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# EXISTENCE OF SCIENTIFIC EVIDENCE IN EVIDENTIARY LAW

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***Abstract***

*Environmental cases are often decided by decision of exemption because the evidence is scientific. The Criminal Procedure Code (KUHP) still adheres to conventional evidence. The judge did not receive scientific evidence. Even though, the environmental cases will not be completed without scientific evidence. Normative legal research methods are used, because scientific evidence is contained in laws and regulations including the Criminal Procedure Code. Legal materials collected were analysed to answer the problem. Legal analysis of norm obscurity is carried out by law interpretation while legal vacancies are carried out by legal construction or rechtsvinding. The results showed that environmental cases in the form of pollution and environmental damage were only proven by scientific evidence, which was an extension of evidence in the Criminal Procedure Code, which had an impact on the procedural Burden of Proof, namely the position of evidence. Scientific evidence does not stand alone but follows one of the legitimate evidences, namely expert information or proof of evidence or evidence.*

***Keywords:*** *scientific evidence, proof law, existence*

***JEL Codes:*** *K00, K15, K32, K40*

## Introduction

Environmental cases these days are often denied by the judiciary because the evidence presented is weak. Because for environmental cases especially in relation to environmental delik facts and evidence tools are scientific. Affirmed by Biezeveld (2001):

> Investigation can be hard work. Especially in environmental cases, because:
> - environmental legislation is complex and not always adequate;
> - technical and chemical aspects require special expertise, including the art of measuring and taking samples and understanding analysis reports;
> - administrative and financial research (i.e., in accounting system on paper or in digital version) require both special expertise and much effort;
> - to most offences more than one person has contributed, so it may be difficult to determine anyone's part;

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- often witnesses are not available or not willing to talk;
- and last but not least, quite often it appears that the competent administrative authority or governmental officials have tolerated the violations for a long time.

The difficulties faced by investigative authorities in Japan to provide evidence in environmental pollution cases were put forward by Julian Gresser, Koichiro Fujikura and Akio Morishima in Mishima (1992).

From an evidentiary perspective, prosecution of a pollution offense is also comparatively difficult because, although the police have strengthened their capacity to investigate pollution violations, police training and technical competence in the pollution field have been grossly deficient. Consequently, in many areas (e.g., air pollution) the prosecutors have had difficulty in marshalling concrete evidence.

Japan's experience raises the awareness that environmental deliberations are a formidable challenge for investigators in presenting strong and argumentative evidence tools. To overcome the difficulty of proving causal relationships environment can be put forward innovative concepts contained in the Law for the Punishment of Crimes Relating to Environmental Pollution Which Adversely Affects the Health of Persons, Law No. 142 of 1970 Japan, effective July 1, 1997 Article 5, this law expressly establishes the presumption of causal relationship.

The presumption of causal relationships is a creative finding to address the problem of evidentiary (and) causality in environmental deliberations that pose an immediate danger to lives and public health. Weaknesses in the evidentiary and determination of environmental causality can lead to environmental cases being denied by judges in the judiciary.

Relevance to the Burden of Proof regarding the existence of scientific evidence that needs to be discussed not only the issue arises how we collect scientific evidence, because juridically scientific evidence is still a new tool of evidence that is not known in KUHAP only experts understand. If not explained again in a letter or expert statement, then scientific evidence cannot be understood by law enforcement. In addition, the problem is that judges who examine environmental cases for example do not receive scientific evidence because it is not known in the Burden of Proof. Whereas environmental cases will not be processed completely without accompanied by scientific evidence. Similarly, in a civil case concerning a child's blood relationship with his parents, it is difficult to prove only with a witness without a DNA test to further ensure whether or not the blood is biologically related. Burden of Proof is the duty of a party in a court to provide evidence that will substantiate claims they make against another party.

The evidentiary law that has been taught in the criminal procedural law as stipulated in the Criminal Procedure Law (KUHAP) is still conventional evidence. Looking at the word proof (in Dutch bewijs) is used in two meanings, sometimes it is interpreted as an act by which given a certainty, sometimes also as a result of the act that is the establishment of a certainty. So here the proof is directed to the certainty of an act. Whereas according to Hiariej (2012) that: The word Evidence is closer to the understanding of evidence according to positive law, while the word proof can be interpreted as proof that leads to a process.

