

Reference year 2024

ENVIRONMENTAL BULLETIN OF MITILINI “ODYSSEAS ELYTIS” AIRPORT (MJT)



Contents

1. INTRODUCTION	3
1.1 Location	3
1.2 Administration	3
1.3 Environmental licensing	3
1.4 Airport Basic Data	3
1.5 Airport facilities	4
1.5.1 Fuel Handlers	4
1.5.2 Ground Handlers	4
2. TRAFFIC DATA STATISTICS	5
2.1 Annual Traffic Data	5
2.2 High season traffic data	5
2.3 Low season traffic data	5
3. AIRCRAFT NOISE	6
3.1 Noise measurements during the reference year	6
3.2 Noise levels calculation based on noise simulation software	7
4. AIR QUALITY	8
4.1 Air quality measurements during the reference year	8
4.2 Air pollutants emission and dispersion modelling	9
5. WASTE MANAGEMENT	10
6. ECOSYSTEM AROUND THE AIRPORT	11
6.1 Flora – Fauna	11
7. WILDLIFE HAZARD MANAGEMENT	12
8. CULTURAL HERITAGE	13
9. RESOURCES CONSUMPTION	14
9.1 Energy consumption	14
9.2 Fuel consumption	14
9.3 Heating oil or natural gas consumption	14
9.4 Fuel consumption for generator	14
9.5 Water consumption	14
10. GREENHOUSE GAS EMISSIONS & CARBON FOOTPRINT	15
11. HUMAN CONSUMPTION WATER MONITORING PROGRAM	16
12. RAINWATER	17
13. GROUNDWATER AND/OR SOIL AND/OR SOIL GAS MONITORING	18
14. SEWAGE TREATMENT AND DISPOSAL	19

1. INTRODUCTION

1.1 Location

"Odysseas Elytis" airport of Mitilini is located at a distance of 6km from the capital of Mitilini island, near the east coast of the island of Lesvos. At the south-west the settlements Akrotiri, Taxiarches and Aghia Marina are located, at the north the settlements Neapoli and Vareaia are located, whereas at the south the village Agrilia Kratigos is located.

1.2 Administration

The airport administratively belongs to the Municipal Community of Mytilene and the Local Community of Aghia Marina of the Municipal Unit of Mitilini of the Municipality of Lesvos of the homonym Regional Unit that belongs to the Region of South Aegean.

1.3 Environmental licensing

Approved Environmental Terms

E.T. Decision Reference number	JMD 81441/20.12.2002
	Ref. No 23984/11.05.2016
E.T. Amendment Decision Reference Number	Ref. No 1004/16.01.2018
	Ref No. 77785/5110/19.07.2023

1.4 Airport Basic Data

Airport name IATA / ICAO	MJT / LGMT
Airport location – Airport Reference Point (ARP)	Latitude: 39° 03' 28" N Longitude: 26° 35' 55" E
Altitude	18.41m
Number of runways	1
Operation hours (summer)	00:00 – 23:59
Operation hours (winter)	00:00 – 23:59



Runways	Length/Width	Code
Runway	2,406m x 45m	14/32
Full length of parallel taxiway	N/A	
Number of taxiways	5	
Apron capacity	A B C D E	
	- - 4 1 -	



Terminal	
Total area (m ²)	7.135



Other buildings and service/storage areas	
RFF Station (m ²)	1.180



Parking Areas	
Car parking spaces	141
Bus parking spaces	12
Taxi parking spaces	13



Employees	High season (31.08.2024)	Low season (30.11.2024)
Fraport Greece (FG) employees	38	32
Employees of other companies	349	254

1.5 Airport facilities

1.5.1 Fuel Handlers

Number of fuel handler companies

<i>Number of fuel handler companies operating at the Airport</i>	2
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<i>Installations inside the airport</i>	<i>EKO</i>	<i>GISSCO</i>	<i>HAFCO</i>
<i>Environmental Management System (EMS)</i>	YES	YES	Not operating at the airport

1.5.2 Ground Handlers

Number of ground handler companies

<i>Number of ground handler companies operating at the Airport</i>	3
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<i>Installations inside the airport</i>	<i>SKYSERV</i>	<i>SWISSPORT</i>	<i>GOLDAIR</i>
<i>Environmental Management System (EMS)</i>	YES	YES	YES

2. TRAFFIC DATA STATISTICS

2.1 Annual Traffic Data

Annual Traffic Data for the year 2024



Overall Annual Air Traffic Movements¹
7.178



Annual passenger traffic
563.543



Annual cargo transferred (tn)
128

Percent of increase or decrease in relation to the previous year



11,9%



13,3%



-9%

¹ Military and training flights not included.

