

V. LEGAL AND ENVIRONMENTAL REGULATORY CONSIDERATIONS APPLICABLE TO AN ACTIVITY, WORK OR PROJECT

The population growth and the economic development of our country together with the interest of our Government in reactivating the economy require the promotion of road improvement with a special focus on the development of the Eastern region. Such improvement must go hand in hand with a healthy and ecologically balanced environment, and for this reason, projects such as the BYPASS in San Miguel must be implemented within the legal framework of the Salvadoran legislation which applies to the opening of new access roads.

The present chapter makes a comprehensive legal analysis of the implications, both positive and negative, that the laws and regulations currently in effect in El Salvador have on the implementation of this Project.

Our legislation has special laws for the protection of natural resources that embody the constitutional principle established in the Constitution of the Republic, which lays down the foundation for the development of legal provisions and acts of the governmental entities that were created and organized for that purpose.

The legislation presented below is focused on the Project scenario, the degree of intervention, its relationship with the society and the impact that it may have on areas of natural, social, economic and cultural importance.

V.I NATIONAL LAWS AND REGULATIONS

We present below a brief summary of the laws to be considered and applied to the opening of new access roads. The construction of the bypass in San Miguel will have environmental, ecological, social and wildlife repercussions throughout a length of 25.022 km. Therefore, special laws such as the following will have to be taken into account: the Environment Law, the Wildlife Conservation Law, the Forestry Law, the Territorial Organization and Distribution Law, the Land Transportation, Traffic and Road Safety Law, and the Law on Secondary and Minor Roads.

V. 1.1 *Constitution of the Republic of El Salvador of 1983.*

Decree No. 38 of December 15, 1983, published in the Official Gazette No. 234, Volume No. 281 of December 16, 1983.

Article 117 of the Constitution of the Republic sets forth that the right to a healthy and ecologically balanced environment is a human right of each citizen of El Salvador in particular, and of the Salvadoran population as a whole.

The population growth and the economic development must not result in excessive environmental contamination or the extinction or destruction of animals and vegetation.

This provision recommends to the Salvadoran State, through concrete laws and actions, the promotion and support of initiatives seeking to protect and develop the natural resources, and control and punishment of individuals and companies who contaminate the environment.

Since the Bypass in San Miguel is a project that will be implemented in a length of 25.022 km, it is necessary to take into account Article 106 of the Constitution of the Republic that establishes the legal way to carry out compulsory expropriation, which is the way to take possession of property from an individual, in this case real property located within the project area, for reasons of public use or in the social interest. Given that the purpose of this project is to provide comfort to the community and is convenient to a large group of the Salvadoran society, therefore, compulsory expropriation applies in this case for reason of public use and/or in the social interest, legally proven and with prior and fair compensation.

V. 1.2 *Environment Law*

Decree No. 233 of March 2, 1998, published in the Official Gazette No. 79, Volume 339 of May 4, 1998.

In conformity with the provisions of the Constitution of the Republic, the protection, conservation and improvement of the natural resources and the environment must be subject to special legislation, and for this reason, the Environment Law was created to provide the country with modern environmental legislation consistent with the sustainability principles for economic and social development in harmony with the economic and social development needs, sustainable use of the natural resources and environmental protection.

Article 15 of the Environment Law sets forth that development plans must ensure that the location of project infrastructure must promote the better use of the natural resources.

- Article 21 of the Environment Law regulates that natural and juridical persons must submit the corresponding Environmental Impact Assessment for the implementation of road projects.
- Article 22 of the Environment Law sets forth that prior to starting a process to obtain an environmental permit for the implementation of any project, the project owner must complete and submit the environmental form provided by the relevant Ministry.
- Article 23 of the Environment Law provides the specifications for preparing the Environmental Impact Assessment to be carried out by the owner through a multidisciplinary technical team authorized by the Ministry.
- Article 24 of the Environment Law sets the rules for Environmental Impact Assessment preparation, evaluation and approval.
- Article 25 of the Environment Law sets the rules for public consultation of Environmental Impact Assessments.
- Article 28 of the Environment Law grants the Ministry authority to control and follow up Environmental Assessments with the support of the environmental units.
- Article 29 of the Environment Law sets forth that for ensuring compliance with Environmental Permits with regard to the implementation of Environmental Management and Adjustment Programs, the project owner must submit a Performance Bond in the amount

equivalent to the total Project costs.

Chapter III of Title V of the Environment Law regulates contamination prevention and control criteria such as atmosphere, water resources and soil resources protection.

- Article 67 of the Environment Law regulates the participation of government institutions responsible for ensuring biological diversity, prioritizing conservation in their place of origin of singular species which represent the various ecosystems, legally declared threatened species and endangered species as well as gene banks of native species.
- Article 75 of the Environment Law regulates soil and land ecosystem management-related matters, avoiding practices that may cause erosion, soil degradation by contamination or modification of its topographic and geomorphologic characteristics. In case of construction of civil works and use of non-renewable natural resources, which may directly or indirectly cause significant damage to the soil, the required regeneration and restoration actions must be carried out.

V.1.3 Special Regulations on Technical Standards for Environmental Quality

Decree No. 40 of May 31, 2000 published in the Official Gazette No. 101, Volume No. 347 of June 1, 2000.

The purpose of the Special Regulation on Technical Standards for Environmental Quality is to determine guidelines or directives for setting technical standards for environmental quality in receiving environments and the implementation mechanisms regarding atmosphere, water, soil and biodiversity protection, and thereby comply with the provisions established by the Environment Law in this regard.