Proof is the act of proving; proof will be required in a process of examination of a case. In this evidentiary process is given the opportunity to submit a legal evidence tool according to the law and relevant to the lawsuit, both with legal facts and actions. Proving means giving or showing evidence, doing something truthful, carrying out, witnessing and convincing. Subekti (1983) argues that proving is convincing the Judge of the truth of the evidence or the evidence presented in a dispute. Evidentiary is one of the series in the process of proceedings before the civil court. In the proceedings in the civil trial, the judge will carry out his basic

duties in examining the case. The judge will make a case to fulfill his duty to seek the truth of the legal facts and events that occurred in order to resolve the dispute (Erliyani, 2017a).

In the proceedings before the court in examining criminal cases, proof is the decisive part, because all criminal cases that are examined and decided by the judge are based on the purpose of realizing material truth. The proof has begun from the stage of investigation to find whether or not an investigation can be conducted in order to make light of a criminal act and find the suspect, until it decides someone is criminally guilty and prosecuted criminally, it must be based on the evidentiary process. In this case the Evidentiary Law has governed it.

The evidence for civil and administrative cases brought to justice is believed to have strong evidence. And the litigation settlement process must also be based on the implementation of the evidentiary process as stipulated by the Evidentiary Law. Evidence is an effort to convince the judge about the truth of the arguments of the lawsuit / rebuttal of the lawsuit arguments presented in a dispute at trial (Soeroso, 2016). There are two kinds of proof in civil procedural law, namely: the law of material proof and the law of formal proof. The law of material proof regulates whether or not certain evidence is accepted at the trial and regulates the strength of proof of evidence. Meanwhile, the formal law of evidence regulates how to apply evidence. Evidence law in Indonesia is a series of rules, regulations and procedures for the implementation of evidence in criminal, civil and state administrative proceedings at the competent courts in Indonesia.

The problem now with the development of technology and the advancement of human civilization, the development of forms of crime and acts against the law is also increasingly diverse forms that require enforcement that is also in line with the development. Then came the question of scientific evidence that is now developing in law enforcement in this country. How is the existence or existence of scientific evidence in its relevance to the Burden of Proof? then we can be formulated juridical problems that we will examine, namely as follows:

1. What is the urgency of scientific evidence in its extension to the evidentiary process?
2. What is the position of scientific evidence in the Burden of Proof?

**Research Methods**

The research conducted in the writing of this paper is legal research with qualitative approach, because the study of scientific evidence in the Burden of Proof is based on the provisions of the laws governing the Burden of Proof. Provisions of Evidentiary Law contained in various laws and regulations as material to analysing normatively on the subject matter in this study.

Primary data and secondary data were used in this study. Primary data is collected by interview techniques with several law enforcement, secondary data is sourced from primary legal materials collected, especially the Book of Criminal Procedural Law (KUHAP), the Civil Procedure Law, HIR/RBg and the legislation governing new evidence. All will be analysed to answer the problems raised in the study. By using conceptual approach and case approach, legal analysis is carried out. Legal analysis of problems caused by blurring of norms will be conducted appropriate interpretation while problems caused by legal vacancies are carried out legal construction or *rechtsvinding*[4].

**Results and Discussion**

**The urgency of scientific evidence in its extension to the evidentiary process.**

[4] Legal term from the Dutch language which means legal discovery.

Proof is a process to prove. According to Mertokusumo (2006) that the understanding of proving contains logical or scientific understanding prove absolute certainty, because that applies to all people and does not allow the other proof. And proof in the conventional sense means to provide certainty relative that has a level of:

1. Certainty based on mere feelings (conviction in time).
2. Certainty based on reasoning (conviction rainsonce).

Proving can also be interpreted in the concept according to the law of the event means that juridically both logically and absolutely applicable to each person in accordance with the provisions of the law of the event that closes the possibility of evidence of the opponent. This juridical proof applies only to the litigants.

