PART 301

Aviation Environmental Regulation

This new part of the Jordanian Civil Aviation Regulations is hereby adopted under the authority and provision of the Civil Aviation Law No. (41) of 2007.

Capt. Suleiman Obeidat
Chief Commissioner / CEO
Civil Aviation Regulatory Commission



ASHEMITE KINGGOM

Amendment No.: (1)

Effective: July, 2008

Page No.i



Revision Control Sheet			
Amendment No.	Effective Date	Subpart	Paragraph
Original	April., 2008		ALL
(1)	July , 2008		301.29
][
]
]

Contents

Section No.	<u>Subject</u>		
301.1	<u>Applicability</u>		
301.3	<u>Definitions</u>		
301.5	General Provisions		
301.7	Application of Standards and Requirements		
301.9	Reserved		
301.11	Airport Noise		
301.13	Aircraft Engine Emissions		
301.15	Airport Operations		
301.17	Environmental Management System		
301.19	Environmental Impact Assessment		
301.21	Environmental Baseline		
301.23	Availability and Inspection of Documents		
301.25	Communications		
301.27	Environment Committee		
301.29	Payment of Noise Reduction Plans and Emissions Penalties		
301.31	Enforcement by Airport Operators		
301.33	Management of Penalties		
	Appendix-A Clauses to be incorporated in contracts and agreements between the airport operator and service providers or commercial entities.		

Appendix-B

CARC Environmental Penalties

301.1 Applicability.

- (a) This Part applies to airport operators, aircraft operators, entities tenants and individuals who undertake activities on airport property.
- (b) The aviation environmental issues referred to in this Part are issues that relate to aircraft noise, aircraft emissions and land use planning on and surrounding airports.

301.3 Definitions.

With respect to this Aviation Environmental Regulation, the following definitions shall apply:

- "Aircraft operator" means the natural or juridical person operating and directing an aircraft, and putting it to use either personally or through his employees, agents or subsidiaries, and its crew members shall be under his instructions and commands, whether he is an owner, lessee or in possession thereof".
- "**Airport operator**" means the party responsible to operate the airport and holds an Airport Operating Certificate.
- "Carbon sink" means a natural or man-made feature that achieves a net reduction in atmospheric carbon dioxide.
- "CARC" means the Civil Aviation Regulatory Commission CARC.
- "Emissions" means gases and particles emitted as a result of fossil fuel combustion.
- "Environment" has the same meaning as "environment" as defined in Environmental Protection Law, No. 52 of 2006, "The surroundings which include the living and nonliving beings, the materials contained, and what surrounds it, such as air, water, soil, and interactions of any of them, as well as the establishments built by the human being."
- "Hazardous Waste" has the same meaning as "hazardous and harmful waste" defined in Regulations No. 24 of 2005: Management, Transportation and Handling of Harmful and Hazardous Substances issued by virtue of Sub-paragraph 7 of Paragraph A of Article 23 of the Environmental Protection Law, No. 52 of 2006.
- "Movement" means an aircraft take off and related taxiing or other motion, or an aircraft landing and related taxiing or other motion.

- "Multiple departure" applies only to flying training organizations and means either an agreed number of take-offs or "touch-and-goes" by an individual aircraft during a notified flight, (such agreement being between the airport operator and the aircraft operator), or the actual number of recorded departures during the notified flight.
- "Quarantine waste" means organic waste generated on a flight arriving in Jordan from another country, and includes vegetable, fruit, meat, food, beverage and similar wastes and any materials that may be in contact with these wastes such as cutlery.
- "Solid Waste" has the same meaning as "solid waste" defined in Regulation No. 27 of 2005: Management of Solid Waste Regulations, issued by virtue of subparagraph 7 of Paragraph A of Article 23 of the Environmental Protection Law, No. 52 of 2006.

"**Tenant**" means any organization – other than the relevant airport operator – who carries out any form of activities at the airport under a contract with the airport operator.

301.5 General Provisions.

- (a) The CARC shall supervise all aspects of this Part related to aviation environmental issues and its implementation. Non-aviation environmental issues shall be supervised by relevant government authorities. CARC shall establish aviation environmental standards, procedures and requirements in accordance with international obligations, national laws and applicable regulations and required good practice sufficient to ensure proper aviation sector environmental practices and standards are applied and maintained. CARC shall inspect and enforce the requirements of this Part with respect to aviation environmental issues.
- (b) CARC shall ensure that appropriate staff with environmental management expertise exists to coordinate the implementation of this Part and shall promptly communicate the name of the individual responsible for environmental management to each airport operator.
- (c) Within 6 months of the enactment of this Part, each airport operator shall identify and, as necessary, train appropriate staff to ensure sufficient environmental management capacity to coordinate the implementation of this Part at the airport operator level and shall promptly communicate the name of the individual responsible for environmental management to the CARC.

