



**SEMI-ANNUAL PROGRESS REPORT FOR THE IMPLEMENTATION OF ENVIRONMENTAL TERMS DURING
THE CONSTRUCTION PHASE (A' SEMESTER 2014)**

Edition: 1.0
Page: 1 / 70
Date: 20.07.2014

SEMI-ANNUAL PROGRESS REPORT FOR THE IMPLEMENTATION OF ENVIRONMENTAL TERMS DURING THE CONSTRUCTION PHASE

PROJECT: "DESIGN – CONSTRUCTION – FINANCING – OPERATION – MAINTENANCE AND EXPLOITATION OF THE PROJECT "IONIA ODOS MOTORWAY FROM ANTIRIO TO IOANINA, PATHE ATHENS (METAMORFOSSI I/C) – MALIAKOS (SKARFIA) AND PATHE CONNECTING BRANCH SCHIMATARI – CHALKIDA"

(CORRECT REPETITION)

SECTION:

IONIA ODOS Motorway of a total length of 196 km, from Antirio to Egnatia I/C

Issue No.	1.1	PREVIOUS Issues	
Date	20.07.2014	Number	Date
Prepared	EURO IONIA J/V		
Reviewed	Health, Safety and Environment Department Stavros Karapanos		



**SEMI-ANNUAL PROGRESS REPORT FOR THE IMPLEMENTATION OF ENVIRONMENTAL TERMS DURING
THE CONSTRUCTION PHASE (A' SEMESTER 2014)**

Edition: 1.0
Page: 2 / 70
Date: 20.07.2014

Approved	General Director of EuroIonia J/V		
	Kiriakos Vavarapis		

A' SEMESTER 2014

**SEMI-ANNUAL PROGRESS REPORT FOR THE IMPLEMENTATION OF
ENVIRONMENTAL TERMS DURING THE CONSTRUCTION PHASE**

**IONIA ODOS MOTORWAY
FROM ANTIRIO TO IOANINA**

**PATHE MOTORWAY FROM METAMORFOSSI TO SKARFIA
PATHE CONNECTING BRANCH FROM SCHIMATARI TO CHALKIDA**



**SEMI-ANNUAL PROGRESS REPORT FOR THE IMPLEMENTATION OF ENVIRONMENTAL TERMS DURING
THE CONSTRUCTION PHASE (A' SEMESTER 2014)**

Edition: 1.0
Page: 3 / 70
Date: 20.07.2014

CONCESSIONAIRE OF THE PROJECT: **NEA ODOS S.A.**
CONSTRUCTOR: **EURO IONIA J/V**

JULY 2014

1. GENERAL INFORMATION

This semiannual progress report on the implementation of the Environmental Terms during the construction phase includes briefly some general information about the project and a table showing the biannual progress report for the **A' Semester** of **2014**. The table has been supplemented by observations and inspections that took place during the construction works that have been implemented, and procedures as outlined in the Environmental Monitoring Control Program of the project.

1.1. DESCRIPTION OF THE PROJECT

The scope of the whole project is the design, financing, construction, operation and maintenance in accordance with the Concession Agreement, which was ratified by Law 3555/2007:

“DESIGN - CONSTRUCTION - FINANCING - OPERATION - MAINTENANCE AND EXPLOITATIO OF THE PROJECT IONIA ODOS MOTORWAY FROM ANTIRIO TO IOANINA, PATHE ATHENS (METAMORFOSSI I/C) - MALIAKOS (SKARFIA) AND CONNECTING BRANCH PATHE SCHIMATARI – CHALKIDA.”

It should be noted that, under the Law 4219/2013 (OGG 269A/11-12-2013) the Amendment Agreements of the concession agreements of the major road projects, including the IONIA ODOS project, have been ratified.

**SEMI-ANNUAL PROGRESS REPORT FOR THE IMPLEMENTATION OF ENVIRONMENTAL TERMS DURING
THE CONSTRUCTION PHASE (A' SEMESTER 2014)**

Edition: 1.0
Page: 4 / 70
Date: 20.07.2014

More specifically, pursuant to Article 3 ***"Ratification of the Amendment Agreement of the Concession Agreement Provisions of the Project on the Design, Construction, Financing, Operation, Maintenance of Ionia Odos motorway from Antirio to Ioanina, Athens PATHE (Metamorfossi I/C) – Maliakos (Skarfia) and Connecting Branch of PATHE Schimatari – Chalkida"***, the Agreement dated 28.11.2013 amending the Concession Agreement Provisions, apart from its annexes, in accordance with Articles 37.1 and 37.2 of the Concession Agreement dated December 19, 2006, as ratified by Article (1) of Law 3555/2007, has been ratified and enacted as Law. The text of the Amendment Agreement is annexed as Appendix C of Law 4219/2013 and constitutes an integral part of Article (3) of that Law.

The provisions of the Amendment Agreement include the amendment of Article 4.2.2 based on which **the Basic Design** of the section **between Riza I/C (CH 6+000) and Klokova I/C is amended to a new alignment of twin tunnels**, each one measuring **around 2,9 km of length**, which does not affect the existing National Road thus being able to operate as an alternative non-tolled route. The above amendment of the Basic Design applies since, based on 4628/2013 Decision of Department E' of the Council of State, the Environmental Terms for this section -JMD 142128/25-07-2005- have been partly deemed (for the said section from Riza I/C to Klokova I/C) to be annulled.

This annual progress report on the implementation of the environmental terms during the construction phase refers to a part of the concession agreement and includes specific sections of the "IONIA ODOS" Motorway, PATHE (Metamorfossi – Skarfia) and PATHE Connecting Branch of PATHE Schimatari – Chalkida:

**SEMI-ANNUAL PROGRESS REPORT FOR THE IMPLEMENTATION OF ENVIRONMENTAL TERMS DURING
THE CONSTRUCTION PHASE (A' SEMESTER 2014)**

Edition: 1.0
Page: 5 / 70
Date: 20.07.2014

IONIA ODOS

1. Agrinio – Southern End of Agrinio Bypass (Kefalovryso)
2. Agrinio Bypass
3. Northern End of Agrinio Bypass (Kouvaras) - Southern End of Arta Bypass (Kompoti) and Northern end of Arta Bypass (Filippiada) - Ioanina (Eleousa)
4. Arta Bypass

The construction works and the operation of the said sections of the project are governed by the environmental terms described in the following Joint Ministerial Decisions (JMD):

IONIA ODOS

Antirio - Southern end of Agrinio bypass (Kefalovryso)

- JMD 142128/25.07.2005 Environmental Terms Approval of the Ionia Odos project: Antirio Kefalovryso (Southern End of Agrinio Bypass).
- JMD AMENDEMENT “as regards the alignment of the roadway of the above project in the areas of Vassiliki, Evinos and Antirio river and the small improvements along the aforementioned approved project” (Decision no. 166142/13.02.13).

**SEMI-ANNUAL PROGRESS REPORT FOR THE IMPLEMENTATION OF ENVIRONMENTAL TERMS DURING
THE CONSTRUCTION PHASE (A' SEMESTER 2014)**

Edition: 1.0
Page: 6 / 70
Date: 20.07.2014

Agrinio Bypass

- JMD 84982/96/11.04.1997 Environmental Terms Approval for the construction and operation of the project: "Motorway of Western Greece (Ionia Odos)" in the "Agrinio Bypass from CH. 0+000 to CH. 34+401 or CH. 34+811" in the prefecture of Aitoloakarnania."
- JMD 105886/03.07.2008 Extension of No. 84982/96/11.04.1997 JMD on environmental terms approval of the project "Motorway of Western Greece (Ionia Odos)" in the "Agrinio Bypass" from CH. 0+000 to CH. 34+401 or CH. 34+811" in the Prefecture of Aitoloakarnania."
- JMD 144713/23.09.2009 Amendment of No. 84982/96/11.04.1997 JMD on environmental terms approval, as amended by No. oik.105886/03.07.2008 JMD, EPO, the project "Western Greece Motorway. (Ionia Odos) in the "Agrinio Bypass" from CH. 0+000 to CH 34+401 or CH. 34+811 in the prefecture of Aitoloakarnania"

Northern End of Agrinio Bypass (Kouvaras) – Southern End of Arta Bypass (Kompoti) and Northern End of Arta Bypass (Filippiada) - Ioanina (Eleousa)

- JMD 141564/25.07.2005 Environmental Terms Approval for the "Ionia Odos" project Northern End of Agrinio Bypass (Kouvaras) – Southern End of Arta Bypass (Kompoti) and Northern end of Arta Bypass (Filippiada) - Ioanina (Eleousa).

**SEMI-ANNUAL PROGRESS REPORT FOR THE IMPLEMENTATION OF ENVIRONMENTAL TERMS DURING
THE CONSTRUCTION PHASE (A' SEMESTER 2014)**

Edition: 1.0
Page: 7 / 70
Date: 20.07.2014

Arta Bypass

- JMD 120756/96/03.06.1997 Environmental Terms Approval for the construction and operation of the project 'Ioanina - Antirio National Road, Section of Filippiada - Arta Bypass, from CH. 60+000 to CH. 82+000 starting from Ioanina, at the Prefectures of Preveza and Arta, including section of almost 1 km of the road linked with the city of Arta.
- JMD 132550/31.07.2003 Modify the Common Ministerial Decision Approval of Environmental Terms for the construction and operation of the project "National Road of Ioanina - Antirio, Section of Filippiada – Arta Bypass, from CH. 60+000 to CH 82+000 starting from Ioanina, at the Prefectures of Preveza and Arta, including section of almost 1 km of the road linked with the city of Arta.
- JMD 137938/31.12.2003 Joint Ministerial Decision Amendment of the Environmental Terms Approval for the construction and operation of the project "Ioanina - Antirio National Road, Section of Filippiada – Arta Bypass, from CH. 60+000 to CH. 82+000 starting from Ioanina, at the Prefectures of Preveza and Arta, including section of almost 1 km of the road linked with the city of Arta.

1.1 CONTRACTUAL SCOPE

The Design, Construction, Operation and Maintenance of the above Motorways are subject to the Agreement, as follows:

(A) C.P. New Sections and Technical Works which will be designed and constructed by the Concessionaire:

**SEMI-ANNUAL PROGRESS REPORT FOR THE IMPLEMENTATION OF ENVIRONMENTAL TERMS DURING
THE CONSTRUCTION PHASE (A' SEMESTER 2014)**

Edition: 1.0
Page: 8 / 70
Date: 20.07.2014

(i) Ionia Odos/Antirio - Agrinio Southern end of Agrinio bypass 42.9 km (GU 1N to 13N) and completion of Agrinio bypass incomplete section of an approximate length of 13.0 km. In the area of Makynia the solution applied is by tunnel under the alignment contained in the EIS as L - A solution.

(ii) Ionia Odos/Northern end of Agrinio Bypass (Kouvaras) - Arta Bypass Beginning (Kompoti) 53.0 km (GU 15N to 18N).

(iii) Ionia Odos/Arta Bypass End - Egnatia Odos 50.0 km (GU 21N to 23N) with A' phase construction works in Egnatia I/C.

(B) Existing C.P. Motorway Sections constructed and operated by and at the expense of the Greek State and the contribution of the European Union and are going to be studied and executed in accordance with the agreement:

(i) Ionia Odos/Arta Bypass section 10.5 km (GU 20Y)

(C) Motorway New Sections constructed by and at the expense of the Greek State and the contribution of the European Union, for which they can be informed by the services executing these works as follows:

(i) Ionia Odos/Agrinio Bypass 20.6 km (GU 14N/W)

(ii) Ionia Odos/Arta Bypass 6.15 km (GU 19N/W)

The project is divided into Geographical Units of the Special Conditions of Contract¹ as follows:

(A) Concessionaire New Sections (C.P. and L.P.).

(B) Existing Sections of the Concession Project (C.P.)

¹ Agreement between EYDE/YPEHODE and the Concessionaire. The said sections are specified in Table 1-I of the Agreement.

**SEMI-ANNUAL PROGRESS REPORT FOR THE IMPLEMENTATION OF ENVIRONMENTAL TERMS DURING
THE CONSTRUCTION PHASE (A' SEMESTER 2014)**

Edition: 1.0
Page: 9 / 70
Date: 20.07.2014

(C) State New Sections (C.P.) constructed and operated by and at the expense of the Greek State which will grant to the Concessionaire the exclusive right of Operation, Maintenance and Exploitation, as regulated by the Concession Agreement.

The Concessionaire's obligations include any temporary connection to the existing network, depending on the time schedule for the completion of the individual sections and the existing conditions.

1.1.1 Project New Sections and technical requirements

The scope of the Project is the "Design – Construction – Financing – Operation – Exploitation and Maintenance of Ionia Odos Motorway from Antirio to Ioanina, for thirty (30) years in accordance with its Concession Agreement:

- i. "Ionia Odos" motorway, of an approximate length of 196 km from Antirio to Egnatia I/C,

The Project is part of the Trans – European Network. It serves the national traffic gates of Patra, Igoumenitsa and Kakkavia and the interregional traffic.

The Ionia Odos motorway starts at Rio – Antirio Bridge and ends in Egnatia Odos, travelling through the Prefectures of Aitoloakarnania, Arta, Preveza and Ioanina.

It consists of two lanes per traffic lane and of an emergency traffic lane. The width of the motorway on Antirio – Amvrakia I/C is 24.5m with planting in the a middle island with New Jersey; the Amvrakia I/C – Egnatia section is 22.0m with a double New Jersey in the middle island.

**SEMI-ANNUAL PROGRESS REPORT FOR THE IMPLEMENTATION OF ENVIRONMENTAL TERMS DURING
THE CONSTRUCTION PHASE (A' SEMESTER 2014)**

Edition: 1.0
Page: 10 / 70
Date: 20.07.2014

The design speed for the Antirio – Amvrakia I/C section is 110 km/hour on the open sections and 100 km/hour on the tunnels, while on Amvrakia I/C – Egnatia is generally 100 km/hour.

It includes:

19 Junctions

- Antirio I/C at CH. 0+800
- Gavrolimni I/C at CH. 14+270
- Evinochori I/C at CH. 23+300
- Mesologgi I/C at CH. 27+530
- Chaliki I/C at CH. 47+200
- Ag. Ilias I/C at CH. 51+250
- Aggelokastro I/C at CH. 55+500
- Rigani I/C at CH. 60+200
- Kouvaras I/C at CH. 75+500
- Amvrakia I/C at CH. 84+670
- Amfilochia I/C at CH. 101+260
- Kompoti semi-junction at CH. 125+700
- Arta I/C at CH. 135+400

**SEMI-ANNUAL PROGRESS REPORT FOR THE IMPLEMENTATION OF ENVIRONMENTAL TERMS DURING
THE CONSTRUCTION PHASE (A' SEMESTER 2014)**

Edition: 1.0
Page: 11 / 70
Date: 20.07.2014

- Filippiada I/C at CH. 147+270
- Ammotopos semi-junction at Ch. 154+230
- Gorgomylos I/C at Ch. 163+110
- Terovo I/C at CH. 175+700
- Avgo I/C at CH. 187+000
- Egnatia I/C at CH. 96+000

4 Frontal & 10 Lateral Toll Stations

- a. Frontal:
 - Klokova - Mesologgi at CH. 10+100
 - Aggelokastro – Fities at CH. 57+212
 - Kompoti at CH. 111+300
 - Gorgomylos – Avgo at CH. 187+600
- b. Lateral:
 - 2 in Gavrolimni I/C at CH. 14+300
 - 2 in Mesologgi I/C at CH. 27+530
 - 2 in Kouvaras I/C at CH. 75+500
 - 2 in Arta I/C at CH. 135+400
 - 2 in Gorgomylos I/C at CH. 163+110

**SEMI-ANNUAL PROGRESS REPORT FOR THE IMPLEMENTATION OF ENVIRONMENTAL TERMS DURING
THE CONSTRUCTION PHASE (A' SEMESTER 2014)**

Edition: 1.0
Page: 12 / 70
Date: 20.07.2014

9 Motorist Service Stations

- Evinochori I/C at CH. 22+400 on 2 sides
- Amvrakia at CH. 81+200 on 2 sides

Amfilochia at CH. 95+500 on 1 side (right-hand)

Filippiada at CH. 148+800 on 2 sides

Episkopiko at CH. 189+600 on 2 sides

3 Exploitation and Maintenance Centres

(Maintenance, Fire Brigade, Police Buildings)

Mesologgi I/C at CH. 26+900

Amfilochia MSS at CH. 95+500

Filippiada MSS at CH. 148+800

4 Tunnels

- Makynia Tunnel of a length of 542m at CH. 4+000
- Klokova Tunnel of a length of 2950m at CH. 6+380
- Kalydona Tunnel of a length of 1200m at CH. 24+020



**SEMI-ANNUAL PROGRESS REPORT FOR THE IMPLEMENTATION OF ENVIRONMENTAL TERMS DURING
THE CONSTRUCTION PHASE (A' SEMESTER 2014)**

Edition: 1.0
Page: 13 / 70
Date: 20.07.2014

- Ampelia Tunnel of a length of 900m at CH. 192+000

9 Bridges > 50m

1. Bridge of a length of 67.5 (d) & 102m (a) at CH. 3+850
2. Bridge of a length of 254 (d) & 259m (a) at CH. 19+300
3. Bridge of a length of 50m at CH. 100+598
4. Bridge of a length of >300m at CH. 118+304
5. Bridge of a length of 252m at CH. 158+120
6. Bridge of a length of 105m at CH. 162+354
7. Bridge of a length of 430m at CH. 166+508
8. Bridge of a length of 105m at CH. 167+260
9. Bridge of a length of 280m at CH. 183+482
10. 10 bridges or wide underpasses of a length of <50m

The motorway of IONIA ODOS also includes the Upper & Underpasses, Retaining wall, Culverts, Parking and Rest Areas etc.

