



GREAT STEP-2011

PETROWIZARD CHALLENGE



SOCIETY OF PETROLEUM
ENGINEERS, IIT KHARAGPUR
STUDENT CHAPTER

ENVIRONMENTAL JUSTICE CASE STUDY: TEXACO OIL PRODUCTION IN THE ECUADORIAN RAINFOREST

When significant deposits of oil were discovered in the 19th Century, this fossil fuel appeared to offer a limitless source of energy to drive development. While oil and the energy it supplies provide multiple benefits to human society, every stage in the life cycle from exploration to use can have harmful effects on our health and the environment if not managed properly. This case examines one such production activity gone terribly wrong because of careless management. It deals with the health and environmental effects of oil production in the Ecuadorian rainforests.

BACKGROUND

Ecuador is located in western South America, bordering the Pacific Ocean at the Equator between Columbia and Peru. Its total area is 283,560 square km. Growth has been uneven due to natural disasters, fluctuations in global oil prices, and government policies designed to curb inflation. Petroleum is one of the major source of economy.

The history of petroleum development in Ecuador began in 1878 when the National Assembly of Ecuador granted exclusive rights to M.G. Mier and Company for the extraction of petroleum, tar, kerosene and other bituminous substances. Years later in 1937, the government of Ecuador granted Shell Oil the first oil concession in the Oriente region of the Amazon rainforest. This area encompasses about 200 square miles in the northern part of the Amazon region, one of the most fragile ecosystems in the world. It is inhabited by eight indigenous tribes who live mostly in small villages along the river courses and it holds five percent of all plant species on Earth. Many of the 10,000 species of plants, fishes, and birds are now endangered. It also contains enormous oil reserves, and in 1964, a **Texaco** subsidiary called Texaco Petroleum Company was invited by the government to explore for and produce oil in the region through a partnership with the government.

Texaco's role in the operation was to design the wells, build the pipeline that would transport the oil across the Andes Mountains to the Pacific Coast, and manage on behalf of a consortium that included **Petroecuador**, Ecuador's state-run oil company. Texaco's involvement in the project was governed by a 28-year concession agreement and by 1977 Petroecuador became the majority owner and Texaco Petroleum a minority owner. Finally, in 1992, Texaco's concession ended and Petroecuador became the full owner. Over their years in Ecuador, Texaco provided jobs for 840 employees and 2,000 contract workers. The amount of money generated by the consortium that was received by the country represented more than 50 percent of their Gross National Product (GNP) during that period.

Unfortunately, oil drilling was not completely beneficial to the country. Ecuador had no experience in the oil industry and relied heavily on Texaco to design and build the infrastructure for the extraction of oil and transportation to the market. The governmental leaders trusted that Texaco would use at least the minimum of technological standards it used drilling in the United States and around the world.

However, Texaco decided to dispose of the byproducts of drilling, called production water, by dumping it into unlined pits dug out of topsoil next to each of the 300 wells. Production water is water trapped in the geological formation that is brought to the surface when oil is produced. This wastewater was highly toxic and millions of gallons were dumped into the pits. Texaco's policy in other areas it operates is to reinject the wastewater into the ground, where it cannot endanger the environment. The amount of savings Texaco achieved through this procedure totaled \$5 billion over the time of its operations in Ecuador. The waste pits used by Texaco are the approximate size of a small pond and when these pits filled up, oil workers would drain them into nearby streams and rivers. This water carried dangerous chemicals, such as Benzene, Toluene, Xylenes and Polycyclic Aromatic Hydrocarbons, chemicals known for their connections to cancer. Additional gallons of raw crude oil, more toxic than wastewater, were also dumped or put into the pits. Over the years, these toxins leached into the ground and overflowed into the wetlands and rivers that flow into the Amazon River. About 4.3 million gallons of the wastewater reach Amazon tributaries every day (Talbot, 1999).

Another hazardous activity performed by Texaco was the burning of excess crude oil and wastewater, resulting in the occurrence of what local people refer to as black rain. The waste was dumped into landfills and spread over dirt roads in order to maintain them and control dust. Texaco did not maintain the pipeline network properly, and this resulted in further discharges of crude oil into the environment.