- (d) Airport operators shall adhere to the requirements of this Part as they apply to the airports for which they are responsible. Airport operators shall also ensure that all entities and individuals who undertake operations or other activities on their behalf meet the environmental standards, procedures and requirements set out in this Part. Where more than one entity has a responsibility for airport operations, each such entity shall meet the requirements set out in this Part.
- (e) Aircraft operators shall meet aircraft performance standards set out in this Part, or referred to by this Part.
- (f) Entities and individuals that undertake activities on airport property shall undertake the actions necessary to comply with the requirements of this Part. Tenants shall be responsible for ensuring that any of their sub-contractors or other employees comply with the requirements of this Part.
- (g) All reports, charts, maps and other documents required to be provided to the CARC by this Part, shall be in both electronic and hard copy formats.

301.7 Application of Standards and Requirements.

- (a) Nothing in this Part shall be understood or construed to prevent the application of any other requirement that may be required by any other government entity according to applicable laws.
- (b) In Special Economic Zones or similar government entities, the laws and bylaws of the Special Economic Zones or similar zones shall be applicable to nonaviation environmental issues. Where no specific Special Economic Zone or similar entity regulation relating to non-aviation environmental issues exists, the laws and by-laws of the Ministry of Environment shall apply.

301.9 Reserved.

301.11 Airport Noise.

- (a) Preparation of Noise Contours.
 - (1) Airport operators shall prepare noise contour maps for the airports for which they are responsible in accordance with JCAR Part 150 within 6 months of the effective date of this Part. Airport operators shall submit noise contour maps to the CARC within 1 week of their completion.

- (2) Airport operators shall validate noise contour maps at least bi-annually at the expense of the airport operator, or as required by CARC at the expense of CARC.
- (3) Validation of the noise contour maps shall be through:
 - (i) A revision of the aircraft fleet mix that was used to construct noise contours; or
 - (ii) A new run of the noise model if the aircraft fleet mix does not fall within the criteria established for the previous noise contour development; or
 - (iii) On-site measurement of noise levels.
- (4) CARC shall review noise contour maps submitted to it and shall approve them within 20 working days provided they meet the requirements for preparation of noise contour maps set out in JCAR Part 150.
- (b) Noise Reduction and Management Measures.

Where a noise contour map referred to in 301.11 (a) identifies a non-compatible land use with respect to JCAR Part 150 Appendix A Table 1, the CARC shall immediately order the airport operator to:

- (1) Specify and implement operational procedures to reduce noise levels in specific areas to become compatible with the existing land use as specified in 301.11 (c), and
- (2) Prepare, in consultation with the appropriate authorities, a Noise Reduction and Management Plan to be implemented in the case where the operational procedures to reduce noise were ineffective in reaching compatible noise levels as specified in 301.11 (d) (4).
- (c) Operational Procedures To Reduce Noise.
 - (1) Where the airport operator receives an order from the CARC to specify and implement operational procedures to reduce noise at the airport, the airport operator shall consider the following, in consultation with the concerned parties, among other things that may be specified by the CARC:
 - (i) Selection of runways to reduce noise in adjacent communities.

- (ii) Delayed engine start up.
- (iii) Use of ground power units in place of auxiliary power units.
- (iv) Application of continuous descent approach procedures.
- (v) Use of low power/low drag procedure.
- (vi) Minimizing flap angles.
- (vii) Reduced use of reverse thrust.
- (viii) Taxiing with fewer engines running.
- (ix) Joining the instrument landing slope from a higher angle.
- (x) Enforced shut down of engines while on the apron/ramp.
- (xi) Requirements for aircraft to maintain airspace allotted for take off and landing.
- (xii) Imposing curfews.
- (2) The airport operator shall specify, and forward to the CARC, operational measures within 30 working days of an order being issued by the CARC under this Section after consulting with all relevant airport operational units.
- (3) The CARC shall give its determination on the specified operational measures within 20 working days of receipt of the measures.
- (4) The airport operator shall implement operational procedures to reduce noise at the airport within 20 working days of the date of issuance of an approval by the CARC.
- (d) Noise Reduction and Management Plan.
 - (1) Where the airport operator receives an order to prepare a Noise Reduction and Management Plan under this Section, and/or where operational conditions prescribed in 301.11 (b) exist, the airport operator shall develop a Noise Reduction and Management Plan to reduce noise levels in the non-compatible area to levels that fall within the criteria specified in JCAR Part 150 Appendix A Table 1.

