


**SEMI-ANNUAL PROGRESS REPORT FOR THE IMPLEMENTATION OF
ENVIRONMENTAL TERMS DURING THE OPERATION & MAINTENANCE PHASE**

**PROJECT: "DESIGN – CONSTRUCTION – FINANCING – OPERATION – MAINTENANCE
AND EXPLOITATION OF THE PROJECT "AFTOKINITODROMOS KENTRIKIS ELLADOS
(E65)"**

Date	31.07.2014
Prepared	

A' SEMESTER 2014

SKARFIA - THERMOPYLES

(JMD 146113/12.07.2005)

SECTION:
SKARFIA -
THERMOPYLES
AET: Prot. No.
146113/12-07-2005

TABLE FOR THE IMPLEMENTATION OF THE ENVIRONMENTAL TERMS
DURING THE OPERATION PHASE

MONTH / YEAR: 07/ 2014

S/N	ENVIRONMENTAL TERM	ENVIRONMENTAL TERMS: WAYS – METHODS OF ASSESMENT
A.	Issues of Permits/Approvals	
A.1	Permits for any activity or installation required for the operation of the motorway	<p>The foreseen by the legislation permits and approvals, including the environmental permit possibly required, are obtained, when needed.</p> <p>For the implementation of any partial additional activity or expansion that is not described in the Environmental Impact Assessment (EIA) and consequently not covered by the Approval of Environmental Terms (AET) a relevant environmental permit shall be obtained by EYPE/YPEXODE.</p> <p>The requests for granting environmental permit to the ancillary works are carried out by EYPE/YPEXODE.</p> <p>The following ancillary works have been licensed via the following environmental decisions EYPE:</p> <p>Frontal toll station of Agia Triada and lateral toll station of Molos (EYPE Decision: 122881/8-3-2010)</p>
B.	Design-related Issues	
B.1	Noise Barriers Special Study	<p>The monitoring program OKTH (Road Traffic Noise) of PATHE (METAMORPHOSSEI - LOGOS & LOGOS - SKARFIA-THERMOPYLES) motorway for 2013 has been submitted to the Directorate of EARTH/YPEKA via Concessionaire's document with prot. no. 31107/19-08-2013. The directorate of EARTH/YPEKA approved the Environmental Monitoring Program OKTH 2013 with its 1844425/11-10-2013 letter.</p> <p>As for the 6 noise measurement positions of Skarfia-Thermopyles (17-22 measurements) of this program, no excess of the permitted levels has been recorded. THEREFORE, there is no need for the elaboration of a special anti-noise barriers protection.</p> <p>A similar program which is expected to be completed later this year, is about to be implemented for 2014 (24hour measurements registration in selected locations) and it will be submitted to the directorate of EARTH/YPEKA for approval. If OKTH shows that the produced noise exceeds the statutory noise limits, the Concessionaire shall prepare and submit for approval a Special Acoustic Design for Noise Protection to the EARTH.</p>

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C.	Operation Issues	
C.1	Traffic Noise	<p>The monitoring program OKTH OF PATHE Motorway (Metamorphossi – Logos & Logos – Skarfia - Thermopyles) for 2013 has been submitted to the Directorate of EARTH/YPEKA via the Concessionaire's letter with prot. no. 31107/19-08-2013. The Directorate of EARTH/YPEKA approved the Monitoring Program of Environmental OKTH 2013, with its 1844425/11-10-2913 letter.</p> <p>This study determines, by using appropriate models and methodologies (according to JMD 211773/2012 (OGG 1367/B/27.04.2012, JMD 13586/724) (28.03.2006 OGG 384) and European Directive 2002/49/EC), the type and efficiency of the anti-noise measures (noise barriers), the technical characteristics and their adaptation to the topological characteristics of the region.</p> <p>Under this program, the relevant specifications and the locations of the Road Traffic Noise (OKTH) for the recording of the acoustic conditions before and after implementation of the noise barriers at locations inside and outside city plans and at sensitive receivers have been determined. The relevant Inventories of environmental road noise measurements are mentioned in the annual report. Also, processing of noise measurements data are shown in the reports. For the quantitative and qualitative assessment of compliance with the limits - under MD 1725291 – of the maximum allowable noise level of index L10 (18 hours) at the façades of the nearest – to PATHE - residents, extensive acoustic measurements with special auto-propelled units of statistical analysis noise are conducted. More analytically, the measurements are made in accordance with the approved noise monitoring program, by auto-propelled units, at a minimum of 2 m. from the facade of the nearest residence. Usually, in order to capture the unfavourable conditions, the measurement is being held closer to the source and to the facade the most exposed one. The program provides full examination on the effectiveness of the implemented noise barriers as well as evaluation of the need to apply additional measures.</p> <p>For the implementation of the above OKTH program, the current MD 17252/91 and the European Directive 2002/49/EC are kept, both in full calculation and evaluation of the new European indicators, Lden & Lnight.</p> <p>A similar program for 2014 is under implementation and it is expected to be completed within this year (24hour measurements registration in selected locations) and it will be submitted to EARTH/YPEKA for approval.</p>
C.2		As for the 6 noise measurement positions of Skarfia-Thermopyles (17-22 measurements) of the OKTH program, no
C.3		excess of the permitted levels has been recorded. Where future monitoring programs OKTH are exceeded, the proper study on noise barrier implementation will be

