

ENVIRONMENTAL MANAGEMENT PLAN

**for
Civil Works for the Prahova Palace of Justice**

ROMANIA: JUDICIAL REFORM PROJECT

(applicable also under Romania – Justice Services Improvement Project)

September 26, 2016

ENVIRONMENTAL MANAGEMENT PLAN

This EMP seeks to manage and keep to a minimum the negative impacts of a development and at the same time, enhance the positive and beneficial impacts.

A copy of the EMP must be kept on site during the construction period at all times. This EMP will be made binding on all contractors operating on the site and is included within the Contractual Clauses.

MITIGATION

Project activity	Potential impact	Impact scale	Proposed mitigation measures	Responsibility
Construction of Prahova Palace of Justice in Ploiesti municipality				
<p>Preparation activities before construction works start</p> <p>Construction of Prahova Palace of Justice in Ploiesti city, 42 Gheorghe Doja street</p>	<p>Possible adverse social and health impacts to the population, drivers and workers due to:</p> <ul style="list-style-type: none"> – Lack of ensured safety measures at the start of construction works – Injury passing near by the construction site – Not compliance with strict OH&S standards and work procedure 	<p>Local/ within public institutions and services area in the city of Ploiesti</p> <p>Short term during the construction period</p> <p>Significance - major</p>	<ul style="list-style-type: none"> ➤ Establish the access roads, prior to start up activities; ➤ The construction site will be temporarily fenced, as jointly established by the customer and the systemization office, in order to prevent the access of unauthorized persons, especially when the site is closed, and for protection against thefts, etc. ; ➤ Connection to the utilities: <ul style="list-style-type: none"> • For site management purposes, the contractor will take all the necessary measures, together with the power supply and phone network companies, in order to temporarily connect the construction site. • The construction site must have artificial lighting when the works are carried out before sunrise or after sunset or in spaces where there is not enough natural light. ➤ Security: The contractor must ensure the protection of the site during off-work hours (at night, during weekends ...). ➤ Application of good construction practice for marking out the construction site including: <ul style="list-style-type: none"> • Warning tapes and signage need to be provided; • Installation of Notice board with general information about the project, Contractor and Supervisor at street; • Forbidden entrance of unemployed persons within the warning tapes; • Community and Worker’s OH&S measures should be applied (first aid, protective clothes for the workers, appropriate machines and tools); • The street and around sidewalks/ small roads should be kept clean; 	<ul style="list-style-type: none"> • Contractor – Bidder • Supervisor • Municipal staff (Communal Inspector and Environmental Inspector)

Project activity	Potential impact	Impact scale	Proposed mitigation measures	Responsibility
			<ul style="list-style-type: none"> The mobile toilet should be placed on the construction site; Machines should be handled only by experienced and trained personnel, thus reducing the risk of accidents; Larger quantities of flammable liquids should not be kept on the site along the construction street. 	
	<p>Possible emissions by transportation vehicles and impact on air quality in the City of Ploiesti due to:</p> <ul style="list-style-type: none"> Gases emissions of dust-suspended particulates and traffic congestion within the public institutions and services area 	Local/ within the public institutions and services area short term/ major	<ul style="list-style-type: none"> Construction site, transportation routes and materials handling site should be water-sprayed on dry and windy days; Construction materials should be stored in appropriate places covered to minimize dust; Vehicle loads likely to emit dust need to be covered; Usage of protective masks for the workers if the dust appears; Restriction of the vehicle speed within the construction location; Perform regular maintenance of the vehicles and construction machinery in order to reduce the leakages of motor oils, emissions and dispersion of pollution; Burning of debris from ground clearance not permitted. 	<ul style="list-style-type: none"> Contractor – Bidder Supervisor
	<p>Possible noise disturbance as a result of outdoor equipment usage and transportation vehicles driving around the site</p>	Local/within the public institutions and services area short term /minor	<ul style="list-style-type: none"> Whole noise protection area is located in public institutions and services zone and belong to the area with the maximum allowed noise level should be 40dBA for night and 50dBA for evening and day; The construction work should be not permitted during the nights; the operations on site shall be restricted to the hours 7.00 -19.00. 	<ul style="list-style-type: none"> Contractor – Bidder Supervisor
	<p>Possible adverse environmental impact and health effects could occur as a result of generation of the</p>	Local within the public institutions and services area short term/ major	<ul style="list-style-type: none"> Preparation, approval and implementation of the Waste Management Plan, according to the Annex of the R.A.S.P. Ploiesti approval no. 339/11.09.2014; Identification of the different waste types at the construction site (soil, sand, bottles, food, etc.) and proper classification according the national List of Waste (Official Gazette no.100/05); 	<ul style="list-style-type: none"> Contractor – Bidder Supervisor