- (2) The Noise Reduction and Management Plan shall include the following:
 - (i) Operational measures in accordance with those approved by the CARC or, if these have not been approved at the time the Noise Reduction and Management Plan is submitted to the CARC they shall be added as soon as they have been approved.
 - (ii) Identification of properties and buildings in the area(s) of non-compatible land use identified by the noise contour maps together with specification of measures to be undertaken by the airport operator to reduce airport noise in buildings in these areas. The measures to be specified shall include, as appropriate and among other measures that may be considered appropriate:
 - (A) installation of windows and doors designed to reduce noise.
 - (B) installation of noise insulation.
 - (C) construction of berms on airport property.
 - (D) installation of noise barriers.
 - (iii) Identification of the sites that will be used for aircraft noise monitoring.
 - (iv) The identification of a schedule of noise charges that shall be paid by aircraft operators for each aircraft movement at the airport.
 - (v) A schedule for terminating within 3 years following commencement of the implementation of the Noise Reduction and Management Plan, the use of the airport by aircraft that do not meet Stage 3 noise certification standards as specified by JCAR Part 36, or subsequent noise certification standards for quieter aircraft that may be adopted by the CARC.
 - (vi) Specified restrictions in the use of the airport by aircraft in the event that other measures to reduce noise in communities adjacent to the airport do not reduce noise levels to within the thresholds specified in JCAR Part 150 Appendix A Table 1.
 - (vii) An implementation and financing plan in accordance with 301.29 of this Part that shall achieve implementation of all measures in this part within 3 years of approval of the plan by the CARC except for

- 301.11 (d) (2) (v), which shall be implemented as necessary after the third year following approval of the Noise Reduction and Management Plan to achieve noise levels to within the thresholds specified in JCAR Part 150 Appendix A Table 1.
- (3) The airport operator shall submit the Noise Reduction and Management Plan to the CARC within 6 months of receiving an order under this Section.
- (4) CARC shall give its determination on the specified operational measures within 20 working days of receipt of the Noise Reduction and Management Plan.
- (5) Where an updated noise contour map prepared after the implementation of operational procedures identified in this Section identifies a continuing level of noise that exceeds the JCAR Part 150 Appendix A Table 1, the CARC shall within 20 working days of receipt of the updated noise contour map, order the airport operator to implement the measures of the Noise Reduction and Management Plan.
- (6) The CARC shall monitor the implementation of the Noise Reduction and Monitoring Plan and may order the airport operator to take additional measures to reduce noise.
- (7) As of 1 April 2010, the cost of implementing the Noise Reduction and Management Plan shall be met by Noise Reduction Plan penalties set out in 301.29.
- (8) The implementation of 301.11 (d) (2) (ii) and (iii) of the Noise Reduction and Management Plan shall be through the appropriate local authorities.

(e) Noise Monitoring.

As of 1 April 2010 the airport operator shall install noise monitoring equipment to monitor noise levels at the airport to determine non-compliance with operational measure set to reduce noise.

301.13 Aircraft Engine Emissions.

(a) Operation of Aircraft.

For the purpose of this Section, all civil aviation aircraft using Jordanian airports shall meet the requirements of JCAR Part 21, JCAR Part 34 and JCAR Part 91.

- (b) Operational Procedures to Minimize Aircraft Engine Emissions.
 - (1) Within 6 months of the implementation of this Part, the airport operator shall submit to the CARC operational procedures to reduce aircraft engine emissions at airports. The following procedures shall be considered in addition to others that the airport operator may specify:
 - (i) Delayed engine start up.
 - (ii) Use of ground power units in place of auxiliary power units.
 - (iii) Use of low power/low drag procedure.
 - (iv) Taxiing with minimum engines running.
 - (v) Shutting down of engines immediately upon arrival at the ramp or apron.
 - (2) The CARC shall give its determination on the specified operational procedures within 20 working days of receipt of the measures.
 - (3) The airport operator shall require aircraft operators to implement the operational procedures to reduce aircraft emissions at the airport within 10 working days of the date of issuance of an approval by the CARC
- (c) Supplemental Voluntary Measures.

As of 1 April 2009, the airport operator shall negotiate supplemental agreements with airline companies that use Jordanian airports to provide for the achievement of further reductions in aircraft engine emissions by the airline companies. These agreements shall be implemented voluntarily by airline companies and shall achieve reduced aircraft take off weight, reduced fuel use and/or greater fuel efficiency among other measures that might also be achieved to reduce emissions. Commitments shall be documented using formats provided by the International Civil Aviation Organization (ICAO).

(d) Emissions Monitoring,

As of 1 April 2010 the airport operator shall install emissions monitoring equipment to monitor emissions at the airport to determine non-compliance with operational measure set to reduce emissions in cooperation with the concerned authority.

301.15 Airport Operations.

(a) General.

The airport operator shall undertake airport operations in compliance with the requirements of this Part and in compliance with the environmental requirements of relevant government authorities. The airport operator shall include the clauses provided in Appendix 1 to this Part as part of its contracts and agreements with all parties who undertake activities on property within the jurisdiction of the airport operator.