Article 9 of this Regulation sets the maximum allowable limits to be applied to air contaminants to ensure human health and the environment.

Section II of Chapter III, Article 14 and 15, establish the control of motor vehicle emissions. The Ministry of the Environment, the Ministry of Public Health and Social Assistance and the Vice Ministry of Transport will coordinate and control compliance with the technical standards for air quality through motor vehicle emission measurements.

Article 17 sets the noise emission limits of fixed or mobile sources according to intensity and frequency.

Article 19 sets the maximum allowable limits and parameters to discharge water into a receiving environment.

Article 25 sets forth that comprehensive waste management and disposal will be carried out as provided by Article 50 of the Environment Law which sets the criteria applicable to soil contamination prevention and control.

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Construction of a Bypass in the city of San Miguel

V.1.4 Wildlife Conservation Law

Legislative Decree N° 844 of April 14, 1994 published in the Official Gazette N° 96, Volume 323 of May 25, 1994.

Wildlife is essential to conserve a healthy and balanced environment which sustains a great diversity of renewable natural resources, and due to the lack of knowledge and misuse by the population, different wildlife species are threatened, which adversely affects the livelihood of the communities that live in them. For the reasons stated above, the State enacted a legislation that facilitates wildlife protection, conservation and improvement.

Article 21 of the Wildlife Conservation Law, which is under the responsibility of the Ministry of Environment and Natural Resources, imposes the respective sanctions without detriment to the corresponding legal action against crimes or any offense against the present Law, its Regulations or guidelines.

V.1.5 Protected Natural Areas Law

Legislative Decree No. 579 of January 13, 2005, published in the Official Gazette No. 32, Volume No. 366 of February 15, 2005.

The knowledge, protection and sustainable use of the biodiversity that exists in the natural areas is critical to achieve the social and economic development of the country. For this reason, it is necessary to create a special regime for the conservation and improvement of those areas in view of the decreased forest cover that the country currently has which is in constant deterioration and is the habitat for several locally endangered wildlife species. These species are mostly represented in natural areas that contribute to soil conservation, aquifer recharging, biodiversity protection and other environmental benefits to the society.

Article 5 sets forth that the Ministry of Environment and Natural Resources is the competent authority to deal with and resolve any situation in connection with the Protected Natural Areas and the resources that they contain. Such Law and its Regulation will prevail over any other law that may contradict it.

Article 7 regulates that all public administration institutions and municipalities are obliged to cooperate with the Ministry of Environment and Natural Resources in its efforts to achieve a better and more efficient management of the Protected Natural Areas of the country.

Article 9 sets forth that the Protected Natural Areas System consists of State-owned areas, municipal areas and areas belonging to autonomous entities.

Article 10 provides that the Protected Natural Areas will be established by Decree of the Executive Branch for Environment and Natural Resources.

Article 16 regulates that the objectives for managing the categories included in the Protected Natural Areas are to protect the original ecosystems of El Salvador; protect the natural spaces and

landscapes of local significance; maintain the environmental goods and services; preserve the species and genetic diversity, among others.

Article 33 sets forth that the Ministry may authorize natural or juridical persons to carry out activities, Works or projects compatible with the objectives of the Protected Natural Areas without detriment to prior compliance with the requirements established by the Environment Law.

V.1.6 Forestry Law

Decree No. 852 of May 22, 2002 published in the Official Gazette No. 110, Volume No. 355 of June 17, 2002.

The purpose of this Law is to promote the participation of the private sector to increase the tree cover for productive purposes as well as to establish clear rules for the free use of forests and woods through induced regeneration, with aims to contribute to fulfill the economic, environmental and social needs of the present and future generations.

Article 9.- Forestry management plans must be prepared by professionals in forest science or related fields based on the standards issued by the MAG to that effect through Executive Agreement.

Article 12.- The use of soils class VI, VII and VIII covered with trees is forbidden. They may be used in a sustained manner.

The Forestry Law defines and classifies soils as follows:

- SOIL CLASS VI: Soils suitable for permanent vegetation, grazing, forests, fruit trees and other, with moderate restrictions for cultivation. The main limitation is the degree of the slope, shallow soil depth or the presence of too many rocks, including flat and sandy soils with little surface soil and organic material prone to losing it by erosion;
- SOIL CLASS VII: They are only suitable for permanent vegetation, including meadows. Soils in salt water forests belong to this class. The majority of these soils are found on mountainous land with shallow effective depth, abundant rocks or stones;
- SOIL CLASS VIII. They are found in rugged land, excessively rocky, Sandy, where there is no soil. They are not suitable for farming activities and may be suitable for wildlife, protection, recreation or ecotourism activities.

Article 15 regulates tree planting, pruning and felling in urban zones, which will be under the exclusive responsibility of the relevant municipality.

Article 23 declares the Restricted Use Areas, real property areas where their owners will have the obligation to manage the existing vegetation in a sustainable manner.

Article 34 sets forth that the Ministry of Agriculture and Livestock is responsible for dealing with infringements of the Forestry Law and imposing the respective penalty.

V.1.7 Land Transportation, Traffic and Road Security Law

Legislative Decree No. 477 of October 19, 1995 published in the Official Gazette No. 212, Volume No. 329 of November 16, 1995.

The purpose of the Land Transportation, Traffic and Road Security Law is to establish the legal framework in connection with such matters, only and exclusively relating to land-related matters, since there were no regulations in place until 1995.

