

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

SECTION: IONIA ODOS

- 1. Antirio – Southern end of Agrinio bypass (Kefalovriso)**
- 2. Agrinio bypass**
- 3. Northern end of Agrinio bypass (Kouvaras) – Southern end of Arta bypass (Kompoti) and Southern end of Arta bypass (Filippiada) – Ioannina (Eleousa)**
- 4. Arta bypass**

B' SEMESTER 2010



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

IONIA ODOS MOTORWAY FROM ANTIRIO TO IOANNINA

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

DECEMBER 2010



ANTIRIO – SOUTHERN END OF AGRINIO BYPASS (KEFALOVRYSO)

(JMD 142128/25.07.2005)

A. PERMITS AND APPROVALS		
S/N	SUBJECT	PROGRESS – PROBLEMS
A.1	Installation permits for any activity or necessary installation for the construction of works.	<p>All foreseen by the legislation permits and approvals, including the environmental permit possibly required, are obtained, when needed.</p> <p>The relevant Special Technical Implementation Studies (STIS) for all required sites (quarries, borrow pits, disposal sites and worksites) have been submitted to the Ministry and their approval is expected.</p> <p><u>Borrow pits</u></p> <ul style="list-style-type: none"> • STIS (Protocol No. 15264/07-10-2009) for BP A1 has been elaborated and submitted to EYPE. • STISs for the new positions BP A2 – location “Koutsospyrou” and BP A5 – location “Zabara” have been submitted to EYPE/YPEKA (Protocol No. 18383/18-12-2009). • TIS and STIS have been elaborated and are being submitted for positions BP A3 – location “Sarli”, BP A4 – location “Rema Ragou” and BP A6 – location “Diamantopoulou”. <p><u>Quarry</u></p> <p>Location “Kremasti” (QP 08):CH 40+000:An STIS was submitted to EYPE with Protocol No. 101816/03-03-08. From 7/04/09 all required positive opinions of bodies/revocation of reforestation, etc. have been submitted to EYPE. Additional data were submitted to EYPE with Protocol No. IC-C-S1000-Pro14900/NIK/sfa. EYPE’s approval is expected. The relevant submission for intervention approval by the forest department with Protocol No. CC-X-SB-S1000EIO, dated 9/07/09 was conducted.</p>



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A. PERMITS AND APPROVALS		
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		<p><u>Gravel extraction from Evinos river</u></p> <p>Gravel extraction in the approved positions of “Kalfa” and “Paradission” in Evinos River (with EYPE approval with protocol no. 141647/5.8.09) has been realized. Under decision of Western Greece Region the gravel excavation from “Kalfa” position has been postponed for 7 months (protocol no. 28379/24-08-10). A request for drawing up a delivery protocol to the Land owned company of Aitoloakarnania (31855/29-11-10) has been submitted.</p> <p><u>Worksites</u></p> <p>Gavrolimni area: Submission of STIS to EYPE with Protocol No. 14753/23.09.09 for worksite area around ch. 12+000 of the axle. Approved with the relevant 122415/8.3.2010 letter.</p> <p>Agios Georgios location - Evinos river: Submission to EYPE with Protocol No. 102919/04.04.08. Re-submission to EYPE with Protocol No 11939/26-06-09. Approval of STIS by EYPE (document with Protocol No. 141505, 23/09/09).</p> <p>“Kourtouga” area – premises of former 3E bottling hall – it is about offices and environmental permits are not required</p> <p>Aitoliko area (CH. 39+000): STIS was submitted to the Service (IC-C-CO-S111N-PRO6030/EM/em/) and following EYPE’s remarks a re-submission was carried out Rev A (24-04-09) the approval is being awaited.</p> <p>A worksite for Kalydona exit tunnel Submission of STIS to EYPE with J/V protocol no. 27587/05-08-2010 for worksite area around ch. 26+450 of the axis.</p>



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A. PERMITS AND APPROVALS		
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		<p>respect to the main project, the procedure of intervention permit and revocation of reforestation (Law 355/2007 art.4, par. 4 (a) (Gazette 81A/16.04.2007), Law 2445/1996 (Gazette 274A) paragraph 1 per.c of Article Two) is not required. For the ancillary works:</p> <ul style="list-style-type: none"> • Decision of reforestation partial removal (OGG172D/09-04-2010) for the quarry of Kremasti which has been announced to EYPE • Requests for reforestation removal took place for the borrow pits of Shinos (BP08), Kranollaggada (BP03) and Theotokos (BPA6). • Characterization act has been issued for BPA1 & BPA4 for the borrow pits. • Finally, a request has been submitted to the Forest Service of Messologi for issuance of the Characterization Act for the borrow pits BPA2 and BPA3 (new limits). • No characterization act is needed for the worksite in the tunnel exit of Kalydona, since the site is located within the expropriation limits. <p>As far as the additional works that were executed in this period of time (geotechnical researches, works in Kalydona and Makyneia tunnel, coating of materials in Evinos Tunnel, drillings, preliminary tunnel works, etc.) no permit was necessary by the competent Forest Service because the existing forest areas were located within the occupation zone of the project and in that case Law 2445/96 is in force.</p> <p>For any work or installation, an intervention permit is needed which is granted by the Forest Service</p>

A. PERMITS AND APPROVALS		
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		<p>responsible.</p> <p>With respect to the revocation of re-forestation, in accordance with Law 3555/2007 (ratification of the Concession Agreement)/ Article 4/ par. 4a and Law 2445/1996/ Article 2/ par. <i>'The occupancy, 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.'</i> This law approves the change of use, revokes the re-forestation and grants intervention permits and permits for felling works to the above sites."</p>
A.2	Archaeological Services	<p>For the works executed on the said period (works in Kalydona tunnel, construction works in Evinos bridge, coating materials, construction of underpass, construction of culverts etc.) no notification of the competent archeological service has been required.</p> <p>For the reference time period:</p> <p>Alikyrna archaeological site from ch. 28+800 – ch. 30+000. From these, only in 200m. (CH. 29+320 – CH. 29+540) they are in embankment. 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). Finally, it is mentioned that in "Borbora" position CH. 30+450 the 22nd Ephory of Byzantine Antiquities (30223/15-10-10) executes from 04-10-10 saving excavation survey.</p> <p>Messologi I/C: Ancient graves have been found in the region and saving excavations have been conducted. Relocation of the I/C (with protocol no. 21560/16-03-10, 1392/12-03-10 LST EPCA) has been</p>



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		<p>proposed by the archeology.</p> <p>The service launched the solution of Overpass construction in the same position. Detailed designs and a relevant document addressed to the Service for approval and to the Archeology for the written consent have been submitted.</p> <p>The assent of the competent Ephory of Antiquities (27956/11-08-10 J/V) has been notified and the change of the Center of Analysis and Study has been approved (31712/25-11-10 J/V, YPPOT/GDAPK/ARX/F40/70558/3348/08-11-10 Ministry of Culture).</p> <p>In the event new antiquities are found and works begin, the process referred to in the relevant Environmental Terms will be followed.</p> <p>With respect to the coverage of the expenses incurred during the archaeological surveys, article 1, parof Law 3555/2007 shall apply.</p>
A.3	Borrow pits – Quarries	For all new sites where materials have been delivered, the required STISs have been submitted, as referred to in term d2.1 of paragraph A1, and the relevant opinion of the responsible Archaeological Services is requested in order to obtain the appropriate environmental permit.