- (b) Quarantine Waste Management.
 - (1) Within 2 years from the enactment of this Part, unless required earlier by local authorities, the airport operator shall ensure the availability of technology and trained expertise to treat quarantine waste and shall designate the technology for the treatment of quarantine waste and shall communicate the designation to aircraft operators and their agents together with the responsibilities of aircraft operators and their agents to treat quarantine waste.
 - (2) Within 20 working days of notification by the airport operator of the availability of designated technology, aircraft operators or their agents shall ensure that quarantine waste off-loaded in Jordan is:
 - (i) Separately collected and transported from aircraft; and
 - (ii) Appropriately treated to kill any organisms that may be contained in the quarantine waste.
 - (3) The airport operator shall ensure that all quarantine waste management activities are carried out in accordance with local and national health and safety requirements.
 - (4) Following treatment of quarantine waste, it may be disposed of with non-hazardous solid waste.
- (c) Non-Hazardous Solid Waste Management.

The airport operator and all parties operating at the airport:

- (1) Shall manage their non-hazardous solid waste in accordance with the requirements of the Ministry of Environment Bylaw "Solid Waste Management", or the requirements of relevant authorities, as applicable, through an established Non-Hazardous Solid Waste Management Plan.
- (2) Shall not dispose of solid waste except in containers that are designed for solid waste management and for which the airport operator, service provider or commercial entity, as appropriate, has made waste collection and disposal arrangements and which comply with international or national requirements which relate to recycling of non-hazardous solid waste.
- (3) Shall not discard solid waste into a solid waste container that is too small for the waste or which is too full to properly accommodate the waste.
- (4) Shall not place liquids in a container designed or intended for solid waste.

(d) Hazardous Wastes.

The airport operator and all parties operating at the airport shall prepare a Management Plan that identifies actions to address hazardous waste at the airport. The plan shall be in accordance with the requirements of the Ministry of Environment Regulation on Hazardous Waste Management and Handling, 2000, or the requirements of relevant authorities, as applicable, and JS 431: 1985 Storage - General Precautionary Requirements for Storage of Hazardous Substances, issued by Jordan Institution for Standards and Metrology.

(e) Dangerous Goods.

The airport operator and all parties operating at the airport shall manage their Dangerous Goods in accordance with the requirements of Jordan Civil Aviation Regulation Part 139, CARC HAZMAT Regulations in JCAR Part 120 and the ICAO Document 9284. Aircraft operators who are International Air Transport Association (IATA) members shall also be required to comply with the requirements of IATA, noting that precedence is given to JCARs, ICAO, then IATA requirements in descending order.

(f) Spills Management.

(1) Planning

(i) The airport operator and all parties operating at the airport and who store, transport or use dangerous goods, hazardous materials or who generate any hazardous waste shall prepare a Hazardous Materials Spills Management Plan that identifies actions to address spills of hazardous goods or hazardous waste in accordance with the Ministry of the

Environment Regulation on Environmental Protection from Pollution in Emergency Cases, Regulation on Hazardous Waste Management and Handling, 2000 and JS 431: 1985 Storage - General Precautionary Requirements for Storage of Hazardous Substances, issued by Jordan Institution for Standards and Metrology, as well as ICAO Document 9284 requirements.

- (ii) The Hazardous Materials Spills Management Plan for each service provider and commercial entity operating at the airport shall specify actions to be taken at their own facilities as well as at notification of appropriate officials with civil defense and airport operations.
- (iii) The Hazardous Materials Spills Management Plan of the airport operator shall address the actions at facilities it operates itself, as well as the range of requirements in this Part.
- (iv) The Hazardous Materials Spills Management Plan shall include the minimum quantities of spills that must reported to the CARC.
- (v) The airport operator and all parties operating at the airport shall submit their Hazardous Materials Spills Management Plans to the CARC, within 3 months of establishment of the party that uses or generates the hazardous waste for airport operators and parties already established on the airport, and prior to the establishment of the party for new entities. The CARC shall approve them when it is satisfied that the Hazardous Materials Spills Management Plan will provide an effective response to a hazardous materials spill, and shall advise the concerned party of its decision within 20 working days of receipt of the Hazardous Material Spills Management Plans.
- (vi) The airport operator shall ensure that the approved Hazardous Material Spills Management Plans are distributed to all relevant parties.
- (vii) The airport operator shall designate staff members contactable 24 hours per day who shall have responsibility for taking action in respect to spills of hazardous goods or hazardous waste, and shall communicate details regarding contacting these staff members to all parties operating at the airport.

(2) Implementation.

- (i) The operator of the facility in which the spill occurred shall be responsible for the containment and clean up of the spill and for actions to address the spill and its consequences within the facility it operates.
- (ii) The operator of the facility in which a spill has occurred shall immediately contact the civil defense authorities, as appropriate, and the airport operator to report the spill.
- (iii) The airport operator, in consultation with the appropriate government authority, shall be responsible for determining whether the spill poses a threat to other facilities, to people outside the facility in which the spill occurred, or to the environment, and shall undertake all communication and coordination measures necessary to protect people, property and the environment from the consequences of the spill.
- (iv) The airport operator and all parties operating at the airport shall immediately implement their Hazardous Materials Spills Management Plan in the event of a spill of a hazardous good or a hazardous waste.
- (v) All parties operating at the airport must immediately contact the airport staff member mentioned in section 301.15 (f) (1) (vii) above, in the event of a spill of a hazardous good or a hazardous waste for which they are responsible.