Chapter VIII of Title II in Articles 39 to 42 regulates the road system and its use, classifies the roads in both the urban and the rural area. It also sets forth that the Vice Ministry of Transport has the power to authorize the implementation of works or installations on public roads.

Title IV, Chapter II in Articles 90 to 94 establish that the Vice Ministry of Transport is responsible for planning and designing the road signage which must be compatible with the Latin American Manual for Traffic Control Devices.

V.1.8 Urban Planning and Construction Law

Decree No. 232 of June 4, 1951 published in the Official Gazette No. 107, Volume No. 151 of June 11, 1951.

In El Salvador, the great majority of residential developments in the capital city and other cities of the country have been built in a disorganized way; as a general rule, they were built in the interest of the developers and not of the intended dwellers of these new developed areas. As a consequence, the needs that every residential development has were not fulfilled, which led to serious problems and difficulties not only for the Government who has been forced to repair and correct these errors and omissions but also for the dwellers of these areas. For that reason, it was necessary to enact a law that regulates urban growth and sets the basic and fundamental rules that will be observed in the future by every new residential development.

Article 1 of this Law sets forth that the Vice Ministry of Housing and Urban Development is responsible for formulating and leading the National Policy for Housing and Urban Development as well as preparing the National and Regional Plans and general provisions that will be observed by residential developments, plot developments and constructions throughout the territory of the Republic.

It will also be responsible for the preparation, approval and implementation of local Urban and Rural Plans of the relevant municipality, which must be in line with the Regional Development plans or the National Housing and Development plans. In the absence of Local Development plans, the general provisions and plans to which the first paragraph of this article refers, will apply.

In the event that the Municipalities do not have their own local development plans and their respective Municipal Ordinances, every person, official or autonomous entity, prior to any approval required by any other office, must obtain first the corresponding approval of the Vice Ministry of Housing and Urban Development to implement any type of project to which this Article refers.

In order that the Vice Ministry of Housing and Urban Development grants the approval to which the preceding Article refers, applicants must comply with the requirements of Article 2 of said Law.

Article 8 sets forth that all building construction projects to be carried out by individuals, official, municipal or autonomous entities must be prepared by an architect or civil engineer duly authorized to practice his/her profession in the Republic, and to this effect, all drawings submitted to the Vice Ministry of Housing and Urban Development or to the relevant Municipal Authorities must be signed by said authorized professional, as the case may be. The implementation of the relevant construction works must be carried out or supervised by an architect or civil engineer duly authorized and registered with the relevant Registry.

V.1.9 Regulation for the Urban Planning and Construction Law

Decree No. 69 of September 14, 1973 published in the Official Gazette No. 179, Volume No.240 of September 26, 1973.

Urban development in El Salvador is growing at an accelerated pace posing a threat to agriculture, water and all kinds of resources, and this is mainly due to the absence of a regulation that properly controls these developments.

One of the problems of concern to our major cities is the fact that more than sixty percent of the urban population of the country is, for multiple reasons, concentrated in them. And given that urban growth is the main force of the economic and social development of the country, it is necessary to enact legal provisions with aims to the accomplishment of reasonable urban development.

V.1.10 Law on Expropriation and Occupation of Private Property by the State

Legislative Decree No. 33 of July 25, 1939, Official Gazette No. 174, Volume No. 127 of August 17, 1939.

Article 50 of the Constitution of the Republic recognizes private property as an inalienable right and establishes the cases in which a person may be deprived of his/her assets for reasons of public service, legally justified and with prior fair compensation. As a consequence, it was necessary to enact a special law to set the procedure to be followed in cases of expropriation and occupation of property by the State.

Article 2 of the Law on Expropriation and Occupation of Private Property by the State lists the works considered of Public Service and their purpose must be the provision of any public service at the expense of the State, the Municipality or official entities duly authorized for that purpose or by private companies or concessionaires obliged to provide them by virtue of a contract with the State or a Municipality.

Article 3 sets forth that in the event of the implementation of a work of public service or occupancy of private property, prior to the expropriation the interested party must try to reach an agreement, within a reasonable period of time that will not affect the intended purpose, with the

owner with regard to the Price to be paid as the value of the expropriated or assigned property.

Article 4 regulates that in case an agreement on the price or any other negotiation point is not reached, a compulsory expropriation will apply; and this Article establishes the requirements.

Article 8 sets forth that the request for expropriation will be addressed to the Executive Branch by the Ministry of Governance.

Article 10 provides that the competent authority to deal with ordinary expropriation proceedings is the Judge of First Instance appointed to the domicile of the owner of the property to be expropriated. The judge of first instance will deal with said proceedings provided that the Ministry of Governance considers that the works are of public service and will promote the summary civil lawsuit.

V.I.II Law on Secondary and Minor Roads

Legislative Decree No. 463 of September 9, 1969 published in the Official Gazette N° 196, Volume N° 225 of October 22, 1969. (Latest Publication)

The purpose of the Law on Secondary and Minor Roads is to regulate the planning, construction and maintenance of secondary and minor roads as well as their use and the use of surfaces in direct proximity to the public roads. Land transport and communication routes in the Republic of El Salvador are classified in main roads, secondary and minor or municipal roads and streets.

Article 3 of the referred Law classifies the subdivision of roads according to their importance and geometric characteristics.

Article 6 sets forth that all terrains occupied by public roads must belong to the State.

Article 10 sets forth that the Ministry of Public Works will be responsible for the planning, design, construction, improvement, conservation and proper signage of the roads.