Project activity	Potential impact	Impact scale	Proposed mitigation measures	Responsibility
	<p>different waste streams</p> <p>The inappropriate waste management and not in time collection and transportation of waste streams</p>		<ul style="list-style-type: none"> • The main waste would be classified under the Waste Chapter 17 “Construction and demolition wastes (including excavated soil from contaminated sites)” with the waste code 17 05 04 – Excavated soil, 17 09 04 – Mixed waste from construction site; • Small amount of solid municipal waste could be found (food, beverages), as well as packaging waste (paper, bottles, glass, etc.). • Collection of the generated waste on daily basis, selection of waste, transportation and final disposal on appropriate places (according the type of waste). 	
<ul style="list-style-type: none"> • No environmental impacts are expected during the Operational phase, only regular maintenance of the access street and construction site is needed to be performed. 			<ul style="list-style-type: none"> • Collection, transportation and final disposal of the inert and communal waste according to the R.A.S.P. Ploiesti approval no. 339/11.09.2014 • Possible hazardous waste (motor oils, vehicle fuels) should be collected separately and authorized collector and transporter should be sub-contracted to transport and finally dispose the hazardous waste; • The materials should be covered during the transportation to avoid waste dispersion; • Burning of construction waste should be prohibited. 	<ul style="list-style-type: none"> • Contractor – Bidder • Supervisor

ENVIRONMENTAL MONITORING PLAN

<i>What parameter to be monitored?</i>	<i>Where is the parameter to be monitored?</i>	<i>How is the parameter monitored?</i>	<i>When is the parameter monitored (frequency of measurement)?</i>	<i>Why is the parameter monitored?</i>	Responsibility	
					<i>Construction of building</i>	<i>Operations of building</i>
Project stage: Preparation activities/ Startup of the construction works (site cleanup, and marking out the route and construction site)						
The safety protection measures applied for the workers and surrounding employees work in the companies located in the public institutions and services area	On the construction site	Visual checks	During the clean-up activities At the beginning of each working day during the project activities	To prevent health and safety risks – mechanical injuries To be in compliance with national communal health regulation and OH&S standards	Contractor - Bidder Supervisor Communal Inspector at the Municipality of Ploiesti	
Safety traffic flow through the construction site in public institutions and services area in city of Ploiesti	On the site	Visual monitoring	During the working day	To ensure the coordinated traffic flow through the city of Ploiesti	Contractor - Bidder Supervisor Communal Inspector in the Ploiesti municipality	
Prepared and approved Waste Management Plan and its implementation	On the site	Review the documentation and approval by the Supervisor is needed	At the beginning of work with new material/s	To ensure minimization of risks for improper waste handling, temporary/final disposal, collection and transportation	Contractor – Bidder Supervisor	
Project stage: Construction of Prahova Palace of Justice, in Ploiesti city, public institutions and services area						

What <i>parameter to be monitored?</i>	Where <i>is the parameter to be monitored?</i>	How <i>is the parameter monitored?</i>	When <i>is the parameter monitored (frequency of measurement)?</i>	Why <i>is the parameter monitored?</i>	Responsibility	
					<i>Construction of building</i>	<i>Operations of building</i>
Collection and transport as well storage of hazardous waste (if any occurs)	On safety temporary storage	Review the transportation list and conditions at the storage facility	Before the transportation of the hazardous waste (if there is any)	To improve the waste management practice on municipality and national level/ Not to dispose the hazardous waste on the waste disposal spots	Authorized Contractor for collection and transportation of hazardous waste (if any occurs)	
Fulfilled Annual Waste Report	Local self-government administration	Review of documentation – Identification of waste list	After the accomplishment the task of collection, transportation, temporary disposal and final disposal of waste	To improve the waste management on local and national level	Mayor of Municipality of Ploiesti	