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## Understanding the Environmental Crime



فهم الجريمة الببئفة

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### Abstract

Due to globalization and advanced technology, negative environmental consequences result from industrial and commercial operations worldwide. Tackling environmental illegalities is a major global concern that requires ongoing evaluation and revision at all levels and in different parts of the world. During the last century, there has been increased attention given to the problem of environmental crimes. Sanctions against environmental crimes must be more effective, stronger, realistic and imminent. In the battle against environmental crimes, several obstacles have distracted the implementation of criminal law.

This paper addresses the valuable role of criminal law in providing effectiveness of environmental protection laws, since compliance with environmental laws is not usually voluntary. In specific, this paper examines some obstacles in an international context. The study is based on theoretically driven research methods. It examines primary and secondary resources on the topic such as assigned laws, precedents, academic books, journal articles and reliable websites. Finally, it concludes with some recommendations that could contribute to minimizing (if not preventing) environmental crimes.

**Keywords:** Forensic Science, Environmental, Crime, Criminal law, Responsibility, Strict liability.



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### المستخلص

أدى انتشار العوالة والتقدم التقني الذي شهده العالم إلى تزايد المشاريع الصناعية وعمليات التبادل التجاري، وشهدت جميع الدول تلك التطورات ما أدى بالضرورة إلى معاناتها من الآثار السلبية لهذه التطورات على الطبيعة والبيئة، فقد ظهرت مجموعة من الجرائم الببئفة المستحدثة لم تكن معروفة من قبل. ولذلك ازداد الاهتمام بالبيئة وبمكافحة الانتهاكات الببئفة منذ القرن الماضي. و كان لهذا الاهتمام انعكاسه الإيجابي على التشريعات الببئفة التي ترمي إلى إضفاء الحماية القانونية على البيئة. وسعت بعض الدول إلى تطوير تشريعاتها الببئفة القائمة أو تبني تشريعات جديدة لمواجهة مختلف الإنتهاكات الواقعة على البيئة.

تسلط هذه الورقة العلمية الضوء على دور القانون الجنائي في مكافحة الجريمة الببئفة، وذلك من خلال تصنيف الانتهاكات الواقعة على البيئة إلى انتهاكات مُتعمدة وانتهاكات غير مُتعمدة وانتهاكات «المسؤولية المُشددة»، وهنا يُعاقب الشخص على مجرد مخالفة النصوص الببئفة حتى ولو لم يحدث أي ضرر للبيئة، و الهدف من هذا التشديد هو تعزيز الحماية الكافية للبيئة من خلال فرض عقوبات رادعة على من يخالف القوانين الببئفة. وتعتمد الورقة على البحث النظري المبني على المصادر الأولية والثانوية: الكتب والقوانين والإجتهاادات القضائية، والأوراق العلمية في المجلات المحكمة، ومواقع الإنترنت. وقد خلصت هذه الورقة إلى بعض التوصيات التي تهدف إلى التقليل من الانتهاكات الببئفة (إن لم امنعها).

الكلمات المفتاحية: علوم الأدلة الجنائية، البيئة، الجريمة، القانون الجنائي، المسؤولية، المسؤولية المُحددة

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## 1. Introduction

Due to globalization and advanced technology, the world has become a small, borderless village full of mutual commerce and a variety of industrial activities. Globalization and advanced technology have also resulted in environmental damage which necessitates legal protection of the global environment of utmost concern. Recognizing this interest, legislative bodies in most countries have passed a wealth of environmental laws in order to safeguard the environment. Over time, environmental laws have been reformed to include criminal laws that enforce criminal penalties on environmental violations. This paper will conduct an analytical-theoretical examination of the three elements of environmental crime: the 'legal recognition of an environment' element, the 'Actus Reus' element, and the 'Mens Rea' element. The paper will identify the legal definition of the term "environment", and examine how an environmental crime is potentially committed, whether by doing an act or by omitting to do a certain act. In terms of the 'Mens Rea' element, this paper will explore how criminal law deals with environmental crimes differently. In order to emphasize protection for the environment, criminal law has developed in imposing criminal penalties on voluntary and involuntary violations, as well as on mere violations of environmental law or regulations even when those violations did not cause any environmental damage.

## 2. Elements of Environmental Crime

Ordinarily, for a crime to exist there must be three elements to be fulfilled: the legal element (subject of crime), the physical element (Actus Reus), and the mental element (Mens Rea).

