

EXAM OF ENVIRONMENTAL IMPACT ASSESSMENT

II SEMESTER 2012-2013 (70 pts)

Name:

Date:

1. Fill the spaces with the right answer (1 e/o)

A	Impact	Everything surrounding us: land, aquatic, aerial, where all living organisms, born, grow, develops and die	
B	Environment	identify the most important topics and prepare the TOR	
C	baseline	systematic process performed to identify, predict and evaluate the environmental effects of proposed actions	
D	Sreening	There are the environmental conditions that governs before any alteration or impact	
E	Promotor	Any action that produce a change or alteration on the environment	
F	Background	original environmental conditions existing at a given moment before a change	
G	Indirect Impact	Natural of juridic person, from the private or public sector interested in the development of a project	
H	Scoping	Decide if the EIA must be done and at what level	
I	Environmental License	It is produced by one of the project´s activity and it occur after or at a certain distance of the project location	
J	EIA	authorization that the designed authority will give to the natural or juridic person in order to the project to be executed	

2. Answer the following questions

2.1. Mention the steps (in order) needed to get the environmental license. Briefly explain each of them (15 pts)

- 2.2. a. Which is the highest environmental authority in Ecuador? (1 pts)
 b. What is her/his name? (1 pt)
 c. What does AAA means? (1 pt)
 d. Give an example of an AAA and who designate this AAA? (2 pts)

CASE 1 (10 pts)

The Canadian company Deluxe Tours is very interested in developing a big project , the construction of a luxurious hotel in the Natural Park of El Cajas. This company must fulfill all the requirements needed in order to make this project a reality, for this reason they hired your EIA consultancy group called Environmental Services that will execute all the requirements needed for this purpose. You have read all the documentation provided by this Company and you accept to perform the environmental studies. There are some complaints about the initiative of this project, for example, native people living close to this Park are complaining that the project should not be executed, they argue that the company wants to built the hotel in a protected area. You as the leader of this consultancy group must fulfill a series of steps and you must know exactly what documentation should be provided in each case in order to make the execution of this project possible. Answer the following questions.

- a) Who is the Promotor of the project? (pts)
 b) According to the MAE classification in which category will this project be located and why? (2 pts)
 c) What document you must check before accepting the responsibility of the elaboration of the environmental studies in order to be sure what exactly you need to perform and how deep this study must be? (2 pts)
 d) What document will you need to present to the community in order to proof that the project is not going to be located in a protected area? (2 pts)
 e) What document the promotor must obtain in order to legally start the project after the approval of the EIA document you are elaborating? (2 pts)

CASE 2 (15 pts)

A chemistry fabric has been working in an industrial area for 15 years already. In the last 5 years the production of this fabric has doubled. An urban area near the fabric has been complaining about the bad smell coming from this fabric. For this reason the community asked the Municipality to perform an environmental evaluation to this fabric since never before has any evaluation been executed. The fabric hired an Environmental Consultancy in order to perform this evaluation. You are the leader of this consultancy.

- a) What type of environmental evaluation you will need to perform according in this case? Explain your answer (4 pts)
- b) How many people you will need to have at **least** in your EIA team? What experts will you consider to work in your EIA team (4 pts)
- c) Mention four characteristics that the EIA team must fulfill, from the ones mentioned during classes? (4 pts)
- d) You are experimenting some delays in the execution of the EIA. Mention three possible causes (explained in the class) for this delay (3 pts)

CASE 3 (15 pts)

Read the following article and answer the questions below

DRILLING IN ECUADOR

The pollution is worse every day. Everyone has a cough or other sickness.
 -- Gabriel Alatorre, Petroecuador mechanic in Shushufindi, Ecuador (Althaus, 1996)

The Ecuadorean Amazon, known as the Oriente, was once one of the richest ecological and sparsely populated sites in the world. When oil was discovered there in 1967, the situation changed dramatically. Extremely high levels of water pollution of drinking, bathing, and fishing waters in the Oriente have been attributed to contamination from unlined waste pits (Brooke, 1994). More than 600 of these toxic waste pits were created during Texaco's involvement in Ecuador between 1972 and 1990 (Kane, 1996). Texaco used such pits set into the ground to store toxic byproducts from oil production and separation. The lack of barriers allowed waste to leak into the surrounding soil. Ecuador's Undersecretary for the Environment, Jorge Alban, reports that Texaco, while having cleaned 268 waste pits, has not cleaned at least 400 pits and these are not included in the cleanup plan signed by Texaco, Petroecuador and the Ecuadorean government (Schemo, 1998).

Oil pollution in local water supplies vastly exceeds international standards. According to the EPA, the level of polycyclic aromatic hydrocarbons (PAHs) deemed acceptable in water is zero, as they are strong carcinogens. The EPA standard in the U.S. is for a maximum PAH concentration of 28 nanograms per liter of water, corresponding to a one in 100,000 lifetime risk of cancer. Samples of drinking water collected near oil production facilities in the Oriente ranged from 33 to 2,793 nanograms of PAHs per liter of water -- counts up to one hundred times the EPA's safety guidelines. Bathing and fishing waters had concentrations ranging from 40 to 1,486 nanograms per liter, and water from waste pits ranged from 46,500 to 405,634 nanograms per liter (Brooke, 1994).

Ecuador's debt has created a dependency upon oil that has pressured the government into two compromising policies: to accept substandard operational practices by oil companies and to open ecologically-sensitive areas to exploration and production, disregarding the effects on indigenous populations. Neither action involved consideration of indigenous groups that have lived in the Oriente for centuries, and rarely were indigenous groups informed of oil production or settlement plans. The Ecuadorean government has estimated the cost of environmental damage to be \$5 billion and has asked Texaco for reparations for cleanup costs in the region (Parrish and Long, 1994).

- a) Which are the main impacts caused by the oil company Texaco in the Amazonian Territory. Mention 2 environmental and 2 social impacts (4 pts)

Environmental Impacts	Social Impacts

- b) Classify those impacts according to the most proper impact categories. At least three classifications must be provided for each impact (6 pts)

Environmental Impacts	Classification
Social impacts	Classification

- c) Are there any accumulative impacts present in the area due to the oil extraction activity. If the answer is yes, identify which ones are accumulative impacts and explain **Why they are accumulative?** (3 pts)
- d) The local community is part of a legal process and they are willing to proof that the environmental quality of this area has been severely affected after the oil activities have started. What document (part of the EIA) the community will need to get in order to proof how was the previous situation before the oil drilling activities? (2 pts)