Proving in a juridical sense means providing sufficient ground basis to the judge examining the case in question in order to provide certainty about the veracity of this proposed event (Erliyani, 2017b).

In the legal aspect of criminal case proof, KUHAP adheres to the negative *wettelijke* system (negative evidentiary theory according to the law) contained in Article 183, which reads:

„The judge shall not sentence a person unless with at least two valid pieces of evidence, and he obtains the conviction that a crime actually occurred and the guilty defendant did so".

According to the negative *wettelijke* system requires a causal relationship between evidence and belief. The evidence in the proof system negative *wettelijke* has been determined limitative in the law and how to use it (bewijs voering[5]) which must also be followed by a belief, that criminal events are true and the accused is guilty.

Evidentiary Law stipulates that in the criminal procedural law used evidence as mentioned in article 184 paragraph (1) KUHAP namely:

1. Witness Statement
2. Expert Information
3. Letter
4. Instructions
5. Description of the Accused.

The existence of evidence is very important in the enforcement of criminal law, considering that criminal law is very much in contact with a person's human rights and the purpose of law enforcement is to pursue material truth. Law enforcement, both from the stage of investigation by the Police, prosecution by the Prosecutor's Office to trial by the Court Institution, requires a careful expression of heart in determining a person as a suspect or defendant. Without the basis of the evidentiary process in accordance with the evidentiary law, the enforcement of criminal law will be biased against the nature of justice and human rights (Nasution, 1976).

But according to the theory of evidentiary law, in the process of examination of criminal cases that the existence of evidence is not as a determinant of the guilt of a person, meaning that with the evidence in a criminal case even though it has qualified as a valid evidence tool and meets the requirements as the basis for the judge's decision, then with the evidence can not necessarily be used as a basis to declare someone guilty of a criminal offence and asked for criminal responsibility. Because in the theory of evidentiary law that the existence of the evidence must also be coupled with the conviction of the judge. If the Judge is not convinced

[5] Legal term from the Dutch language which means legal discovery.

that the Defendant is guilty of a criminal offence, then it could be that the defendant is not found guilty of a criminal offence, so it can be declared free, that is free from all lawsuits. This indicates that the existence of evidence in the evidence of a criminal case is not a determinant of the guilt or innocence of a person, his name is very important to be the basis of the judge's decision.

But in law enforcement today the understanding and ability of judges in handling environmental disputes in the canyon is still minimal (Rangkuti, 2000). Judges often do not accept scientific evidence of environmental destruction because it is considered incompatible with the principle of proof. As a result, the verdict of the environmental destruction criminal case does not solve the problem.

This was conveyed by Prayekti Murharjanti, an environmental law researcher from the Indonesia Centre for Environmental Law (ICEL). According to him, it is not uncommon for judges to fail to interpret scientific evidence as legal evidence. Prayekti exemplified, in one of the cases of forest fires that pervaded the settlements, the judge rejected the witness's argument that there was deliberate arson (Hukumonline, 2011). This is often the case in environmental law enforcement. Whereas environmental crimes generally require proof with the help of scientific evidence to know the relationship between actions and environmental impacts, generally can only be known and measured impact with scientific examination, for example based on the results of laboratory tests. Scientific evidence has a very important role in the handling of environmental cases. Scientific evidence is needed to prove the causality relationship between unlawful acts and their impacts (Mike, 1991) in Kisworo, 2018.

*Related to the environmental case, there is the real meaning of environmental law enforcement which directed to the return of the environment into an ecosystem, meaning the environment in an order of environmental elements that is a whole-whole and affect each other in shaping the balance, stability, and environmental productivity. When the ecosystem is being problematic due to pollution and environmental damage, enforcement of environmental law is not addressed to a matter of one's behaviour, but to an environmental condition. Therefore, enforcement of environmental law has its own character, because enforcement of environmental law is a bit fairly complicated law enforcement because environmental law occupies a cross between the various fields of classical law*.

Although it concerns the cross-stitch of various classic areas of law, but in its development requires scientific evidence to better accurately the fact of the occurrence of environmental criminal acts. So scientific evidence is very important in this regard (Erliyani, 2020).