(3) Enforcement.

- (i) The CARC may order the airport operator or the responsible party as appropriate for causing the spill to take additional actions to address spills or the clean up of spills.
- (ii) The additional actions required shall be at the expense of the party causing the spill.

(g) Surface Water and Wastewater.

(1) The airport operator shall ensure that surface waters are separately collected and stored on airport for non-potable usage. Surplus shall, in any case, be discharged separately from sewage and other wastewater.

- (2) The airport operator shall ensure that wastewater generated on the airport property is managed through a system that ensures it is treated prior to discharge in accordance with standards prepared by Jordanian Institution for Standards and Metrology and applicable regulatory standards.
- (3) The airport operator shall ensure that de-icing operations are conducted in areas that permit de-icing fluids to be collected for treatment, as necessary to ensure the protection of the environment.
- (4) The airport operator and all parties operating at the airport shall ensure that no hazardous goods or hazardous waste, including oil, fuel or chemical substance, is discarded into the surface water management system or into the wastewater management system.

(h) Atmospheric Emissions.

The airport operator and all parties operating at the airport shall not discharge gases or vapors to the atmosphere except in accordance with the standards and provisions of the Ministry of the Environment Regulation on *Air Protection*, or relevant authorities as applicable.

(i) Wildlife Management.

Wildlife at the airport shall be managed in accordance with the provisions of the JCAR Part 139.337.

(j) Land Use Within Airports.

Land use within the airport shall be managed by the airport operator in accordance with the provisions of JCAR Part 139 and JCAR Part 150.

- (k) Land Use Planning Around Airports.
 - (1) In accordance with Article (7) of the Civil Aviation Law No. (41) of 2007, the approval of land use planning around the airport is the responsibility of CARC and shall be determined in cooperation with the concerned land authority.
 - (2) Where the airport operator owns, or is responsible for, land around the airport, the airport operator shall comply with approved land use plans.
 - (3) In the case of any actual or suspected infringement, such infringement shall be reported by the relevant airport operator to the appropriate land authority and to the CARC.

301.17 Environmental Management System.

(a) Certification of Airports.

The issuance of airport certification under JCAR Part 139 by the CARC requires that, as of 31 December 2009, the applicant develop an Environmental Management System to be included in the Airport Certification Manual. The Environmental Management System shall address:

- (1) The environmental compliance requirements of this Part by both the airport operator and by the services and commercial entities operating at the airport under agreement with the airport operator.
- (2) The assessment of violation penalties identified by this Part, and the invoicing, management of these penalties.
- (b) Content of an Environmental Management System

The Environmental Management System to be included in the Airport Certification Manual shall describe to the satisfaction of the CARC the following:

- (1) The Environmental Policy statement for the airport operator that provides the airports' commitment to environmental quality.
- (2) The Environmental Management Plan to be implemented by the airport operator, including:
 - (i) The environmental priorities of the airport operator during the period during the certification period to ensure compliance with applicable environmental requirements.
 - (ii) How the priorities shall be achieved.
 - (iii) General timing of key actions to achieve the priorities.
 - (iv) The financial resources necessary to achieve the priorities and how they shall be raised.
- (3) The Environmental Monitoring and Enforcement Plan to be implemented by the airport operator, including:
 - (i) Mechanisms for monitoring the proper environmental performance of all parties operating at the airport.

- (ii) Mechanisms for enforcing the environmental management obligations of all parties operating at the airport.
- (iii) The provision to the CARC of a report annually that verifies the compliance of the airport operator and all parties operating at the airport with the environmental requirements set out in this Part as well as including non-compliance and corrective actions.
- (c) CARC shall give its determination on the specified operational measures within 20 working days of receipt of the measures.

301.19 Environmental Impact Assessment.

- (a) The airport operator shall notify the CARC of any construction or other development they propose to undertake and shall conduct an Environmental Impact Assessment, as necessary, in accordance with the regulations of the Ministry of Environment or relevant authorities, as applicable.
- (b) The Environmental Impact Assessment shall be presented to the CARC prior to submission to the Ministry of Environment or relevant authorities, as applicable for comment.

301.21 Environmental Baseline.

- (a) Environmental Baseline Report
 - (1) The airport operator shall prepare an Environmental Baseline Report in accordance with the requirements of the Ministry of Environment or relevant authorities, as applicable, or in accordance with this Part.
 - (2) The Environmental Baseline Reports shall be submitted as follows:
 - (i) Existing airports under the same management.