The sections of the Concession Project are divided into forty three (43) Geographical Units (GU), five (5) of which are State's New Sections. Those sections, after their completion, shall be delivered by the State to the Concessionaire, as defined in the C.A., in order to proceed with



**SEMI-ANNUAL PROGRESS REPORT FOR THE IMPLEMENTATION OF ENVIRONMENTAL TERMS DURING
THE CONSTRUCTION PHASE (A' SEMESTER 2014)**

Edition: 1.0
Page: 14 / 70
Date: 20.07.2014

the additional works concerning the operation and maintenance of the motorway. Up to now, 4 of them have been delivered as shown in the table below.

GU	SECTION (CH)	Length	Delivered by the State
14 S/W	Agrinio Bypass IONIA CH 55+600 -76+272	20,672	Delivered
19 S/W	Arta Bypass IONIA CH 129+053 -135+200	6,147	Delivered

The following tables set out the terms of the JMD Approval of the Environmental Terms relating only to the under-construction (S1, S2-S3) sections for each JMD separately, and per environmental term.

For each term listed in the table, there is a commentary on course compliance or potential problems encountered or observed in relation to compliance.

2. TABLES FOR MONITORING ENVIRONMENTAL CONDITIONS



**SEMI-ANNUAL PROGRESS REPORT FOR THE IMPLEMENTATION OF ENVIRONMENTAL TERMS DURING
THE CONSTRUCTION PHASE (A' SEMESTER 2014)**

Edition: 1.0
Page: 15 / 70
Date: 20.07.2014

ANTIRIO – SOUTHERN END OF AGRINIO BYPASS (KEFALOVRYSSO)

- **ETA JMD no. 142128/25.07.2005,**
- **JMD Amendment Decision no. 166142/13.02.2013**



SEMI-ANNUAL PROGRESS REPORT FOR THE IMPLEMENTATION OF ENVIRONMENTAL TERMS DURING THE CONSTRUCTION PHASE (A' SEMESTER 2014)

Edition: 1.0
Page: 16 / 70
Date: 20.07.2014

Main Project Environmental Licensing - Background

As regards the main project of Ionia Odos motorway on this section, the ETA JMD no. 141128/25.07.2005 and the amendment of Decision 166142/13.02.13 regarding the alignment of the road axle on the area of Vassiliki, Evinos river and Antirio as well as the minor improvements along the approved project shall apply. The Amendment Decision did not include the section from CH 5+050 to 11+300 (Klokova).

Under the Council of State decision no. 4628/2013 (J/V prot. no. 40951/13.03.2014), the JMD 142128/25.07.2005 environmental terms have been partially annulled concerning S1 and more specifically from CH 7+380 to 11+552.

The Basic Design of the section between Riza I/C (CH. 6+000) and Klokova I/C shall be amended by new alignment consisting of twin tunnels, each of which of a length of 2,9km. The alignment shall not affect the existing National Road which shall operate as an alternative non-tolled route. The Environmental Impact Study regarding the amendments of the IONIA ODOS alignment for that section, CH. 5+104,495 – CH. 14+904,360, including the amendment of Klokova (prot. no. EYDE EPA & IO/1/00/01/01/oik. 23803/24.06.2014 - ΑΔΑ: 7ΤΤ51-ΣΙ), has been submitted.

**SEMI-ANNUAL PROGRESS REPORT FOR THE IMPLEMENTATION OF ENVIRONMENTAL TERMS DURING
THE CONSTRUCTION PHASE (A' SEMESTER 2014)**

Edition: 1.0
Page: 17 / 70
Date: 20.07.2014

A/A Decision	Environmental Terms - Description	Description of Progress - Problems
b.	<p>Specific limit values of pollutant loads and concentrations emission according to the applicable provisions</p> <p>For gaseous, the allowable concentrations of pollutants are listed in: JMD 9238/332/2004 (OGG 405V/27.02.2004), Act of CM 34/30.05.2002 (OGG 125B) and Act of CM 11/14.02.1997 (OGG 19A)</p> <p>For liquid waste, the applicable prefectural decisions shall apply.</p>	<p>All foreseen by the legislation limits are taken into consideration.</p> <p>Hazardous waste is managed under contract by appropriately licensed companies.</p>
c.	<p>Specific limit values of noise level and vibrations according to the applicable provisions</p> <p>Maximum permissible noise limit as mentioned in Ministerial Decision no. 17252/20.9.92 (OGG 395/B/19.6.92).</p> <p>For noise emitted from the construction equipment, those provided in JMD 37393/2028/01.10.2003 (OGG 1418V) shall apply.</p> <p>For air quality, the permitted emissions of air pollutants and noise from fixed E/M facilities are provided in PD 1180/81 (OGG 293/A).</p>	<p>The control, during the construction phase, is conducted in accordance with the current legislation and the limit values specified in this are met.</p> <p>With respect to the noise during the construction of the project, pursuant to the Program for Environmental Management and in terms of Environmental Monitoring Control Program noise measurements are conducted parametrically of the worksite and the construction faces and the results were within the allowable limits. The said measurements are reflected in maps depicting the extent of the construction of the project and the location the measurements were made. The said maps as well as the measurement, which are repeated at regular intervals (monthly), are included in each monthly check list. Finally, a noise measurement issue is prepared, which is submitted with the annual report.</p>
d.1	<p>- Terms relating to the structures and measures to address environmental degradation (paragraph d) are mandatory and relate to:</p> <ul style="list-style-type: none"> - the project owner - the Services and Agencies responsible for the construction and operation of the Project 	<p>The Environmental Terms and the other contractual obligations regarding the construction phase, have been analyzed in the Environmental Monitoring & Control Program submitted in May 2009 (protocol no. IC-X-CO-S0000-PRO9251/ACH/Kla). During the current period, a review of the PEAE and the EMS was carried out, which was promoted to the worksites for compliance.</p> <p>The plan and its review have been presented to the joint venture's supervising engineers, as well as to any</p>

**SEMI-ANNUAL PROGRESS REPORT FOR THE IMPLEMENTATION OF ENVIRONMENTAL TERMS DURING
THE CONSTRUCTION PHASE (A' SEMESTER 2014)**

Edition: 1.0
 Page: 18 / 70
 Date: 20.07.2014

A/A Decision	Environmental Terms - Description	Description of Progress - Problems
	<ul style="list-style-type: none"> - the Independent Engineer, who is required to ensure their implementation and their effective monitoring of full compliance - the heads of these agencies and bodies, who must ensure their implementation and their effective monitoring of compliance - to everyone who, because of their position and powers, shall be responsible for the design, approval, tendering, awarding, monitoring, certification, delivery and other procedures relating to the construction and operation of the project - the Contractor's project 	<p>subcontractors that will provide the joint venture with their services.</p>
d1.1	<p>In the procurement, tendering, supervision, receipt procedures all necessary actions to be made and all necessary measures to be taken to ensure:</p> <ul style="list-style-type: none"> - compliance with the environmental conditions of the Contractor - ability to cope and rehabilitate unpleasant environmental conditions due to actions or omissions of the Contractor in breach of the environmental conditions. 	<p>The Environmental Terms and the other contractual obligations regarding the construction phase, have been analyzed in the Environmental Monitoring & Control Program submitted in May 2009 (protocol no. IC-X-CO-S0000-PRO9251/ACH/Kla). During the current period, a review of the PEAE and the EMS was carried out, which was promoted to the worksites for compliance.</p> <p>The plan and its review have been presented to the joint venture's supervising engineers, as well as to any subcontractors that will provide the joint venture with their services.</p> <p>There are responsible persons for the implementation of the Environmental Management System and the monitoring of compliance with the E.T.</p>
d1.2	<p>Credits for the construction and operation of the project ensuring, by priority, the required expenditure on environmental protection projects (planting projects, etc.).</p>	<p>All required costs are taken into account when tendering for the construction of this project. To date expenditures for environmental protection are submitted in the annual environmental reports.</p>

**SEMI-ANNUAL PROGRESS REPORT FOR THE IMPLEMENTATION OF ENVIRONMENTAL TERMS DURING
THE CONSTRUCTION PHASE (A' SEMESTER 2014)**

Edition: 1.0
Page: 19 / 70
Date: 20.07.2014

A/A Decision	Environmental Terms - Description	Description of Progress - Problems
d2	For any activity or facility necessary for the construction – operation of the project, all the permits and approvals under the current legislation should previously have been granted; including also any individual required environmental licensing.	The procedure for obtaining all necessary permits and approvals in progress, as specified below.
d2.1	Every kind of individual projects or activities relating to the construction or operation of the project (i.e., borrow pits, quarries or aggregate extraction sites and other materials, permanent or temporary surplus materials landfills, worksite facilities, particle size separation facilities, concrete production and sand production units, Motorist Service Stations (MSS), toll stations, administrative buildings and other commercial activities) are ancillary works of the main project and can be implemented only after submission, assessment and approval of Special Technical Implementation by EYPE/YPEHODE.	<p>The relevant STIS or Technical Environmental Studies for all required sites (quarries, borrow pits, disposal sites and worksites) have been submitted to EYPE. The submissions of the studies as well as the progress of the approval procedure are as follows:</p> <p>Quarries:</p> <ul style="list-style-type: none"> •QP08 "Kremasti", Municipality of Mesologgi <p>During the current period: The quarry of Kremasti has been activated: (CH. 40+000): EYPE approval 123390/3.8.10, Region of Western Greece approval lease/concession 2465/63972/18.7.12 and intervention approval Forest Directorate of Aitolokarnania 42711/846/3.4.2014.</p> <p>Borrow Pits: (the borrow pits which the STIS etc. have been carried out and which are not licensed/used, are not reported in detail herein,)</p> <ul style="list-style-type: none"> •BP08 location "Skinos", Municipality of Mesologgi •BP03 location "Karanolaggada" •BPA1 location "Machaira", Municipality of Nafpaktia •BPA2 location "Rena" •BPA3 location "Agios Ioannis" •BPA4 location "Rema Ragou" •BPA5 location "Palaiomylos" •BPA6 location "Theotokos" •BP7 "Prapoeri" location

**SEMI-ANNUAL PROGRESS REPORT FOR THE IMPLEMENTATION OF ENVIRONMENTAL TERMS DURING
THE CONSTRUCTION PHASE (A' SEMESTER 2014)**

Edition: 1.0
 Page: 20 / 70
 Date: 20.07.2014

A/A Decision	Environmental Terms - Description	Description of Progress - Problems
		<ul style="list-style-type: none"> • 3 Borrow pits (15A, 15B and 15C) <p>The above sites are not going to be used. The reasons for their refusal are described in detail in previous annual and semi-annual reports.</p> <p><u>Disposal Sites:</u></p> <ul style="list-style-type: none"> • Temporary deposits (6 sites) of Kalydona tunnel excavation materials, aggregates and topsoil (submission 07/2011 – approval of positions in the Amendment File of the main project). • 4 D/P (E1, E2, E3, E4) Municipality of Chalkia. Environmental licensing for E1 (02/2008) (not currently in use). <p><u>Worksites:</u></p> <ul style="list-style-type: none"> • S1.2 Agios Georgios, Mesologgi: Main worksite of S1. STIS approval by EYPE (prot. no. 41505/23.09.09). • S1.3 Aitoliko Worksite: Installation of laboratory (environmental permit 36016/13-05-11 completed). • S1.4 A worksite for Kalydona exit tunnel (environmental permit 36015/13-05-11 completed) • The Headquarters are not in use anymore: “Kourtouga” location – premises of former 3E bottling plant. No environmental permit is needed. <p><u>Gravel extractions:</u></p>

**SEMI-ANNUAL PROGRESS REPORT FOR THE IMPLEMENTATION OF ENVIRONMENTAL TERMS DURING
THE CONSTRUCTION PHASE (A' SEMESTER 2014)**

Edition: 1.0
Page: 21 / 70
Date: 20.07.2014

A/A Decision	Environmental Terms - Description	Description of Progress - Problems
		<ul style="list-style-type: none"> Gravel excavation RB01 in Kalfa and Paradission positions in Evinos River (J/V approval with protocol no. A/1/08/09/01/5293/09-11-09 EYDE EPA&IO). <p>For the current time period, canal basins and linings, flood protection and slope restoration works have been performed</p> <p>For the environmental licensing of the ancillary works, the procedures provided for in Law 4014/2011 (Government Gazette 209A/2011) shall be followed.</p>
d2.2	No permit authorization or approval from any authority or the Independent Engineer for the implementation of any individual project, activity or extension that is not described in the EIS, and therefore not covered by this decision, for which environmental authorization is required in accordance with the applicable law, without previously being environmentally approved by EYPE/YPEHODE.	Pursuant to the Environmental Term d2.1, the environmental approvals are given by EYPE after submission of the relevant STIS or TES or as laid down in Law 4014/2011 (OGG 209a/2011). The necessary STIS/ TES have been elaborated for the relevant authorizations, for which detailed reference is made above. The environmental permitting shall be issued in accordance with Law 4014/2011 (OGG 209A/2011)
d2.3	For any kind of work or facilities within areas of forest character the intervention approval, required by Law 998/79, must previously be granted. The reforestation removal should be preceded in the case in which the project will be constructed in reforested area prior to receiving the intervention approval.	<p>The license for intervention is now incorporated in the project, provided that those referred to in MD 15277/12 are met. Modification of the project AEPO (prot. No. 167 980/30.04.13), those referred to the above MD are met and the conditions included under the letter of the Directorate of Aesthetic Forests, National Parks and Game Management are included. Consequently, subject to these terms, the said amendment also constitutes an intervention approval. (See. D) Prot. No. 167980/30.4013)</p> <p>During the reporting period, the quarry "Kremasti" was activated (CH. 40+000): EYPE approval no. 123390/03.08.10, Region of Western Greece approval lease/concession 2465/63972/07.18.12 and approval of intervention Forest Directorate of Aitolokarnania 42 711/846/03.04.2014. Ref. No. 41 797/06.05.2014 which was notified to the c/o the construction of Forestry Mesologgi Setup Protocol.</p>
d2.4	If installing concrete and asphalt production worksite units, these should be at least 500m from the	It has been ensured that the layout planning of these plants abide by the afore-mentioned restrictions, as specified in the Environmental Term. This issue is reviewed in the submitted STIS/ TES and the

**SEMI-ANNUAL PROGRESS REPORT FOR THE IMPLEMENTATION OF ENVIRONMENTAL TERMS DURING
THE CONSTRUCTION PHASE (A' SEMESTER 2014)**

Edition: 1.0
 Page: 22 / 70
 Date: 20.07.2014

A/A Decision	Environmental Terms - Description	Description of Progress - Problems
	boundaries of the settlements and take all necessary measures to protect streams of the region, particularly in areas of Evinos River (CH. 16+180 – 22+500) and the lagoon of Mesologgi and the irrigation canal (CH. 33+500 – 42+272).	implementation of the stipulated protective measures is checked. In particular, as far as the concrete production unit that is installed in Evinos worksite, in Agios Georgios, Mesologgi all the aforementioned restrictions were followed. The installation is around 1000m away from Agios Georgios area and in order to protect Evinos river, two water collection tanks have been constructed. The distance is also kept for the worksite of Aitoliko.
d2.5	The deforestation to be made should be strictly the necessary ones. Also, the rehabilitation of the intervention zones should be made both for reasons of protection and improvement of the beauty of the landscape, harmonized to the local character.	Land reclamations and site clearing were carried out before the suspension of works in motorway sections areas bounded by piles. The term is respected and controlled by the responsible of the consortium Environmental department and the "appointed subcontractors" as described in the Monitoring & Control Environmental Program and the Environmental Management Plan submitted in May 2009 (protocol no. IC-X-CO-S0000-PRO9251/ACH/Kla/12-05-2009 and have been amended during this period.
d2.6	For the construction of all types of projects (technical, road surfacing, embankments, etc.) the excavation materials of the digging works will be used. In addition to those aforementioned, any materials for the construction of the project may be required either from legally operating quarries of the region, which should have the required JMD for approval of environmental terms and provided that they are laid down either by the quarries - borrow pits which may be created in accordance with the applicable law after the necessary environmental licensing, under environmental term no. 2.1. If soil collection or disposals of redundant materials are needed outside the already existing sites, this will be held by indicating the space to the competent ΑΣΤ' EPKA and 8th EBA and upon written authorization. The same	For all new sites where materials have been delivered, the required STISs/TES have been submitted and approved, as referred to in term d2.1, and the relevant opinion of the responsible Archaeological Services is required.