Aircraft types

Prevailing aircraft types for domestic flights

Aircraft type	No. of flights
AT76	4.428
A320	795
AT45	496
A20N	40
A321	22
AT75	12
AT46	10
A21N	6
BE20	6
C550	6
Other	78

Prevailing aircraft types for international flights

Aircraft type	No. of flights
B738	589
A320	217
A20N	124
B739	95
B737	42
DH8D	42
A321	40
A318	28
C25M	15
A319	14
Other	59

2.2 High season traffic data

High season traffic data (June-September)

Highest traffic month	July
Air traffic movements during the month with highest traffic	860
Air traffic movements daily average number during the month with highest traffic	28

2.3 Low season traffic data

Low season traffic data (October-May)

Lowest traffic month	February
Air traffic movements during the month with lowest traffic	408
Air traffic movements daily average number during the month with lowest traffic	28

3. AIRCRAFT NOISE

3.1 Noise measurements during the reference year

Measurement points



Have noise measurements at the airport's surrounding area been performed during the reference year? **YES**

Summary of measurement results

Noise levels are monitored according to the airport's monitoring program.

No exceedance of noise indicators levels $L_{den}=70$ dB(A) and $L_{night}=60$ dB(A) was observed.

Measurement points coordinates	Measurement points description
MP-1: 39° 04' 10" N 26° 35' 19" E	Neapoli area, north of the runway in a hotel yard. Affected by arrivals RWY 14 and departures RWY 32.
MP-2: 39° 03' 56" N 26° 35' 47" E	Located in Neapoli, east of the runway on the roof of a hotel. Affected by all procedures in both directions.
MP-3: 39° 02' 06" N 26° 36' 44" E	Located in Agia Marina, south of the runway in the yard of a house. Affected by arrivals RWY 32 and departures RWY 14.
Measurement period	01.07.2024 – 02.07.2024
Noise indicators	L_{day} , L_{night}

Noise complaints: 0

3.2 Noise levels calculation based on noise simulation software

Aircraft noise levels calculation based on noise simulation software

NO

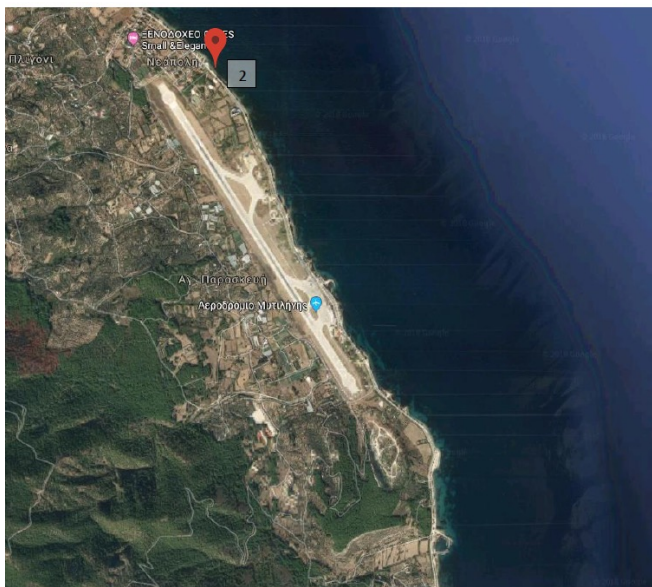
Summary of results

According to the approved environmental terms, there is no obligation for year 2024.

4. AIR QUALITY

4.1 Air quality measurements during the reference year

Measurement points



Have air quality measurements at the airport's surrounding area been performed during the reference year? **YES**

Measurement points	Measurement points description
Position 2	Hotel parking lot 850 meters from the airport
Measurement period	21.03.2024 – 04.04.2024 30.05.2024 – 13.06.2024 21.08.2024 – 05.09.2024 10.10.2024 – 24.10.2024
Pollutants measured	PM ₁₀ , PM _{2.5} , NO ₂ , SO ₂ , C ₆ H ₆ , O ₃ , CO

Summary of results

Air quality is monitored according to the airport's monitoring program.

No exceedance of the air quality limits was observed.