### 2.1 Legal Element (Subject of Crime)

The subject of environmental crime is the 'environment'. What is the definition of an environment from a legal perspective?

The environment is our surroundings, including non-

living things, such as land, air, and water, and living things such as plants, animals, and human beings. Living things provide conditions for development and growth, as well as of danger and damage [1].

### 2.2 Physical Element (Actus Reus)

This element consists of three divisions: act/omission, result, and the causality between them.

#### 2.2.1 Act or Omission

##### 2.2.1.1 Committing environmental crime by doing an act

Doing an act means that the defendant makes positive efforts towards an act prohibited by law [1]. Some environmental crimes are positive crimes where the 'Actus Reus' is achieved by making efforts to do the act. This is clear in most criminal laws worldwide. For instance, according to the Environmental Protection Act 1990 in England and Wales any person who initiates or participates in any acts of collection, transport, treatment, storage and tipping of 'controlled waste' without a waste management license will be subjected to a penalty [1]. In some cases, the cause of environmental damage is conducted deliberately. The 'Ecuador Vs. Chevron Texaco' case is a landmark environmental lawsuit that will be explained later in this paper. Most environmental crimes are positive crimes (require acts) that consist of all conducts that contribute to environmental degradation. The following acts include, but are not limited to, the actions of damaging the environment:

**Pollution:** there are several types of pollution such as water pollution, noise pollution, and air pollution. As for pollution, pollutants come from different sources and could be visible or nonvisible [2]. They contribute to global warming [2]. There is an infinite number of human activities that contribute to air pollution, but this study will concentrate on some human activities that are prohibited by law. However, "the contribution of environmental exposures, if any, to these differentials is largely unknown. Establishing a causal relationship between exposures to an environment agent and subsequent diseases or injury in hu-



mans is usually difficult unless the link is very strong.” [3].

**Deforestation:** It might seem that there is nothing wrong with rapid population growth, but this rapid growth can affect the environment negatively in one way or another [4]. Cutting trees which results in deforestation is sometimes conducted in order to increase the land area to cope with rapid population growth [4].

**Landfills:** This is one of the many illegal human activities that are not confined to just harming the environment, but also the human beings themselves. This landfill activity has increased since the late nineteenth century [5]. Consequently, a large volume of diseases emerged from epidemics that are a result of landfills [3].

### 2.2.1.2 Committing environmental crime by omission

While most environmental crimes are of a positive conduct nature, some of these environmental crimes are committed by omission. To illustrate, a person who has a legal duty to protect the environment yet has omitted to do so will be criminally liable. As an example, according to the Environmental Protection Act 1990, Section 34 article (1): there is an imposed duty on “any person who imports, produces, carries, keeps, treats or disposes of controlled waste or, as a broker, has control of such waste, to take all such measures applicable to him in that capacity as are reasonable in the circumstances” [1].

a- to prevent any contravention by any other person of section 33;

b- to prevent any contravention of certain (i.e. specific) provisions of the Pollution Prevention and Control Regulations;

c- to prevent the escape of the waste from his control or that of any other person; and

d- on the transfer of the waste, to secure-

1- that the transfer is only to an authorized person or to a person for authorized transport purposes; and

2- that there is transferred such a written description of the waste as will enable other persons to avoid a contravention of the section 33 or the Pollution Prevention and

Control Regulations” [1].

Accordingly, a person who fails to do the previous duties will be a subject of penalty. Notably, in the environmental crime, not any omission is criminalized but only the culpable omission will be indictable. According to the general principles of criminal law, the omission will be culpable when three conditions are fulfilled:

- a- There is a legal duty or environmental obligation
- b- There is intentional omission to do the legal duty
- c- Fulfilling the duty was possible and within the power of the defendant

In accordance to the above-mentioned conditions, failure to do the imposed environmental legal duty will not be culpable if it was not within the power of the defendant to do so.

### 2.2.2 Consequences

In order to convict the defendant for an environmental crime such as pollution, a prohibited consequence must take place [6]. This is called a ‘result crime’ [6]. For other environmental crimes, especially the dangerous ones such as having or dealing with hazardous waste, the environmental criminal law does not account for the prohibited result to take place. It is legally enough to convict the defendant if he only commits the act, aside from the result and whether this act does not ensue in a harmful result. This is called a ‘conduct crime’ [6].