**SEMI-ANNUAL PROGRESS REPORT FOR THE IMPLEMENTATION OF ENVIRONMENTAL TERMS DURING
THE CONSTRUCTION PHASE (A' SEMESTER 2014)**

Edition: 1.0
 Page: 23 / 70
 Date: 20.07.2014

A/A Decision	Environmental Terms - Description	Description of Progress - Problems
	applies to any ancillary works arisen in the framework of the main projects.	
d2.7	The disposal of the inappropriate excavation materials to be carried out in positions that shall not affect the flow of the surface waters, shall not be wooded areas and shall be placed at least 250 meters from the boundaries of settlements, archaeological sites, cemeteries, etc. In any case, care shall be taken to avoid entrainment of deposited materials from rain. Throwing even temporarily gravel and other aggregates in the beds of streams and rivers is prohibited.	<p>So far, no permanent disposal is required in this area. The sites of top soil temporary disposals and piles of aggregates or useful excavation materials were selected in leased land, or within limits of expropriation. No temporary disposal near the streams. During the current period, the locations of temporary disposals are recorded in the ENV-F02-01 file of the EMS.</p> <p>The implementation of the E.T. with respect to the protection of water recipients from the disposed soil material is controlled via the Environmental Monitoring & Control Program.</p> <p>The term on the disposal of inappropriate excavation products is a criteria used during searching locations for possible disposal sites and is taken into account during the preparation of the respective studies that are submitted to the EYPE.</p> <p>For the environmental licensing of the disposal sites, the procedures of Law 4014/2011 (OGG 209A/2011) are followed.</p>
d2.8	All redundant excavation materials should be separated from waste or other solid waste and should be disposed with proper configuration in approved areas.	No cases related to excavation materials, which usually include waste or dangerous sewage, have been presented. In the event that during the construction phase, excavation locations containing waste or other solid waste are found, these will be separated from the excavation materials and will be appropriately disposed. Also, it has been ensured that excavation materials, which are free of foreign substances, are kept free of waste or free substances in specific deposition chambers or integrated per priority in the body of the Project. During the preparation period of the present report, there were no excavation materials to be permanently deposited.
d3	Archeological Services Prior to the commencement of the construction of each section of the project the relevant Archeological Services (ΑΣΤ' ΕΡΚΑ, 8th ΕΒΑ) should be notified on time and in writing.	The Archeological Service is updated for each section of the project in time before the commencement of the works. Excavations have been conducted in the past or continue to be conducted in all positions. The site is delivered by the archaeological service, given that its work is completed.

**SEMI-ANNUAL PROGRESS REPORT FOR THE IMPLEMENTATION OF ENVIRONMENTAL TERMS DURING
THE CONSTRUCTION PHASE (A' SEMESTER 2014)**

Edition: 1.0
Page: 24 / 70
Date: 20.07.2014

A/A Decision	Environmental Terms - Description	Description of Progress - Problems
d3.1	Upon localization of antiquities, works will be stopped and a rescue excavation study will follow, the results of which will determine their continuation, after consultation with the relevant Councils of the Ministry of Culture. All works will be conducted under the supervision of servants of the competent services of the Ministry of Culture (ΛΣΤ' ΕΡΚΑ, 8th ΕΒΑ), which will be notified by the subcontractor companies one month before the commencement of these works. Particular attention will be given to the works undertaken in parts of the project passing near the archaeological sites of Makynia, Kalydona, Alikyrna, Plevrona, in the area of Ano Vassiliki and Kato Vassiliki and around the Evinos river.	See attached table "RESERVATION - RELEASE AREAS OF THE PROJECT BY ARCHAEOLOGICAL SERVICES"
d3.2	The cost of all works to be performed by the co-competent ΛΣΤ' ΕΡΚΑ, 8th ΕΒΑ will be covered by appropriations of the project, in accordance with Article 37 of Law 3028/28.06.2002. When this expense exceeds 10% of the project budget, it is required, after a relevant question of the competent Department of the Ministry of Culture, a written statement of the developer of the projects that the latter wants its continuation.	With respect to the coverage of the expenses incurred during the archaeological surveys, article 1, par. 13.2 of Law 3555/2007 shall apply.
d4	Worksite infrastructure to be established serving the project's needs during its operation (de-icing, etc.)	The issue concerns the operation of the project.
d5	Regarding the worksite facilities of Stone processing and concrete production when installed, to implement the following: - The dust emitted from the crushing operation	The E.T. are followed in the stone processing and concrete production plant that operates in Agios Georgios Mesologgi worksite. In the worksite area of Aitoliko, during the said time period, the concrete production plant has been installed, and those mentioned are met.

**SEMI-ANNUAL PROGRESS REPORT FOR THE IMPLEMENTATION OF ENVIRONMENTAL TERMS DURING
THE CONSTRUCTION PHASE (A' SEMESTER 2014)**

Edition: 1.0
Page: 25 / 70
Date: 20.07.2014

A/A Decision	Environmental Terms - Description	Description of Progress - Problems
	<p>assembly will be minimized through water sprinkling at critical positions as crushing stages and the output of the product from the assembly.</p> <ul style="list-style-type: none"> - Shipments of aggregates and cement will be made with closed conveyors or bolts that will be dedusted through filters. - For the preparation of concrete closed systems of wet type will be used. - The cement storage silo should have dedusting filters and the relief valves will volatilize in filters. 	<p>In the worksite areas of Kalavrouza and Gavrolimni, such installations are provided, while the protection measures of the term refer to the relevant STIS. Their implementation after the installation according to the EMCP (Environmental Monitoring & Control Program) will be checked.</p> <p>As for the supply of aggregates and concrete held by the Suppliers, their environmental licensing is controlled and the respective record is kept.</p> <p>Bitumen production plants do not exist and when required, either they will be supplied by outside environmentally licensed partner or they will be installed on the licensed worksite areas.</p>
d5.1	Bitumen production plants must be equipped with fabric filters or equivalent performance system, on a rotary kiln for only-drying aggregates, the sieves, temporary aggregates deposition silos, material lifts and any other location allowing dust emission or particulate matter.	
d6	Any kind of rubbish, waste materials, old parts and machinery, oil, all kinds of grout, etc., and their allocation shall be made in accordance with applicable regulations. Materials combustion (tires, oil, etc.) in the prohibited work area.	With respect to the collection of urban waste, four waste bins of the Municipality of Mesologgi have been placed in the worksite of Ag. Georgios and there is a relevant agreement with the respective Municipality for emptying the bins and transferring the waste to HYTA (landfill site) 4 th Geographical Unit of the Prefecture of Aitolokarnania (relevant document of the worksite record).
d6.1	Any toxic solids such as batteries and metal waste, tire equipment, etc. will be collected and disposed in accordance with the current regulations.	With respect to the management of used oils, batteries, tires, etc. relevant agreements with licensed management companies (oils of Achaia, SYDESIS, ecoelastica) have been signed and depending on the constructional procedure and the payment of the temporary containers, they are delivered for further management. While, where appropriate, relevant proof of compliance from suppliers and sub-contractors are required. The dangerous waste is temporarily stored in special areas within the worksites prior to their final disposal, while in some cases the relevant conformance documents are requested by the suppliers and
d6.2	Pollution of surface and ground waters from any kind of oils, fuels, etc. is prohibited. Also, the disposal of	

**SEMI-ANNUAL PROGRESS REPORT FOR THE IMPLEMENTATION OF ENVIRONMENTAL TERMS DURING
THE CONSTRUCTION PHASE (A' SEMESTER 2014)**

Edition: 1.0
Page: 26 / 70
Date: 20.07.2014

A/A Decision	Environmental Terms - Description	Description of Progress - Problems
	<p>old oil on the ground is prohibited. The management of used oils should be in accordance with the provisions of P.D.82/25.2.2004 (OGG 64/2.3.2004) on "Establishment of measures and procedures for the management of previously used oil" (B '40). Measures conditions and program the alternative management of waste oils, which replaced the JMD 98012/2001/95 (Gov. 40/V/19-1-96).</p> <p>The management and disposal of hazardous waste will be carried out in accordance with No. 19396/1546/08.07.1997 JMD. "Measures and conditions for the management of hazardous waste" (GG 604V).</p>	<p>the separate subcontractors.</p> <p>A record of contracts and evidence for the appointed subcontractors is kept in the worksite of Ag. Georgios.</p> <p>The maintenance and washing of vehicles and machines are realized either in licensed worksites (Ag. Georgios and Aitoliko worksites) with appropriate infrastructure (settling tanks, tank assembly, etc.) or in a licensed external garage or laundry area.</p> <p>As regards the urban waste at the worksite of Ag. Georgios, a sewerage system and a watertight septic tank have been constructed; an agreement on its evacuation and transportation of the waste to biological treatment of the municipality has been concluded with the Municipality of Mesologgi.</p> <p>The same applies for the worksite of Aitoliko, which operates recently.</p>
d7	<p>To ensure the uninterrupted flow of the surface water by constructing all required structures and considering a return period of at least 50 years, excluding any stream filling with debris etc, to avoid phenomena of stagnant water and flooding given that a section of the project is developed in the wide bed of the Evinos river and in lowland areas with an extensive irrigation network.</p>	<p>The compliance with this condition is ensured through the development - approval of hydraulic studies, which take into account the E.T.</p>
d8	<p>The concessionaire should prepare a contingency plan and have all the necessary tools to address a</p>	<p>The Risk Assessment Study has been elaborated and submitted to the I.E. for the area of Evinos river, J/V letter with protocol no. 27580/ 5-8-10.</p> <p>An Environmental Monitoring & Control Program in terms of the overall Plan for Environmental</p>

**SEMI-ANNUAL PROGRESS REPORT FOR THE IMPLEMENTATION OF ENVIRONMENTAL TERMS DURING
THE CONSTRUCTION PHASE (A' SEMESTER 2014)**

Edition: 1.0
Page: 27 / 70
Date: 20.07.2014

A/A Decision	Environmental Terms - Description	Description of Progress - Problems
	<p>possible accident during handling tankers with hazardous liquid fuels along sensitive water recipients. More specifically, in order to address the accidental pollution and prevent pollution of ecologically sensitive wetland ecosystems with oil or hazardous substances (Evinos) examining the possibility of constructing appropriate retention and separation reservoirs (tanks). These tanks are connected to the system rainwater of the motorway so as to be able to address any case of accidental pollution. The design and sizing of the tanks to be arranged on a special study of risk assessment (risk assessment study) which will be prepared with care of the institution of the study project.</p>	<p>Management, which includes control procedures for all works referred to in the environmental terms, has been drawn up. The ECMP and the Environmental Management Plan have been updated during the current period.</p> <p>The Program has been presented to the joint venture's supervising engineers for them to be updated it and implement it, as well as to any subcontractors that will provide the joint venture with their services.</p>
d9	<p>Any kind of modification or intervention to an existing infrastructure project (i.e. water supply, sewerage etc.) should be done in collaboration with the relevant agencies, to ensure their satisfactory operation. Repair of network utilities affected to be done immediately. In the irrigation network in the area of Mesologgi and in particular regarding the rehabilitation of the irrigation canal in sections from CH. 34+260 to 35+010 and 37+565 to 38+330 the final design of rehabilitation projects of the irrigation canals should be prepared in consultation with the Directorate of Land Reclamation of Aitolokarnania S/E. Any intervention in the</p>	<p>A contact with all involved Public Utility Organizations has been made (in accordance with par. 7 of the Special Conditions of Contract) in order to identify the areas for networks relocation. The necessary actions will be carried out to rehabilitate the irrigation networks and passages from other irrigation channels to the area with respect to the positive opinion about the hydraulic design from the respective Service of Aitolokarnania</p> <p>See attached table " P.U.O. Networks TABLE"</p>

**SEMI-ANNUAL PROGRESS REPORT FOR THE IMPLEMENTATION OF ENVIRONMENTAL TERMS DURING
THE CONSTRUCTION PHASE (A' SEMESTER 2014)**

Edition: 1.0
 Page: 28 / 70
 Date: 20.07.2014

A/A Decision	Environmental Terms - Description	Description of Progress - Problems
	irrigation network will be carried out outside the irrigation period.	
d10	The construction of the large structure (bridge), on the section of Klokova to be carried out using an aforementioned construction method. The construction of worksite pathways going downstream of the existing roads is not permitted and any interventions to be reduced only in the positions of the pedestals for opening base wells with access only from above.	
d10.1	Throughout the construction phase to ensure a 24-hour continuous circulation of the existing motorway for both traffic lanes including the area of Klokova.	<p>The construction works in Klokova section have not started yet. The relevant term is going to be modified since the crossing through this area is no longer foreseen. The Basic Design of the section between Riza I/C (CH. 6+000) and Klokova I/C is being amended with a new alignment of twin tunnels each one measuring around 2,9 km of length, which does not affect the existing National Road thus being able to operate as an alternative non-tolled route. The Environmental Assessment Study concerning the amendment of Ionia Odos Alignment in this section, CH. 5+104,495 – CH. 14+904,360 including the alignment of Klokova (prot. No. EYDE EPA & IO A/1/00/01/01/oik. 23803/24.06.2014 – ADA: 7TT51-ΣI).</p>
d10.2	Prohibition from tipping excavation products in the marine area or in the slopes of the mountain during the construction of Klokova section.	
d10.3	<p>Given the criticality of the existing road in the area of Klokova on the road connection of West. Greece with the Peloponnese and Eastern Central Greece:</p> <ul style="list-style-type: none"> - Before the beginning works on the construction of the projects of the section of Klokova, a plan smooth traffic circulation from Peloponnese and Eastern Continental Greece to the west part of Klokova should be prepared by the Contractor and approved by EYDE-PLO and vice versa, which should be directly applied in case any failure or unexpected events may occur resulting in 	

**SEMI-ANNUAL PROGRESS REPORT FOR THE IMPLEMENTATION OF ENVIRONMENTAL TERMS DURING
THE CONSTRUCTION PHASE (A' SEMESTER 2014)**

Edition: 1.0
 Page: 29 / 70
 Date: 20.07.2014

A/A Decision	Environmental Terms - Description	Description of Progress - Problems
	traffic disruption in the area. - The cost of implementing that plan in Klokova is borne by the Contractor.	
d10.4	In the area of Makynia, the road axle should be constructed in a tunnel under the spatial planning preliminary approval with prot. no. 8876/1748/08.04.1999.	The term is implemented
d11	During the construction phase to develop and implement worksite signage study with appropriate warning signs and light signals (mainly at night) to avoid the risk of accidents.	An Environmental Monitoring & Control Program in terms of the overall Plan for Environmental Management, which includes protection measures for all works referred to in the environmental terms, has been drawn up and recently reviewed. The Program has been presented to the joint venture's supervising engineers, as well as to any subcontractors that will provide the joint venture with their services. The necessary steps for the traffic arrangements are taken. Warning signs and light signals have been placed, where appropriate, during the night. During the drilling for the formation of the faces of Kalydona and Makynia tunnel, incorporated dust containment equipment has been used. During the current period no drillings have been made. As regards the temporary disposals (6 positions) within or outside the expropriation limits, those mentioned in E.T. d2.1 and d.2.7 shall be applicable. The trucks moving on the NR or on other roads are covered. The routes within the project are preferred, when this is possible. The cleaning of the road axle is being held on a daily basis with broom and maceration.
d12	During the perforation, mechanical equipment to be used in order to contain the dust.	
d13	Regular wetting of worksite materials etc., to be conducted in order to reduce the dust during the execution of earthworks.	
d13.1	Regular wetting of all bare surfaces is required during summer, so as to prevent dispersion of dust.	
d13.2	Excavation products and aggregates to be transported from and to the project and coverage of heavy vehicle carriers with a suitable cover.	
d13.3	Washing the wheels of trucks before their exit from the worksite and regular cleaning of the existing road network to be used, for approaching the worksites, from material debris.	
d14	Planting after carrying out specific landscaping studies	