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		elaborated and submitted for approval to the directorate of EARTH/YPEKA.
C.4	Pollution due to accident	Because of the State incomplete contracting works in sections of PATHE Motorway (E65), the retention reservoirs (tanks) for the pollutants, as required by the EIS JMD 146113/12-07-2005 "Approval of environmental terms for the construction and operation of the Skarfia - Thermopyles subsection in Skarfia - Lamia of PATHE motorway" have not been completed yet. Therefore, when they will be completed and delivered by the State, the Concessionaire will implement a plan to address pollution which will involve the use of such tanks, pursuant to the E.T. and its contractual obligations. Meanwhile, the Concessionaire has entered into force and implements some Action plans that anticipate the appropriate actions in the event of accidental pollution and include all measures/required equipment etc. that should be taken in case of accident and leakage of non-biodegradable substances. There is also a possibility of accidental fuel leakage from maintenance and operation machinery, etc. which may result to a direct contamination of water, soil, etc. especially when the quantity is large. In this case, adsorption materials such as sand, chippings or a special geotextile will be used immediately after run out. Such materials exist in the central worksite for immediate use. Their disposal, in the event of any such occurrence, shall be in accordance with the instructions for the disposal of toxic waste.
C.5	Vegetation	This term is met. The Concessionaire has contracted with the Subcontractor for the maintenance and the managing of the vegetation and the plantings of PATHE motorway with SPACON Geniki Techniki S.A.
C.4	Waste management	The Concessionaire has contracted with the Subcontractor for the motorway cleaning and waste harvesting, transferring them into appropriate licensed areas.
D.	Maintenance Issues	
D.1	Materials combustion	The term is met. The subcontractor of Kentriki ODOS S.A. collects the waste generated by the motorway operation and maintenance, and transfers them into appropriate licensed sites or into special waste collection sites of the approved alternative management systems. Also, the Concession Company prepares an annual report of waste producer pursuant to Article 11 (4) (c) of JMD no. 13588/725/06, and in accordance with Law 2939/2001 and 3854/2010. A table of waste producer for 2013 was prepared and submitted to EYDE/LSEP (prot. no.: 33054/10-02-2014), while all the elements for 2014 are to be collected and a waste production table is expected to be submitted for 2014.
D.2	Waste materials Management	The Concessionaire has contracted with the company the Subcontractor for the motorway cleaning and the waste harvesting. Also, the Concession Company prepares an annual report of waste producer pursuant to Article 11 (4) (c) of JMD no.