B. CONSTRUCTION ISSUES		
S/N	SUBJECT	PROGRESS - PROBLEMS
B.1	Works of building projects - toll stations – MSS - KES	With respect to the environmental permit of the new toll stations for Motorists Service Stations/O&M Centres, the relevant permit procedures shall be followed.
B.2	Disposal / Excavations / Explosives	<p>No works executed in the area of Klokova.</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 STIS that are submitted to the EYPE.</p> <p>No cases on 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 in specific deposition chambers or integrated per priority in the body of the Project. During the preparation period of the present report all the excavation materials are reused in fillings and coatings. If required, any additional or inappropriate materials will be disposed in approved areas. The excavation materials are separated in top soil (surface layer) and other materials. The top soil is stored, where appropriate, for use in the slopes of the Motorway in the final stage of planting.</p>
B.3	Rehabilitation/ Worksites	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 and the 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, Messologi all the aforementioned restrictions are followed. The installation is around 1000m away from Agios Georgios area and in order to



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B. CONSTRUCTION ISSUES		
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		<p>protect Evinos river, two water collection tanks have been constructed.</p> <p>In STIS of Aitoliko, Kalavrouza and Gavrolimni worksites, the term has been taken into consideration.</p> <p>A general Environmental Management Plan in terms of the Environmental Monitoring and Control Program, which includes control procedures for all works referred to in the lateral environmental terms, has been drawn up. The Plan has been presented to the joint venture's supervising engineers, as well as to any subcontractors that provide the joint venture with their services.</p> <p>The E.T. are followed in the concrete production plant that operates in Evinos worksite. In particular, the dust is minimized via the atomization with a water tank, the transportation of aggregates is conducted with closed transportation tapes, the storage bunkers have dust separation filters and the concrete production system is a wet-typed closed one. In the stone processing installation, which operates in Agios Georgios Messologi worksite, dust is minimized by springing, since a piping system with beck has been placed on the piles of aggregates and during the "breaking" of the materials, a tall cone of material is allowed to be created so that the creation of dust to be avoided. There are no bitumen production plants. With respect to the remaining section of the project, there are no operating stone processing installations or concrete production and bitumen plants.</p> <p>In the worksite area of Aetoliko as well as in the 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>During the period mentioned by this report, in some sections and in areas bounded by piles, site clearing</p>

B. CONSTRUCTION ISSUES		
S/N	SUBJECT	PROGRESS - PROBLEMS
		<p>was required.</p> <p>For any new worksite installation (or installation from the subcontractor) STISs are being prepared and will be submitted as usual to EYPE for approval. The protection measures referred to in STIS will be observed and will include all details referred to in the respective environmental term. The implementation of the E.T. will be inspected via monitoring in line with the EMCP.</p> <p>The final landscaping plans and the corresponding irrigation plans have been assigned, are currently being drafted and will be submitted to the Independent Engineer. The rehabilitation works and their budget is an integral part of each STIS (disposal sites, borrow pits, worksites, etc.). With respect to this section, the rehabilitation landscaping design has been submitted:</p> <ul style="list-style-type: none"> • With Protocol No. IC-C-CO-S103N-PRO18495/GEP/mag dated 23.12.09 and resubmission with protocol no. IC-C-CO-S103N-PRO21703/GEP/mag dated 18.3.2010 and approved by the I.E. • IC-C-CO-S103N-PRO20815/GEP/mag dated 1.3.2010 and expecting for its approval by the I.E. <p>Flora is being retained via the rational storage, condensation etc. in order to be used in landscaping rehabilitation works after the completion of the main works.</p>
	Various construction terms	<p>The term for the creation of infrastructure service refers to the operation of the project.</p> <p>The term on the direct entrance to ancient Kalydona tunnel has been taken into account in the design of the tunnel that was elaborated and has been submitted to the Independent Engineer with Protocol No. 5216/22-10-08.</p> <p>The design of the eastern front of Kalydona tunnel has been approved by the I.E. via the document IC0035</p>



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B. CONSTRUCTION ISSUES		
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		<p>DAC 5/03/09. Based on this design, no surface excavations will be performed at >5m, except for the temporary ones. The layout planning of the front will be carried out via excavation and re-embankment. A landscaping design will follow.</p> <p>The term for the wild fauna has been taken into account at the studies already drawn up. This issue is included in the Environmental Impact Studies of the relevant final road studies.</p> <p>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.</p>
	Superficial runoffs	<p>The relevant hydraulic designs, in which all necessary terms for the uninterrupted flow of surface water are taken into account, have been assigned, prepared and submitted to the Independent Engineer.</p> <p>The term on the protection of slopes from corrosion has been taken into account to the hydraulic designs which have been submitted for approval to the Independent Engineer. Especially for Evinos River has been taken into account in the design with protocol no. 13774/18-8-09 to the I.E. with IC.C.EN.S107.MO. 0200.110.HYD.XXX.FL..01.01-A code.</p>

C. WORK-SITE MANAGEMENT ISSUES		
S/N	SUBJECT	PROGRESS - PROBLEMS
C.1	Water protection - Liquid waste	<p>The content of the Environmental Term for the uninterrupted flow of the surface water shall be taken into account during the preparation of the relevant hydraulic designs.</p> <p>The content of the Environmental Term for cooperation with the competent bodies will be taken into account during the elaboration of the relevant rehabilitation designs.</p> <p>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 Aetoloakarnania (Protocol No. 6206/30-10-2009 for the section from K.P.25+640 –K.P. 32+000 and 6207/30-10-2009 for the section K.P. 32+000 – K.P. 42+000). The final hydraulic design in the section from K.P. 25+640 – K.P. 32+000 has been approved by the IE (Protocol No. 27004_IC-C-IE-S1000_21-07-2010). The final hydraulic study has also been approved to the section from CH. 36+940 to CH. 43+502 from the IE (protocol no. 32061/06-12-10) and the design of the irrigation canal in the CH. 40+116.</p> <p>To the reference period for the remaining PUO, particular documents have been sent to:</p> <ul style="list-style-type: none"> a) Greek Telecom for the information of networks existence in the administrative division of Gavrolimni and Ano Vassiliki of the Municipality of Halkia, within the alignment of Ionia Odos (document with J/V protocol no. 28157, 13.08.10). b) Municipality of Halkia, Hania, Gavrolimni for information of networks existence in the region of administrative division of Gavrolimni and Ano Vassiliki of the municipality of Halkia within the alignment of Ionia (document with J/V Protocol No. 28158, 13.08.10). c) Electric Supply Company of Agrinio for the relocation of Network from CH. 14+300 – CH. 18+000 (document



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C. WORK-SITE MANAGEMENT ISSUES		
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		<p>with J/V Protocol No. 31199, 12.11.10).</p> <p>d) Electric Supply Company of Agrinio for the relocation of Network from CH. 23+360 (document with J/V Protocol No. 32329, 13.12.10).</p> <p>Liquid waste shall be managed based on the relevant terms. 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. 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.</p> <p>With respect to the management of used oils, batteries, tires, etc. relevant agreements with licensed management companies have been signed and depending on the constructional procedure and the payment of the temporary containers, they are delivered for further management. The dangerous waste are temporarily stored in special areas within the worksites, while in some cases the relevant conformance documents are requested by the suppliers and the separate subcontractors.</p> <p>Finally, where required special cleaning areas of vehicles and machines have been constructed in the worksites using a waterproof tank for the collection of waters.</p>
C.2	Air and noise protection	<p>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.</p> <p>In particular with respect to dust, based on the works foreseen, the following shall be implemented:</p> <ul style="list-style-type: none"> • Worksite roads and piles of aggregates are regularly sprayed. Especially during the summer months care is taken for the continuous spraying of both the worksite roads and the urban network near the worksites. Special attention is paid to the spraying of worksite roads near residential areas and areas with increased