**SEMI-ANNUAL PROGRESS REPORT FOR THE IMPLEMENTATION OF ENVIRONMENTAL TERMS DURING
THE CONSTRUCTION PHASE (A' SEMESTER 2014)**

Edition: 1.0
 Page: 30 / 70
 Date: 20.07.2014

A/A Decision	Environmental Terms - Description	Description of Progress - Problems
	<p>of all surfaces susceptible to vegetation (worksites spaces, disposal areas, ditches, embankments, node islets etc.). Emphasis should be given to planting trees and ensuring appropriate conditions for their satisfactory growth (minimum topsoil of depth of 1 m). The planting works should begin immediately to any section of the project in which earthworks are completed and the final surfaces are set up.</p>	<p>The relevant landscaping designs have been elaborated and submitted for approval to the Independent Engineer for specific sub-sections. The plantings are going to start on the completed embankments. The rehabilitation works and their budget constitute an integral part of each STIS submitted (disposal sites, borrow pits, worksites, etc.).</p> <p>As regards the topsoil of the construction works, care is taken in order to stockpile it and use it in plantings - restorations. The topsoil on the flat land is stockpiled along the road. Where this is not possible by virtue of the landscape, the topsoil is stockpiled in leased land.</p>
d14.1	<p>Collection and preservation of top soil in the project execution area in order to be used for the landscaping restoration. Please use native species to restore this vegetation.</p>	
d14.2	<p>For plantings to ensure with watering, through pipelines, the rapid development and maintenance of vegetation. The care of plants should be continued throughout the project life.</p>	
d15	<p>During the operation of the worksites all measures for fire-protection should be taken against fire when operating machinery, workshops, etc., and to minimize the risk of fire spread in the wider area of the project. The way in organizing the fire protection shall be audited and approved by the Supervising Service before the commencement of the works. When selecting worksites positions the ΑΣΤ' EPKA and their coincidence with archaeological sites, and avoid antiquities destruction</p>	<p>The term is respected through the implementation of the Environmental Monitoring & Control Program (and their review) in terms of the overall Plan for Environmental Management, which includes control procedures for all works referred to in the environmental terms, has been drawn up. In any event, after the commencement of works, the fire measures in the project's machines and the scope of works are controlled and the provided H&S Plan should be adhered to. Special attention should be given to areas that are near forests and fields during the summer months. Emphasis is given in order for the machines located at the project area to be equipped with the provided firefighting equipment. Regarding the premises of the site (offices, workshop, laboratory and concrete preparatory) the adequate firefighting equipment, like fire extinguishers, sand and water supply to be provided.</p>

**SEMI-ANNUAL PROGRESS REPORT FOR THE IMPLEMENTATION OF ENVIRONMENTAL TERMS DURING
THE CONSTRUCTION PHASE (A' SEMESTER 2014)**

Edition: 1.0
Page: 31 / 70
Date: 20.07.2014

A/A Decision	Environmental Terms - Description	Description of Progress - Problems
		For the worksites (Ag. Georgios, Kalydona) the opinions of the responsible Archaeological Services are positive.
d16	As for the noise, the Contractor of the project construction should comply with all applicable provisions of Community law, all appropriate measures should be taken in order to minimize the large noise emissions and ensure that noise and the vibrations will be within the acceptable limits during the construction of the project.	
d16.1	As regards sections of the project that are less than 200 meters from the town plan limit when planning and implementing the project, the possibility of installing noise barriers should be foreseen if it is required to do so in the future.	With respect to the noise during the construction of the project, an Environmental Monitoring & Control Program in terms of the overall Plan for Environmental Management, which includes control procedures in order to resolve noise problems in accordance with the environmental terms, has been drawn up. Noise measurements were conducted during the whole period in specific control points using the appropriate equipment in order to monitor the respect of the worksite noise levels more frequently. The measurements were shown in measuring tables with measurement points' graphics and are analytically presented to the Annex of Measurements of the Annual Environmental Terms Reports. No excess of the permitted levels has been recorded but only individual limits and for a really short time period.
d16.2	Protection of settlements by the noise during the construction phase is required. The performance of noisy works (earthworks and use of jackhammers), are prohibited in the said settlements during quiet hours.	
d16.3	Worksites must be surrounded with elegant enclosures - noise barriers for both noise reduction and safety of the passing cars.	Regarding the provision for implementation of noise barriers, concerning the operation phase of the project, with the finalization of road designs, a Special Acoustic Design for Noise Protection (ETME), submitted for approval to EYPE/YPEHODE, will be assigned and produced.
d16.4	Machinery remaining and use on the construction site is not allowed without the approval certificate of noise, EOK type, as defined in paragraph c of the present. The Supervising Service should ensure compliance with those aforementioned.	

**SEMI-ANNUAL PROGRESS REPORT FOR THE IMPLEMENTATION OF ENVIRONMENTAL TERMS DURING
THE CONSTRUCTION PHASE (A' SEMESTER 2014)**

Edition: 1.0
Page: 32 / 70
Date: 20.07.2014

A/A Decision	Environmental Terms - Description	Description of Progress - Problems
d17	<p>Applying modern methods and technologies to allow direct tunnel entrance to the tunnel in ancient Kalydona on the mountain massif limiting the open excavations in the entrance and exit foreheads should be applied. The maximum level of open excavation works in the areas of the project is set indicatively the height of 5m above the clavicle of the tunnel, above which the open-surface excavations are prohibited.</p>	<p>The layout planning designs of the fronts of Kalydona tunnel have been approved by the I.E. Based on these designs, no surface excavations will be performed at >5m, except for the temporary ones. The layout planning of the fronts will be carried out via excavation and re-embankment. A landscaping design will follow.</p>
d18	<p>In construction activities (tunneling, construction of trench, etc.) where vibrations may arise, the construction body must install, at critical points, measure and record system of all significant variables of the phenomenon. This system will measure and record ground displacement, velocity and acceleration versus time.</p> <p>The level of the vibrations should not in any case exceed 0,5 m/s² of weighted acceleration or 13mm/s equivalent peak ground velocity particle, to the building closer to the production point of vibrations or other structure.</p>	<p>During the current semester, no vibration measurements were conducted since the drilling works of Kalydona and Makynia tunnels have been completed.</p> <p>No adverse impact on residents and generally on any anthropogenic structure and archeological sites were generated from the works not previously executed, because of the construction of the road.</p>
d19	<p>Attention should be given to rescue – escape of people entrapped in case of emergency in the tunnel of Kalydona. It is at least required: To construct two lateral arcades connecting the tunnel tubes.</p>	<p>The term has been taken into account based on the risk analysis study. According to the “Risk Assessment” submitted for Kalydona Tunnel, two (2) transverse arcades, connecting the two branches per around 410m, are foreseen. The ILF Tunnel Risk assessment Final Report has been submitted to the I.E. via letter IC-C-CO-S1000-PRO 7293/MC/js 23/2/09, has been approved by the I.E. via the letter no. IC0035 DAC 5/03/09.</p>

**SEMI-ANNUAL PROGRESS REPORT FOR THE IMPLEMENTATION OF ENVIRONMENTAL TERMS DURING
THE CONSTRUCTION PHASE (A' SEMESTER 2014)**

Edition: 1.0
Page: 33 / 70
Date: 20.07.2014

A/A Decision	Environmental Terms - Description	Description of Progress - Problems
d20	During the construction phase of the project, access to settlements and in general to areas of various uses should be maintained (commercial operations, houses, etc.)	During the preparation of this report, no need for structures that block access has arisen.
d21	During the construction phase of the structures, the passage of wildlife should be secured with minimum dimensions, listed in the EIS (chapter 7) of the project.	It is taken into consideration in the designs already elaborated. This matter has been re-examined in the amendment file JMD 166142/13.02.3013 (prot. No. J/V 39517/05.03.2013) concerning minor modifications of the alignment due to finalization of the studies, and those referred to are ensured. Furthermore, it is also under examination, where appropriate, in the Environmental Assessment Reports of the corresponding definitive road designs which are approved by the IE.
d22	During the study regarding the construction of the project bridges, an hydraulic study should be done defining all measures for the protection against corrosion of natural slopes in both Evinos River and the remaining project.	It is taken into consideration in the hydraulic studies submitted for approval to the Independent Engineer.
d23	The developer of the project must ensure the proper operation of installations and the removal of waste from the road users along its entire length by dedicated staff at regular intervals. Furthermore, the areas where flammable materials (papers, etc) are concentrated should be determined, especially during the summer months where there is an increased risk of fire.	It refers to the operation phase.
d24	Upon the launch of the project, quarterly sample sound measurements of indicators L10 (18h) or Leg (08:00-20:00) will be carried out, as defined by the MD 17252/20.9.92 (as referred to in section (c) hereof), and	It refers to the operation phase.

**SEMI-ANNUAL PROGRESS REPORT FOR THE IMPLEMENTATION OF ENVIRONMENTAL TERMS DURING
THE CONSTRUCTION PHASE (A' SEMESTER 2014)**

Edition: 1.0
Page: 34 / 70
Date: 20.07.2014

A/A Decision	Environmental Terms - Description	Description of Progress - Problems
	<p>the indicator Lden, as defined in the "Directive 2002/49/EC of the European Parliament and of the Council of 25 June 2002 on the assessment and management of environmental noise" (Official Newspaper EU L 189/12, 18.7.2002). The traffic volume should also be monitored. The results of sound measurements and the congestion recordings, along with the point, the date and time of measurement, the prevailing meteorological conditions, details and date of last calibration of sound level meter and the name of the controller measurement will be recorded in a reporting format. Should routinely recorded exceedances of the applicable limit for the road traffic noise, the construction and operation body of the project must take immediate appropriate measures to remove excesses. These measures will be the subject of a special study, which will be submitted for approval to EYPE/YPEHODE.</p>	
d25	<p>At least 1 automatic air pollution and wind station should be installed. The mounting of the station will be determined after approval of EYPE/Ministry and the minimum potential of the station should include:</p> <ul style="list-style-type: none"> - Measurements of temperature, humidity, wind speed and direction, - Concentration measuring CO, NOx, SO2, BTX (benzene-toluene xylene), TSP and PM10. 	<p>With respect to the installation of the measurement station, a relevant study will be submitted upon restarting the works, in order to determine any possible locations and submit them for approval to EYPE/YPEHODE. The operation of the station is related to the operation of the project.</p>

**SEMI-ANNUAL PROGRESS REPORT FOR THE IMPLEMENTATION OF ENVIRONMENTAL TERMS DURING
THE CONSTRUCTION PHASE (A' SEMESTER 2014)**

Edition: 1.0
Page: 35 / 70
Date: 20.07.2014

A/A Decision	Environmental Terms - Description	Description of Progress - Problems
d.26	Immediately after signing the contract, the concessionaire must create an Environmental Service, providing the necessary staffing and logistics, as well as the necessary powers and resources to fulfill the obligations of the next term.	The EuroIonia Joint Venture has a department of Environment, Health and Safety staffed with the required personnel and external partners. The responsibilities and obligations of the department's staff are described in the Quality Management System of the Joint Venture.
d.26.1	The above Environmental Service will be the link between the concessionaire and the competent Departments of the Public Administration and will be responsible for the compliance with the environmental conditions, the implementation of the impact monitoring programs, the submission of the required periodic reports and petitions, in accordance with term 27, and for the design, development and implementation of a program of environmental monitoring and control. Within a period not exceeding one year from the signing of the concession, the content of the environmental monitoring and control program should be submitted for approval to EYPE/YPEHODE, as well as the staffing and sub-structure of the above the Environmental Service.	
d.27	By January 31 of each year the body of the construction or operation of the project shall submit a statement to EYPE/YPEHODE setting out: - The course of the construction of the projects, accompanied by detailed documentation of compliance with the environmental conditions. - Sections of the project that have been received or	The E.T. s fulfilled. The J/V submits relevant Reports to the Concessionaire every six and twelve months, shared by the whole consortium. The present report of the said E.T.

**SEMI-ANNUAL PROGRESS REPORT FOR THE IMPLEMENTATION OF ENVIRONMENTAL TERMS DURING
THE CONSTRUCTION PHASE (A' SEMESTER 2014)**

Edition: 1.0
 Page: 36 / 70
 Date: 20.07.2014

A/A Decision	Environmental Terms - Description	Description of Progress - Problems
	<p>delivered for operation.</p> <ul style="list-style-type: none"> - Permits or authorizations granted in accordance with the terms of the present. - Studies awarded, qualitative, quantitative and economic data on environmental protection projects and the percentage that the costs for these projects represent, in relation to the total expenditures for the construction of the project. - Anti-pollution and environmental protection works to be made for the next year. - Summary of results concerning the noise monitoring, the measurements of air pollution and the monitoring program of water quality. - Problems encountered, contingencies and any information or suggestions that could be useful to mitigate any adverse environmental impacts caused by the construction or operation of the project. 	
d.28	<p>The possibility of relocating the southwest alignment to be examined, at CH. 26+100 and 30+000 without affecting buildings, so that the route passes through the two hills of fot.59, 60,61 of the EIS, without intersecting their foot, taking into account that for one of these (hill of ancient Alikyrna) there is a relevant observation of Gen. Division of antiquities of the Ministry of Culture (document F666/ST/13623/16.12.2003): "... The foot of these hills</p>	<p>The relocation of the S/W alignment is not feasible because of the dispersed settlement. The Final Road Design foresees the raise of the red line in the area of the archeological site so as for the C-C construction not to be appropriate anymore, while the lateral road is located to the entry step of the embankment in order for the noise to be the minimum one. Regarding the location of "Borbora" hill, the Final Road Design foresees the improvement of the slopes and the reduction of the breadth of the excavation. In both positions a landscape restoration of the trenches is suggested. The above proposals have been submitted to the ΛΣΤ' Archeological Service (25928/24-06-10), which recommends in its letter to Ministry of Culture (27956/11-8-10) the approval of the proposal. A positive opinion has been received by the Ministry of Culture (31712/25-11-10).</p>

**SEMI-ANNUAL PROGRESS REPORT FOR THE IMPLEMENTATION OF ENVIRONMENTAL TERMS DURING
THE CONSTRUCTION PHASE (A' SEMESTER 2014)**

Edition: 1.0
 Page: 37 / 70
 Date: 20.07.2014

A/A Decision	Environmental Terms - Description	Description of Progress - Problems
	<p>should not be affected for reasons of aesthetic protection..." If the relocation is not possible, cut & cover should be constructed where the trenches are (CH. 28+200 to 28+700 and 29+800 to 30+000) for the coating of which the excavated material will be used, in order for the hills to be restored.</p>	<p>After the relevant opinions by the Ministry of Culture, and for the amendment of the term, the procedure provided by article 13 of the JMD 11014/703/Φ104/14.3.2003 is adhered to. It has been included in the relevant design submitted to EYPE/YPEKA.</p> <p>Also, three designs of the study file 13 have been re-submitted/replaced because of little changes in the area of Mesokampos I/C resulting on demand of the Archeological Service.</p> <p>The aforementioned small modifications have been approved via the JMD 166142/13.02.2013 (prot. no. J/V 39517/05.03.2013)</p>
d.29	<p>The environmental conditions compliance proposed in the EIS (Chapter 8), which accompanies the present, shall apply if the said conditions are not consistent with those mentioned above and the remedies proposed.</p>	<p>They are taken into consideration.</p>

**SEMI-ANNUAL PROGRESS REPORT FOR THE IMPLEMENTATION OF ENVIRONMENTAL TERMS DURING
THE CONSTRUCTION PHASE (A' SEMESTER 2014)**