It can indeed be said in the theory of criminal law that the existence of evidence in the process of proof of criminal cases and in terms of determining a person's criminal wrongdoing requires the conviction of a judge. In theory of negative evidentiary law requires the relevance between at least two tools of evidence and the conviction of the judge (Fuady, 2006). As also stated in Article 183 KUHAP. But the existence of scientific evidence is needed to increase the judge's confidence in the act can be proven by also looking at the impact of the work.

Furthermore, based on the development of human civilization, the existence of evidence tools in criminal evidentiary law has developed, including the recognition of scientific evidence in the Burden of Proof regulated in a regulation outside KUHAP, namely:

1. Law No. 31 of 1999 as amended by Law No. 20 of 2001 concerning the Eradication of Corruption Crimes (Tipikor Law). The development of evidence tools based on the Tipikor Law is contained in Article 26A, which is in the form of an extension of the source of evidence in KUHAP, namely in the form of information stored and used / issued electronically and documents. In the form of information stored and used / issued electronically and documents. This evidence is necessary because of the development of crime and its characteristics in the

form of a modus operandi of corruption crimes itself related to various fields, such as administration, taxation, bureaucracy, government, accounting, and banking.

2. Law No. 11 of 2008, revised by Law No. 19 of 2016 on Information and Electronic Transactions. (ITE Law).

The ITE Law also recognizes Electronic Evidence Equipment, Article 5 Paragraph (1) law No. 11 of 2008 on ITE, mentions that „Electronic Information and/or Electronic Documents and/or their printouts are valid legal evidence" Paragraph (2) states „Electronic Information and/or Electronic Documents and/or their printouts as referred to in Paragraph (1) is an extension of valid evidence in accordance with the Applicable Procedural Law in Indonesia."

The regulation of the development of evidence in the ITE Law contained in the Article and its explanation shows the recognition of new evidence tools in the form of electronic information and electronic documents, as well as stipulates that the printout of electronic information is a valid evidence tool and has legal consequences. The business world, education, as well as in government and law enforcement, already use the internet media for various activities, especially in the era of pandemic covid 19. Internet media is a solution in various activities in the current social distancing condition. Consideration because of the various advantages that drive the rapid use of the internet, and of course will encourage the creation of cybercrime. This evidence is necessary because of the development of crime and its characteristics in the form of a modus operandi which is a crime on a technology basis, especially information technology.

3. Law of the Republic of Indonesia Number 15 of 2002 as amended by Law of the Republic of Indonesia Number 25 of 2003 concerning Money Laundering Crimes (UU TPPU). The development of evidence in the Law on money laundering crimes is contained in Article 38, namely in the form of recognition of new evidence in the form of information stored and used / issued electronically and documents. This development is influenced by the unique characteristics of the modus operandi of money laundering crimes.

4. Law No. 15/2003 concerning the Establishment of Government Regulation In lieu of Law No. 1 of 2002 concerning the Eradication of Terrorism Crimes. The regulation of the development of evidence in the Terrorism Act is contained in Article 27, namely in the form of recognition of new evidence in the form of information stored and used / issued electronically and documents. This is similar to that in the money laundering laws.

5. Law of the Republic of Indonesia Number 21 of 2007 concerning the Eradication of People Trafficking Crimes. The regulation of new evidence in this Law is contained in Article 29, namely in the form of information stored and used / issued electronically as well as documents similar to those in the money laundering crime law and the Law on the eradication of terrorism crimes. The influence of the peculiarity of the nature of traffic crimes in the form of divided elements in the form of processes, ways and purposes, the nature of this crime which is a transnational crime and criminal subjects in the form of individuals and corporations, leads to the need for clearer arrangements, as stipulated in the explanation of Article 29, namely concerning the evidence of documents including any bank records, business, finance, credit or debt, transaction either related to a person or corporation , records of movements or travel, to documents or evidence obtained from other countries.