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C. WORK-SITE MANAGEMENT ISSUES		
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		<p>human activity. Furthermore, a piping system with beck, placed on the piles of aggregates, realizes the springing of the piles of aggregates.</p> <ul style="list-style-type: none"> • Special care is taken so that trucks are not overloaded with loose materials, while the trucks that transfer materials are covered. • The trucks are cleaned before they exit the worksite and the existing road network is cleaned when deemed necessary. <p>With respect to the installation of measurement station, the appropriate actions are taken to determine any possible locations so that they are submitted for approval to EYPE/Ministry. The operation of the station is related to the operation of the project.</p>
C.3	Noise - Movable noise barriers - Vibrations	<p>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 to resolve noise problems in accordance with the environmental terms has been drawn up. In addition, noise measurements are conducted in defined control spots by using the appropriate equipment so that noise levels at the worksites are followed. The measurements are reflected in measurement tables with graphic presentation of the measurement points and they are given analytically in the Annex of Measurements of the Annual Environmental Terms Report.</p> <p>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 submitted for approval to EYPE/YPEXODE, shall be assigned and submitted.</p> <p>In any case, after the commencement of the works, the relevant legislation for noise will be taken into account, which is referred to in term c.</p> <p>Construction works with a possibility to create vibrations will be equipped with a measurement and recording system in order to monitor all significant variables. During the construction, vibration measurements in specific</p>



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C. WORK-SITE MANAGEMENT ISSUES		
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		locations have been realized. The measurements are shown in measurement tables, which are given analytically to the Annex of Measurements of the Annual Environmental Terms Report.
C.4	Solid and hazardous waste	<p>With respect to waste management 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 compliance with the environmental terms, has been drawn up. 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.</p> <p>With respect to the management of used oils, batteries, tires, etc. relevant agreements with licensed management companies have been signed and depending on the constructional procedure and the payment of the temporary containers, they are delivered for further management. The dangerous waste are temporarily stored in special areas within the worksites, while in some cases the relevant conformance documents are requested by the suppliers and the separate subcontractors.</p> <p>In any case, domestic waste is transferred to the local authorities via bins located in the work areas upon the Authorities requests or via bin leasing by private owners or under the responsibility of the site manager.</p> <p>The maintenance and washing of vehicles and machines is realized either in licensed worksites with appropriate infrastructure (settling tanks, tank assembly, etc.) or in a licensed external garage or laundry area.</p> <p>It refers to the operation.</p>



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C. WORK-SITE MANAGEMENT ISSUES		
S/N	SUBJECT	PROGRESS - PROBLEMS
C.5	Fire prevention	<p>An Environmental Monitoring & Control Program in terms of the overall Plan for Environmental Management, which includes control procedures in compliance with the environmental terms, has been drawn up. In any case, after the commencement of the works, the fire protection measures will be inspected in the machinery and worksites, while all specifications and requirements of the Health & Safety Plan of the Project should be observed. 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> <p>Detailed instructions and leaflets have been distributed on the sites in order for the workers to front fire incidents.</p> <p>With respect to the worksite area of Agios Georgios, CH. 21+000 for which the relevant STIS (d2.1 term) has been submitted, the opinion of the relevant Archaeological Services was requested.</p>
C.6	Safety / Pollution caused by accident	<p>The relevant signage will be installed at the worksites before the commencement of the works, as described in the H&S Plan of the Project and the relevant worksite signage or traffic studies required. In the said period, the Design of Traffic Regulations for the construction of the UP44 underpass (CH. 23+331.35 – Right branch and CH. 23+348.51 – Left branch) has been submitted and approved by the Independent Engineer (Approval ICO195, 23.03.2010). Warning signs and light signals have been placed, where appropriate, during the night.</p> <p>An 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</p>

C. WORK-SITE MANAGEMENT ISSUES		
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		<p>leakage of non-biodegradable substances, including the necessity to construct Pollution Control Units or not. The Risk Assessment Study has been assigned in areas of sensitive ecological receivers (Evinos) and has been submitted to the I.E. the Design of Risk Assessment, with J/V protocol no. 27580/5-8-10.</p> <p>The term has been taken into account based on the risk analysis study submitted to the Independent Engineer with IC-C-CO-S1000-PRO 7293/MC/js dated 23/2/09 for Kalydona Tunnel, where two (2) transverse arcades, connecting the two branches per around 410m, are foreseen.</p>
C.7	Public Utility Organizations – traffic settlement	<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 Aetoloakarnania (Protocol No. 6206/30-10-2009 for the section from CH. 25+640 – CH. 32+000 and 6207/30-10-2009 for the section CH. 32+000 – CH. 42+000). The final hydraulic design in the section from CH. 25+640 – CH. 32+000 has been approved by the IE (Protocol No. 27004_IC-C-IE-S1000_21-07-2010). The final hydraulic design in the section from CH. 36+940 to CH. 43+502 and the design of the irrigation canal in the CH. 40+116 has been approved by the IE (protocol no. 32061/06-12-10).</p> <p>In the reference period for the remaining PUOs, particular document have been sent to:</p> <p>a) Greek Telecom for information of network operator in the area of Gavrolimni and Ano Vassiliki Administrative Division of the Municipality of Halkia, within Ionia Odos alignment (document with J/V Protocol No. 28157, 13.08.10).</p> <p>b) Halkia Municipality, Hania of Gavrolimni for information network operation in Gavrolimni and Ano Vassiliki Administrative Division of Halkia Municipality within Ionia Odos alignment (document with J/V Protocol No. 28158,</p>



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C. WORK-SITE MANAGEMENT ISSUES		
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		<p>13.08.10).</p> <p>c) PPC of Agrinio for the relocation of network from CH. 14+300 – CH. 18+000 (document with J/V Protocol No. 31199, 12.11.10).</p> <p>d) PPC of Agrinio for the relocation of network located from CH. 23+360 (document with J/V Protocol No. 32329, 13.12.10).</p> <p>Traffic management is being carried out based on the relevant traffic designs, through which adequate and safe communication will be ensured throughout the entire construction phase.</p> <p>The construction works in Klokova section have not started yet.</p> <p>The term for the construction of the tunnel near Makyneia is being implemented.</p> <p>Special care will be given according to the term of retention of access to the residential areas. This issue will be controlled through monitoring the Environmental Terms. During the preparation of this report, no need for structures that block access has arisen.</p>



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**(JMD 84982/96/11.04.1997, JMD 105886/03.07.08
& JMD 144713/23.9.09)**



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A. PERMITS AND APPROVALS		
S/N	ACTIVITY	PROGRESS – PROBLEMS
A.1	Installation permits for any activity or installation necessary for the construction of works.	<p>The E.T. of the project have been modified based on file with EYPE JMD 144713/23.9.09 For the said section, new additional areas are not required.</p> <p>An Environmental Monitoring & Control Program in terms of the overall Plan for Environmental Management, which includes control procedures for all works referred to in the said environmental terms, has been drawn up.</p> <p>The project has been delivered to circulation, while some additional completion works are being realized. The inappropriate disposals that may occur due to any final works (junctions, toll stations, etc) attention will be given so as to be deposited to the nearest licensed disposal place for Ionia Odos project (i.e. disposal pit E1 with EYPE approval protocol no. 101105/07.02.08). The same shall be in force for requirements of the term regarding the possibly required aggregates.</p> <p>The old project of the Southern section of Agrinio Bypass and the worksite of Agios Georgios constitutes a worksite area of this section. This site has been defined by the relevant studies of the said project. The disposal of excavation products in streams or river beds is avoided.</p> <p>The responsible Forest Service was not updated during this particular period because the lightning works were performed outside forest areas. For any work or installation, an intervention permit, which is granted by the Forest Service responsible, is needed.</p> <p>With respect to the revocation of re-forestation, in accordance with Law 3555/2007 (ratification of the Concession Agreement)/ Article 4/ par. 4a and Law 2445/1996/ Article 2/ par.1c, <i>'The occupancy, 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.'</i> This law approves the change of use, revokes the re-forestation and grants intervention permits and permits for felling works to the above sites".</p>



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A. PERMITS AND APPROVALS		
S/N	ACTIVITY	PROGRESS – PROBLEMS
A.2	Archaeological Services	Due to the nature of the works completed (completion of the road) the Archaeological Service was not updated during the report period. For any additional completion or installation work, a permit and approval is needed and granted by the responsible Forest Service.
A.3	Borrow pits – Quarries	Referred above in section A1.