Edition: 1.0
 Page: 38 / 70
 Date: 20.07.2014

A/A Decision	Environmental Terms - Description	Description of Progress - Problems
e1	<p><u>Local environment - Sensitive elements – Specially Protected Areas.</u> The settlements listed in the EIS of the project, while the protected by the European Ecological Network NATURA 2000 areas are found in the broader region, the Delta region of Acheloos – Mesologgi /Aitoliko - Evinos estuary (GR 2310001, A00040032, A00010048, AV2090026 , R9), the mount Varassova (GR 2310005, A00020023, AT2010026, K387), the mount Arakynthos & Stena Kleissouras (GR 2310010, A00010050), the mount Klokova (AV2080060), the Wildlife Refuge Kodarades – Kamares - Makynia – Kalavrouza of Trikorfo (K379) and the archeological sites of ancient Makynia, Chalkis, Calydon, Alikyrna, ancient Pleurona-Castle of Kyra Ryni.</p>	<p>Sensitive environmental elements (settlements, protected areas and sites) were taken into account during the investigation of borrow sites positions, etc. and the elaboration of the STIS/TEPEM and TIS. The Department of Environment has elaborated a map with the environmental commitments, and pursuant to EIS subsequent documentation, which constitutes a tool for exploring of additional spaces and other works as well as assistance for all persons involved to the construction.</p>
e2	<p><u>Measures and projects for the conservation of the above elements</u> Those referred to in paragraph d of the present are sufficient.</p>	-
f	<p>Period for which the given environmental approval is valid - Conditions for its review The above mentioned environmental conditions are valid for ten years from the date hereof and on the condition that they will be met accurately. After this</p>	<p>For the renewal of the environmental conditions the procedures provided for in Law 4014/2011 (Government Gazette 209A/2011) will follow.</p>

**SEMI-ANNUAL PROGRESS REPORT FOR THE IMPLEMENTATION OF ENVIRONMENTAL TERMS DURING
THE CONSTRUCTION PHASE (A' SEMESTER 2014)**

Edition: 1.0
Page: 39 / 70
Date: 20.07.2014

A/A Decision	Environmental Terms - Description	Description of Progress - Problems
	date, Article 4 of Law 1650/86 will be met, as replaced by Article 2 of Law 3010/2002 and Article 13 of the JMD 11014/703/F104/14.3.2003.	
g	For the modernization, improvement, expansion or modification of the project, as described in the EIS with the terms and limitations of this decision, the procedure - laid down in Article 13 of the JMD 11014/703/F104/14.3.2003 - is required to be met.	The additional EISs on the improvement of the alignment in Evinos River (CH. 19+200 – CH. 22+090), in the area of Vassiliki (CH. 14+300 – CH. 18+000, Antirio I/C, as well as a File of Article 13 (JMD 11014/03) or small changes of section S1, which resulted by the elaboration of the final designs, have been elaborated and submitted by the J/V. The above modifications have been approved via the JMD 166142/13.02.2013 (prot. no. J/V 39517/05.03.2013). For the modernization, improvement, expansion or modification of the project, the provisions of Law 4014/2011 (Government Gazette 209A/2011) are required to be met.
h	Each term of this Decision may be amended in accordance with Article 2 of Law 1650/86 as replaced by Article 2 of Law 3010/2002. By the same reasoning can be put new environmental conditions, if it results from a new data science and technology in the field of protection and management of the environment.	The amendment of the terms is governed by the provisions of Law 4014/2011 (OGG 209a/2011)
i	The present and the accompanying EIS should, in any control, be located at the offices of EYDE/OAP (road axle with concession) as well as at the site and the Administration Centre of the project and must be presented in each jurisdiction, in accordance with current legislation.	The term is respected.
j	The non-compliance with the E.T. of the present and any realization of projects and activities that will result in environmental degradation, involving addition to the	-



**SEMI-ANNUAL PROGRESS REPORT FOR THE IMPLEMENTATION OF ENVIRONMENTAL TERMS DURING
THE CONSTRUCTION PHASE (A' SEMESTER 2014)**

Edition: 1.0
Page: 40 / 70
Date: 20.07.2014

A/A Decision	Environmental Terms - Description	Description of Progress - Problems
	<p>sanctions by other provisions of the legislation, enforcement officers to those referred to in Articles 28, 29 and 30 of Law 1650/86, as amended by Law 3010/2002. The County Council of Southeastern of Aitolokarnania notified via the present, is required to disclose it, in accordance with those aforementioned to the JMD H.Π.37111/2021/26.9.03 (OGG 1391/B/29.9.03). The publications costs shall bear the operator of the project.</p>	



**SEMI-ANNUAL PROGRESS REPORT FOR THE IMPLEMENTATION OF ENVIRONMENTAL TERMS DURING
THE CONSTRUCTION PHASE (A' SEMESTER 2014)**

Edition: 1.0
Page: 41 / 70
Date: 20.07.2014

**AGRINIO BYPASS NORTHERN END (KOUVARAS) –
SOUTHERN END ARTA BYPASS (KOMPOTI) AND
ARTA BYPASS NORTHERN END (FILIPPIADA) – IOANNINA (ELEOUSA)**

- **ETA JMD 141564/25.07.2005**

**SEMI-ANNUAL PROGRESS REPORT FOR THE IMPLEMENTATION OF ENVIRONMENTAL TERMS DURING
THE CONSTRUCTION PHASE (A' SEMESTER 2014)**

Edition: 1.0
Page: 42 / 70
Date: 20.07.2014

Main Project environmental licensing - Background

As regards the main project of Ionia Odos motorway, JMD EIS no. 141564/25-07-2005 (Kouvaras – Kompoti & Filippiada –Eleousa / CH. 76+272 –CH. 129+632 & CH. 145+706 –Ch. 196+000) shall apply.

JMD EIS no. 141564/25-07-2005 has been amended by JMD 167980/30-04-2013. This amendment is not related to section S3.

As regards the environmental licensing of the modifications on the Ionia Odos alignment resulted from the final road studies, during the current period, an ET amendment file has been submitted, under Article 6 of Law 4014/2011

Submission of amendment File: (J/V prot. No. : 42506_IC-P-CO-S0000_KV-sk_30.05.14).

For the sections below:

Ionia Odos Section	Approved alignment		Suggested alignment		s/n sub-section	Length (km)
	from CH	to CH	from CH	to CH		
S2	76+618	105+439,31	76+618	105+500	1°	28,9
	108+282,50	112+082,49	108+700	112+500	2°	3,8
	112+082,49	115+302,49	112+500	115+720	3°	3,2
	119+976,04	128+892,01	120+700	129+626,05	4°	8,9
S3	145+706	154+743,87	145+706	154+796,05	5°	9,1



**SEMI-ANNUAL PROGRESS REPORT FOR THE IMPLEMENTATION OF ENVIRONMENTAL TERMS DURING
THE CONSTRUCTION PHASE (A' SEMESTER 2014)**

Edition: 1.0
Page: 43 / 70
Date: 20.07.2014

	154+743,87	181+758,30	154+796,05	181+710	6°	26,9
	186+969,01	194+380,00	186+650	194+319,70	7°	7,7

The EIS on the modifications of Ionia Odos has been submitted (J/V prot. No.: 43016_IC-P-CC-S0000_16.06.14)

For the sections below:

Ionia Odos Section	Approved alignment		Suggested alignment		Brief description of the modification	s/n sub-section
	from CH	to CH	from CH	to CH		
S2	105+439,31	108+282,50	105+500	108+700	Krikello	1°
	115+302,49	119+976,04	115+720	120+700	Menidi	2°
S3	152+446	154+743,87	152+446	154+796,05	Ammotopos I/C	3°
	181+758,30	186+969,01	181+710	186+650	Papageorgiou Military Camp	4°

**SEMI-ANNUAL PROGRESS REPORT FOR THE IMPLEMENTATION OF ENVIRONMENTAL TERMS DURING
THE CONSTRUCTION PHASE (A' SEMESTER 2014)**

Edition: 1.0
Page: 44 / 70
Date: 20.07.2014

A/A Decision	Environmental Terms - Description	Description of Progress - Problems
b.	<p>Specific limit values of pollutant loads and concentrations emission according to the applicable provisions</p> <p>For gaseous, the allowable concentrations of pollutants are listed in: JMD 9238/332/2004 (OGG 405V/27.02.2004), Act of CM 34/30.05.2002 (OGG 125B) and Act of CM 11/14.02.1997 (OGG 19A)</p> <p>For liquid waste the applicable prefectural decisions shall apply.</p>	<p>All foreseen by the legislation limits are taken into consideration.</p> <p>Hazardous waste is managed under contract by appropriately licensed companies.</p>
c.	<p><u>Specific limit values of noise level and vibrations according to the applicable provisions</u></p> <p>Maximum permissible noise limit as mentioned in Ministerial Decision no. 17252/20.9.92 (OGG 395/B/19.6.92).</p> <p>For noise emitted from the construction equipment those provided in JMD 37393/2028/01.10.2003 (OGG 1418B) shall apply.</p>	<p>The control, during the construction phase, is conducted in accordance with the current legislation and the limit values specified in this are met.</p> <p>With respect to the noise during the construction of the project, pursuant to the Program for Environmental Management and in terms of Environmental Monitoring Control Program noise measurements are conducted parametrically of the worksite and the construction faces and the results were within the allowable limits. The said measurements are reflected in maps depicting the extent of the construction of the project and the location the measurements were made. The said maps as well as the measurement, which are repeated at regular intervals (monthly), are included in each monthly check list. Finally, a noise measurement issue is prepared, which is submitted with the annual report.</p>
d.1	<p>Terms relating to the structures and measures to address environmental degradation (paragraph d) are</p>	<p>The Environmental Terms and the other contractual obligations regarding the construction phase, have been analyzed in the Environmental Monitoring & Control Program submitted in May 2009 (protocol no. IC-</p>

**SEMI-ANNUAL PROGRESS REPORT FOR THE IMPLEMENTATION OF ENVIRONMENTAL TERMS DURING
THE CONSTRUCTION PHASE (A' SEMESTER 2014)**

Edition: 1.0
Page: 45 / 70
Date: 20.07.2014

A/A Decision	Environmental Terms - Description	Description of Progress - Problems
	mandatory and relate to: - the project owner - the Services and Agencies responsible for the construction and operation of the Project - the Independent Engineer, who is required to ensure their implementation and their effective monitoring of full compliance - the heads of these agencies and bodies, who must ensure their implementation and their effective monitoring of compliance - to everyone who, because of their position and powers, shall be responsible for the design, approval, tendering, awarding, monitoring, certification, delivery and other procedures relating to the construction and operation of the project - the Contractor's project	X-CO-S0000-PRO9251/ACH/KIa). During the current period, a review of the PEAE and the EMS was carried out, which was promoted to the worksites for compliance. The plan and its review have been presented to the joint venture's supervising engineers, as well as to any subcontractors that will provide the joint venture with their services.
d1.1	In the procurement, tendering, supervision, receipt procedures all necessary actions to be made and all necessary measures to be taken to ensure: - compliance with the environmental conditions of the Contractor - ability to cope and rehabilitate unpleasant environmental conditions due to actions or omissions of the Contractor in breach of the environmental conditions.	The Environmental Terms and the other contractual obligations regarding the construction phase, have been analyzed in the Environmental Monitoring & Control Program submitted in May 2009 (protocol no. IC-X-CO-S0000-PRO9251/ACH/KIa). During the current period, a review of the PEAE and the EMS was carried out, which was promoted to the worksites for compliance. The plan and its review have been presented to the joint venture's supervising engineers, as well as to any subcontractors that will provide the joint venture with their services. There are responsible persons for the implementation of the Environmental Management System and the monitoring of compliance with the E.T.

**SEMI-ANNUAL PROGRESS REPORT FOR THE IMPLEMENTATION OF ENVIRONMENTAL TERMS DURING
THE CONSTRUCTION PHASE (A' SEMESTER 2014)**

Edition: 1.0
Page: 46 / 70
Date: 20.07.2014

A/A Decision	Environmental Terms - Description	Description of Progress - Problems
d1.2	Credits for the construction and operation of the project ensuring, by priority, the required expenditure on environmental protection projects (planting projects, etc.).	All required costs are taken into account when tendering for the construction of this project. To date expenditures for environmental protection are submitted in the annual environmental reports.
d.2	In the area of the Prefecture of Ioanina: i) To construct a J/V in the CH. 175+700 (area of Terovo) ii) To remove the alignment from the settlement of Ampelia, with the construction of a tunnel iii) Degradation of the motorway to be done in the area of Episkopiko	<ul style="list-style-type: none"> i) The J/V of Terovo in CH. 175+708 is under construction ii) The tunnel of Ampelia with an approximate length of 870 - 900m has been included in the Finalized Design. The layout planning designs have been prepared and approved by the I.E. The A' and B' phase of excavation of Ampelia Tunnel has been completed. No construction works have been conducted in Ampelia tunnel during the current period. iii) The hypsometrical lowering included in the Finalized Design has been approved. In the area of the overpass at Episkopiko, the embankments have a height of 3m (Motorists Service Station - Episkopiko - height of 4m).
d.3	For any activity or facility necessary for the construction – operation of the project, all the <u>permits and approvals</u> under the current legislation should previously have been granted; including also any individual required environmental licensing.	The procedure for obtaining all necessary permits and approvals is underway, as specified below (d4). For the environmental licensing of the ancillary works, the procedures are met prior to their installation.
d.4	Every kind of <u>individual projects or activities relating to the construction or operation of the project</u> (i.e., borrow pits, quarries or aggregate extraction sites and other materials, permanent or temporary surplus materials landfills, worksite facilities, particle size separation facilities, concrete production and sand production units, Motorist Service Stations (MSS), toll stations, administrative buildings and other commercial activities) are <u>ancillary works of the main project and can be</u>	<p>The relevant STIS for all required sites (quarries, borrow pits, disposal sites and worksites) have been submitted to EYPE and their approval is expected. The submissions of the studies as well as the progress of the approval procedure are as follows:</p> <p>Borrow pits: <i>Pinakoulia location:</i> (Submission to EYPE with Protocol No. 102908/02.04.08 and J/V Protocol No. 2853/IM/εc/01.04.08. Approved with EYPE Protocol No. 138434/03.07.2009) <i>Paliokoulia location:</i> (Submission to EYPE with EYPE Protocol No. 143393, 10/08/09 and J/V Protocol No. 13478/06.08.09. Approved with EYPE Protocol No. 122353/22.02.2010).</p>

**SEMI-ANNUAL PROGRESS REPORT FOR THE IMPLEMENTATION OF ENVIRONMENTAL TERMS DURING
THE CONSTRUCTION PHASE (A' SEMESTER 2014)**

Edition: 1.0
Page: 47 / 70
Date: 20.07.2014

A/A Decision	Environmental Terms - Description	Description of Progress - Problems
	<p><u>implemented only after submission, assessment and approval of Special Technical Implementation by EYPE/YPEHODE.</u></p>	<p><u>Makryvouni location:</u> Borrow Pit BP14, Makryvouni location, Municipality of Dodoni (CH. 180+000). The Technical Studies and the STIS. The approved studies have been sent along with the explanatory report and other opinions to the responsible of the Municipality of Dodoni. Furthermore, the study has been presented before the City Council and an additional geological report was given.</p> <p>In order for the Municipality to proceed with the leasing of the site, a question was sent to YPEKA Directorate of Natural Resources, Ministry of Interior, and Epirus Region, where setting out the legal vacuum on how to lease the municipal quarries. The Municipality has no objection to the rental of the site, but it wants the best documented legal solution. In response, the General Directorate of Natural Resources of YPEKA, refers to the use of Law 3557/2007, namely 12.2 "additional sites", which provides for the "State assistance" in acquiring any additional sites or/and the "disposal of additional sites by the State." This issue has not been resolved. The exploitation licensing by the Region is pending.</p> <p>Quarries:</p> <p><u>Toubanos location</u> (QN 08): Submission to EYPE with Protocol No. 12215/6.7.09 of the J/V and approval of STIS by EYPE with Protocol No. 141902/3.9.09.</p> <p><u>Ag.Georgios Glykorizo location:</u> Submission to EYPE with EYPE Protocol No. 101995, 06/03/08 and J/V Protocol No. 2525/IK/ΕΣ/05.03.08. Approved (protocol no. 205553/28.11.11)</p> <p><u>Selitoura location</u> (QN 13): (EYPE Protocol No. 2196, 03/02/09 and J/V Protocol No. 6871/IM/kla/30.01.09). Approved with EYPE Protocol No. 135889/21.7.09.</p> <p>Disposal pits:</p> <ul style="list-style-type: none"> The licensing of possible disposal pits E4 E5 E6 is pending (on CH. 108+000 110+000 and 113+000). The characterization act as well as the resubmission of the studies as TEPEM by the forestry is expected. The licensing of EMAL (special design on the Rehabilitation) (E36B & E36C) of inactive quarries (submission to the Forestry of Ioanina (EIJV: 39324/10.12.12) is expected.