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		13588/725/06, and in accordance with Law 2939/2001 and 3854/2010. A table of waste producer for 2013 was prepared and submitted to EYDE/LSEP (prot. no.:33054/10.02.2014), while all the elements for 2014 are to be collected and a waste production table is expected to be submitted for 2014.
D.3	Liquid waste	<p>A general Environmental Management Plan, which includes procedure ENV-P-01 for handling hazardous liquid waste in compliance with the respective environmental terms and the applicable legislation, has been drawn up, submitted and is being implemented. A relevant file with agreements and orders for waste collection of waste management licensed businesses has been created.</p> <p>Inspections are conducted in the areas where construction works are executed and the respective check list is completed. Pursuant to the checks, in case of non respect of the provisions, instructions are given (corrective actions) for the conformance method. The performance of corrective actions is checked via new inspections based on the check list.</p> <p>Also, the Concession Company prepares an annual report for waste producer under JMD no. 13588/725/06, Article 11(4) (c), and pursuant to Law 2939/2001 and 3854/2010.</p> <p>A table of waste producer for 2013 was prepared and submitted to EYDE/LSEP (prot. no.: 33054/10-02-2014), while all the elements for 2014 are to be collected and a waste production table is expected to be submitted for 2014.</p>
E.	General Issues	
E.1	Obligation to comply with the Environmental Terms	The Environmental Terms of the project are met by the Construction J/V, the Independent Engineer, the Concessionaire, the Subcontractors and their Advisors.
E.2	Construction and Operation Expenses for the protection of the environment	The required percentage of the total budget of the operation/maintenance works that are necessary for the full compliance with the Environmental Terms and restrictions of the present JMD, has been ensured by priority. A detailed analysis regarding the expenses that are provided for the realization of protection works of the environment is included in the annual progress report on the compliance with the environmental terms.
E.3	Change of the Project's Basic Characteristics	During the operation of the project, no differences have arisen and the new decision approving the environmental terms has not been required. It will be met if such a need arises.
E.4	Submission of annual report to EYPE	The term is met. The annual and 2 nd semiannual report for 2013 is submitted with 15329/17-3-2014 Kentriki Odos S.A.

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		letter. Also, Kentriki Odos S.A., with prot. no. 15447/3-4/2014, submitted to EYPE all the environmental reports already elaborated.
E.5	E.T. controllability by the competent authorities	This report is in the Concessionaire's Headquarters
E.6	Project Environmental Terms Validity	The Environmental Terms are in force.
D.	Construction and Maintenance Issues	
E.11	Measures for preventing implications of EIS and AET	All measures for preventing environmental implications that are proposed in the EIS and do not contravene this AET, are taken into account in conjunction with the provisions of JMD EIS of this section.

THERMOPYLES I/C – SPERCHIOS NEW RIVERBED

(JMD EIS 131550/4.03.2003)

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A.	Issues of Permits/Approvals	
A.1	Permits for any activity or installation required for the operation of the motorway	<p>The foreseen by the legislation permits and approvals, including the environmental permit possibly required, are obtained, when needed.</p> <p>For the implementation of any partial additional activity or expansion that is not described in the Environmental Impact Assessment (EIA) and consequently not covered by the Approval of Environmental Terms (AET) a relevant environmental permit shall be obtained by EYPE/YPEXODE.</p> <p>The requests for granting environmental permit to the ancillary works are carried out by EYPE/YPEXODE.</p> <p>The following ancillary works have been licensed via the following environmental decisions EYPE: Frontal toll station of Agia Triada and lateral toll station of Molos (EYPE Decision: 122881/8-3-2010)</p>
B.	Operation Issues	
B.1	Traffic volume/ Traffic noise	<p>The term is met.</p> <p>The traffic volumes are measured on a monthly basis and are much lower than those predicted in the EIS (prediction 2025 ADT 48.700).</p> <p>For 2013, ADT was 13.186, i.e. 18.382.</p>