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B. CONSTRUCTION ISSUES		
S/N	SUBJECT	PROGRESS PROBLEMS
B.1	Buildings - toll stations - Motorists Service Stations - O&M Control Centres	<p>A file of article 13 of the JMD 11014/2003 regarding the amelioration proposal of Aggelokastro I/C, in order for the process of the environmental license (J/V protocol no. 5400/20-10-08) to be followed, has been submitted to EYDE/YPEHODE. The certification has been approved under the project's JMD of E.T. amendment with protocol no. 144713/23-09-2009. A file of article 13 of JMD 11014/2003 regarding the proposal for lateral toll stations placing with J/V protocol no. 12938/24-7-09 has been submitted. The file has been submitted to EYPE by EYDE with EYDE protocol no.: A/1/013/06/24/4176/17-12-09. After the change of the toll stations type, the lateral tolls of Aggelokastro, Agios Ilias, Rigani, Haliki are repealed and thus a new 13 File will be submitted, which shall include the new situation created.</p> <p>With respect to the environmental license of EMC and MSS, the relevant licensing procedures will follow.</p>
B.2	Excavations / Explosives / Disposal	<p>All products deriving from the foreseen and approved excavation designs were used to manufacture embankments or any other road works, only after they were proved to be appropriate for this purpose (after several laboratory tests).</p> <p>Disposal was temporary and within the occupancy zone. Furthermore, for the disposal of non-appropriate excavation materials, E1 disposal site has been approved for this part of the project (Protocol No. 101105/07.02.08/EYPE).</p> <p>All terms have been taken into account in the road works design IC-C-EN-S113N-IJ-0200-000-ALI-000-FL.002.01.01.01-C submitted and approved (Approval Certificate: IC0003/10-07-2008, Code: IC.U.IE.S113N.MO.0200.000.A) for Aggelokastro I/C. In the present alignment in the area of Aggelokastro I/C, the cuts are less than 30m and may be 15m in height max. Therefore, there is in no need for small relocations of the axis or for the construction of a cut & cover. The proposed formation of the embankments arises from the geotechnical study so that safety and stability conditions are ensured.</p> <p>With respect to the large cut at CH. 13+400, during the excavation phase of the previous subcontractor, landslide failures and creeping movements presented. The construction was paused and the excavations were re-embanked to restore the failures and movements. At this phase in order to construct the road, the slopes declination was re-defined so as to discharge</p>

B. CONSTRUCTION ISSUES		
S/N	SUBJECT	PROGRESS PROBLEMS
		<p>the problematic area (by removing materials) and to significantly reduce the creeping movement of the land.</p> <p>The solution of mild slopes offers greater safety in the event of earthquake in the area, where the cuts will be moved causing minor compression failures to the pavement, which can be easily repaired.</p> <p>Any other solution to this problem (e.g. Cut & Cover) would be established at a problematic area of possible failure and the compression movements in the event of earthquake would cause irreversible damage.</p> <p>Following the above, it is clear that the large cut has arisen as a need to manage landslides. Its layout planning in scales with mild declination in combination with the appropriate landscaping measures will lead to its smooth integration into the surrounding area.</p>
B.3	Rehabilitation/ Worksites	<p>The permits granted to worksites by preparing and approving STIS by EYPE/YPEXODE ensures the implementation of the E.T., i.e. the exclusion of the spatial planning of the worksites in river beds.</p> <p>The landscaping recovery design has been approved by The I.E. with IC.C.IE.S113N.CE.DAC005924, dated 15.12.09 for the section of the bypass from ch. 0+620 to ch. 13+541. Suggestions for the protection of slope embankments and excavations, which include, among others, anti-corrosion measures (hydroseeding), have been formulated in the geotechnical designs and have been adopted by the landscaping design too.</p>
B.4	Various construction terms	<p>The request for the toll stations construction for ensuring the uninterrupted moving of fauna has already been met by the constructed technical structures of the existing work in Agrinio bypass, which has been built under the State's responsibility.</p> <p>A File according to article 13 of JMD 11011/2003 on the improvement of Aggelokastro I/C has been submitted to EYPE/YPEHODE, in order for the process on the environmental license to be followed (J/V protocol no. 5400/20-10-08). The</p>

B. CONSTRUCTION ISSUES		
S/N	SUBJECT	PROGRESS PROBLEMS
		144713/23-09-2009 improvement with the amendment of the JMD of the project's E.T. has been approved. A File according to article 13 of JMD 11014/2003 on the proposal for lateral tolls placing with J/V protocol no. 12938/24-7-09 has been submitted. The file has been submitted to EYPE by EYDE with EYDE protocol no. A/1/013/06/24/4176/17-12-09. After the change of the tolls type, Aggelokastro, Ag. Ilias, Chalikio, Kouvaras and Rigani lateral tolls are repealed and therefore a new File 13 will be submitted, which will include the new situation created.
B.5	Superficial runoffs	<p>The hydraulic works are already built at the largest part of this section. Where hydraulic designs (non-completed parts) are required, these are being prepared and will be submitted to the Independent Engineer.</p> <p>More specifically, with respect to Aggelokastro I/C, the hydraulic design IC-C-EN-S113N-IJ-0200-203-HYD-FL.00000.00.01-B has already been submitted and approved (Approval Certificate: IC0003/10-07-2008, Code: IC.U.IE.S113N.MO.0200.000.A). The approved design ensures the implementation of the E.T. Moreover, the largest part of the alignment in the area has been conducted over a cut and therefore, there will be no need for flood prevention at the adjacent agricultural areas.</p> <p>Other drainage designs approved for the said section are the following:</p> <ul style="list-style-type: none"> • The "rainwater drainage design CH. 1+276 – CH. 2+975 with IC-C-EN-S113N-IJ-0200-203-HYD-FL.00000.00.01-B code number approved with certificate of approval: IC0051/15-05-2009, Code number wbs IC.U.IE.S113N.ALI.PAV.HYD.051. (it refers to the design only of the central island). • "The final design of drainage dewatering of lateral Toll Stations (Haliki I/C, Agios Ilias, Aggelokastro, Rigani, Kouvaras) with code numbers: IC.C.EN.S113N.IJ.0200.000.HYD.FOL.FL.003.02.01.01-A