Article 27 sets the prohibitions to carry out or not any act that may give origin or constitute an obstacle to free transit.

V.1.12 Special Law on Cultural Heritage Protection and its Regulation

Decree No. 513 of April 22, 1993 published in the Official Gazette No. 98, Volume No. 319 of May 26, 1993.

In accordance with the Constitution of the Republic, the State has the obligation to ensure the citizens' enjoyment of the culture, preserve the Spanish language and native languages spoken within the national territory as well as safeguard the artistic, anthropologic and historical and archeological heritage of the country as part of the Salvadoran cultural wealth. The Cultural Heritage of El Salvador or the Salvadoran Cultural Wealth needs to be rescued, investigated, studied, recognized, identified, conserved, fostered, promoted, developed, disseminated and

valued, which is why the present law was enacted. This law regulates their ownership, possession, tenure and circulation to make possible the exercise of the right to cultural enjoyment of the cultural heritage through communication of their message to the population as provided by the Constitution of the Republic.

Article 1 sets forth that the purpose of the referred Law is to regulate the rescue, investigation, conservation, protection, promotion, fostering, development, dissemination and valuation of the Salvadoran Cultural Heritage or Wealth through the Ministry de Education or the Secretariat of State in charge of the Administration of the Cultural Heritage of the country.

Article 9 defines which are the Public Property assets and the Private Property assets.

Article 13 provides that in order to carry out investigations and excavations of archeological or historical interest, in public or private land, it is necessary to obtain the corresponding authorization through an agreement issued by the relevant entity in conformity with the pertinent regulation.

Article 27 regulates that cultural heritage investigations, studies and interventions may be carried out directly by the Ministry or through national or foreign entities duly authorized for that purpose.

Article 30 sets forth that when a cultural asset is at imminent risk of damage or destruction, the Ministry will adopt the protection measures that it may deem convenient.

The protection measures agreed by the Ministry will be notified in writing to the owner or possessor of the cultural asset and to the relevant authorities in the way set forth in Article 46 of the referred Law. At its own discretion, the Ministry will publish those measures in one or several national newspapers and in any other social media.

V.1.13 Health Code

Decree No. 955 of April 28, 1988 published in the Official Gazette No. 86, Volume 299 of May 11, 1988.

Article 65 of the Constitution of the Republic sets forth that the health of the population is a public good and the State and the people are obliged to ensure its conservation and recovery. It also sets forth that the State will determine the national health policy and will control and oversee its enforcement.

Article 43 of the Health Code sets forth that for the effects of the referred Code and its Regulations, health promotion actions will be those which aim to promote the normal physical, social and mental development of the people.

Article 56 of the Health Code grants to the Ministry of Health and regional, departmental and local health organizations, the authority to develop environmental sanitation programs.

Article 57 of the Health Code grants authority to the Ministry of Health, through its intervention and control organizations, for addressing all matters related to health engineering works and sanitation activities.

Article 59 of the Health Code sets forth that in the event that hygienic or sanitation deficiencies are verified, the Ministry of Health will be responsible for giving instructions to correct or repair such deficiencies.

Article 96 of the Health Code sets forth that for the creation of new residential areas or the expansion of the existing ones, and starting a new land development and opening new roads, it is mandatory to obtain a written authorization from the Ministry of Health with prior favorable resolution issued by the attached soil protection offices. A delegate in representation of the Ministry will coordinate actions with the Ministry of Public Works.

V.1.14 Mining Law

Decree. N° 544 of December 14, 1995, published in the Official Gazette N° 16, Volume 330 of January 24, 1996.

In accordance with Article 103, Paragraph 3 of the Constitution of the Republic, the subsoil belongs to the State, who may grant concessions for its exploitation. It is of foremost importance that our country has a set of rules in harmony with the principles of a social market economy which is convenient to the mining sector investors for the purposes of creating new employment opportunities for Salvadorans and promoting the social and economic development of the regions where the minerals are located, thus allowing the State to perceive the income that it requires for the accomplishment of its objectives.

Article 17 of the Mining Law regulates that the exploration and exploitation of mines and quarries as well as processing of minerals must be carried out in accordance with the requirements of mining engineering and techniques as well as the international requirements in order to prevent, control, minimize and compensate the negative effects on the population inside and outside the exploration and exploitation areas or the environment as a consequence of the referred mining activities; in which case, the immediate and necessary measures must be taken to avoid or reduce the referred effects and compensate them with rehabilitation or restoration actions.

V.1.15 Criminal Code

Decree No. 1030 of April 26, 1997 published in the Official Gazette No. 105, Volume No. 335 of June 10, 1997.

The democratic constitutional States have found it necessary to adjust their criminal rules to the new doctrinal orientation that considers Criminal Law as the last resort to resolve social conflicts and the most effective instrument to achieve public peace and security among the people, which is fully shared by El Salvador. And with the purpose of directing our criminal rules within a highly effective conception that ensures social violence control with a broad scope of non-selective

punitive function, it is necessary to have a Criminal Code which, without departing from our cultural patterns, becomes a modern, dynamic and efficient instrument to fight delinquency.

Article 253 of the Criminal Code sets forth that anyone who carries out a construction that has not been legally or administratively authorized, on land not suitable for development or on land of artistic, historical or cultural value, will be punished with 6 months to one year in prison and a fine equivalent to one to two hundred days.