### 2.2.3 Causation

This is the nexus between the act/omission and its consequences [6]. In most cases of environmental crime, it is always difficult to identify the real cause of a result. Causality in environmental crime is different from general criminal cases. This is due to the fact that in some environmental crimes, the result does not take place right after the act/ omission but after a varying period of time. Traditional theories of causation do not offer the solution. However, there have been other theories such as epidemiology causality theory, the indirect disproof theory, and causal-



ity presumption rule, etc. [7]. This inevitable difficulty has made legal scholars explore another base for criminal liability. They suggested that there is no need to wait for the prohibited result to happen. Instead, they establish criminal liability on the base of 'strict liability', where there is no need to prove the Mens Rea (mental element), as well as no need to wait for the result to take place. The defendant is criminalized and penalized if he is caught with any conduct that is prohibited by environmental law.

### 2.3 Mental Element (Mens Rea)

Mens Rea refers to the mental element necessary for a particular crime [6]. When environmental crime is examined, a variety of Mens Rea such as 'malice aforethought', intention, or recklessness can be identified. Nevertheless, environmental crime is still a crime, even if there is no culpable intention [6]. Sometimes environmental damage happens because of gross negligence. Based on what has been mentioned earlier in this paper, some environmental crimes are considered strict liability offences. Unsurprisingly, this severity with environmental criminal liability emerges due to the desperation to provide criminal legal protection for the environment. Therefore, penalties are imposed whether there is a culpability or negligence in an act or not [8]. To illustrate, environmental violations could be held as intentional crimes, involuntary (gross negligence) crimes, or strict liability environmental offences.

#### 2.3.1 Intentional (voluntary) Environmental Crime

This is the most serious environmental crime because it has the most culpable form of Mens Rea [6]. The defendant not only knows that his/her act/omission will cause grievous environmental damage, but he/she intends to do so. This is clear in the Ecuador Vs. ChevronTexaco case (2011) where the ChevronTexaco Oil Company conducted illegal oil extraction tactics that were deliberately illegal and unethical in order to avoid high costs [9].

#### Ecuador Vs. ChevronTexaco (2011)

In 1994, the American oil company ChevronTexaco went to the Republic of Ecuador to invest in oil. The company exercised intentional and unethical oil extraction practices which led to immense environmental harm. Unfortunately, the company did this in an attempt to reduce costs [9]. Indigenous Ecuadorian people living in the rain-forest suffered extreme health issues and faced the costs of the environmental damage that took place as a result of that environmental disaster. Due to the geographic magnitude of the environmental harm and the sizable damages, the indigenous Ecuadorian people, led by Maria Aginda, filed a case before the American courts and claiming 27 billion dollars. Chevron Texaco successfully avoided trial in New York for nine years and succeeded in convincing the New York judge to move the trial to Ecuadorian courts. In 2003, Ecuadorian judges agreed upon a judicial inspection of the polluted land, which prolonged the trial another eight years until February 2011. This was when the Ecuadorian court made its decision in favor of Ecuador, forcing Chevron Texaco to pay 8.6 billion dollars towards damages and make a public statement of apology. Chevron Texaco appealed the court decision and the appeal is still ongoing. However, such judicial decision stands as an important victory for indigenous people as well as for the environment [9]. The crucial question in this case was why the penalty was confined to paying damages rather than imprisonment even though it contains the most culpable form of Mens Rea.

#### 2.3.2 Involuntary Environmental Crime

The defendant under this type does not commit the environmental crime with culpability, but with gross negligence. A prime example is the ongoing lawsuit filed against British Petroleum Oil Company, otherwise known as BP.

#### The case of British Petroleum Oil Company

BP is one of the largest oil companies worldwide. The company was in search of oil in the Gulf of Mexico when on the evening of 20 April 2010, the Deepwater Horizon oil



rig exploded after gas seeped into the well that the rig was drilling, killing 11 crew members and injuring 17 others. Unfortunately, this catastrophe not only caused the casualties and killings of BP crew members, but also caused a huge catastrophic environmental disaster as “5 million barrels of oil escaped into the Gulf of Mexico over the next 87 days, coating hundreds of miles of shoreline with oil which caused severe damage to marine life, coral reefs and birds” [10]. In November 2012, a statement was made saying “BP agrees to pay \$4.5 billion in fines and other penalties and pleads guilty to 14 criminal charges [11]. The U.S. government banned BP from new federal contracts, imperiling the company’s role as a top U.S. offshore oil producer and No. 1 military fuel supplier. Separately, the U.S. Department of Justice filed criminal charges against three BP employees in connection with the accident. Finally, BP agreed to pay about \$18.7 billion in damages for water pollution caused by the spill, settling claims with the U.S. government and Louisiana, Mississippi, Alabama, Texas and Florida”[11]. However, it can be noticed from this case that criminal law was implemented through setting criminal charges against the employees who were grossly negligent, imposing fines on the company, and paying damages as a result to what BP caused of massive environmental damage.