**SEMI-ANNUAL PROGRESS REPORT FOR THE IMPLEMENTATION OF ENVIRONMENTAL TERMS DURING
THE CONSTRUCTION PHASE (A' SEMESTER 2014)**

Edition: 1.0
 Page: 48 / 70
 Date: 20.07.2014

A/A Decision	Environmental Terms - Description	Description of Progress - Problems
		<ul style="list-style-type: none"> • Currently, as for the temporary storage of topsoil or excavation materials, leased areas are used for which no environmental licensing is required. <p>Worksites:</p> <ul style="list-style-type: none"> • <i>Kampi and Gorgomylos site</i>: STIS has been submitted: protocol no. EYPE:107730/05.09.08 and J/V protocol no. 4759/05.09.08. EYPE approval (EYPE: oik.136719/23.02.09). • <i>Sikoula location</i>: (STIS submission: EYPE prot. no: 12763, 20.01.10 and J/V protocol no. 19059/18.01.10). EYPE approval (EYPE 202687/24-10-12). • <i>Gymnotopos location</i>: (STIS Submission: EYPE protocol no. 132846/26.11.10 and J/V protocol no. 31644/23.11.10). EYPE approval 165762/01.02.2013 (J/V 39536/08.03.13). • <i>In "Knauf factory" location, (CH. 84+000)</i>: New installation. During the current period, a TEPEM (Technical Environmental Design) has been submitted for the worksite area and ancillary installations. • <i>Worksite CH 89+240 – CH 89+540 in the Municipality of Stanos</i>: STIS Submission to EYPE (31776/26-11-2012) and return of the STIS (38369/22-02-2012). • <i>Agia Triada S3.4 location</i>: ex Municipality of Ag. Dimitrios, now Municipality of Dodoni (CH. 176+000 in the area of Terovo I/C). STIS has been approved. • <i>"Perdika Worksite" (CH. 182+600)</i>: New installation. During the current period a TEPEM has been prepared for the worksite area and ancillary installations. • <i>Ampelia tunnel exit S3.6</i>, ex Municipality of Bizani, now Municipality of Ioanina (CH. 193+000

**SEMI-ANNUAL PROGRESS REPORT FOR THE IMPLEMENTATION OF ENVIRONMENTAL TERMS DURING
THE CONSTRUCTION PHASE (A' SEMESTER 2014)**

Edition: 1.0
 Page: 49 / 70
 Date: 20.07.2014

A/A Decision	Environmental Terms - Description	Description of Progress - Problems
		<p>at the exit of Ampelia tunnel). STIS has been approved. The Technical Environmental Study has been submitted to EYPE to expand the Se.6 worksite, pursuant to those specified in Article 7 of the new Law 4014/2011 (39221/08-11-12); its approval is expected.</p> <ul style="list-style-type: none"> • <i>Ampelia tunnel exit S3.7</i>, ex Municipality of Bizani, now Municipality of Ioanina (CH. 192+000 at the exit of Ampelia tunnel). STIS has been approved (36014/13-05-11). <p><u>Temporary Disposals:</u> Within the worksite of Agia Triada (S3.4). STIS submitted (31008/09-11-10). The EYPE/YPEKA with prot. no. 167346/03.04.2013 returned the file for the additional information on the temporary deposit in an approved worksite (code S3.4) in the village of Agia Triada/Terovo I/C (CH. 176+000), Municipality of Ioanina in order to be revised /completed. No revision is required; the materials have been removed from the site.</p> <p><u>Restoration of old quarries:</u> E36 "Mirodafni" location, Mirodafni, ex municipality of Ag. Dimitrios, now Municipality of Dodoni (CH. 178+500). The relevant study (EMAA) has been elaborated and submitted to the Municipality (16496/5-11-09). Following Company's relevant request to forward the study for approval, the Municipality of Dodoni, via a reply letter, gives its consent to leasing the area and more specifically the sub-places of E36B and E36C, given that the study has been duly approved (G.S. of Epirus region - Forest Service) (Municipality's protocol no. 23378/12-12-11). The EMAL has been resubmitted for approval by the Forest Service and the Region (39324/10-12-12). Also an opinion on the sub-sites of E36B and E36C has been requested to IB EPCA (39222/08-11-12) and a positive opinion has been received (39360/27-12-12). E37 "Makryvouni" location, Perdika, now Municipality of Dodoni (CH. 180+000). The restoration of the area is included in the STIS of ΔΘ BP14.</p>

**SEMI-ANNUAL PROGRESS REPORT FOR THE IMPLEMENTATION OF ENVIRONMENTAL TERMS DURING
THE CONSTRUCTION PHASE (A' SEMESTER 2014)**

Edition: 1.0
Page: 50 / 70
Date: 20.07.2014

A/A Decision	Environmental Terms - Description	Description of Progress - Problems
		<p>E38"Vasseika" location, Perdika, now Municipality of Dodoni (CH. 181+200). The licensing procedures stopped due to negative opinion by the IB ΕΠΚΑ.</p> <p>E39 "Krifovo" location, Krifovo, now Municipality of Dodoni (CH. 182+600). The relevant study (EMAA) has been elaborated and submitted to the Municipality (16496/5-11-09). The restoration is not possible because the disposal of the material has already been carried out by other users.</p> <p>E50 "Old quarry of Pedini", Pedini, ex Municipality of Bizani, now Municipality of Ioanina. The relevant study (EMAA) has been elaborated and submitted to the Municipality (22582/12-04-10). During the current semester the relevant study (EMAA) has been re-submitted for approval to the Forestry and the Region (39323/10-12-12).</p> <p>According to the above mentioned, the deposits to restore quarries, which were ultimately promoted are in the locations of E36 (sub-sites B & C) and E50.</p>
d.5	<p>No permit authorization or approval from any authority or the Independent Engineer for the implementation of any individual project, activity or extension that is not described in the EIS, and therefore not covered by this decision, for which environmental authorization is required in accordance with the applicable law, without previously being environmentally approved by EYPE/YPEHODE.</p>	<p>Pursuant to the Environmental Term d4, the environmental approvals are given after the elaboration and approval of the relevant STIS by EYPE. For all licensing submitted up to now, the necessary STIS have been elaborated, for which a detailed report is being held above.</p> <p>The environmental licensing is now issued in accordance with Law 4014/2011 (OGG 209A/2011).</p>
d.6	<p>If installing <u>concrete and asphalt production worksite units</u>, these should be at least 500m from the boundaries of the settlements and take all necessary measures to protect streams of the region, particularly in the areas of Amvrakikos Gulf and Amvrakia Lake.</p>	<p>It has been ensured that the layout planning of concrete and asphalt mix production units abide by the afore-mentioned restrictions, as specified in the submitted STISs already approved. No worksite unit is installed at a distance of at least 500m.</p>
d.7	<p>The deforestation that will be made should be strictly necessary. Also, the rehabilitation of the intervention</p>	<p>The observance of the term will be controlled by the Environmental Monitoring & Control Program.</p>

**SEMI-ANNUAL PROGRESS REPORT FOR THE IMPLEMENTATION OF ENVIRONMENTAL TERMS DURING
THE CONSTRUCTION PHASE (A' SEMESTER 2014)**

Edition: 1.0
 Page: 51 / 70
 Date: 20.07.2014

A/A Decision	Environmental Terms - Description	Description of Progress - Problems
	zones should be made both for reasons of protection and improvement of the beauty of the landscape, harmonized to the local character.	
d.8	For the construction of all types of projects (technical, road surfacing, embankments, etc.) the excavation materials of the digging works will be used. In addition to those aforementioned, <u>any materials for the construction of the project</u> may be required either from legally operating quarries of the region, which should have the required JMD for approval of environmental terms and provided that they are laid down either by the quarries - borrow pits which may be created in accordance with the applicable law after the necessary environmental licensing, under environmental term no. 4.	The need for delivery is mainly covered by the excavation products and any further estimated needs will be ensured by the sites referred to the environmental term in paragraph d4.
d.9	The disposal of the inappropriate excavation materials to be carried out in positions that shall not affect the flow of the surface waters, shall not be wooded areas and shall be placed at least 250 meters from the boundaries of settlements, archaeological sites, cemeteries, etc. In any case, care shall be taken to avoid entrainment of deposited materials from rain. Throwing even temporarily gravel and other aggregates in the beds of streams and rivers is prohibited.	<p>It has been taken into account in order to find possible sites to dispose materials and has also been taken into account for the preparation of the respective STISs that were submitted to EYPE. The implementation of the E.T. with respect to the protection of water recipients from the disposed soil material is controlled via the Environmental Monitoring & Control Program.</p> <p>The term was a criteria used during searching locations for possible disposal sites in section S2 and S3 conducted in collaboration with the Department of Environment and Construction Division.</p> <p>More specifically, a technical study for E36 (former quarry - sub-sites E36A, E36B and E36C) and E39 old quarries restoration as well as for the old quarry and E50 of Pedini was submitted. During the current period, an EMAA has been re-submitted for the sub-sites E36B & E37C at the Forestry of Ioanina, as well</p>

**SEMI-ANNUAL PROGRESS REPORT FOR THE IMPLEMENTATION OF ENVIRONMENTAL TERMS DURING
THE CONSTRUCTION PHASE (A' SEMESTER 2014)**

Edition: 1.0
 Page: 52 / 70
 Date: 20.07.2014

A/A Decision	Environmental Terms - Description	Description of Progress - Problems
		<p>as for the space E50 (old quarry of Pedini). The approval of the EMAA is expected.</p> <p>Temporary material deposition was adjacent to the front exit of the Ampelia tunnel. The volume of the deposition, in the output of the Ampelia tunnel, at the left front, has been reduced significantly. Complete removal of materials will be carried out after the restarting of the works. For this space the Technical Environmental Study has been elaborated and submitted for the extension of the S3 worksite (39221/08-11-12), and its approval is expected.</p> <p>The approvals for the STIS regarding the space E9 S2 (prot. no. JV: 37643/5-10-11), for the space E6 S2 (prot. no. JV: 37643/5-10-11), E5 S2 (prot. no. JV: 37643/5-10-11), E4 S2 (prot. no. JV: 37643/5-10-11) are expected.</p> <p>As part of the environmental licensing of the disposal pits required, the J/V has submitted the relevant STIS for the sites E8 S2, E3 S2, E2 S2, E1 S2 (JV: 6757/23-1-09) which were withdrawn from the J/V (JV: 34716/10-3-11). These STISs were withdrawn because the J/V application is pending (JV: 23892/11-5-10) for Designation Act adoption by the competent Forestry.</p> <p>The STIS for the area of "Pouliana" E1 S3 has been rejected by EYPE due to forest character in combination with the E.T. D9.</p> <p>Excess materials are also placed in the Operation Infrastructure Sites integrated in the Amendment File of the main project.</p> <p>Temporary disposal of materials is being held within the limits of the project or in leased land areas. The sites are registered (topographical and agreements) on a monthly basis and with a special form foreseen by the Environmental Management System (EMS). Care should be taken in order for the sites to be private or local ones and those referred to the ET to be met. The sites are also registered into the monthly Table of Monitoring Environmental Terms.</p>
d.10	For any kind of work or facilities within areas of forest character the intervention approval, required by Law 998/79, must previously be granted. The reforestation	As regards the works within the of the occupation zone of the project (Motorway, lateral roads etc. as described in the Concession Agreement), pursuant to Law 3555/2007 (Ratification of the Concession Agreement)/ Article 4/ Paragraph 4a and Law 2445/1996/ Article 2/ Paragraph 1c, 'The occupancy,

**SEMI-ANNUAL PROGRESS REPORT FOR THE IMPLEMENTATION OF ENVIRONMENTAL TERMS DURING
THE CONSTRUCTION PHASE (A' SEMESTER 2014)**

Edition: 1.0
Page: 53 / 70
Date: 20.07.2014

A/A Decision	Environmental Terms - Description	Description of Progress - Problems
	removal should be preceded in the case in which the project will be constructed in reforested area prior to receiving the intervention approval.	<p><i>reclamation or coverage of forests or forest areas that are included in the boundaries specified in the designs of Annex 7 and in accordance with the terms and conditions of the agreement are permitted. This law approves the change of use, revokes the re-forestation and grants intervention permits and permits for felling works to the above sites'.</i></p> <p>The license for intervention is now incorporated in the project, provided that those referred to in MD 15277/12 are met. Modification of the project AEPO (prot. No. 167980/30.04.13), those referred to the above MD are met and the conditions included under the letter of the Directorate of Aesthetic Forests, National Parks and Game Management are included. Consequently, subject to these terms, the said amendment also constitutes an intervention approval. (See. D) Prot. No. 167980/30.4013) As regards the borrow pits, an installation protocol for the B/P at "Paliokoulia" position BP11 (08.03.2012) is signed. No other borrow pits have been used.</p>
d.11	All redundant excavation materials should be separated from waste or other solid waste and should be disposed with proper configuration in approved areas.	<p>The excavation materials do not usually contain waste or toxic waste. All redundant excavation materials (after the necessary split) were transported in approved deposition chambers or in rehabilitation positions of borrow pits/old quarries, as provided by STIS and TMA.</p> <p>The top soil is stored, where appropriate, for use in the slopes of the Motorway within the expropriation limits or in the leased land areas. For the disposals see par. d9.</p>
d.12	Worksite infrastructure serving the project's needs during its operation (snow removal etc.)	<p>O&M Control Centres Maintenance Control Centers (TBR) are to be built, which will dispose the necessary worksite infrastructure in order to serve the needs of the project during the operation phase.</p> <p>Also, the Operation Infrastructure Sites are integrated in the Amendment File, where the required local operation infrastructure of the motorway.</p>
d.13	<p>Regarding the worksite facilities of Stone processing and concrete production when installed, to implement the following:</p> <ul style="list-style-type: none"> - The dust emitted from the crushing operation assembly will be minimized through water sprinkling at critical positions as crushing stages and the output of 	<p>Crushers are used in a permanent location ("Toumpanos" – MSS – S2, and in 166+000-S3A, in the worksite of Ag. Triada) and many mobile ones moving accordingly to the excavation fronts.</p> <p>To minimize dust generation, piles of aggregate material are being macerated.</p> <p>Also, during the fall of materials tall from the conveyor belt, a material tall cone is created, in order to avoid the dust generation. Finally, the transfer was realized with closed conveyors. During the regular</p>

**SEMI-ANNUAL PROGRESS REPORT FOR THE IMPLEMENTATION OF ENVIRONMENTAL TERMS DURING
THE CONSTRUCTION PHASE (A' SEMESTER 2014)**

Edition: 1.0
 Page: 54 / 70
 Date: 20.07.2014

A/A Decision	Environmental Terms - Description	Description of Progress - Problems
	<p>the product from the assembly.</p> <ul style="list-style-type: none"> - Shipments of aggregates and cement will be made with closed conveyors or bolts that will be dedusted through filters. - For the preparation of concrete closed systems of wet type will be used. - The cement storage silo should have dedusting filters and the relief valves will volatilize in filters. 	<p>audits by those responsible for the environment, the compliance with the term is adhered to, and relevant remarks are held when necessary.</p> <p>There are no facilities of bituminous production.</p> <p>During the current period, 2 concrete production units in section S2 (84+600, 101+500) and 2 in section S3 (within the worksite of Agia Triada and in 165+700) are installed.</p> <p>Settlement tanks and filters are constructed inside the operating units, as required. It has to be pointed out that, by reviewing the Environmental Management System implemented by the J/V, the Subcontractor's obligations have been put into practice against the compliance with the construction E.T. in the form of Directive through ENV-WI10-01.</p> <p>For future concrete or asphalt production plant, which will be installed in the approved worksite locations, the approved STISs/TEPEM, which provide those aforementioned in the environmental term, will be met.</p>
d.14	<p>Bitumen production plants must be equipped with fabric filters or equivalent performance system, on a rotary kiln for only-drying aggregates, the sieves, temporary aggregates deposition silos, material lifts and any other location allowing dust emission or particulate matter.</p>	
d.15	<p>Prior to the commencement of the construction of each section of the project to alert on time and in written the relevant Archaeological Services (IB', ΛΓ' and ΛΣΤ' ΕΠΚΑ, 8th EBA) will receive special attention during the construction of the project in the following positions which fall in its broader area.</p> <ul style="list-style-type: none"> - In Amfilochia I/C - Kompoti I/C, near Argos and at "Paliokoulia" position, north to the settlement of Menidi, where remains of ancient fortifications are preserved. In Plakoti – "Paliokoulia" position Krikelvros position - In Gorgomylos I/C – Philippiada I/C <p>1. At "Kastropoula" and the settlement of Chanopoulo which is a preserved archaeological site.</p>	<p>Before the commencement of the works carried out to date, the relevant archaeological services monitoring the project have been informed. The above update and monitoring are carried out for the ancillary projects as well.</p> <p>In the event of the installation of an ancillary project or modification of the main road project, the advice of the competent archaeological services is taken. All relevant correspondence with the antiquities ephorates is included into the monthly audit tables.</p>