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C.1	Pollution due to accident	<p>The Intervention Plan for Emergency Situations has been drawn up by the Concessionaire and constitutes an Annex of the Policing & Fire Fighting Agreement signed with the Ministry of Interior. This plan specifies measures to timely collect and remove hazardous substances while preventing pollution of the water/soil resources, etc. This Intervention Plan includes all measures/required equipment etc. that will be needed in case of accident and leakage of non-biodegradable substances, including the necessity to construct Pollution Control Units.</p> <p>There is a possibility of accidental fuel leakage from maintenance and operation machinery, etc. which may result to a direct contamination of water, soil, etc. especially when the quantity is large. In this case, adsorption materials such as sand, chippings or a special geotextile will be used immediately after run out. Such materials exist in the central worksite for immediate use. Their disposal, in case this happens, shall be held in accordance with the disposal for the toxic waste disposal. Furthermore, a comprehensive action plan for the operation of the highway has also been drafted and implemented.</p>
C.2	Vegetation	This term is met. The Concessionaire has contracted with the Subcontractor for the maintenance and the managing of the vegetation and the plantings of PATHE motorway with SPACON Geniki Techniki S.A.
C.3	Waste management	The Concessionaire has contracted with the Subcontractor for the motorway cleaning and waste harvesting, transferring them into appropriate licensed areas.
D.	Maintenance Issues	
D.1	Materials combustion	<p>The term is met. The subcontractor of KENTRIKI ODOS S.A. collects the waste generated by the motorway operation and maintenance, and transfers them into appropriate licensed sites or into special waste collection sites of the approved alternative management systems.</p> <p>Also, the Concession Company prepares an annual report of waste producer pursuant to Article 11 (4) (c) of JMD no. 13588/725/06, and in accordance with Law 2939/2001 and 3854/2010. A table of waste producer was prepared and submitted to EYDE/LSEP for 2013 (prot. no.: 33054/10-02-2014), while all the evidence for 2014 is collected and a table of waste producer is expected to be prepared and submitted for 2014.</p>
D.2	Waste materials Management	<p>The Concessionaire has contracted with the Subcontractor for the motorway cleaning and the waste harvesting.</p> <p>Also, the Concession Company prepares an annual report of waste producer pursuant to Article 11 (4) (c) of JMD no. 13588/725/06, and in accordance with Law 2939/2001 and 3854/2010. A table of waste producer was prepared and</p>

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		submitted to EYDE/LSEP for 2013 (prot. no.: 33054/10-02-2014), while all the evidence for 2014 is collected and a table of waste producer is expected to be prepared and submitted for 2014.
D.3	Liquid waste	<p>A general Environmental Management Plan, which includes procedure ENV-P-01 for handling hazardous liquid waste in compliance with the respective environmental terms and the applicable legislation, has been drawn up, submitted and is being implemented. A relevant file with agreements and orders for waste collection of waste management licensed businesses has been created.</p> <p>Inspections are conducted in the areas where construction works are executed and the respective check list is completed. Pursuant to the checks, in case of non respect of the provisions, instructions are given (corrective actions) for the conformance method. The performance of corrective actions is checked via new inspections based on the check list.</p> <p>Also, the Concession Company prepares an annual report for waste producer under JMD no. 13588/725/06, Article 11(4) (c), and pursuant to Law 2939/2001 and 3854/2010.</p> <p>A table of waste producer was prepared and submitted to EYDE/LSEP for 2013 (prot. no.: 33054/10.02.2014), while all the evidence for 2014 is collected and a table of waste producer is expected to be prepared and submitted for 2014.</p>
D.4	Motorway Fence	During the administrative receipt for use of part of the said section on behalf of the Concessionaire, some deficiencies in fencing the Motorway have been observed, which are recorded in the official correspondence between the Concessionaire and the State. The course of recovery of these deficiencies is underway.
E.	General Issues	
E.1	Obligation to comply with the Environmental Terms	The Environmental Terms of the project are met by the Construction J/V, the Independent Engineer, the Concessionaire, the Subcontractors and their Consultants.
E.2	Construction and Operation Expenses for the protection of the environment	The required percentage of the total budget of the operation/ maintenance works that are necessary for the full compliance with the Environmental Terms and restrictions of the present JMD, has been ensured by priority. A detailed analysis regarding the expenses that are provided for the realization of protection works of the environment is included in the annual progress report on the compliance with the environmental terms.
E.3	Submission of annual report to EYPE	The term is met. The annual and semiannual report for 2012 is submitted. The annual and 2 nd semiannual report for 2013 are submitted with 15329/17-03-2014 Kentriki Odos SA letter. Also, KENTRIKI ODOS S.A., with prot. no. 15447/3.4.2014, submitted to EYPE all the environmental reports already

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		submitted.
E.5	E.T. controllability by the competent authorities	This report is in the Concessionaire's Headquarters
E.6	Project Environmental Terms Validity	The Concessionaire has submitted a file for the E.T. renewal of the said section with prot. no. 13645/20.02.2013 (EYDE/MKEPA&IO prot. no. 18610/01.03.2013).
D.	Construction and Maintenance Issues	
E.11	Measures for preventing implications of EIS and AET	All measures for preventing environmental implications that are proposed in the EIS and that do not contravene this AET, are taken into account in conjunction with the provisions of JMD EIS of this section.