6. Law No. 32/2009 on Environmental Protection and Management. The regulation of new evidence tools in this Law is contained in Article 29, namely other evidence tools, including evidence tools stipulated in the Legislation. Then in the Explanation of Article 29 mentioned what is meant by other evidence that includes information spoken, transmitted, received, or stored electronically, magnetically, optically, and / or similarly; and/or evidence of data, recordings or information that can be read, viewed, and heard that can be issued with and/or without the help of a means, whether contained on paper, any physical object other than

paper, or electronically recorded, is not limited to writing, sound or drawing, maps, designs, photographs or the like, letters, signs, numbers, symbols that have meaning or that can be understood or read.

In cases that require the examination process according to the evidentiary law relating to electronic data, as has been described, in this case the examination will use a certain process or technique developed in a science called Digital Forensic, namely as a field of specialization of computer science and technology that has a significant position to investigate cases of computer crime and / or computer related crime. Digital Forensic provides the science and expertise to identify, correct and test digital evidence when handling a case that requires the handling and identification of digital evidence. By using Digital Forensic, all kinds of electronic data can be used as evidence in the trial, because Digital Forensic processes electronic data into data that can be read and understood by everyone, especially for law enforcement, this is because electronic data is not in the form of data containing letters or numbers but sometimes also a computer language that can only be understood and understood by people who are involved in the world of digital science.

This means that in the use of scientific evidence tools such as the involvement of forensic laboratories, both in processing data in the form of electronic data and data related to the disclosure of a person's DNA. Currently there are few people who have a desire to study science in the field of forensic laboratories, although in fact the results of forensic laboratories become determinants of the existence of scientific evidence.

As also revealed by the Police Resort Banjarbaru South Kalimantan, that scientific evidence is needed in the investigation of criminal acts, especially the results of forensic laboratorium, especially many in the investigation of narcotics crimes, also used for examination of blood samples, sperm, fingerprints, and others that are evidence in a criminal act that is being investigated – Hadmanto[6] (personal communication, June, 29, 2020).

Empirical data can also be known that the use of scientific evidence in the enforcement of criminal law in certain cases in the District Attorney's Office Rantau South Kalimantan, shows that scientific evidence is very urgent and used to uncover the occurrence of a criminal act - Sajimin[7] (personal communication, June, 29, 2020).

For proof in civil cases, scientific evidence is also needed for example in determining the biological relationship between a child and his father. It is important to demand civil rights as broken by the Constitutional Court of the Republic of Indonesia in Decision No. 46/PUU-VIII/2010 dated February 17, 2012 which also lays scientific evidence as evidence to prove the existence of blood (biological) relationship between a child and his father. This court's decision in addition to intending to provide protection of rights to the legal subject, namely a child who has been according to the law of marriage in Law No. 1 of 1975 on Marriage, that for children born outside of a valid marriage only have a civil legal relationship with the biological mother and her mother's family. But with this court ruling provides protection to children outside marriage to have a civil legal relationship with his biological father and his father's family. In this case the Court found a new legal subject that must be accounted for the child. The relationship of blood between the child and his father is a blood (biological) relationship that is confirmed based on legal process, but this court ruling also lays the legal basis for proof, because the legal relationship between a child outside kawain with his biological father will be confirmed by law if it can be proven by the latest science and technology. This means that the Evidentiary Law for civil law field cases also places scientific evidence as one of the evidence tools.

In addition, in the field of civil law in the realm of formal law, namely the process of civil proceedings in the court has also used technological advances, with the Regulation of the

[6] Aditya Hadmanto, Banjarbaru Police Police, South Kalimantan
[7] Prosecutor of the Rantau District Prosecutor's Office in South Kalimantan

Supreme Court of The Republic of Indonesia No.3-year 2018 on the Administration of Electronic Cases in the Court (E Court). This system of proceedings e court was not originally known in the rules on civil procedural law contained in the *Het Herziene Indonesisch Reglement* (HIR) in Staatblad year 1941 Number 44 and *Reglement op Burgerlijk Rechtvordering* (RBg) in Staatblad Year 1847 Number 52.