**SEMI-ANNUAL PROGRESS REPORT FOR THE IMPLEMENTATION OF ENVIRONMENTAL TERMS DURING
THE CONSTRUCTION PHASE (A' SEMESTER 2014)**

Edition: 1.0
 Page: 55 / 70
 Date: 20.07.2014

A/A Decision	Environmental Terms - Description	Description of Progress - Problems
	<p>2. In Castri of Old Philippiada where traces of Wall, buildings and classical and Hellenistic cemetery are identified.</p> <p>3. At "Ancient Orraon", District of Ammotopos, preserved archeological site 1st Institutional Zone A protection.</p> <p>4. "Kokkino" hill or "Castri", in the settlement of Vathi, in front of the settlement of Kerassona where remains of archeological Wall are preserved.</p> <p>- In Gorgomylos I/C – Avgo I/C section</p> <p>1. In "Varlaoum" position with remains of ancient citadel</p> <p>2. "Castri" hill in position of Mavrodafni with remains of Acropolis</p> <p>3. "Avlotopos" position, at Pesta, preserved archaeological site</p> <p>4. "Palioklissi" position, at Pesta, where a building in form of chamber has been identified.</p> <p>5. In "Perdika" where an ancient cemetery has been identified.</p> <p>6. On the hill of "Kalogeritsa", at Theriakissio, a preserved archaeological site</p> <p>7. District of Avgo, on a hill on the west side of the village which is in proximity to the road axis and the Avgo node, where a carved tomb has been detected.</p> <p>- In Avgo I/C - Egnatia I/C section (lowland)</p> <p>1. District of Episkopiko on the Castri hill, which is located in close proximity to the road axis and the Avgo</p>	

**SEMI-ANNUAL PROGRESS REPORT FOR THE IMPLEMENTATION OF ENVIRONMENTAL TERMS DURING
THE CONSTRUCTION PHASE (A' SEMESTER 2014)**

Edition: 1.0
Page: 56 / 70
Date: 20.07.2014

A/A Decision	Environmental Terms - Description	Description of Progress - Problems
	<p>node, and where citadel has been recently detected.</p> <p>2. In the wider region of Ampelia district where surface archaeological discoveries have been made.</p> <p>3. Agia Marina position, district of Pedini, which is in close proximity to the OA and Egnatia node (lowland) and where a settlement of the Iron Age has been identified.</p> <p>4. In Agios Apostolos position, under the Bridge of Egnatia Odos, between Ampelia and Pedini, where building remains of the Hellenistic years and a tomb are found.</p> <p>The alignment of the road should not affect the region nor the environment of the Fortress of the Pente Pigadia, as indicated in the doc. with prot no. YPPO/ARCH/V1/F33/30683/1017/1999 during the pre-approval phase concerning the positioning of the project.</p> <p>Upon detection of antiquities, the works will be interrupted and a rescue excavation survey is going to follow; the continuation of these works will depend on the results of this survey, after consultation with the appropriate Boards of the Ministry of Culture. All works will be conducted under the supervision of employees of the competent services of the Ministry of Culture (IB', and ΛΣΤ' EPKA, 8th EBA), which will be notified by the contracting companies one month before the</p>	

**SEMI-ANNUAL PROGRESS REPORT FOR THE IMPLEMENTATION OF ENVIRONMENTAL TERMS DURING
THE CONSTRUCTION PHASE (A' SEMESTER 2014)**

Edition: 1.0
 Page: 57 / 70
 Date: 20.07.2014

A/A Decision	Environmental Terms - Description	Description of Progress - Problems
	<p>commencement of these works. Particular attention should be paid to CH. 93,80 to 94,20 (Ancient Limnaia), 103,80 to 104,10 (Amfilohiko Argos), 178,50 to 178,70 (walling of citadel).</p> <p>The cost of all works to be performed by the competent ΑΣΤ' ΕΡΚΑ, the 8th ΕΒΑ will be covered by the appropriations from the project, in accordance with Article 37 of Law 3028/28.06.2002. When this expense exceeds the 10% of the project budget, a written statement - after a relevant question of the competent Department of the Ministry of Culture - of the body of the project is required.</p>	
d.16	<p>The developer of the project must ensure the proper operation of facilities and the removal of waste from the road users by skilled personnel at regular intervals. You should also clean the points where flammable materials are gathered (papers, etc), especially during the summer months where increased risk of fire is presented.</p>	It refers to the operation phase.
d.17	<p>Any kind of rubbish, waste materials, old parts and machinery, oil, all kinds of grouting agents, etc., and materials combustion (tires, oil, etc.) in the work area should be collected and removed; their disposal should be done in accordance with the current provisions. Any kind of material combustion (wires, oils, etc.) is prohibited in the said area.</p>	<p>Controls are regularly held by the responsible of environment in the manner described in the Environmental Monitoring and Control Program and it is found that: Sites of temporary disposal of old spare parts, scrap, dangerous solid waste, etc. have been layout in all the worksite areas. As regards the disposal of urban waste, an agreement (there are also relevant documents) has been made with the corresponding Municipalities of Amfilochia, Ksirovouni and Filippiada in order for the waste, which are put together in the Municipalities special bins, to be collected using garbage trucks and led to HYTAs.</p>

**SEMI-ANNUAL PROGRESS REPORT FOR THE IMPLEMENTATION OF ENVIRONMENTAL TERMS DURING
THE CONSTRUCTION PHASE (A' SEMESTER 2014)**

Edition: 1.0
 Page: 58 / 70
 Date: 20.07.2014

A/A Decision	Environmental Terms - Description	Description of Progress - Problems
d.18	Any toxic solids such as batteries and scrap metal, tires, etc. will be collected and disposed in accordance with the current provisions.	Regarding the management of the environmentally dangerous materials, the following agreements have been contracted and are valid with the responsible companies:
d.19	<p>Pollution of surface and ground waters from any kind of oils, fuels, etc. is prohibited. Also, the disposal of old oil on the ground is prohibited. The management of used oils should be in accordance with the provisions of P.D.82/25.2.2004 (OGG 64/2.3.2004) on "Establishment of measures and procedures for the management of previously used oil" (B '40). Measures conditions and program the alternative management of waste oils, which replaced the JMD 98012/2001/95 (Gov. 40/V/19-1-96).</p> <p>The management and disposal of hazardous waste will be carried out in accordance with No. 19396/1546/08.07.1997 JMD "Measures and conditions for the management of hazardous waste" (OGG 604V).</p>	<p>A) For the management of used oil – ACHAIA LUBRICANTS S.A. B) For the management of used oil and petroleum filters, used wad and contaminated material (soil, sorbents) from any possible leaking of oil – INTERGEO ΕΠΕ C) For management of used accumulators (batteries) – SIDESIS S.A. D) For management of used tires – ECOELASTIKA</p> <ul style="list-style-type: none"> • The separation of the above materials is conducted in specially designed areas on the licensed worksites where there are garages – laundries, i.e. Amphilochia worksites (Knauf), in Kampi, in Perdika and the temporary storage was done in special buckets and barrels sent from the above management companies. • The maintenance works of vehicles and machinery are made by the J/V's oil vehicles and in a licensed garage-laundry-lubrication of the area or in the licensed worksites.
d.20	Any kind of modification or intervention to an existing infrastructure project (i.e. water supply, sewerage etc.) should be done in collaboration with the relevant agencies, to ensure their satisfactory operation. Repair of network utilities affected to be done immediately.	<p>There is a continuous correspondence with all PUOs involved (pursuant to paragraph 7 of Special Conditions of Contract) in order to opinion on their networks and the relocation of those.</p> <p>For sections where there will be a blockage with irrigation or sewerage systems, the relevant actions shall be held in order for the PUOs to be informed.</p> <p>The monthly check lists include the correspondence with the competent PUO bodies.</p>
d.21	The possibility of relocating the alignment of the road axle under design should be studied:	The term is taken into account in elaborating the designs and is documented in the Environmental Assessment Final design Report which accompanies each road study, when submitted for approval to the

**SEMI-ANNUAL PROGRESS REPORT FOR THE IMPLEMENTATION OF ENVIRONMENTAL TERMS DURING
THE CONSTRUCTION PHASE (A' SEMESTER 2014)**

Edition: 1.0
Page: 59 / 70
Date: 20.07.2014

A/A Decision	Environmental Terms - Description	Description of Progress - Problems
	<p>a. where intersecting with already approved settlement boundaries</p> <p>b. where there is not the limit of 100m imposed by the directions of the prior study on preliminary positioning and given the fact that there were pre-existing settlement boundaries as well</p> <p>c. where, out of the boundaries it includes individual buildings or structured nuclei in its coverage area, mostly newly built buildings incorporating some investment costs. In the event that a building is in connection with the project, to enable the proprietor - if the latter wants it - to expropriate or retain the ownership and use of the property.</p>	<p>IE. This means that the realization of the condition is ensured through the designs approval process held by the Independent Engineer.</p> <p>Pursuant to the submitted Final Road Designs and the Final Design Environmental Assessment Reports as checked in the Reports of Environmental Assessment Final Design Reports, the alignment does not cut approved limits of settlements and passes through in a distance of more than 100m from them. Small residential complexes, located in proximity to the project are the Parazaria, "Pente Pigadia" – Brigka and Krounes. These are non-bound rural settlements, and not newly built ones.</p> <p>As regards the subsection in Egnatia I/C, branch 3 of the I/C is near "Pindos" hatchery. In this position, the layout relocation of the branch compared with the relevant one of EIS, is the largest one observed (40m), resulting in the removal from the hatchery. It has to be noted that the proximity of the hatchery was foreseen during the phase of elaboration and during the phase of the EIS publication, where the involved parties are informed and are entitled to protest. Such action of complaint was not reported. In addition, as mentioned the branch has been removed at 40m., therefore it is optimized with respect to the EIS.</p>
d.22	During the construction phase to develop and implement worksite signage study with appropriate warning signs and light signals (mainly at night) to avoid the risk of accidents.	An Environmental Monitoring & Control Program in terms of the overall Plan for Environmental Management, which will include protection measures for all works referred to in the environmental terms, has been drawn up and reviewed during the current period. The Program has been presented to the joint venture's supervising engineers, as well as to any subcontractors that will provide the joint venture with their services.
d.23	During the perforation, mechanical equipment to be used in order to contain the dust.	The implementation of ET22 is controlled by the persons responsible for safety and health. Perform All necessary actions for the required traffic regulations (approval from the Independent Engineer, Traffic Police, Directorate of Technical Projects – Department for Transportation Projects are performed.
d.24	Regular wetting of worksite materials etc., to be conducted in order to reduce the dust during the execution of earthworks.	As regards the dust, based on the works carried out in the past, the following were implemented:
d.25	Regular wetting of all bare surfaces is required during	<ul style="list-style-type: none"> ▪ The worksite roads were regularly soaked as well as the piles of materials

**SEMI-ANNUAL PROGRESS REPORT FOR THE IMPLEMENTATION OF ENVIRONMENTAL TERMS DURING
THE CONSTRUCTION PHASE (A' SEMESTER 2014)**

Edition: 1.0
Page: 60 / 70
Date: 20.07.2014

A/A Decision	Environmental Terms - Description	Description of Progress - Problems
d.26	<p>summer, so as to prevent dispersion of dust.</p> <p>Excavation products and aggregates to be transported from and to the project and coverage of heavy vehicle carriers with a suitable cover.</p> <p>Their passage through the settlements is prohibited. In case this not possible, a written approval should be given by the supervision service.</p>	<ul style="list-style-type: none"> ▪ The bulk material trucks were not overcharged and all trucks transporting loose materials were covered. ▪ Regular cleaning of the existing road axle from trucks before leaving the worksite and regular cleaning of the existing road network to be used. <p>The penetrating machines used in Ampelia tunnel, had been certified and they were holding dust filters. The penetrations in the tunnel are completed.</p>
d.27	<p>Washing the wheels of trucks before their exit from the worksite and regular cleaning of the existing road network to be used, for approaching the worksites, from material debris.</p>	
d.28	<p>In case of creating large embankments and special uses in contact with the expropriation zone to examine the possibility of suitable construction (wall) holding the foot, which will be a natural limit to the perimeter of the embankment and a starting point for the construction of the embankment. A space between the wall and the base of the slope to be provided, which will be filled with coarse materials for easy removal of the water.</p>	<p>The term is taken into consideration in the designs and is documented in the respective Environmental Assessment Final Design Report accompanying the current road design when submitted for approval to the IE. This means that the realization of the condition is ensured through the designs approval process held by the Independent Engineer.</p>
d.29	<p>Planting after carrying out special planting designs of all surfaces susceptible to vegetation (worksite spaces, disposal areas, ditches, embankments, node islets etc.).</p> <p>Emphasis should be given to planting trees and ensuring appropriate conditions for their satisfactory growth (minimum topsoil of depth of 1m).</p>	<p>No need for reconstruction of any site during the report time period has arisen, but in any case, the term will be met, pursuant to the SCC of the project.</p> <p>The design of restoration works and their budget constitute an integral part of every ETME/TEPEM design (disposal pits, borrow pits, worksites, etc.)</p>



**SEMI-ANNUAL PROGRESS REPORT FOR THE IMPLEMENTATION OF ENVIRONMENTAL TERMS DURING
THE CONSTRUCTION PHASE (A' SEMESTER 2014)**

Edition: 1.0
Page: 61 / 70
Date: 20.07.2014

A/A Decision	Environmental Terms - Description	Description of Progress - Problems
	The planting works should begin immediately to any section of the project in which earthworks are completed and the final surfaces are set up.	
	As regards plantings to ensure with watering, through pipelines, the rapid development and maintenance of vegetation. The care of plants should be continued throughout the project life.	
	Collection and preservation of top soil in the project execution area in order to be used for the landscaping restoration. Please use native species to restore this vegetation.	
d.30	During the operation of the worksites all measures for fire-protection should be taken against fire when operating machinery, workshops, etc., and to minimize the risk of fire spread in the wider area of the project. The way in organizing the fire protection shall be audited and approved by the Supervising Service before the commencement of the works.	An Environmental Monitoring & Control Program in terms of the overall Plan for Environmental Management, which includes protection measures for all works referred to in the environmental terms, has been drawn up. In any event, after the commencement of works, the fire measures in the project's machines and the scope of works are controlled and the provided H&S Plan should be adhered to. Special attention should be given to areas that are near forests and fields during the summer months. Emphasis is given in order for the machines located at the project area to be equipped with the provided firefighting equipment. Regarding the premises of the site (offices, workshop, laboratory and concrete preparatory) the adequate firefighting equipment like fire extinguishers, sand and water supply are provided. Fire stations have been installed at critical points in the work fronts. Finally, to those mentioned in P-18 process are met under the Health and Safety Plan.
d.31	As for the noise, the Contractor of the project construction should comply with all applicable provisions of Community law, all appropriate measures should be	With respect to the noise during the construction of the project, pursuant to the Program for Environmental Management and in terms of Environmental Monitoring Control Program noise measurements are conducted parametrically of the worksite and the construction faces and the results were within the

**SEMI-ANNUAL PROGRESS REPORT FOR THE IMPLEMENTATION OF ENVIRONMENTAL TERMS DURING
THE CONSTRUCTION PHASE (A' SEMESTER 2014)**

Edition: 1.0
 Page: 62 / 70
 Date: 20.07.2014

A/A Decision	Environmental Terms - Description	Description of Progress - Problems
	<p>taken in order to minimize the large noise emissions and ensure that noise and the vibrations will be within the acceptable limits during the construction of the project.</p>	<p>allowable limits. The measurements were reflected in measurement maps drawing the measurement points and are analytically presented in the Measurement Annex of the Annual Progress Reports of the Environmental Terms. The limits were not exceeded but only individually and for a short time period.</p> <p>During the current semester, no noise level measurements were conducted.</p>
d.32	<p>Upon the launch of the project, quarterly sample sound measurements of indicators L10 (18h) or Leg (08:00-20:00) will be carried out, as defined by the MD 17252/20.9.92 (as referred to in section (c) hereof), and the indicator Lden, as defined in the "Directive 2002/49/EC of the European Parliament and of the Council of 25 June 2002 on the assessment and management of environmental noise" (Official Newspaper EU L 189/12, 18.7.2002). The traffic volume should also be monitored. The results of sound measurements and the congestion recordings, along with the point, the date and time of measurement, the prevailing meteorological conditions, details and date of last calibration of sound level meter and the name of the controller measurement will be recorded in a reporting format. Should routinely recorded exceedances of the applicable limit for the road traffic noise, the construction and operation body of the project must take immediate appropriate measures to remove excesses. These measures will be the subject of a special study, which will be submitted for approval to EYPE/YPEHODE.</p>	<p>It refers to the operation phase.</p>