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B. CONSTRUCTION ISSUES		
S/N	SUBJECT	PROGRESS PROBLEMS
		<p>IC.C.EN.S113N.IJ.0200.000.HYD.FOL.FL.004.02.01.01-A</p> <p>IC.C.EN.S113N.IJ.0200.000.HYD.FOL.FL.005.02.01.01-A</p> <p>IC.C.EN.S114N.IJ.0200.000.HYD.FOL.FL.001.02.01.01-A</p> <p>IC.C.EN.S114N.IJ.0200.000.HYD.FOL.FL.002.02.01.01-A</p> <p>Approved with certificate of approval: IC0266/21-5-10 and code number wbs IC.U.IE.S0000.MLD.266.</p> <ul style="list-style-type: none"> • The design of "Additional hydraulic projects of Agrinio Bypass" with code number IC.C.EN.S100.CW.0200.901.HYD.FL.901.01.01-A approved with the certificate of approval: IC0145/13-11-09 and code number wbs IC.U.IE.S1000.HYD.145. • Finally, the approval of the final design of hydraulic projects of Ag. Ilias I/C with code number wbs IC.C.EN.S100.CW.0200.901.HYD.FL.901.01.01.01-B is mentioned approved with the certificate of Approval: IC0276/02-06-10 and code wbs IC.U.IE.S113N. HYD.276. <p>After the change of the tolls type, the hydraulic designs for Aggelokastro I/C (32647/20-12-10), Ag. Ilias (32931/7-1-11), Kouvaras I/C (prot. no. 33137/12-1-11) have been re-submitted.</p> <p>No irrigation networks in the area that could be affected by the works performed.</p>



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C. WORK-SITE MANAGEMENT ISSUES		
S/N	SUBJECT	PROGRESS – PROBLEMS
C.1	Water protection - Liquid waste	<p>Liquid waste is being managed based on the relevant terms. An Environmental Monitoring & Control Program 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.</p> <p>In the area of this project there are no worksite installations and the service is conducted by the licensed worksites of the old contract in the Southern section of Agrinio Bypass and Evinos.</p> <p>Urban wastes that may arise are channeled in the urban local authorities network.</p> <p>With respect to the management of used oils, batteries, tires, etc. relevant agreements with licensed management companies have been signed and depending on the constructional procedure and the payment of the temporary containers, they are delivered for further management. The dangerous waste are temporarily stored in special areas within the worksites, while in some cases the relevant conformance documents are requested by the suppliers and the separate subcontractors.</p>
C.2	Air and noise protection	An Environmental Monitoring & Control Program in terms of the overall Plan for Environmental Management, which



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C. WORK-SITE MANAGEMENT ISSUES		
S/N	SUBJECT	PROGRESS – PROBLEMS
		<p>includes protection measures for all works referred to in the environmental terms, has been drawn up.</p> <p>In particular with respect to dust, based on the works foreseen, the following are implemented:</p> <ul style="list-style-type: none">• Worksite roads are sprang with water on a regular basis.• The trucks that transfer materials are not overloaded and all trucks transferring loose materials will be covered.• The trucks drive on the existing asphalt-layered road before they exit the worksite. Despite this, the existing worksite network is being cleaned to remove any residuals (dirt, stones, etc.).



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C. WORK-SITE MANAGEMENT ISSUES		
S/N	SUBJECT	PROGRESS – PROBLEMS
C.3	Noise - Movable noise barriers - Vibrations	<p>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.</p> <p>Furthermore, noise measurements are conducted in specific control points using the appropriate equipment in order to monitor the respect of the worksite noise levels more frequently.</p> <p>For the majority 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 EOK type are kept. Also, all the machines of the project are equipped with the foreseen fire-fighting measures. Also, at Evinos site (offices, workshop, laboratory, concrete laboratory) there are fire-extinguish means, like fire-extinguishers, sand, water.</p> <p>The measurements will be repeated in all the successive phases during which this section undertakes a different traffic role in connection with the realization of the remaining sections of "Agrinio Wide Bypass".</p>



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C. WORK-SITE MANAGEMENT ISSUES		
S/N	SUBJECT	PROGRESS – PROBLEMS
		<p>When sound measurements result in a noise level higher than the permitted limits, measures will be taken, among which is the placement of temporary noise barriers.</p> <p>The measurements will be repeated in all the successive phases during which this section undertakes a different traffic role in connection with the realization of the remaining sections of "Agrinio Wide Bypass".</p>
C.4	Solid and hazardous waste	<p>In the area of this project there are no worksite installations and the service is conducted by the licensed worksites of the old contract in the Southern section of Agrinio Bypass and Evinos.</p> <p>Any waste from the regular cleaning of the road are collected and transported in bins of the Municipality of Agrinio.</p> <p>There is an agreement for the disposal of mineral oils with Licensed Management Company (relevant agreement).</p> <p>Furthermore, an Environmental Monitoring & Control Program in terms of the overall Plan for Environmental Management, which includes control procedures in compliance with the environmental terms, has been drawn up. 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.</p>
C.5	Fire prevention	<p>An Environmental Monitoring & Control Program in terms of the overall Plan for Environmental Management, which includes control procedures in compliance with the environmental terms, has been drawn up.</p> <p>In any case, all the content of the H&S Plan should be applied. All the machines of the project are equipped with the foreseen fire-fighting measures. Also, at Evinos site (offices, workshop, laboratory, concrete laboratory) there are fire-extinguish means, like fire-extinguishers, sand, water. Detailed instructions and leaflets have been distributed to the sites in</p>



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C. WORK-SITE MANAGEMENT ISSUES		
S/N	SUBJECT	PROGRESS – PROBLEMS
		order for the employers to front the fire incidents.
C.6	Safety / pollution caused by accident ¹	<p>An Intervention Plan, which is 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.</p> <p>In the case of accidents, adsorption materials such as sand, chippings or a special geotextile will be used immediately after run out. Such materials will exist in the central worksite for immediate use. Their after-use-disposal will be carried out in accordance with the instructions for disposing toxic waste.</p>



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C. WORK-SITE MANAGEMENT ISSUES		
S/N	SUBJECT	PROGRESS – PROBLEMS
C.7	Public Utility Organizations – traffic settlement	<p>The vertical roads, the infrastructure works, the structures of the slab-paved culverts and the majority of the side roads have been constructed during a previous contract work and have been foreseen in the relevant design.</p> <p>During the construction phase, the existing mass transport infrastructures are not blocked between the residential districts.</p>



**NORTHERN END OF AGRINIO BYPASS (KOUVARAS) – SOUTHERN END OF ARTA
BYPASS (KOMBOTI) AND NORTHERN END OF ARTA BYPASS (FILLIPIADA) –
IOANNINA (ELEOUSA)
(JMD 141564/25.07.2005)**

A. PERMITS AND APPROVALS		
S/N	SUBJECT	PROGRESS – PROBLEMS
A.1	Installation permits for any activity or installation necessary for the construction of the works.	<p>All foreseen by the legislation permits and approvals, including the environmental licensing possibly required, will be obtained, when needed.</p> <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><u>Borrow pits</u></p> <p>Pinakoulia location (BP10): Submission to EYPE with Protocol No. 102908/02.04.08 and J/V Protocol No. 2853/IM/εç/01.04.08. Approved with EYPE Protocol No. 138434/03-07-2009</p> <p>Paliokoulia location: 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> <p>Makryvouni location (BP14): Submission to EYPE with Protocol No. 23094, 23/04/10. Approval is expected after the issue and submission of the opinions to EYPE.</p> <p><u>Quarries</u></p> <p>Toubanos location (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>Ag.Georgios Glykorizo location: Submission to EYPE with EYPE Protocol No. 101995, 06/03/08 and J/V Protocol No. 2525/IK/ΕΣ/05.03.08. Approval is expected.</p>



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A. PERMITS AND APPROVALS		
S/N	SUBJECT	PROGRESS – PROBLEMS
		<p>Selitoura location (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><u>Disposal pits</u></p> <p>Pouliana location: (EYPE Protocol No. 143101/04.08.09 and J/V Protocol No. 13265/03.08.09). The approval is pending.</p> <p><u>Restoration of old quarries</u> A technical restoration design of the old quarries E36, E37, E38 and E39 with J/V protocol no.16496/5-11-09 and for E50 Pedini old quarry with J/V protocol no. 22582/12-04-10 was submitted.</p> <p><u>Worksites</u></p> <ul style="list-style-type: none"> • Sikoula location: STIS is drawn up and will be submitted for approval to EYPE with EYPE protocol no. 12763/20-1-10 and J/V protocol no. 19059/18.01.10. • “Gymnotopos” location: (STIS Submission: EYPE protocol no.132846/26.11.10 and J/V protocol no. 31644/23.11.10). The approval is pending. • “Agia Triada” location: CH. 176+000 with EYPE approval with protocol no. 136713/23.02.09. A new STIS has been resubmitted in order for the site to be used and for the temporary materials disposal 31008/09-11-10. • Ampelia tunnel exit – CH. 193+000 the relevant STIS has been submitted with EYPE protocol no. 136713/23-02-09 • Kampi and Gorgomylos site: STIS has been submitted: protocol no. EYPE:107730/05.09.08 and J/V protocol no. 4759/05.09.08. The STIS have been approved with EYPE protocol no. oik136719/23.02.09.