If the construction is carried out under the supervision or responsibility of a construction professional, a special suspension to practice the profession will be additionally imposed upon such professional for the same period.

Article 255 of the Criminal Code regulates that anyone who provokes or causes, directly or indirectly, emissions, radiations, spills of any nature on the soil, atmosphere, surface, underground or sea waters, in violation of the applicable laws and regulations, and puts at high risk the health or quality of life of the people or the balance of the ecologic systems or the environment, will be punished with four to eight years in prison.

Article 256 of the Criminal Code regulates that in the cases mentioned in Article 255, the punishment will be from six to ten years in prison if the event is attributable to a public or private juridical person operating without the corresponding environmental permit, or in secret, or who has failed to comply with the express provisions of the environmental authority to correct or suspend its operations; has provided false information to obtain the corresponding environmental permit, or has prevented or hindered an inspection by the environmental authority.

Article 258 of the Criminal Code sets forth that anyone who destroys, burns, fells or damages, totally or partially, forests or any other legally protected natural or cultivated vegetation formation, will be punished with three to six years in prison. Farmers engaged in strictly farming activities are exempted from any punishment.

Article 259 of the Criminal Code sets forth that anyone who cuts, fells, burns, collects, makes business with or engages in illegal trafficking in any protected flora species or sub-species, or destroys or severely disturbs their natural environment, will be punished with one to three years in prison. The same punishment will apply to anyone who causes severe damage to any of the elements of a protected natural environment that have contributed to classify that environment as such.

Article 263 of the Criminal Code sets forth that in the cases regulated by Chapter II, Book II, on crimes against nature and the environment, as it may apply, if the offender voluntarily and timely repairs the damage, such offender will not incur in any punishable crime. The judge or court will instruct the adoption of the measures to repair, to the extent possible, the disturbed ecological balance as well as the adoption of any complementary measures required for protecting the resources under the protection of this Chapter.

V.2 CITY ORDINANCES

The Municipal Councils within the territory of the project's jurisdiction may issue ordinances intended to protect and use natural resources and protect the environment.

Each municipality has an Environmental Unit to which the environmental permit granted by the Ministry of Environment must be submitted, to carry out projects within the Municipality.

V.2.1 Ordinance for environmental management of the City of San Miguel

The purpose of this ordinance is to create a participatory process for the protection, conservation and recovery of environmental management, that ensures the quality of life of residents and defines the fundamental concepts to coordinate and implement actions related to the duties and rights of people and corporations, so as to avoid the deterioration of the environment, according to the implementation of an environmental plan that facilitates decision-making by the highest authority of the municipality.

Article 33 of the Municipal Ordinance provides that the owner of any project that requires an environmental permit, shall process it through the Ministry of the Environment and Natural Resources and then submit a copy of the decision to the Environmental Unit of the Municipality.

Article 7 states that the Mayor is empowered to impose sanctions for violations to the provisions of this ordinance, after verification of the damage caused to the environment and also to evaluate their impact through a report issued by the Environmental Unit.

The Municipal Halls of Quelepa and Moncagua have not approved the Municipal Ordinance on the matter, but it is contained in the Bill. The procedures established in Article 33 of the Municipal Ordinance for environmental management of the Township of San Miguel will be followed. –

V.3 INTERNATIONAL TREATIES IN FORCE

V.3.1 Convention on the International Commission on Environment and Development.

Legislative Decree No. 444 of February 8, 1990, and Resolution No. 11, of January 13, 1990, published in the Official Gazette No. 36, Volume No. 306, dated February 15, 1990.

By means of this Convention, the Contracting States shall establish a system of regional cooperation for the optimum and rational utilization of the natural resources of the area, as well as for pollution control, and restoration of the ecological balance, to ensure a better quality of life to the population of Central America.

V.3.2 Convention for the conservation of biodiversity and protection of Wilderness Areas in Central America

The objective of this Convention is to conserve the maximum possible marine and coastal land biodiversity, in Central America, for the benefit of present and future generations.

V.3.3 Stockholm Convention on Persistent Organic Pollutants

Legislative Decree No. 553, dated February 21, 2008, published in the Official Gazette No. 60, Volume No. 379, dated April 3, 2008

The objective of this Convention is to protect human health and the environment from POPs.

V.4 AGREEMENT

V.4.1 Categorization of Activities, Projects under the Environmental Law.

Agreement No. 39, dated April 26, 2007, published in the Official Gazette No. 83, Volume No. 375, dated May 9, 2007.

This agreement develops the categorization of activities, works or projects that under Section 21 of the Environment Act, are required to be submitted to the Environmental Impact Assessment and that then must be submitted for an Environmental Assessment, understood as the process or set of procedures that allows the state to assess the environmental impacts caused by the execution of a particular work, based on an Environmental Impact Study, activity or project on the environment and to ensure the implementation and monitoring of environmental measures to prevent, eliminate, correct, address, offset or strengthen, as appropriate, those environmental impacts.

V.4.2 Procedure for Declaring and recording on behalf of the State, those goods that under Article 9 of the Law on Protected Areas, are considered National Assets and part of the Protected Areas that lack a Registration Record.

Agreement No. 45, dated July 22, 2008, published in the Official Gazette No. 143, Volume No. 380, dated July 30, 2008

The Natural Protected Areas System consists of areas owned by the State, municipalities and autonomous entities; inland wetlands and artificial craters, lava, cliffs, lakes and lagoons, natural or artificial coral reefs and rocky cliffs, that are part of the State's natural heritage, as established in Article 9 of the Law of Natural Protected Areas, also in accordance with Article 572 of the Civil Code, that states that State assets are all

lands, located within the territorial limits, but that are not owned by anyone. Areas located in public lands that are actually being managed as protected areas but that have not been declared legally as such and which are not being considered a priority, and should continue under the management and responsibility of the public or private entity responsible for them. These areas should be evaluated by the MARN to determine their adherence to the Protected Areas System.