Within 6 months of the coming into force of this Part, the airport operator shall submit to the CARC an Environmental Baseline Report prepared according to Terms of Reference drafted by the operator and approved by the CARC. The report shall contain all the findings and recommendations, and be independently prepared by duly qualified individuals experienced in preparation of such reports without hindrance or influence from the airport operator, the CARC or any service or commercial enterprise operating currently or in the past at the airport or other parties except that the airport operator shall undertake the

administrative functions to hire the necessary expertise and to ensure the proper delivery of the report.

(ii) Existing airports under new management.

As part of the documentation necessary for the transfer of the Airport Certificate, the incoming operator shall submit to the CARC an Environmental Baseline Report prepared according to the Terms of Reference drafted by the operator and approved by the CARC. The report shall contain all the findings and recommendations, and be independently prepared by duly qualified individuals experienced in preparation of such reports without hindrance or influence from the airport operator, the CARC or any service or commercial enterprise operating currently or in the past at the airport or other parties except that the airport operator shall undertake the administrative functions to hire the necessary expertise and to ensure the proper delivery of the report.

(iii) New airports.

Applicants for an Airport Certificate for a new airport shall comply with the relative requirements of the Ministry of Environment or relevant authorities as applicable.

(b) Scope of Environmental Baseline Report.

The Environmental Baseline Report shall address at least the following environmental liabilities as they existed at the time that the airport operator assumes operational control of the airport; as well as any other requirements imposed by the Ministry of Environment or relevant authorities, as applicable, as well as the requirements of the CARC:

- (1) Pollution of soil.
- (2) Pollution of groundwater.
- (3) Air emissions.
- (4) Noise levels.
- (5) Extent of uncontrolled solid waste and litter.
- (6) Aircraft that are not airworthy or other aircraft or parts of aircraft or support equipment or other related aviation materials that are on the airport site and for which an owner cannot be identified.

- (7) Other conditions at the airport that impact negatively on the ambient environment and which pose an inherited environmental liability for the operator of the airport as a consequence of previous actions or absence of actions.
- (8) Recommended approaches for correcting the identified environmental liabilities.
- (9) Costs for correcting the identified environmental liabilities.
- (10) Environmental criteria and standards used in the report shall be the most recent standards, as applicable.
- (c)Agreement on Environmental Baseline Study.
 - (1) Appropriate international standards and benchmarks shall be used where environmental liabilities are found for which no Jordanian standard or criterion exists, having regard for both environmental quality and airport safety.
 - (2) The CARC shall advise its acceptance of the report within 2 months of its receipt.
- (d) Responsibility of Airport Operator for Environmental Liabilities.
 - (1) The airport operator or intending airport operator, shall not be financially responsible for environmental liabilities determined by the Environmental Baseline Study to have existed at the time that the operator's report was first submitted to the CARC.
 - (2) Within 6 months of notification of acceptance of the Environmental Baseline Report for established airport operators, or within 6 months of receiving the airport certificate in the case of new airport operators or new airports, the airport operator shall undertake the work necessary to correct the environmental liabilities.

301.23 Availability and Inspection of Documents.

(a) Availability of Documents.

The airport operator shall retain all documents related to the scope of this Part for a minimum of 5 years following the end of the calendar year to which they pertain. The airport operator shall include the following clause into all contracts and agreements with service deliverers and commercial entities at the airport:

"[NAME OF ENTITY] shall retain all documents relating to environmental management for a minimum of 5 years following the end of the calendar year to which they pertain and shall make them available for inspection by the airport operator and/or the CARC upon demand."

(b) Inspection of Documents.

A person duly authorized by the Chief Commissioner of the CARC shall have the right to inspect at any time and without prior notice any documents of the airport operator that may be related to the implementation of the requirements of this Part.

301.25 Communications.

- (a) The CARC shall respond in writing to the airport operator within 5 working days to confirm receipt of any report, application, proposal or amendment it receives from the airport operator.
- (b) The CARC shall approve, and, unless otherwise specified in this Part, shall notify the airport operator in writing of its approval, within 20 working days of receipt of the report, application, proposal or amendment, or within the same timeframe it shall notify the airport operator in writing of deficiencies or requirements that it must address and the date by which the deficiencies or requirements must be addressed.

301.27 Environment Committee.

- (a) As of 1 April 2009, the airport operator shall establish an Environment Committee to advise and facilitate the application of this Part generally, including the noise reduction and management measures specified in 301.11 (b) (1), as well as carbon management at the airport to minimize the adverse effect of carbon emissions. The committee shall comprise an odd number of full members drawn from relevant government and municipal entities, a representative of the airlines, other entities that the airport operator considers relevant, and at least 2 community representatives from area(s) where noise exceeds thresholds specified in JCAR Part 150 Appendix A Table 1. The CARC may attend meetings of the committee as an observer. All full members of the Committee shall have equal voting rights.
- (b) The airport operator shall:
 - (1) Chair the meetings of the Environment Committee.

