Total Suspended Particles	TSP	230	24 hour
		90	1 year
Particulate Matter	PM_{10}	300	1 hour
		150	24 hour
Lead	Pb	1	3 Months
Benzene	C_6H_6	50	1 hour
Fluoride	HF	3	24 hour
		0.5	3 months

Table – 3: Indoor Air Quality

Type of Samples	Maximum Acceptable	Sampling Duration
Formaldehyde	< 0.08 PPM	8- hour continuous monitoring (8 hour time-weighted average (TWA))
Total Volatile Organic Compound (TVOC)	< 300 micrograms/ m^3	
Respirable Dust (< 10 microns)	< 150 micrograms/ m^3	
Ozone	0.06 ppm (120 micrograms/ m^3)	
Carbon Dioxide	800 ppm (1440 microgram/ m^3)	
Carbon Monoxide	9 ppm (10 microgram / m^3)	
Bacteria	500 CFU/ m^3 (Algar Plate)	
Fungi	500 CFU/ m^3 (Algar Plate)	



GENERAL ENVIRONMENTAL GUIDELINES FOR OPERATIONAL FACILITY
DACC (DUBAI SOUTH) Code of Practice
Document Reference No.: DACC.DS.OPS.OHSE.ENV.02.EG

Table – 4: Limits for Process Wastewater, Domestic Sewage, and Contaminated Storm water Discharged to Surface Waters

(Milligrams per liter, except for pH, bacteria and temperature)

Pollutant or parameter	Limit
pH	6-9 pH
Biological Oxygen Demand	50 mg/l
Chemical Oxygen Demand	250 mg/l
Oil and Grease	10 mg/l
Total Suspended Solids	50 mg/l
Metals	
Heavy Metals, total	10 mg/l
Arsenic	0.1 mg/l
Cadmium	0.1 mg/l
Chromium	
Hexavalent	0.1 mg/l
Total	0.5 mg/l
Copper	0.5 mg/l
Iron	3.5 mg/l
Lead	0.1 mg/l
Mercury	0.01 mg/l
Nickel	0.5 mg/l
Selenium	0.1 mg/l
Silver	0.5 mg/l
Zinc	2.0 mg/l
Cyanide	
Free	0.1 mg/l
Total	1.0 mg/l
Ammonia	10 mg/l
Fluoride	20 mg/l
Chlorine, total residual	0.2 mg/l
Phenols	0.5 mg/l
Phosphorus	2.0 mg/l
Sulfide	1.0 mg/l
Coliform bacteria	< 400 MPN/100ml
Temperature Increase	< 3°C

Note – MPN; Most Probable Number

Temperature Increase – The effluent should result in a temperature increase of no more than 3°C at the edge of the zone where initial mixing and dilution take place. Where the zone is not defined, use 100 meters from the point of discharge.



GENERAL ENVIRONMENTAL GUIDELINES FOR OPERATIONAL FACILITY
DACC (DUBAI SOUTH) Code of Practice
Document Reference No.: DACC.DS.OPS.OHSE.ENV.02.EG

Table- 5: Allowable Duration of exposure based on sound level dB(A)

Exposure Level, L (dBA)	Duration, T			Exposure Level, L (dBA)	Duration, T		
	Hours	Minutes	Seconds		Hours	Minutes	Seconds
80	24	-	-	106	-	3	45
81	20	10	-	107	-	2	59
82	16	-	-	108	-	2	22
83	12	42	-	109	-	1	53
84	10	5	-	110	-	1	29
85	8	-	-	111	-	1	11
86	6	21	-	112	-	-	56
87	5	2	-	113	-	-	45
88	4	-	-	114	-	-	35
89	3	10	-	115	-	-	28
90	2	31	-	116	-	-	22
91	2	-	-	117	-	-	18
92	1	35	-	118	-	-	14
93	1	16	-	119	-	-	11
94	1	-	-	120	-	-	9
95	-	47	37	121	-	-	7
96	-	37	48	122	-	-	6
97	-	30	-	123	-	-	4
98	-	23	49	124	-	-	3
99	-	18	59	125	-	-	3
100	-	15	-	126	-	-	2
101	-	11	54	127	-	-	1
102	-	9	27	128	-	-	1
103	-	7	30	129	-	-	1
104	-	5	57	130-140	-	-	< 1
105	-	4	43	-	-	-	-

Note - A person shall not be exposed to any continuous, intermittent, or impact noise levels above 86 dB(A), unless the appropriate hearing protection is provided.