### 2.3.3 Strict Liability Environmental Offences

Strict liability offences first originated in the 18th century, regarding contamination of food and tobacco [6]. They were developed in the 19th century [6] to include other public welfare issues, including environmental illegalities, like pollution, to protect the environment from rapidly expanding sources of danger and damage. In codifying these strict liability offences, states did not always prescribe culpability as an element of the offense [8]. Strict liability means that liability is imposed “in the absence of fault, knowledge, intent, negligence, breach of contract, or any other direct or indirect wrongdoing by the person held responsible.”[12].

Most criminal laws impose strict liability for failure to

comply with statutory provisions or regulations, regardless of the reason for the failure. Therefore, a defendant could behave negligently, recklessly, or with absolute “fore-sight and vigilance” [13] if there is noncompliance with a regulation or statutory provision. The nexus between the defendant’s mental state and the violation is irrelevant to criminal liability [13]. In other words, in environmental strict liability offences, Mens Rea is not required. A person, for instance, who commits a strict liability environmental offence, will be subjected to criminal penalties. Ignorance of law plays no role in imposing strict criminal liability on some environmental offences, and this fact constitutes an exception to ‘the general principle that awareness of what one is doing is a prerequisite for the infliction of punishment’[13]. However, “the penalties are usually “relatively small”; and conviction would not cause serious harm to the defendant’s reputation” [8]. So far, in the area of environmental crimes it seems that strict liability is the most effective method of deterring environmental violations [14]. This means that “an individual could be convicted of a felony despite the fact that he or she believed the operations were in total compliance with all applicable regulations and limitations and had taken reasonable steps to ensure that they were in compliance” [15].

There are many environmental statutes that impose strict criminal liability on environmental illegalities such as the Comprehensive Environmental Response, Compensation, and Liability Act known as CERCLA [16]. The incentive behind strict liability according to CERCLA is to assume that there is someone who will be held responsible for the clean-up costs. Strict liability could be joint or several liabilities [16]. If a court recognizes a certain individual out of many that polluted the environment, such an individual can be a subject for responsibility for the total clean-up costs, and the only defense for him will be to claim compensation from other potentially liable individuals [16].

## 3. Conclusion



In the light of the analysis of elements of environmental crime, cases provided, and related laws, it can be concluded that environmental protection must be a top global priority. Environmental crimes must be fought on many fronts. On the legal level, since environmental violations are steadily increasing, it is clear that some of these violations are visible and other violations are invisible. Therefore, lawyers, judges, lawmakers, and practitioners must understand the concept of 'environmental crime' and its changing inclusion.

The analysis led to the conclusion that environmental crimes are not always 'result crimes', but can also be considered 'conduct crimes'. Accordingly, a person who violates environmental laws, even if such violation did not cause any environmental damage, will be a subject of criminal penalties based on a 'strict liability' doctrine.

However, criminal penalties for these destructive acts are still lenient and minor compared to the environmental damage taking place every day. I would suggest for a legal reform to modify penalties in parallel with the increased environmental violations. In the area of environmental crimes, creating a strict criminal liability method is, undoubtedly, a step forward. In addition, serious, severe, and deterrent punishments are now recommended more than ever before.

Although there is pre-existing awareness of environmental violations, I would suggest there should be better awareness of the scale and perspective for environmental crime in every country. Awareness strategies should be drawn up by governments in order to educate and train the relevant authorities to identify any environmental criminal activity. By doing so, the subject of environmental crime would be more identifiable by not only the competent authorities, but also by all people who, as a result of such awareness, will have the zeal and the ethical duty to report on environmental violations. Ultimately, it is evident that environmental crime is a global problem that needs a global response. While several issues have been pointed out in this paper, environmental crime as a growing challenge re-

quires additional studies and research to pace its growth.

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