Administration e Court consists of 3 features, namely registration of cases (E Filing), payment of case money (E payment), and Submission of Notices and Summonses (E Summons). In this case including the administration of the case not only the registration of the case but also the stage of filing a lawsuit, answers, replik, Duplik, and summonses, as well as the submission of the judge's decision by the court, all conducted online or with digital technology with electronic systems. Then in 2019 with the Regulation of the Supreme Court of The Republic of Indonesia No. 1 of 2019, then the improvement or improvement of Supreme Court Regulations (PERMA) RI No. 3 of 2018 concerning The Administration of Electronic Cases in the Court ( E Court ) with PERMA No. 1 Year 2019 is used system E Litigation, in this case the application is used for the administration of cases not only state administration or registration of civil cases, but it is also done for the management of documents in a responsible manner for evidentiary, and the implementation of E Litigation also covers the Appeal, Cassation and Review on civil cases. And this applies in the environment of General Justice, Religious Justice, State Administrative Justice and Military Administration.

In this case we see that the development of technology is also utilized well in the judicial system in Indonesia by updating the litigation system and also the use of electronic mail evidence, because the letter of claim, letter of reply, and Court Judge's Decree are legally recognized even though it is sent in the form of electronic mail, and even with PERMA RI No. 1 year 2019 has also acknowledged the delivery of electronic proof documents , but underlined that it needs to be carried out responsibly. The civil procedure is now familiar with system E Litigation.

Based on the description above, it is clear in certain cases the scientific evidence is very decisive in the Burden of Proof even though it is only included in the laws and regulations governing certain crimes and still not regulated in the evidentiary law contained in the KUHAP. But this is part of the process of using the existing evidence tools set out in KUHAP. Similarly, in the field of civil law, there has been an expansion of evidence tools that have been regulated in the HIR and RBg, expanded by recognizing the existence of scientific evidence tools in civil legal proceedings. For example, laboratory test results of blood tests and DNA test results, widely recognized as a tool of scientific evidence in the evidentiary process in civil cases.

**Position of scientific evidence in evidentiary law**

Valid evidence contained in Article 184 KUHAP are:

a. Witness statement;
b. Expert description;
c. Letter;
d. Instructions;
E. Description of the accused.

In the development of criminal procedural law in Indonesia the problem of evidence tool provisions occurs differences between each other. For example, the Constitutional Court Procedural Law (MK) states that:

The evidence in the court hearing is:

• Letters or writings;
• Witness statements;
• Expert information;

• Information of the parties;
• Instructions;
• Other evidence tools in the form of: information spoken, sent, received or stored electronically with optical instruments or similar.

Meanwhile, the evidence in civil cases is:
1. Proof of mail;
2. Witness evidence;
3. Evidence of conjence;
4. Proof of confession;
5. Proof of oath;
6. On-site inspection (article 153);
7. Expert witness (article 154 HIR);
8. Bookkeeping (article 167 HIR);
9. Knowledge of judges (article 178 (1) HIR, Law-MA No. 14/1985).

In the case of the evidentiary environment based on Article 96 of Law No. 32 of 2009, the legal evidence in the claim of environmental crimes consists of:
a. Witness Statement;
b. Expert Information;
c. Letter;
d. Instructions;
e. Description of the Accused;
f. Other evidence tools, including evidence tools stipulated in the Statutory Regulations.

From the description above, indeed in the Burden of Proof on the Criminal Procedural Law or Civil Procedure Law there has not been regulated scientific evidence as one of the evidence tools. The use of scientific evidence will certainly have an impact on the law of the evidentiary event and will change the paradigm of proof in the trial as stipulated in article 184 paragraph (1) KUHAP about evidence in criminal law or article 163 HIR / article 283 Rbg / article 1865 civil code about proof in civil law.

But in addition to the evidence tools that have been determined by KUHAP, Law No. 32 of 2009 mentions also other evidence tools that can be used in the handling of environmental crimes. What is meant by other evidence tools described in the explanation of Article 96 of Law No. 32 of 2009, that which is meant by other evidence tools, including information spoken, sent, received or stored electronically, magnetically, optically, and/or similarly; and or evidence of data, recordings or information that can be read, viewed, heard that can be issued with and or without the help of a means, whether contained on paper, any physical object other than paper, or that is electronically pounced on, not limited to writing, sound or image, map, design, photograph or the like, signs, numbers, symbols, or traction that have meaning or that can be understood or read.