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A. PERMITS AND APPROVALS		
S/N	SUBJECT	PROGRESS – PROBLEMS
		<ul style="list-style-type: none"> • In “Knauf factory” location, offices have been installed in leased area. <p>The permit from the relevant Forest Service was required for all works performed during this particular period. More specifically:</p> <ol style="list-style-type: none"> a) Application for opinion for the worksite area in Gymnotopos, to the Directory of Forests of Preveza (J/V Protocol No. 27776, 09.08.10). b) Application for decision of final act of characterization on the disposal pit E1 in Pouliana location to Amfilohia Forest Department (J/V Protocol No. 32086, 06.12.10). c) Applications for the issuance of a characterization have been sent for the sites of Agia Triada S3.4 and Ampelia tunnel exit S3.6 (J/V protocol no. 26604/13-07-10). d) An act of characterization for the borrow pit BP14 (30240/15-10-10). e) For the worksite of Ampelia exit tunnel a request has been sent (27590/05-08-10) and a positive opinion has been received (31034/09-11-10). f) A characterization act for the site in Sikoula area has been issued (5486/30-11-10). <p>With respect to the main project (Motorway, lateral roads etc, as described by the concession agreement), an approval for intervention or abrogation of re-forestation is not required to be preceded, in accordance with Law 3555/2007 (ratification of the Concession Agreement)/ Article 4/ par. 4a and Law 2445/1996/ Article 2/ par.1c, <i>‘The occupancy, 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-</i></p>

A. PERMITS AND APPROVALS		
S/N	SUBJECT	PROGRESS – PROBLEMS
		<i>forestation and grants intervention permits and permits for felling works to the above sites'.</i>
A.2	Archaeological Services	<p>Before layout planning and installation of the worksites, the opinions of the above mentioned to the E.T. 12a will be taken into account.</p> <p>Regarding the E.T. d15, the section from Amfilohia I/C to Kompoti I/C and the location "Paliokoulia" have been taken into account as to their archaeological significance during the phase of the design; the remaining areas will be taken into account during the phase of future elaboration of designs.</p> <p>Before the commencement of works that were executed during this specific period of time, the competent Archaeology Department was notified in all cases. More specifically:</p> <ul style="list-style-type: none"> a) Application for the opinion on the worksite in Gymnotopos, to ΑΓ' Archeological Service, 18^η Ephory of Byzantine Antiquities and Service of Contemporary Monuments and Technical Projects (J/V letter with Protocol No. 27776, 09.08.10). b) Review on application of use of the query in the location of Ag. Georgios Glykorizou, section S2 to Directorate of the Archeological service (J/V letter with protocol no. 27436, 03.02.10) c) The competent Ephory of Antiquities IB' EPKA has been informed about the commencement of the construction, and the works are being controlled with an archeologist's suggestions for the monitoring of digging works form CH. 170+000 – Ch. 196+000 with J/V protocol no. 8467/07-04-2009. The alignment of the project in the area of "pente pigadia" follows the approved change without any minor relocation or other change. Consequently and based on the



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A. PERMITS AND APPROVALS		
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		findings of the DEC, the proximity of Frourio and the environment are not affected by the area.
A.3	Borrow pits – Quarries	The need for delivery is mainly covered by the excavation products and any further estimated needs will be ensured by the sites referred to in paragraph A1. It is ensured that small amounts of crushed material, which may be required for the seating of culverts and other small technical structures, are supplied by legally operating mines in the area.



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B. CONSTRUCTION ISSUES		
S/N	SUBJECT	PROGRESS – PROBLEMS
B.1	Buildings - Toll Stations – MSS - EMC	With respect to the environmental permit of the new toll stations for Motorists Service Stations/E&M Centres, the relevant permit procedures shall be followed.
B.2	Disposal / Excavations / Explosives	<p>The E.T. on the disposal of the inappropriate materials 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>All redundant excavation materials (after separation) will be transferred to the approved disposal sites.</p> <p>The excavated materials do not usually contain scraps or toxic waste. Once identified, the necessary separation will be realized. The topsoil is retained for use in the Motorway embankments. The excavated material (after the necessary separation) are temporarily deposited in the occupy areas of the project in order to be used for the construction of the project and to be integrated in it.</p> <p>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.</p>
B.3	Rehabilitation/ Worksites	<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.</p> <p>Depending on the needs of the project, crushers are used within the occupation zone for a short length of time (mobile and rarely stable). To minimize dust generation, especially in stable systems a continuous erosion of piles of aggregate is held -</p>



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B. CONSTRUCTION ISSUES		
S/N	SUBJECT	PROGRESS – PROBLEMS
		<p>chemical and a wetting system of the material with beck is placed onto the crusher conveyor belt. Also, during the fall of materials tall from the conveyor belt, a material tall cone is left to be created, in order to avoid the dust generation. Finally, the transfer is realized with closed conveyors.</p> <p>There are no facilities of bituminous production and concrete production in the said sections. The supply, when required, is being realized by external, environmentally licensed, partners. In cases of future facilities, the content of terms d13 and d14 will be examined under the Plan for Environmental Management and the Environmental Monitoring & Control Program which includes protection measures for all the aforementioned to the environmental terms.</p> <p>Site clearance has been carried out within the occupancy zone of the project. In cases of new works the implementation of term d7 will be checked.</p> <p>No need for reconstruction of any site during the report time period has arisen, but in any case, the term will be observed. The observance of the term will be controlled by the Environmental Monitoring & Control Program. Regarding the relevant designs for the reference period:</p> <ul style="list-style-type: none"> • The landscaping design for the section from CH. 108+700 - Ch. 116+200 has been submitted to the Independent Engineer for approval with J/V protocol no. 25218/8.6.2010. • The landscaping design for the section from CH. 76+618 - Ch. 93+000 has been submitted to the Independent Engineer for approval and has been approved by the Independent Engineer with J/V protocol no. 25217/8.6.2010. • The landscaping design for the section from CH. 188+000 – CH. 196+000 has been submitted to the Independent Engineer for approval with J/V protocol no. 31318/17.11.2010.