**SEMI-ANNUAL PROGRESS REPORT FOR THE IMPLEMENTATION OF ENVIRONMENTAL TERMS DURING
THE CONSTRUCTION PHASE (A' SEMESTER 2014)**

Edition: 1.0
Page: 63 / 70
Date: 20.07.2014

A/A Decision	Environmental Terms - Description	Description of Progress - Problems
d.33	As regards sections of the project that are less than 200 meters from the town plan limit when planning and implementing the project, the possibility of installing noise barriers should be foreseen if it is required to do so in the future.	With respect to the provision of placing noise barriers, which concerns the operational phase of the project, with the finalization of the road designs, a Special Acoustics Study for Noise Protection, which shall be assigned and submitted. The Noise Acoustic Study will examine the areas that are less than 200 m. from the town plan boundary, as well as any existing sensitive uses in areas outside the village limits. Pursuant to the submitted Final Road Designs and as tested in the Final Environmental Assessment Reports, the installation of noise barriers may be required in the settlements Parazaria/Limnaia, scattered buildings in the area of Kompoti, settlement of Kampi, Ammotopos, Ag. Christoforos (settlement – subsection S3B), Episkopiko (subsection S3B) and in “Pindos” incubator (Egnatia junction). In these positions, the cross section of the motorway is such that it allows installing noise barriers in the future, on the shoulder of the road, if this is deemed necessary.
d34	Protection of settlements from noise during the construction phase is required. The performance of noisy works (earthworks and use of jackhammers), are prohibited in the said settlements during quiet hours.	The monitoring of the parameters, mentioned in the E.T. through vibration monitoring program, and in the areas with construction of trenches, is conducted, Amfilochia, Menidi, Gymnotopos etc. And in the past, in the areas of entrance – exit of Ampelia tunnel. When construction works with vibrations are conducted, with possible cause of vibrations, the parameters referred to in the E.T. will be monitored via vibration monitoring programs and if they exceed the limits, the appropriate measures will be taken. During the preparation period of this report, locations of noise disturbance are not identified.
d.35	Worksites must be surrounded with elegant enclosures - noise barriers for both noise reduction and safety of the passing cars.	All the worksite areas are in a long distance from the settlements. If and when shown by the noise measurements that the produced worksite noise exceeds the statutory noise limits, then the issue will be addressed through the Management Plan by taking appropriate measures, including installation of temporary noise barriers.
d.36	In sections of the project, in a distance less than 300m from the Lake of Amvrakia, a wire of <1cm diameter to be inserted in order to avoid chick amphibians passage during periods of mass	It will be taken into account during the design and the construction of the fencings of the motorway in this section and if these sections of the project are identified in a distance less that 300m from the Lake Amvrakia.

**SEMI-ANNUAL PROGRESS REPORT FOR THE IMPLEMENTATION OF ENVIRONMENTAL TERMS DURING
THE CONSTRUCTION PHASE (A' SEMESTER 2014)**

Edition: 1.0
Page: 64 / 70
Date: 20.07.2014

A/A Decision	Environmental Terms - Description	Description of Progress - Problems
	immigration.	
d.37	<p>Machinery remaining and used on the construction site is not allowed without the approval certificate of noise, EOK type, as defined in paragraph c of the present.</p> <p>The Supervising Service should ensure compliance with those aforementioned.</p>	<p>For some of the machines, there are certificates of EC type. For the old machines, which do not have this certificate, emitted noise measurements are being conducted according to JMD 56206/1613/86 and records of the above measurements and machine certificates of EU type are kept.</p>
d.38	<p>In construction activities (tunneling, construction of trench, etc.) where vibrations may arise, the construction body must install, at critical points, measure and record system of all significant variables of the phenomenon. This system will measure and record ground displacement, velocity and acceleration versus time.</p> <p>The level of the vibrations should not in any case exceed 0,5 m/s² of weighted acceleration or 13mm/s equivalent peak ground velocity particle, to the building closer to the production point of vibrations or other structure.</p>	<p>Vibration graphers have been procured, control and vibration measurements are carried out and the results, which are attached to the annual reports, were within the allowable limits.</p>
d.39	<p>The concessionaire should prepare a contingency plan and have all the necessary tools to address a possible accident during handling tankers with hazardous liquid fuels along sensitive water recipients. More specifically, in order to address the accidental pollution and prevent pollution of ecologically sensitive wetland ecosystems with oil or hazardous substances (Evinos) examining the possibility of constructing appropriate</p>	<p>The Intervention Plan, which is a part of the Policing and Fire Fighting Agreement between the Concessionaire and the Ministry of Internal Affairs, has been drawn up.</p> <p>The Intervention Plan for Emergency Situations specifies measures to timely collect and remove hazardous substances while preventing pollution of the water/soil resources, etc.</p> <p>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 or not.</p> <p>A risk analysis study from accidental pollution has been submitted for the section in Amvrakia.</p>

**SEMI-ANNUAL PROGRESS REPORT FOR THE IMPLEMENTATION OF ENVIRONMENTAL TERMS DURING
THE CONSTRUCTION PHASE (A' SEMESTER 2014)**

Edition: 1.0
 Page: 65 / 70
 Date: 20.07.2014

A/A Decision	Environmental Terms - Description	Description of Progress - Problems
	retention and separation reservoirs (tanks). These tanks are connected to the system rainwater of the motorway so as to be able to address any case of accidental pollution. The design and sizing of the tanks to be arranged on a special study of risk assessment (risk assessment study) which will be prepared with care of the institution of the study project.	
d40	Applying modern methods and technologies to allow direct tunnel entrance to the tunnel in ancient Kalydona on the mountain massif limiting the open excavations in the entrance and exit foreheads should be applied. The maximum level of open excavation works in the areas of the project is set indicatively the height of 5m above the clavicle of the tunnel, above which the open-surface excavations are prohibited.	It is taken into consideration from the tunnel designs. The implementation of the term is ensured through the studies approval process by the Independent Engineer. According to the layout planning design of Ambela tunnel exit (IC-C-CO-S323N-MO-0200-000-TUN-PRX-FL.093.IS.01.01-0 and IC-C-CO-S323N-MO-0200-000-TUN-GTD-FL.193.IS.01.01-0) no surface excavations arise at the front >5m, except for the temporary ones. The layout planning of the front will be carried out via excavation and re-embankment. A report of environmental assessment has been submitted to the Independent Engineer for the Design of layout planning of entrance where cover structures and front support with gabions are foreseen (IC-C-CO-S323N-CW-0200-000-ENV-EPR-RP.000.01.01-0/25-11-2009). The filling material will be rock, resulting from the excavation of the front. The relevant design has been approved.
d41	Care should be taken for the rescue – escape of those entrapped in case of emergency in the tunnel of Ampelia and in the tunnel near CH. 117. To construct lateral arcades connecting the tunnel tubes so that their in-between minimum distances to be greater than 350m.	For Ampelia tunnel, a risk analysis study has already been elaborated - risk analysis study which provides the opening of two escape cross routes.
d42	During the construction of the project, the accesses to the settlements and generally to the spaces of various uses (commercial activities, houses etc.) should be	The observance of the term will be controlled by the Environmental Monitoring & Control Program. In the reference period concerning the present report, there was the need to construct structures blocking the access.

**SEMI-ANNUAL PROGRESS REPORT FOR THE IMPLEMENTATION OF ENVIRONMENTAL TERMS DURING
THE CONSTRUCTION PHASE (A' SEMESTER 2014)**

Edition: 1.0
 Page: 66 / 70
 Date: 20.07.2014

A/A Decision	Environmental Terms - Description	Description of Progress - Problems
	maintained.	The Technical Services of the Region and the traffic police are notified on traffic regulations for any works impeding the road traffic. During the current period traffic arrangements have been made and relevant notification upon the execution needs of the project (AA TR 29 on Rapsaioi - Pente Pigadia).
d43	To ensure the uninterrupted flow of the surface water by constructing all required structures and considering a return period of at least 50 years, excluding any stream filling with debris etc, to avoid phenomena of stagnant water and flooding.	It is taken into consideration in the hydraulic designs. The implementation of the term is ensured through the studies approval process by the Independent Engineer. Besides, it constitutes the principle of the design which is imposed by the Study and Inspection Regulation (KME).
d44	During the construction of the structures, the passage of wildlife, with minimum dimensions, should be ensured in accordance with those provided in the EIS (chapter 7) of the project.	It is taken into consideration in the Final Road and Hydraulic Studies. The implementation of the term is ensured through the studies approval process by the Independent Engineer. Also, as part of the Final Environmental Assessment Reports of subsections designs, the distances of structures of the Final Hydraulic Studies are controlled and compliance with the Term is certified. Finally, during the construction phase, care should be taken upon restart of the works.
d45	During the study regarding the construction of bridges of the project, an hydraulic study that outlines all measures to protect from corrosion of the natural slope of the project should be done.	It is taken into consideration in the elaboration of the hydraulic studies. The implementation of the term is ensured by the IE through the studies approval process.
d46	At least two automatic stations measuring air pollution and wind should be placed. The mounting of the station will be determined after the relevant approval of EYPE/YPEHODE; the minimum potential of the station should include: - Measurements of temperature, humidity, wind speed and direction, Concentration of VO, NOx, SO2, BTX	A relevant report is going to be submitted for the location of the stations, which will be submitted to EYPE/Ministry for approval. The operation of the station concerns the operation phase of the project.

**SEMI-ANNUAL PROGRESS REPORT FOR THE IMPLEMENTATION OF ENVIRONMENTAL TERMS DURING
THE CONSTRUCTION PHASE (A' SEMESTER 2014)**

Edition: 1.0
 Page: 67 / 70
 Date: 20.07.2014

A/A Decision	Environmental Terms - Description	Description of Progress - Problems
	measurements (benzene - toluene and xylene), TSP and PM10.	
d47	Immediately after signing the contract, the concessionaire must create an Environmental Service, providing the necessary staffing and logistics, as well as the necessary powers and resources to fulfill the obligations of the next term.	
d48	The above Environmental Service will be the link between the concessionaire and the competent Departments of the Public Administration and will be responsible for the compliance with the environmental conditions, the implementation of the impact monitoring programs, the submission of the required periodic reports and petitions, in accordance with term 27, and for the design, development and implementation of a program of environmental monitoring and control. Within a period not exceeding one year from the signing of the concession the content of the environmental monitoring and control program should be submitted for approval to EYPE/YPEHODE, as well as the staffing and sub-structure of the above the Environmental Service.	Environmental Service with permanent staff and external partners. The powers and responsibilities of the managers of the section are described in the J/V Quality Management System.
d49	By January 31 of each year the body of the construction or operation of the project shall submit a statement to EYPE/YPEHODE setting out: - The course of the construction of the projects,	The E.T. is fulfilled. The J/V submits relevant reports to the Concessionaire in an annual and semi-annual basis, shared by the whole consortium. The present report implements the said E.T.

**SEMI-ANNUAL PROGRESS REPORT FOR THE IMPLEMENTATION OF ENVIRONMENTAL TERMS DURING
THE CONSTRUCTION PHASE (A' SEMESTER 2014)**

Edition: 1.0
 Page: 68 / 70
 Date: 20.07.2014

A/A Decision	Environmental Terms - Description	Description of Progress - Problems
	<p>accompanied by detailed documentation of compliance with the environmental conditions.</p> <ul style="list-style-type: none"> - Parts of the project that have been received or delivered for operation. - Permits or authorizations granted in accordance with the terms of the present. - Studies awarded, qualitative, quantitative and economic data on environmental protection projects and the percentage that the costs for these projects represent, in relation to the total expenditures for the construction of the project. - Anti-pollution and environmental protection works to be made for the next year. - Summary of results concerning the noise monitoring, the measurements of air pollution and the monitoring program of water quality. - Problems encountered, contingencies and any information or suggestions that could be useful to mitigate any adverse environmental impacts caused by the construction or operation of the project. 	
d50	<p>The environmental conditions compliance proposed in the EIS (Chapter 8), which accompanies the present, shall apply if the said conditions are not consistent with those mentioned above and the remedies proposed.</p>	<p>They are taken into consideration.</p>
e1	<p>Local environment - Sensitive elements – Specially</p>	<p>Sensitive environmental elements (settlements, protected areas and sites) were taken into account during</p>

**SEMI-ANNUAL PROGRESS REPORT FOR THE IMPLEMENTATION OF ENVIRONMENTAL TERMS DURING
THE CONSTRUCTION PHASE (A' SEMESTER 2014)**

Edition: 1.0
 Page: 69 / 70
 Date: 20.07.2014

A/A Decision	Environmental Terms - Description	Description of Progress - Problems
	Protective zones. The ecologically sensitive areas of the project is the Lake of Amvrakia (AG00020025), the Lagoon of Katafourko (AG00060068), and the river of Louros (AB3090025)	the investigation of borrow sites positions, etc. and the elaboration of the STIS and Technical Design TME. The Department of Environment has elaborated a map with the environmental commitments, and pursuant to data under the EIS/TEPEM, which constitutes a tool for exploring of additional spaces and other works, and assistance for all persons involved to the construction.
e2	Measures and projects in order to maintain the above elements No further measures are required in paragraph 5	-
f	Period for which the given environmental approval is valid - Conditions for its review The above mentioned environmental conditions are valid till 31.12.2015 and on the condition that they will be met accurately. After this date, Article 4 of Law 1650/86 will be met, as replaced by Article 2 of Law 3010/2002 and Article 13 of the JMD 11014/703/F104/14.3.2003 (OGG 332B/20.3.2013).	For the renewal of the environmental conditions the procedures provided for in Law 4014/2011 (Government Gazette 209A/2011) will follow.
g	For the modernization, improvement, expansion or modification of the project, as described in the EIS with the terms and limitations of this decision, the procedure - laid down in Article 13 of the JMD 11014/703/F104/14.3.2003 - is required to be met (OGG 332B).	For any modification, expansion, improvement, etc. of the road project the procedures provided for in Law 4014/2011 (OGG 209A/2011) shall be adhered to. During the current period: <ul style="list-style-type: none"> • Submission of the Environmental Terms Amendment File of the Project: "IONIA ODOS NORTH END OF AGRINIO BYPASS – SOUTH END OF ARTA BYPASS AND NORTH END OF ARTA – IOANNINA BYPASS" pursuant to Article 6 of Law 4014/2011 • Submission of environmental impact study for the sections: A. CH 105+500 – CH. 108+700, B. CH. 115+720 – CH. 120+700, C. CH. 152+446 – CH. 154+976,05, D. CH. 181+710 – CH. 186+650, of the Project "IONIA ODOS SOUTH END AGRINIO BYPASS (KOUVARAS) – SOUTH END OF ARTA BYPASS (KOMPOTI) AND NORTH END OF ARTA BYPAAS (FILIPPIADA) – IOANNINA (ELEOUSA)" (see background of Environmental licensing of the main project).
h	Each term of this Decision may be amended in	

**SEMI-ANNUAL PROGRESS REPORT FOR THE IMPLEMENTATION OF ENVIRONMENTAL TERMS DURING
THE CONSTRUCTION PHASE (A' SEMESTER 2014)**

Edition: 1.0
Page: 70 / 70
Date: 20.07.2014

A/A Decision	Environmental Terms - Description	Description of Progress - Problems
	accordance with Article 2 of N.1650/86 as replaced by Article 2 of N.3010/2002. It is for the same reasons that new environmental conditions may be put, if this results from the developments in the field of protection and management of the environment.	
i	The present and the accompanying EIS should, in any control, be located at the offices of EYDE/OAP (road axle with concession) as well as at the site and the Administration Centre of the project and must be presented in each jurisdiction, in accordance with current legislation.	The term is met. The EIS, the amendment File and the JMD are kept in the Concessionaire's offices, in the J/V's headquarters and the worksite offices.
j	The non-compliance with the E.T. of the present and any realization of projects and activities that will result in environmental degradation, involve - in addition to the sanctions by other provisions of the current legislation – the enforcement of those prescribed by the provisions of Articles 28, 29 and 30 of Law 1650/86 to the operators, as amended by Law 3010/2002 (OGG 91/A/2002)	-