This Agreement sets out the procedure to Declare and Record on behalf of the State, those goods that under Article 9 of the Law on Protected Areas are National Assets and which have not been recorded as such.

V.5 DOMESTIC AND REFERENCE TECHNICAL STANDARDS TO BE ENFORCED BY THE PROJECT

The standards in force in our country applicable to the project are presented. Since some laws and regulations have not been made official by the competent country authorities, the MARN in many cases, for better management of natural resources, has based its regulations on foreign standards with reference rules adopted by the Agency for Environmental Protection USA (US-EPA) and international institutions like the World Health Organization (WHO), the Interamerican Development Bank (IDB) and the World Bank (WB). Some of these standards are being used as a benchmark for the project.

V.5.1 Salvadoran Standard: *NSO 13.49.01:09* wastewater discharged to a receiving body, 1996.

The purpose of the standard is to establish the physical and chemical characteristics and values, as well as the microbiological and permissible radioactive features of water to protect and rescue the receiving bodies. It is applied throughout the country for the discharge of wastewater.

The standard establishes general parameters for ordinary water and by industry type. The waste water to be discharged during the construction phase of the project is the ordinary one produced by the construction crew, and surface water will be modified mainly for sediment dragging. There could also be discharges of oils and grease, by the use of machines that use these products.

Parameters that must be met:

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|--------------------------|----------|
| • DQO | 150 ml/l |
| • DBO5,20 | 60 ml/l |
| • Settleable solids | 1 ml/l |
| • Total suspended solids | 150 ml/l |
| • Grease and oils | 150 ml/l |

TABLE No. V.1 ALLOWED WASTEWATER DISCHARGE LEVELS INTO A RECEIVING BODY

PARAMETER	LIMIT
Total Coliform Bacteria	should not exceed a density greater than 5000 UFC per 1000 ml of analyzed sample.
Fecal coliforms	should not exceed a density greater than 5000 UFC per 1000 ml of analyzed sample.
Biochemical Oxygen Demand (DBO5)	Oxygen level should not be allowed to fall beyond 5 mg/L
Dissolved oxygen	Equal to or greater than 5mg/L
pH	It should be maintained within a range of 6.5 to 7.5 units or the natural environmental pH value should not be altered by more than 0.5 units
Turbidity	Not to be increased by more than 5 turbidity units beyond the environmental limits of the receiving body.
Temperature	To be maintained within a range of between 20° to 30° C or the temperature of the receiving body should not be altered by 5°C.
Toxicity	Not to exceed 0.05 mg/L of organochlorinated pesticides

Source: Salvadoran Standard: NSO 13.49.01:09

V.5.2 Salvadoran Standard V.5.2: NSO 13.11.03:01 air emissions, mobile sources, 2003.

The purpose of the standard is to establish the permissible pollutant emission limits into the atmosphere generated by mobile sources. It is applicable throughout the national territory for mobile sources.

The project will use vehicles, which can be ignited by spark or diesel, so the respective standards, which are presented in the following table will be followed.

TABLE No. V.2. MAXIMUM PERMISSIBLE LIMITS FOR SPARK IGNITION VEHICLES

POLLUTANT	SYMB	UNIT	LIMIT	
			BEFORE 01/JAN/98	AFTER 01/JAN/98
Hydrocarbons	HC	Ppm	<600	<125
Carbon dioxide	CO2	%	>10.5	>12.0
Carbon monoxide	CO	%	<4.5	<0.5

Source: Salvadoran Standard: NSO 13.11.03:01

TABLE No. V.3. MAXIMUM PERMISSIBLE LIMITS FOR DIESEL

MOTOR VEHICLES

POLLUTANT	UNIT	LIMIT	
		BEFORE 01/JAN/98	AFTER 01/JAN/98
Minibuses and vehicles <3.0 mt			
Opacity	%	70	60
Opacity	K	2.8	
Turbocharged diesel vehicles <3.0 mt			
Opacity	%	80	70

POLLUTANT	UNIT	LIMIT	
		BEFORE 01/JAN/98	AFTER 01/JAN/98
Opacity	K	3.5	2.8
Buses and vehicles ≥ 3.0 mt			
Opacity	%	80	70
Opacity	K	3.5	2.8

Source: Salvadoran Standard: NSO 13.11.03:01

The legislation also establishes allowable levels of noise emissions, which are presented in the following tables.

**TABLE No. V.4. MAXIMUM PERMISSIBLE NOISE EMISSIONS BY
 VEHICLE EXHAUSTS**

VEHICLE TYPE	mt	dB(A)
Automobiles, motorcycles, motor-bicycles, off-road and other vehicles	<3.0	96
	3.0-8.0	98
	>8.0	100

Source: Salvadoran Standard: NSO 13.11.03:01

TABLE No. V.5. MAXIMUM PERMISSIBLE NOISE LIMITS FOR MOTOR VEHICLE SOUND

TYPE DEVICES	dB(A)
Motorcycles and motor-bicycles	105
Automobiles, off-road vehicles, light and heavy duty cargo vehicles, and public transportation	118
Emergency vehicles	120

Source: Salvadoran Standard: NSO 13.11.03:01

V.5.3 Salvadoran Standard V.5.3: NSO 13.11.02:11 Air Emissions, Stationary point sources, (UNDER APPROVAL).