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B. CONSTRUCTION ISSUES		
S/N	SUBJECT	PROGRESS – PROBLEMS
		<ul style="list-style-type: none"> The landscaping design for the section from CH. 168 + 800 to CH. 178+500 has been submitted to the Independent Engineer for approval with J/V protocol no. 31930/01.12.2010 <p>The design of restoration works and their budget constitute an integral part of every ETME design (disposal pits, borrow pits, worksites, etc.)</p> <p>It has been ensured that the relevant landscaping plans are assigned and drawn up in order to be submitted to the Independent Engineer for approval.</p>
B.4	Various construction terms	<p>i) The Terovo I/C in K.P. 175+708 has been included in the Finalized Design of the subsection (Ref. No. IC-C-CO-S322N-PRO11353/10-06-2009).</p> <p>ii) A tunnel with an approximate length of 870 - 900m has been included in the Finalized Design, a layout planning design of the tunnel is currently under preparation and the exit layout planning design has been submitted, IC-C-CO-S323N-MO-0200-000-TUN-PRX-FL.093.IS.01.01-0 & IC-C-CO-S323N-MO-0200-000-TUN-GTD-FL.193.IS.01.01-0. The A' and B' phase of excavation of Ampelia Tunnel has been completed.</p> <p>iii) The Finalized Design includes a hypsometrical lowering. In the area of the overpass at Episkopiko, the embankments have a height of 3m (Motorists Service Station - Episkopiko - height of 4m) – (Prot. No. IC-C-CO-S323N-PRO6595/MC/js/2009).</p> <p>It will be taken into account during the design and the construction of the fences of the motorway in this section and if these sections of the project are identified in a distance less than 300m from the Lake Amvrakia.</p> <p>The compliance with the term is being reviewed in terms of Environmental Impact Assessments of the final designs so that there is compatibility of the design phase with the requirements of this term. It has been included in the designs under preparation and also during the construction phase.</p> <p>Various proposals to be reviewed have been submitted to the Service (EYDE/EPA & IO) that concern optimizations of the alignment. The Service's opinion is expected in order to further proceed to the obtainment of the environmental permit as</p>



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B. CONSTRUCTION ISSUES		
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		provided by article 13 of the JMD 11014/703/Φ104/14.3.2003, (OGG 332B).
B.5	Superficial runoffs	<p>The relevant hydraulic designs, in which the necessary terms are taken into account, have been assigned, prepared and submitted to the Independent Engineer.</p> <p>The term for the retain of the foot of large embankments has been taken into account in the studies and is being documented in the relevant Environmental Protection Report which accompanies the current road design when submitted for approval to the Independent Engineer. That is, the implementation of the guaranteed term, through the designs approval process by the Independent Engineer.</p> <p>The term for the protection from corrosion of natural slopes is taken into account during the elaboration of hydraulic designs.</p> <p>The application of the term is being ensured through the designs approval process by the Independent Engineer.</p>



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C. WORK-SITE MANAGEMENT ISSUES		
S/N	ACTIVITY	PROGRESS - PROBLEMS
C.1	Water protection - Liquid waste	<p>The liquid wastes are managed under the relevant terms. 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. 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.</p> <p>With respect to the management of used oils, batteries, tires, etc. relevant agreements with licensed management companies have been signed and depending on the constructional procedure and the payment of the temporary containers, they are delivered for further management. The dangerous waste are temporarily stored in special areas within the worksites, while in some cases the relevant conformance documents are requested by the suppliers and the separate subcontractors.</p>
C.2	Air and noise protection	<p>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.</p> <p>The Program has been presented to the supervising engineers of the J/V and the subcontractors that will offer their services to the J/V. In addition, noise measurements are conducted in specific points using the appropriate equipment, in order to monitor the noise level at the worksites more frequently. These measurements have been reflected in tables and maps where the range of the construction of the project and the points of the measurements are pictured. These maps and the measurements, which are repeated in regular intervals, are presented in the annual report.</p> <p>Regarding the vibrations during the construction of the project, measurements of vibrations are realized in sensitive receivers</p>

C. WORK-SITE MANAGEMENT ISSUES		
S/N	ACTIVITY	PROGRESS - PROBLEMS
		<p>(houses, constructions, etc.) in explosion works. The results of the above measurements are presented in the annual report.</p> <p>In particular with respect to dust, based on the works foreseen, the following are implemented:</p> <ul style="list-style-type: none"> • Worksite roads and piles of materials are regularly sprayed. • The trucks that transfer materials are not overloaded and all trucks transferring loose materials are covered. • During the drilling works, a mechanical equipment will be used that will hold dust. • The trucks will be cleaned before they exit the worksite and the existing road network that will be used to reach the worksites will be regularly cleaned from residuals. <p>The stations specifications and installation study is being under development and will be submitted to EYPE/YPEXODE for approval. The operation of the station is related to the operation phase of the project.</p>
C.3	Noise - Movable noise barriers - Vibrations	<p>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 to resolve noise problems in accordance with the environmental terms, has been drawn up. In addition, noise measurements are conducted in specific points using the appropriate equipment, in order to monitor the noise level at the worksites more frequently. The measurements are presented in measuring tables with measurement points' graphics.</p> <p>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. The Acoustics Study for Noise Protection examines the areas with a distance less than 200m from the town limits as well as any existing sensitive uses in areas outside the town limits.</p> <p>During the reporting period, the works are carried out on a sufficient long distance from settlements. Following the sound measuring process, in the closest settlements, no excess of the permitted levels has been recorded. If the produced worksite</p>



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C. WORK-SITE MANAGEMENT ISSUES		
S/N	ACTIVITY	PROGRESS - PROBLEMS
		<p>noise exceeds the applicable sound limits, then the issue should be addressed using the Environmental Management Plan and taking the appropriate corrective measures, among which is the installation of temporary noise barriers. In any case, no sonorous works will be performed when worksites are adjacent to residential areas in order to avoid breaching of the peace.</p> <p>The Environmental Management Plan and the Environmental Monitoring & Control Program control the compliance with the applicable legislation for noise. In any case, the legislation applicable on noise is referred to in term c.</p> <p>The monitoring of the parameters, mentioned in the E.T. through vibration monitoring program, in the areas of entry-exit tunnel of Ampelia and in the areas with construction of trenches, is conducted, Amfilohia, Menidi, Gymnotopos etc. 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.</p>
C.4	Solid and hazardous waste	<p>With respect to waste management 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 compliance with the environmental terms, has been drawn up. 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.</p> <p>With respect to worksites of the project, an agreement with the Municipality of Amfilohia, Ksirovounio, Filippiada and Ioannina, has been made on the disposal of urban waste, which is collected in special bins of the Municipalities using garbage trucks.</p> <p>There are agreements on the disposal of mineral oils and dangerous solid wastes with ELTEPE S.A.</p>
C.5	Fire prevention	<p>An Environmental Monitoring & Control Program in terms of the overall Plan for Environmental Management, which includes control procedures in compliance with the environmental terms, has been drawn up.</p> <p>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 respected. Particular attention is given to areas adjacent to forest or grassland during the summer. Detailed instructions and leaflets have been distributed on the sites to deal with incidents of fire from the</p>

C. WORK-SITE MANAGEMENT ISSUES		
S/N	ACTIVITY	PROGRESS - PROBLEMS
		workers.
C.6	Safety / pollution caused by accident	<p>The relevant worksite signage will be installed at the worksites before the commencement of the works, as described in the H&S Plan and the relevant worksite signage or traffic studies required. Especially, for the said period, the Design for temporary traffic arrangements for the construction of TR08 underpass, CH. 148+213.46 (Approval ICo0255, 17.05.10) has been submitted and approved by the Independent Engineer and the appropriate signs have been placed where 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 with ref. no. IC-L-CO-S215N-PRO5876/EM/em on 17/11/2008 for the section in Amvrakia.</p> <p>A risk analysis study is currently under development for Ampelia tunnel (protocol no. 12796/21-07-2009), in which the opening of two escape cross passages is foreseen.</p>
C.7	Public Utility Organizations – traffic settlement	The networks have been designed and the relevant documents with all involved Public Utility Organizations have been submitted (in accordance with par7 of the Special Conditions of Contract) in order to proceed to the necessary actions. The data have been given to the Designers/Consultants in order to be taken into account when drawing up their designs.