- (2) Set the agenda of meetings of the committee and distribute this to members of the committee and to the CARC at least 5 working days before each meeting of the committee.
- (3) Prepare Minutes of each meeting of the committee and distribute the Minutes to each member of the committee and to the CARC within 5 working days following each meeting.
- (c) The Environment Committee shall meet at least once every three (3) months.
- (d) Unless it can show just cause the airport operator shall comply with the resolutions of the Environment Committee.
- (e) The airport operator shall report to the Environment Committee on all activities and expenditure undertaken in accordance with this Part.
- (f) The CARC shall make public all expenditure from the Environment Committee.

301.29 Payment of Noise Reduction Plan and Emissions Penalties.

- (a) Airline companies and all parties operating at the airport or their agents shall make payments according to the terms of agreed arrangements in accordance with this Part. The penalties prescribed in 301.31 (b) shall be applied and be payable under this Part.
- (b) The airport operator shall collect and maintain all penalties received in accordance with this Section in a special Environmental Account.
- (c) Penalties applied and payable become effective from January 1, 2010.
- (d) The airport operator shall invoice aircraft operators for Noise Reduction Plan Penalties and the aircraft operator shall pay the required penalties to the airport operator within 15 working days of the of the invoice date.

301.31 Enforcement by Airport Operators.

(a) General.

All penalties relating to non-compliance with the provisions of this Section and/or to non-payment of penalties imposed under 301.29 of this Part shall be invoiced by the airport operator to the aircraft operator or airport tenant, as applicable, within 5 working days of the occurrence of the infraction and shall be payable within 15 working days.

Amendment No.: (1) Effective: July, 2008 Page No. 2

(b) Noise.

- (1) A Stage 2 aircraft, as identified in JCAR Part 36 and Part 91, that fails to adhere to an operational measure for noise reduction required by the airport operator shall be assessed a Noise Operational penalty as prescribed in the Civil Aviation Law No. (41) of 2007 article (61).
- (2) Stage 2 aircraft may be subject to curfews and other noise limiting procedures in addition to any Noise Operational penalty and/or operational measure imposed.
- (3) An aircraft classified as a Stage 3 aircraft, or an aircraft that is certified to be less noisy than a Stage 3 aircraft under certification standards equivalent to those set out by the ICAO, that fails to adhere to an operational measure for noise reduction required by the airport operator, shall be assessed a Noise Operational penalty as prescribed in the Civil Aviation Law No. (41) of 2007 article (61).
- (4) Where an aircraft operator or airport tenant as applicable, does not pay the penalty prescribed in 301.31 (b) (1) and (3) within 15 working days of the time specified in the relevant invoice, the airport operator shall immediately send the aircraft operator or airport tenant, as applicable, a warning letter stating that the unpaid penalty shall be charged an interest rate in accordance with applicable laws and shall be applicable after 10 working days of receipt of the warning letter.
- (5) Airport operators are encouraged by CARC to implement a system of graded landing fees that will promote the use of Stage 3 or higher aircraft.

(c) Aircraft Engine Emissions.

- (1) An aircraft operator that fails to adhere to an operational measure for emissions reduction that is required by the airport operator shall be assessed an Emissions Reduction penalty as prescribed in the Civil Aviation Law No. (41) of 2007 article (61).
- (2) Where an aircraft operator does not pay within 15 working days of the specified time an Emissions Reduction penalty prescribed in 301.31 (c) (1) above, the airport operator shall immediately send the aircraft operator a warning letter stating that the unpaid penalty shall be charged an interest rate in accordance with applicable laws and shall be applicable after 10 working days of receipt of the warning letter.

- (d) Non-Aviation Operations Waste and Dangerous Goods Disposal.
 - (1) The airport operator shall monitor the operations of the aircraft operators, service and commercial entities operating at the airport in accordance with its Environmental Management System.
 - (2) The airport operator shall document instances of environmental management that do not meet the standards contained in this Part, and report these instances to the Ministry of Environment and /or relevant entities for enforcement action.
 - (3) Where remedial action is necessary to correct the environmental consequences of actions that are contrary to this Part, and the responsible party fails to effect adequate corrective measures, the airport operator shall undertake the required work under order of CARC and shall require the responsible party to pay, within 2 months of the completion of the remedial action, the cost of the remedial action plus a penalty of three (3) times the cost of the remedial action, or make other payment arrangements acceptable to CARC.
- (e) Non-Payment of Penalties.
 - (1) Action by the Airport Operator.

Where an aircraft operator has not paid any penalty (together with any outstanding interest rate) to the airport operator within 6 months after the invoice date for the penalty, the airport operator may not permit an aircraft operator to use the airport for as long as a penalty under this part, and the outstanding interest rate if not previously paid, remain unpaid.

(2) Action by CARC.