The regulations for stationary air emission sources has not been approved, reason why the standard under approval was taken as a reference for the project. The purpose of the standard is to establish the maximum permissible concentration of pollutant emissions discharged into the atmosphere, generated by stationary point sources, established to protect health and the environment. The limits are set by industry, but there are no specific limits for construction or road building, so the limits for ambient air quality are followed.

TABLE No. V.6. AMBIENT AIR QUALITY LIMITS

PARAMETERS	UNITS	MAXIMUM ALLOWABLE	PERIOD
Sulphur dioxide (SO ₂)	ug/m ³	80	Annual
Sulphur dioxide (SO ₂)	ug/m ³	365	24 hours
Carbon monoxide (CO)	ug/m ³	10,000	8 hours
Carbon monoxide (CO)	ug/m ³	40,000	1 hour
Nitrogen Oxides (NO _x)	ug/m ³	100	Annual
Nitrogen Oxides (NO _x)	ug/m ³	150	24 hours
Ozone	ug/m ³	120	9 hours
Ozone	ug/m ³	60	Annual
Inhalable particulates (PM10)	ug/m ³	50	Annual
Inhalable particulates (PM10)	ug/m ³	150	24 hours
Inhalable particulates (PM2.5)	ug/m ³	15	Annual
Inhalable particulates (PM2.5)	ug/m ³	65	24 hours
Suspended particulates	ug/m ³	75	Annual
Suspended particulates	ug/m ³	260	24 hours
Lead (Pb)	ug/m ³	0.5	Annual

Source: Salvadoran Standard: NSO 13.11.02:11

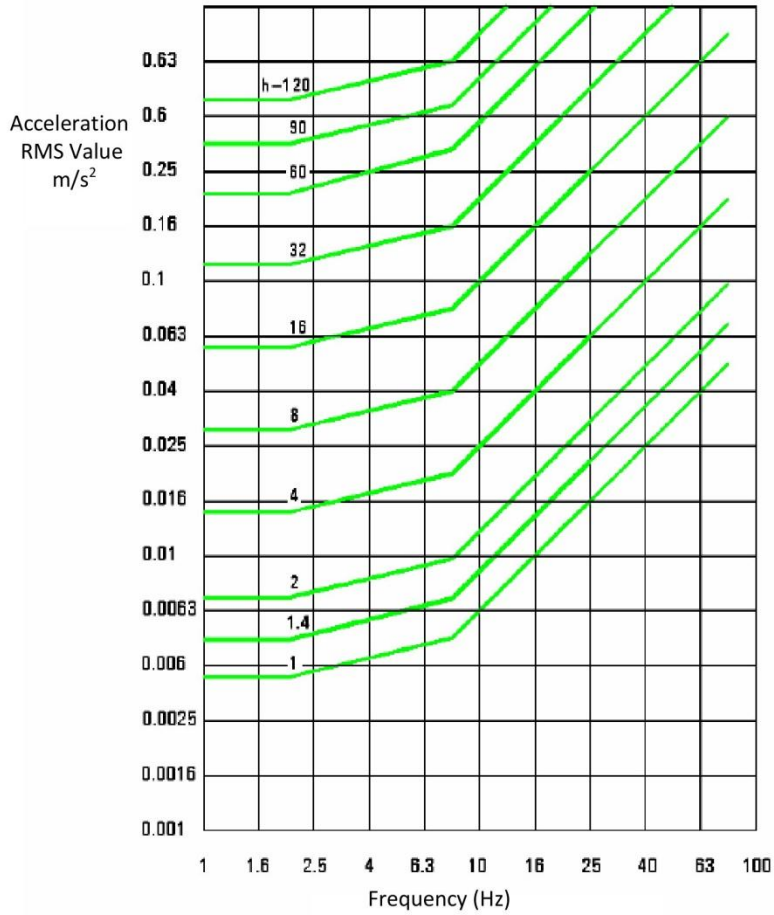
V.5.4 Noise Standard: World Bank (2007), General Environmental, Health, and Safety (EHS) Guidelines.

The final proposed standard for stationary emission sources in El Salvador does not include noise levels. As mentioned above, the General Environmental, Health, and Safety (EHS) Guidelines. 2007), which establish noise levels of 55 dB for the day and 45 dB for the night, for residential, institutional, educational areas, and 70 dB, for industrial and commercial areas, day and night. Day is from 7 am to 22 pm hrs, and night from 22hrs 22 to 7 am..

V.5.5 Vibration Standards.

There is no domestic standard for vibration levels, therefore the "Noise and Vibration Regulations" of the Technical Standards for Supervision and Control services of the Department of Architecture and Housing, Ministry of Environment and Spatial Territory of the Community of Madrid will be used as reference.

This standard establishes allowable levels in K factors, which relate the acceleration in m/s² and frequency in Hz. Limits are presented in the following graph.



Source: Noise and Vibration Regulations, Community of Madrid

Chart No. V.1. K factor calculation Chart

TABLE No. V.7. PERMISSIBLE VIBRATION LIMITS

LOCATION	K FACTOR DAY	K FACTOR NIGHT
Cliics, hospitals, operating rooms and critical areas	1	1
Residential, cultural and educational areas	2	1.4
Offices and Services	4	4
Businesses and Warehouses	8	8
Industry	16	16

Source: Noise and Vibration Regulations, Community of Madrid

V.5.6 Ordinary wastewater discharge limits according to the Code of Federal Regulations of the United States of America

In the absence of a rule or regulation duly formalized for ordinary wastewater discharges, the project will apply the rules of the Code of Federal Regulations of the United States of America.