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C. WORK-SITE MANAGEMENT ISSUES		
S/N	ACTIVITY	PROGRESS - PROBLEMS
		<p>In particular the following have been sent to:</p> <ul style="list-style-type: none"> a) Electricity Supply Company and Arta OTE (Hellenic telecommunications organization s.a.) for the relocation of networks from CH. 148+100 to CH. 148+350 (J/V letter with protocol no. 26888, 20.07.10) b) Electricity Supply Company for the Passing of High Voltage Network under Ionia Odos motorway construction (J/V letter with protocol no. 29114, 15.09.10) c) Municipality of Kompoti for the Passing of Road Lighting Network under Ionia Odos motorway construction (J/V letter with protocol no. 21142, 07.09.10) d) Electricity Supply Company for the Passing of High Voltage Network under Ionia Odos motorway construction (J/V letter with protocol no. 28851, 09.09.10) e) Electricity Supply Company for the Passing of High Voltage Network under Ionia Odos motorway construction (J/V letter with protocol no. 29610, 28.09.10) f) Electricity Supply Company for the Passing of High Voltage Network under Ionia Odos motorway construction (J/V letter with protocol no. 25793, 21.06.10) g) The necessary actions and understandings with the competent service of Electricity Supply Company (31088/10-11-10) for the relocation of the passing of high voltage network of the Electricity Supply Company in section from CH. 175+000 to CH. 185+000. <p>The term for the possibility of displacement of the alignment under study is taken into account in the designs and is documented in the relevant Environmental Protection Report which accompanies the current road design when submitted for approval to the</p>



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C. WORK-SITE MANAGEMENT ISSUES		
S/N	ACTIVITY	PROGRESS - PROBLEMS
		<p>Independent Engineer. This means that the implementation of the term is ensured by the Independent Engineer through the designs approval process.</p> <p>Within the time period of this report, there was the need to construct structures in passing roads in Menidi Area and Stanos of Amfilohia, where, via bypasses, the access to villages, rural areas etc. special care is given so that the access to neighbouring properties is not blocked.</p>



ARTA BYPASS

(JMD 120756/96/03.06.1997, JMD 132550/31.07.2003 & JMD
137938/31.12.2003)



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A. PERMITS AND APPROVALS		
S/N	SUBJECT	PROGRESS - PROBLEMS
A.1	Installation permits for any activity or installation necessary for the construction of works.	<p>During the preparation of this report, no need for such installations has arisen and the materials are covered by licensed installations of subcontractors in the area.</p> <p>Furthermore, an Environmental Monitoring & Control Program 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.</p> <p>Service is performed by the offices in Kambi, Arta. There are two worksites at Kambi and Gorgomylos with ref. no. EYΠE 107730/05.09.08. Furthermore, an Environmental Monitoring & Control Program 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.</p> <p>With respect to the works that were executed during this specific period (construction of safety barrier in the central island, completion of island with plants and improvement works of the existing road in general), no communication or intervention permit were requested by the competent Forest Department.</p> <p>For any work or installation requiring intervention permit, this will be provided by the competent Forest Department.</p> <p>As far as the revocation of reforestation, pursuant to Law 3555/2007 (Ratification of Concession Agreement)/Article 4/ Par. 4a and Law 2445/1996/ Article 2/ Par. 1c, "<i>The occupancy, 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>
A.2	Archaeological Services	No works or activities were performed during the preparation of this report and therefore it was not necessary to inform or receive a permit by the competent Archaeological Department. If required, the term will be followed.
A.3	Borrow pits – Quarries	No works or activities were performed during the preparation of this report that would need such installations.



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A. PERMITS AND APPROVALS		
S/N	SUBJECT	PROGRESS - PROBLEMS
		The works and the materials are covered from the already licensed installations of subcontractors of the area according to the E.T. d2.b.



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B. CONSTRUCTION-RELATED ISSUES		
S/N	SUBJECT	PROGRESS – PROBLEMS
B.1	Toll Station Building works – MSS - E&M Centres	With respect to the environmental permit of any new toll stations for Motorists Service Stations/E&M Centres, the relevant permit procedures shall be followed.
B.2	Disposal / Excavations / Explosives	Due to the nature of works (improvement of the existing road), no new additional areas were required. No disposals were required during this specific period of time. In case there are disposals in the future, they will be conducted within the gauge zone and will be temporarily covered until reused.
B.3	Rehabilitation/ Worksites	<p>In this specific site there is no worksite. Service is conducted from the offices in Kampi, Arta while there are two licensed worksite areas in Kampi and Gorgomylos with Protocol No. ΕΥΠΕ 107730/05.09.08. After using these areas, the term will be followed rehabilitating the areas upon the completion of works.</p> <p>The relevant final planting designs have been assigned, elaborated and will be submitted to the I.E. for approval.</p> <p>An Environmental Monitoring & Control Program in terms of the overall Plan for Environmental Management, which includes control procedures for the implementation of planting works, has been drawn up.</p>
B.4	Various construction terms	-
B.5	Superficial runoffs	Additional issues of E.T. that relate to the design are controlled by the I.E. during the submission of the Design and documented by the Environmental Protection Report, which accompanies every Design submission.



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C. WORK-SITE MANAGEMENT ISSUES		
S/N	SUBJECT	PROGRESS - PROBLEMS
C.1	Water protection - Liquid waste	<p>With respect to the disposal of urban wastes, an agreement has been made with Xyrovounio and Fiippiada Municipalities (see relevant document) to collect the wastes, which will be put in special Municipality bins using a refuse collection vehicle are led to HYTA of Vlaherna.</p> <p>As far as the disposal of oils there is an agreement with the Licensed Management Companies.</p> <p>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. 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.</p>
C.2	Air and noise protection	<p>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.</p> <p>No operations or activities were realized during the period covered by this report in the said section.</p>
C.3	Noise - Movable noise barriers	<p>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 to resolve noise problems in accordance with the environmental terms, has been drawn up. 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.</p> <p>If required, noise measurements will be conducted in specific points using the appropriate equipment in order to monitor the compliance with the noise levels.</p>

C. WORK-SITE MANAGEMENT ISSUES		
S/N	SUBJECT	PROGRESS - PROBLEMS
C.4	Solid and hazardous waste	<p>With respect to the disposal of urban wastes of the project, an agreement (see relevant document) with the Municipality of Ksirovounio and Filippiada has been made to collect the wastes in special bins of the Municipalities using a refuse collection vehicle and to be led to HYTA of Vlaherna. There is an agreement for the disposal of mineral oils with the Licensed Management Companies.</p> <p>With respect to waste management 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 compliance with the environmental terms, has been drawn up. 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.</p>
C.5	Fire prevention	<p>Service is conducted from the offices of the J/V in Kampi, Arta where there are fire-extinguishers. In addition, it is ensured that fire-extinguishers are present in all the machines of the project and the cars executing improvement works in Arta Bypass. Detailed instructions and leaflets have been distributed on the sites in order for the workers to front fire incidents.</p>
C.6	Safety / pollution caused by accident	<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 the 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>



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C. WORK-SITE MANAGEMENT ISSUES		
S/N	SUBJECT	PROGRESS - PROBLEMS
C.7	Public Utility Organizations – traffic settlement	It concerns an existing section of the motorway and the E.T. concern the previous contract. In any case, issues related to the design are checked by the I.E. during the submission of the Design and documented by the Report of Environmental Protection, which accompanies each Design submission.