Following advice to CARC by the airport operator that the provisions of 301.31 (e) (1) above have been applied, CARC may, at its discretion:

- (i) Suspend a license, certificate or permit it has issued to the entity that has not made payment, and/or
- (ii)Order the airport operator to prohibit access to the airport by personnel, or a subset of personnel, of the entity that has not made payment, and/or
- (iii) Exercise its rights under Article 14 (b) of the Civil Aviation Law and prohibit the subject aircraft from flying.

301.33 Reserved.

-End-

APPENDIX -A

CLAUSES TO BE INCORPORATED IN CONTRACTS AND AGREEMENTS BETWEEN THE AIRPORT OPERATOR AND ALL PARTIES WHO UNDERTAKE ACTIVITIES ON PROPERTY WITHIN THE JURISDICTION OF THE AIRPORT OPERATOR

"[INSERT NAME OF AIRPORT OPERATOR] requires that [INSERT NAME OF SERVICE PROVIDER OR COMMERCIAL ENTITY] meets the environmental management requirements of the Commission and of the Ministry of the Environment and/or of the [INSERT NAME OF THE RELEVANT AUTHORITY], as appropriate, as these are provided for in law and with respect to the operations and activities of [INSERT NAME OF SERVICE PROVIDER OR COMMERCIAL ENTITY].

"[INSERT NAME OF SERVICE PROVIDER OR COMMERCIAL ENTITY] shall ensure that all sub-contractors, employees and/or other persons working for "[INSERT NAME OF SERVICE PROVIDER OR COMMERCIAL ENTITY] directly or indirectly shall comply with the relevant Sections of CARC JCAR Part 301.

"[INSERT NAME OF SERVICE PROVIDER OR COMMERCIAL ENTITY] shall establish actions and procedures necessary to ensure compliance with the environmental requirements of [INSERT NAME OF AIRPORT OPERATOR] and of the Civil Aviation Regulatory Commission, and shall nominate to [INSERT NAME OF AIRPORT OPERATOR] and to the Commission in writing within one week of this agreement the name of the individual that shall be responsible within [INSERT NAME OF SERVICE PROVIDER OR COMMERCIAL ENTITY] for ensuring environmental compliance.

"[INSERT NAME OF SERVICE PROVIDER OR COMMERCIAL ENTITY] shall monitor its environmental performance and shall supply environmental reports to [INSERT NAME OF AIRPORT OPERATOR] as requested by [INSERT NAME OF AIRPORT OPERATOR] and according to a format provided by [INSERT NAME OF AIRPORT OPERATOR].

"[INSERT NAME OF SERVICE PROVIDER OR COMMERCIAL ENTITY] shall permit [INSERT NAME OF AIRPORT OPERATOR] or its designated agent and/or the Commission to enter its premises at any time for the purpose of ensuring proper environmental management.

"[INSERT NAME OF AIRLINE OPERATOR OR AIRPORT TENANT] is obliged to make payments according to the terms arrangements and in accordance with CARC JCAR Part 301.29 and 301.31.

"[INSERT NAME OF AIRPORT OPERATOR] is obliged to levy fees and penalties or to prohibit entry to the airport of any [INSERT NAME OF SERVICE PROVIDER OR COMMERCIAL ENTITY] personnel in the event that [INSERT NAME OF AIRPORT OPERATOR] or Commission determines that [INSERT NAME OF SERVICE PROVIDER OR COMMERCIAL ENTITY] has failed to abide by applicable environmental requirements".

APPENDIX -B

CARC Environmental Penalties and Administrative Charges

- **B.1** Under the authority of The Civil Aviation Law (41) of 2007 / Article 61, the following constitute the CARC environmental penalties:
 - (1) A Stage 2 aircraft that fails to adhere to an operational measure for noise reduction shall be assessed a penalty of five thousand Jordanian Dinars.
 - (2) A Stage 3 aircraft, or an aircraft that is certified to be less noisy than a Stage 3 aircraft under certification standards equivalent to those set out by the ICAO, that fails to adhere to operational measure for noise reduction shall be assessed a penalty of one thousand Jordanian Dinars.
 - (3) An airline operator that fails to adhere to an operational measure for emissions reduction shall be assessed a penalty of one thousand Jordanian Dinars.
- **B.2** The airport operator may deduct an annual administration charge from the Environmental Account equivalent to 10% of the annual deposits into that account as compensation for collecting, reporting and disbursing all penalties deposited in accordance with this Part.
- **B.3** At the end of each month the airport operator shall transfer from the nominated Special Account the penalties that have been paid to it to the Environmental Account of CARC.
- **B.4** The airport operator shall deposit into the CARC Environmental account all penalties applicable under this Regulation. Together with any deposits the airport operator shall provide CARC with accounting information sufficient to demonstrate the transfer of all applicable penalties.

- **B.5** Together with the accounting information, the airport operator shall report to CARC by the end of each month:
 - (1) The penalties that it has assessed.
 - (2) The individual party that is responsible for paying the penalty.
 - (3) The status of payment of each penalty by a responsible entity to the airport operator.