TABLE No. V.8. PARAMETERS FOR DISCHARGE OF REGULAR-TYPE SEWAGE WITH IN-PLANT TREATMENT AS PER US EPA STANDARDS. 2007.

PARAMETER ¹	AVERAGE OF 7 DAYS	AVERAGE OF 30 DAYS
5-Day Biochemical Oxygen Demand (BOD5)	30 mg/l ⁽²⁾	45 mg/l ⁽²⁾
Sedimentable solids (Ssed)	Report	Report
Hydrogen potential (pH)	6-9(2)	Not requested
Total Suspended Solids (TSS)	30 mg/l ⁽²⁾	45 mg/l ⁽²⁾
Fats and Oils (F&O)	20.0 mg / l (daily maximum) (3)	15.0 mg/l ⁽³⁾
Total Coliform Count (TCC)	Report	Report
Chlorides (Cl-)	Report	Report

¹ Source: Special Regulations for Wastewater

² Source: US Code of Federal Regulations. US Environmental Protection Agency (US-EPA) Standard 40CFR Ch.1 §133.07. Water programs. Edition of 1 July 2007.

Source: US Code of Federal Regulations. US Environmental Protection Agency (US-EPA) Standard 40CFR Ch.1 §423.15. Performance Standards for New Sources. Edition of 1 July 2007.

Ordinary wastewater must have a minimum percentage of 85% reduction of BOD5 and TSS. (Source: Code of Federal Regulations of the United States of America. Environmental Protection Agency of the United States Standard (US-EPA), 40 CFR § 133.07 Ch.I. Water Program. Edition of July 1, 2007).

- Owner must not allow any water discharges transporting ashes to any receiving body, without having been previously treated.
- Owner must not download the water used in the cooling process at a temperature above 5 ° C compared to the temperature of the receiving environment.
- The Contractor shall comply with the monitoring of the special parameters for wastewater discharges established in the Special Regulations for Wastewater as follows: oxygen chemical demand, oxygen biochemical demand, potential hydrogen, Total Suspended Solids, Grease and Oils, Settleable Solids and Temperature. In addition, the parameters include total copper, total iron, total residual chlorine, which are included in the Environmental Protection Agency of the United States standards (US-EPA), 40FDR423.15 2007, from which the discharge limits have been taken.

V.5.7 Central American Environmental Policy Manual for the Design, Construction and Maintenance of Roads (SIECA)

The Secretariat for Central American Economic Integration (SIECA), created the "American Environmental Policy Manual for the Design, Construction and Maintenance of Roads", which is based on the analysis of the legal and institutional aspects related to Environmental Management Units within Ministries of Transport of Central America, during the diagnostic phase.

The manual contains rules to follow during the planning, design, construction, operation and maintenance of road works, in order to minimize both direct and indirect negative effects on the environment and natural resources in the area of influence of regional roads. It also takes into account the effects of natural disasters on the highways.

The manual also presents the general and specific rules on the management of natural resources for the planning and design stages.

The rules applicable to the project during the construction phase are:

- Implementation, Environmental Monitoring
- Construction and Operation of Camps
- Openness and Adequacy of Access Roads
- Asphalt and Concrete Crusher Plants
- Operation of Machinery
- Transport and Hauling
- Borrow pits or Quarries
- Cuts and fills or embankments
- Typical Sections for rock excavation,
- Typical Sections for Excavation on Ground,
- Typical Sections for landfill construction
- Typical Sections for Fillers on Wet Areas
- Bulk trash in dumps
- Slope Protection Measures
- Construction of Drainage Works
- Construction of Bridges and Special Works
- Construction of tunnels
- Extension and compaction of road surface
- Temporary and Permanent Signage Demarcation
- Final Cleaning of Worksite
- Completion of Construction Works.

V.6 LEGAL IMPACTS

Our Legislation regulates, through our constitution, laws, regulations and bylaws, the parameters and procedures for economic development in conformance with a healthy and ecologically balanced environment.

For the development of a project such as the San Miguel bypass, we performed an analysis of the environmental regulations applicable to this project, to know and comply with the laws of the Republic and to not contravene those laws to avoid administrative penalties and / or criminal proceedings that may affect the development and completion of works.

Among the most relevant rules are the following:

- Articles 21 to 29 of the Environment Act.
- Article 5 of the Law on Protected Natural Areas.
- Article 12 of the Forest Act.
- Articles 39 to 42 of the Land Transport, Traffic and Road Safety Act.
- Article 96 of the Health Code.
- Articles 253 to 263 of the Penal Code.

The main consequences of not complying with the legislation, processes and procedures established therein are the penalties, which may partially or permanently suspend works, or may be of a financial nature, and / or impose imprisonment.

Therefore, it is recommended to follow and respect the laws and to comply with all parameters set out to execute a lawful project, to help improve roads and develop the eastern region in accordance with the environment. And especially request permits from the Ministry of Environment and Natural Resources, Ministry of Public Works, Ministry of Health, Deputy Minister of Transport and the Environment Unit of the City Halls where the works are being developed.

The project is legally feasible if all the procedures and guidelines of the effective laws are complied with.