PROBLEM

Among the consequences of Texaco's drilling in Ecuador is an ongoing and critical health crisis. Health workers have documented an increase in problems such as a rise in cancer rates, miscarriages and birth defects. A study conducted by the Ecuadorian Union of Popular Health Promoters of the Amazon (UPPSAE) found higher occurrences of spontaneous abortions, dermatitis, headaches, and nausea in people of the Oriente. Another study, performed in 1993 by The Center for Economic and Social Rights (CESR), demonstrated that residents of the Ecuadorian Amazon are exposed to levels of oil-related contaminants that significantly exceed internationally-recognized safety limits, and that dermatoses and other skin problems related to oil contamination were found in residents near oil facilities. The Department of Tropical Medicine and Hygiene of the University of London produced a study that documented dramatically increased rates of cancer among the populations in the areas where Texaco drilled. In February of 1999, a community of 500 people where Texaco had operated several wells reported 15 cases of cancer. In another community, four women, all under 40, reported uterine cancer. It is rare to find a child in the region who does not have some type of skin rash due to exposure from toxic chemicals.

Texaco's oil production in Ecuador has damaged the once relatively untouched rainforest through deforestation, soil erosion, and reduced biodiversity. Three indigenous tribes were almost eradicated—the *Cofan* (who inhabit the first place Texaco drilled), the *Secoya*, and the *Siona*. The cultures and traditions developed by these tribes are linked to the rainforest and its abundance of resources. The toxic waste dumped by Texaco has endangered their lives so seriously that extinction has become a real

threat. The *Cofan* numbered approximately 15,000 when wells were first build on their land in 1971. Since then, their population has been reduced to a few hundred due to disease and forced migration to find work in the cities. The *Secoya* and the *Siona* have seen similar decreases in their populations. All of these tribes depend on the rivers for their food, hygiene, and transport. Due to the amount of pollution, the rivers now have been rendered useless for any of the above three activities. The pollution also flowed down the Amazon and affected the livelihood and health of the residents that live along the Napo River in Peru.

EVENTS AFTER

Texaco was debarred from service in 1992 and Petroecuador became an independent player.

In 1993 a group of Amazon Indians and farmers representing 30,000 affected individuals took legal action (the “*Aguinda*” action) in Southern District Court of New York against Texaco. They are asking for \$1.5 billion in damages. The plaintiffs have used an 18th century law in an effort to get the case tried in the United States instead of Ecuador. The case is preferred to be tried in the United States because Ecuador’s judicial system does not even recognize the concept of a class-action lawsuit and has no history of any environmental litigation. The law being referred to is the Alien Claims Tort Act (ATCA) of 1770, which was enacted by Congress in part to prosecute pirates of the high seas who sought refuge on the shores of the United States. It was revived in the early 1980s to allow foreigners to go after human rights abusers that had fled from their home countries into the United States. The district court, relying in part upon pledges made by Texaco to submit to the jurisdiction of the Ecuadorian courts in connection with the plaintiffs’ claims and to honor, subject to certain defenses set forth in New York law, any judgment rendered on those claims, dismissed the *Aguinda* action on forum non convenient grounds, and the Second Circuit affirmed. During this time, The Committee for the Defense of the Amazon, a group that represents 55,000 indigenous people in Ecuador and Peru, launched an aggressive advertising campaign against Texaco.

Two noteworthy developments occurred while the *Aguinda* action was pending. . First, in 1995, Texaco entered into a settlement with the Ecuadorian government and Petroecuador, in which Texaco agreed to undertake environmental remediation activities at the former drilling sites in exchange for a release by the Ecuadorian government from any liability. In 1999, while the *Aguinda* parties were litigating Texaco’s motion to dismiss on forum grounds, Ecuador enacted the “Environmental Management Act,” an act that provided private plaintiffs with the ability to bring an action for damages for the cost of remediation of environmental harms generally, even absent proof of any personal injury or property damages to a specific plaintiff.

LATER DEVELOPMENTS

Chevron bought Texaco in 2001.