4.2 Air pollutants emission and dispersion modelling

Calculation of air pollutants concentrations based on an emission and dispersion modelling software

YES

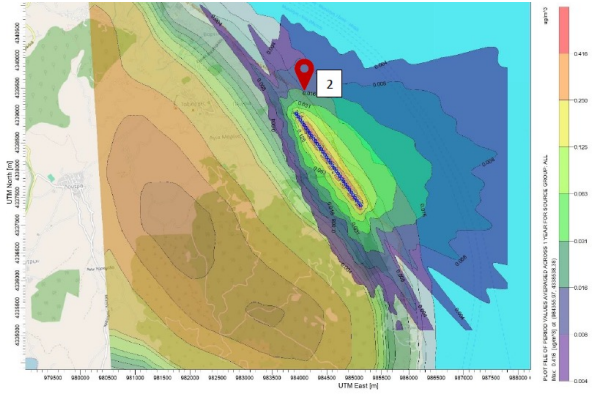
Software used

Aviation Environmental Design Tool (AEDT) - US Federal Aviation Administration & US Environmental Protection Agency AERMOD

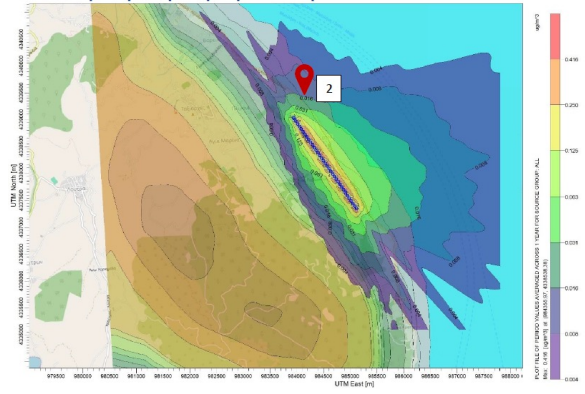
Pollutants concentrations and respective contours calculation