Unsurprisingly, following the Second Circuit's dismissal of the *Aguinda* action on forum grounds, a group of Ecuadorian plaintiffs (including many of the original *Aguinda* plaintiffs) commenced suit against Chevron and Texaco in LagoAgrio, Ecuador. The LagoAgrio court rendered its judgment on February 14, 2011. That judgment awarded the plaintiffs a total of more than US\$18 billion. Of this sum, \$8.646 billion was characterized as compensatory damages; an additional amount equal to ten percent of the compensatory award was to be paid to the Amazon Defense Fund ("ADF"), an organization purporting to represent the plaintiffs; and punitive damages equal to the amount of the compensatory award were to be imposed unless Chevron issued a "public apology" to the plaintiffs within 15 days.

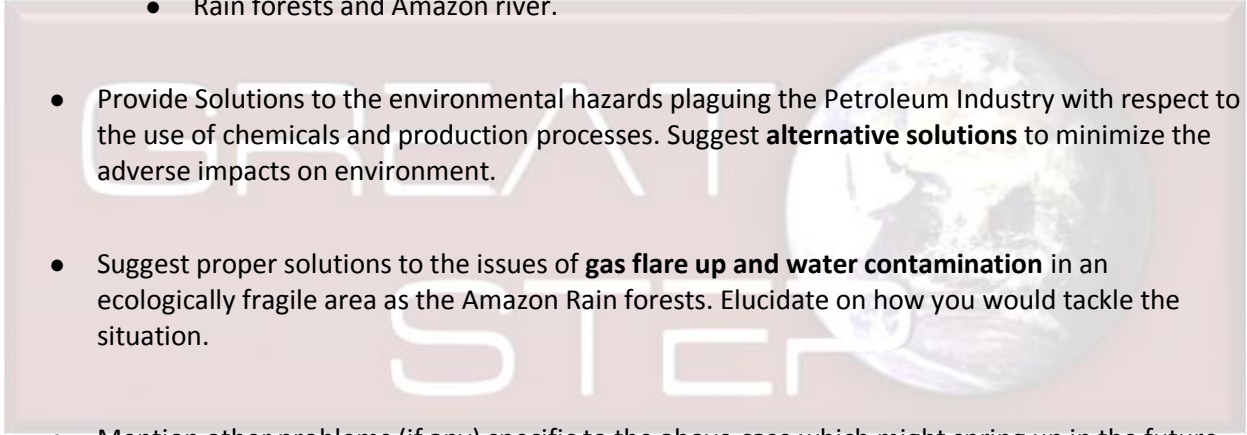
But Chevron says it can't be sued because of a 1990s agreement Texaco struck with the Ecuadorian government to clean up some of the contaminated sites - sites that had been abandoned for years. They claim that Texaco spent \$40 million cleaning up some of these sites. In return for that the Ecuadorian government signed off and said, "You're released of liability". Although it's not specifically written into the agreement, Chevron claims it's responsible for only 40 percent of the cleanup because Texaco was a 40 percent partner with Ecuador's national oil company, Petroecuador.

There have been many further appeals in this case that has already run nearly 16 years. In the meantime, environmental damage continues in this largely unseen part of the world. People say oil and water don't mix, but in the Amazon it's hard to keep them apart.

QUESTIONS:

- **“While oil and the energy it supplies provide multiple benefits to human society, every stage in the life cycle from exploration to use can have harmful effects on our health and the environment”**. Justify this statement by briefly elucidating various adverse environmental impacts in the life of a well from drilling to stimulation of wells and production. Give necessary examples wherever possible in lieu of your answer.
- As an employee of **Chevron’s Health, Environment and Safety Department**, what steps do you recommend to be undertaken by Chevron to minimize the harm that oil drilling has already caused.

Emphasize on the following points:-

- The production water pits
 - Rain forests and Amazon river.
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- Provide Solutions to the environmental hazards plaguing the Petroleum Industry with respect to the use of chemicals and production processes. Suggest **alternative solutions** to minimize the adverse impacts on environment.
 - Suggest proper solutions to the issues of **gas flare up and water contamination** in an ecologically fragile area as the Amazon Rain forests. Elucidate on how you would tackle the situation.
 - Mention other problems (if any) specific to the above case which might spring up in the future and has not yet been dealt with.