PM_{10} , $PM_{2.5}$, NO_x , SO_x , C_6H_6 , CO

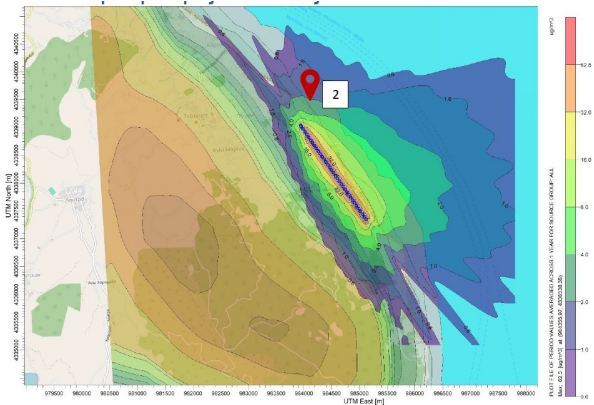
PM_{10}



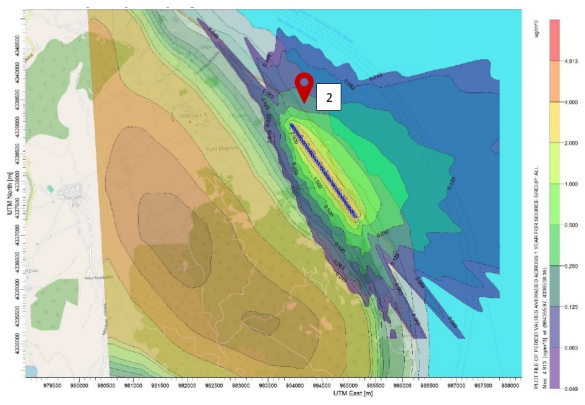
$PM_{2.5}$



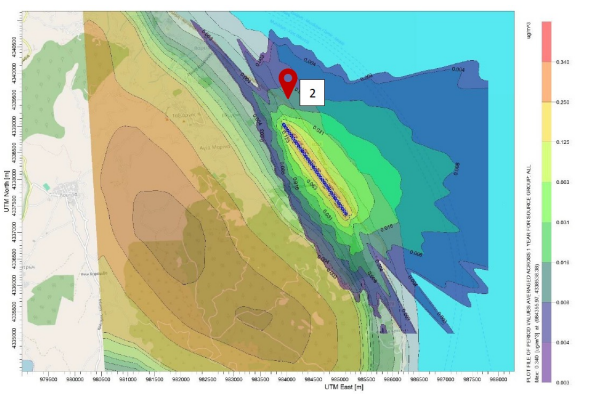
NO_x



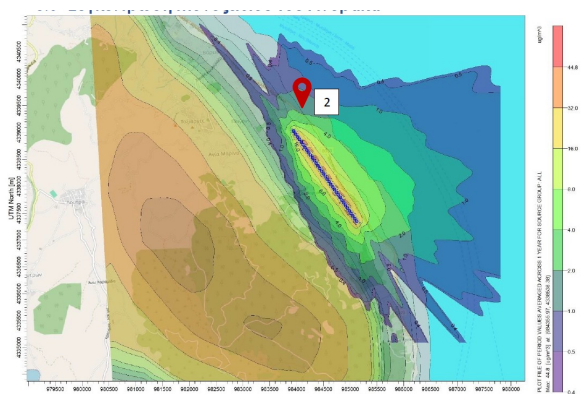
SO_x



Benzene (C_6H_6)



CO



Summary of results

Air quality is monitored according to the airport's monitoring program.

No exceedance of the air quality limits was observed.

5. WASTE MANAGEMENT

<i>Waste</i>	<i>Collection</i>	<i>Management/Disposal</i>
<i>Recyclables (paper, plastic, metals, glass)</i>	<i>Separate collection by the Municipality of Lesvos</i>	<i>Disposal at material recovery facility or transshipment for recycling</i>
<i>Residues (Mixed Waste) and Bulky Waste</i>	<i>Collection by the Municipality of Lesvos</i>	<i>Disposal in landfill</i>

Notes:

1. Regarding the different categories of the MSW (recyclables, mixed waste, bulky waste), the Airport Users handle their waste together with Fraport Greece B (central management).

2. Regarding the "alternative management" waste categories (Waste lubricant oil WLO, WEEE, etc.):

i. Waste Lubricant Oil (WLO): Collection and management by authorized collector "CYTOP S.A."

ii. Waste Electrical & Electronic Equipment (WEEE): Collection and management by alternative management system "Appliances Recycling S.A."

iii. Accumulators: Collection and management by alternative management system "Re-Battery S.A."

iv. Small batteries: Collection and management by alternative management system "AFIS S.A."

v. Used tires: Collection and management by alternative management system "ECOELASTIKA S.A."

3. The total quantities of the hazardous waste further to the above-mentioned and produced at the airport, are managed by licensed private companies which have a contract with Fraport Greece B, after a Tender process according to the provisions of the legislation in force.

4. In the year 2024, Fraport Greece B in MJT managed a total of 45,77 tons of Hazardous waste (MJT FG B 45,12 tn, third parties 0,65 tn).

5. The total quantities of the produced waste by category resulting from all activities of the airport, the collectors and final recipients, are recorded by Fraport Greece B and submitted in the Electronic Waste Registry of the Ministry for Environment and Energy via the Annual Waste Producer Report according to the provisions of the legislation in force.

6. ECOSYSTEM AROUND THE AIRPORT

6.1 Flora – Fauna



Flora

Are there protected zones of vegetation/habitats in the broader airport area?

YES

(if YES) Short description: Mitilini Airport "Odysseas Elytis" is near to the Natura 2000 sites:

• GR4110005 Lesvos: Kolpos Geras, Elos Ntipi Kai Oros Olympos- Potamos Evergetoulas (Area:11.918,14 ha)

GR4110013 Lesvos: Kolpos Geras, Eli Ntipi Kai Charamida (Area:5.172,26 ha)



Fauna

Are there protected species of fauna/birds in the broader airport area?

YES

(if YES) Short description: Mitilini Airport "Odysseas Elytis" is near to the Important Bird Area GR138 Gera gulf, Ntipi and Charamida marshes, Lesvos (Area: 5661.95ha).

The protected bird species (listed under Annex I of Directive 2009/147/EC) that have been observed at Mitilini broader airport area since April 2017 are presented below:

Black-crowned night heron (*Nycticorax nycticorax*), Black kite (*Milvus migrans*), Black stork (*Ciconia nigra*), Black-winged stilt (*Himantopus himantopus*), Booted eagle (*Aquila pennata*), Common tern (*Sterna hirundo*), Cory's shearwater (*Calonectris diomedea*), Dalmatian pelican (*Pelecanus crispus*), Eleonora's falcon (*Falco eleonora*), European honey buzzard (*Pernis apivorus*), European kingfisher (*Alcedo atthis*), European nightjar (*Caprimulgus europaeus*), European roller (*Coracias garrulus*), European shag (*Phalacrocorax aristotelis*), Great egret (*Casmerodius albus*), Lesser spotted eagle (*Aquila pomarina*), Levant sparrowhawk (*Accipiter brevipes*), Little bittern (*Ixobrychus minutus*), Little crane (*Porzana parva*), Little egret (*Egretta garzetta*), Long-legged buzzard (*Buteo rufinus*), Marsh harrier (*Circus aeruginosus*), Masked shrike (*Lanius nubicus*), Mediterranean gull (*Larus melanocephalus*), Montagu's harrier (*Circus pygargus*), Moustached warbler (*Acrocephalus melanopogon*), Peregrine falcon (*Falco peregrinus*), Red-backed shrike (*Lanius collurio*), Red-footed falcon (*Falco vespertinus*), Sandwich tern (*Sterna sandvicensis*), Short-toed snake eagle (*Circaetus gallicus*), Tawny pipit (*Anthus campestris*), White stork (*Ciconia ciconia*), Wood sandpiper (*Tringa glareola*), Woodlark (*Lullula arborea*), Yelkouan shearwater (*Puffinus yelkouan*).

7. WILDLIFE HAZARD MANAGEMENT

Wildlife strikes and wildlife hazard management measures

Wildlife species that suffered a strike	Strikes (%)
Small passerines	75%
Gulls	25%

Wildlife strike risk mitigation measures

The presence and behavior of wildlife species at Mitilini airport is monitored in regular intervals, daily, from dawn to dusk. Some of the wildlife control methods applied at Mitilini airport are: distress calls (bioacoustics), digital sounds, anti-bird laser, etc. Preventive long-term actions that are mainly related to habitat management measures (e.g. grass cutting, water body management) are also taken to further reduce the presence of hazardous wildlife species constituting a risk to flight safety. In addition, a NOTAM is published and regularly updated.

8. CULTURAL HERITAGE

Have new cultural heritage properties been discovered during the reporting period?

NO

9. RESOURCES CONSUMPTION



9.1 Energy consumption

Energy consumption (monthly electric energy consumption, in Kwh)

Total annual electric energy consumption (in Kwh)	1.516.946,41*
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*Third parties' consumption is excluded.



9.4 Fuel consumption for generator

Fuel consumption

Total annual consumption (lt)	3.192,00
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9.5 Water consumption

Water consumption

Total annual consumption (m ³)	19.563,73
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9.2 Fuel consumption

Fuel consumption

Number of FG vehicles at the airport	15	
Total annual fuel consumption	Diesel (lt)	7.525,44
	Unleaded gasoline (lt)	2.912,62



9.3 Heating oil or natural gas consumption

Heating oil or natural gas consumption

Total annual heating oil consumption (lt)	-*
Total annual heating natural gas consumption (m ³)	N/A

*Heating and air conditioning is performed via heat pumps.

10. GREENHOUSE GAS EMISSIONS & CARBON FOOTPRINT

Greenhouse gas emissions that were included in the carbon footprint calculation are the CO₂, CH₄ & N₂O emissions included in scope 1 & 2 of the GHG protocol:

- Scope 1: Direct GHG emissions that occur from sources that are owned and/or controlled by the airport,
- Scope 2: Indirect GHG emissions from the generation of purchased electricity, steam, heat or cooling consumed by the airport.

Source Flows	Total CO ₂ e Emissions (t) 2024	
	Location based	Market based
Direct emissions from heating fuel (scope 1)	0,0	0,0
Direct emissions from fuel used for fleet vehicles (scope 1)	27,0	27,0
Direct emissions from wastewater treatment plant (scope 1)	2,6	2,6
Direct emissions from fuel used for generators (scope 1)	8,4	8,4
Direct emissions from refrigerants (scope 1)	50,1	50,1
Indirect emissions from electricity consumption (scope 2)	759,4	554,8
Total (t)	847,6	642,9
Kg CO₂e /passenger	1,50	1,14

Notes

Fraport Greece B is committed to the monitoring, management and reduction of its airports carbon footprint.

In order for this target to be achieved:

- Direct and indirect carbon emissions from all the emission sources in the airports' boundaries are calculated and reported, based on the GHG Protocol (scope 1 & 2)
- The airport is certified according to ACA (Airport Carbon Accreditation), Level-1.

11. HUMAN CONSUMPTION WATER MONITORING PROGRAM

Human consumption water quality

<i>Water supply (public water network or airport's boreholes)</i>	<i>Municipal Water & Sewage Company (DEYA) of Lesvos</i>
<i>Is sampling of the airport's water network performed?</i>	<i>YES</i>
<i>(if YES) Sampling frequency</i>	<i>Quarterly</i>

Summary of results

The results of the microbiological and chemical analyses show that the parameters analyzed as regards the airport's water network are within the legislative limits defined by the Ministerial Decision Δ1 (δ)/ΓΠ οικ. 27829/2023 (ΦΕΚ 3525/Β` 25.5.2023) regarding the quality of human consumption water. Occasionally there are exceedances of Sodium concentrations, making the water unsuitable for human consumption. Airport users received relevant information.

12. RAINWATER

RAINWATER (collection, treatment disposal and recipient)

Area	Collection/treatment/disposal	[YES/ NO]
Apron and manoeuvring area	Collected in drainage ditches leading to the sea	YES
Other runoffs (runway etc.)	Collected in drainage ditches leading to the sea	YES
Treatment of rainwater by oil-separator		NO

Rainwater quality

Is sampling of the airport's rainwater performed?	YES
(if YES) Sampling frequency	Yearly
Parameters analyzed: pH, conductivity, TSS, DO, NO ₃ , NO ₂ , Oil & grease, BOD, COD, Total Petroleum Hydrocarbons (TPH), PAHs, BTEX, Heavy metals, Detergents	

Summary of results

Surface rainwater quality is monitored according to the airport's monitoring program. The quality parameters are those set in the Standard Environmental Commitments as set in the MD 51354/2641/E103 (GG 1909/B'/08.12.2010). For the reference year 2024, rainwater was not sampled due to the absence of sufficient rainfall and ability to sample.

13. GROUNDWATER AND/OR SOIL AND/OR SOIL GAS MONITORING

Groundwater and/or soil and/or soil gas quality

Is sampling of the airport's groundwater and/or soil and/or soil gas performed?	YES
(if YES) Sampling frequency	Yearly
Parameters analyzed: Groundwater: TPH, BTEX, benzene, MTBE, PAH (16 priority compounds according to USEPA, except Naphthalene), pH, conductivity, TSS, DO, NO ₃ , NO ₂ , oil and grease, BOD, COD, heavy metals (As, Pb, Cd, Cr, Ni, Hg, Al), chlorine ions, sulphate ions & Soil gas: (MTBE (PCE), Toluene, 1,1,1-Trichloroethane, Trichloroethylene (TCE), Vinyl chloride (VC), Xylene (total))	

Summary of results

Groundwater monitoring within airport boundary - Fraport Greece

Groundwater quality is monitored according to the airport's monitoring program. For the year 2024, sampling was carried out from only one point, due to the absence of water from the other points. The results record exceedances in parameters of Ministerial Decision 1811/2011 (Government Gazette 3322/B/2011) and specifically in Aluminum and other heavy metals, as a result of which a Special Substratum Study is required.

Groundwater and/or soil and/or soil gas monitoring at fuel farms – Fuel Handlers

According to the approved environmental terms, monitoring of groundwater, underground air (soil gas) from the Fuel Handlers for reference year 2024 was performed by EKO and GISSCO. No exceedances were recorded.

14. SEWAGE TREATMENT AND DISPOSAL

Sewage

Sewage network to the municipal wastewater treatment plant (WWTP)	NO
Autonomous airport’s wastewater treatment plant (WWTP)	YES*

* In year 2024, FG’s environmental monitoring observed certain exceedances of treated effluent parameters. Due to these exceedances, the treated effluent was not made available for irrigation during the March-October irrigation season but trucked to the municipal WWTP. FG monitors the quality of the treated effluent and takes corrective actions where necessary.

Blue water

Collection and disposal: Collection in watertight tank and disposal to the municipal sewage network.

**Waste water treatment plant description (where applicable)
Description of characteristics and condition of the airport’s WWTP including possible problems. Type and frequency of the effluent quality measurements**

Degree of treatment of airport’s WWTP	Secondary treatment & chlorination
Treatment method	Prolonged ventilation
Disposal of treated wastewater	Limited irrigation during March-October according to the Environmental Terms**
Sludge disposal	Landfill
Sampling frequency of WWTP effluent	Monthly
Parameters analyzed	BOD, SS, TN, TP, T. Coliforms, E.coli, pH, residual Cl ₂
Summary of quality of WWTP effluent	Limits as set in Table 1 of the Annex of JMD 145116/2001

Contact

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