It seems that the legislator of Law No. 32/2009 has opened his eyes to the rapid development of technology today and so recognizes the progress of the development of evidence tools in environmental law to uncover crimes in the field of the environment. If we only adhere to the provisions of the Criminal Procedure Code, there will be very limited evidence that can be used in upholding environmental law, because of the development of environmental crimes with increasingly sophisticated motives and modus operandi. Of course, there is concern that it will be difficult to enforce the law, because it is difficult to reveal the criminal act.

The phenomenon of the expansion of evidence tools in KUHAP today is expected to be able to complete the provisions of evidentiary law and is expected to provide a direction of legal certainty about scientific evidence tools recognized in the Burden of Proof in this Country, So it is expected that judges who examine certain criminal cases, such as environmental crimes, will think progressively no longer confined to the thinking of the conventional evidence tools set forth in the KUHAP, but will open the eyes to the urgency of scientific evidence on law enforcement in this Country.

During this time the Court tends to argue that evidence based on technological developments and advances is not a tool of evidence, but rather as evidence. The existence of this other evidence in the provision of theory contains the consequences that the system negative *wettelijk* embraced in the handling of criminal cases is also enforced. The existence of other evidence tools coupled with one tool of evidence determined KUHAP and added the belief of the Judge, has been a reason for the judge to drop the verdict, so in the case of the environment is closely related to scientific evidence (scientific evidence) or science and technology (science and technology) that can sometimes be uncertainty (uncertainty). Including the loss and widespread impact of Environmental Crimes, has become part of the consideration of errors that can be analysed through science and technology, as well as economic evaluation before and after an Environmental Crime.

In the field of civil law, the position of scientific evidence has also been recognized, one of which is by the recognition by the Court of Justice No. 46/PUU-VIII/2010 on the proof of a child's relationship with his biological father by being placed proof based on scientific evidence. In this case based on scientific evidence according to medical science, namely with DNA tests etc. This means that the recognition of the existence of scientific evidence has been recognized juridically and put as a tool of evidence. In its empirical implementation to obtain scientific evidence is also needed supporting facilities and infrastructure, in addition to necessary science is also needed facilities and infrastructure such as laboratories, such as police are needed Forensic Lab, and this has been greatly developed today and required expertise to deepen the science of this Forensic lab.

So in practice scientific evidence (scientific evidence) is not stand alone but follow one of the evidence tools stipulated in the Criminal Procedural Law, or in the Civil Procedure Law, such as environmental pollution cases, then the sample of water, or soil or air that has been conducted tests in the laboratory can be known with certainty has been tainted after being given information by experts in their fields so [5]re the evidence of expert information, or *visum et repertum* is included as a proof of mail. *Visum et repertum* is a written statement made by a doctor in forensic medicine at the request of an authorized investigator regarding the results of medical examinations of humans, whether alive or dead or parts or suspected parts of the human body, based on their knowledge and under oath, for the benefit of professionals justisia. There is also scientific evidence is inserted into the evidence tool. Similarly, for the evidence in civil cases, scientific evidence is a development in the Burden of Proof today that has also accommodated in the law of civil proceedings. And its extension has been recognized, but in its position as a tool of evidence also cannot stand alone, must also be an extension of the evidence tools contained in the civil procedural law as has been set in the HIR and RBg, bias expansion of the evidence tool letter, or also the expansion of the evidence experts.

**Conclusion**

In closing of this legal research can be given the following conclusions:

1. Scientific evidence is not specifically regulated in KUHAP or in the civil procedure law, but is regulated in various laws and regulations governing certain crimes including in the Environmental Law and in other regulations. But its existence is very urgent in various areas of law and in terms of proof.

2. The position of scientific evidence in the legal system of proof in this Country, is recognized as a tool to prove an act or event or a certain legal relationship, but in its position on the composition of evidence tools either according to KUHAP or environmental law or in the HIR and RBg not mentioned This scientific evidence tool as one of the evidence tools, so that its position cannot stand alone but still is the necessity of the existing evidence tools in the provisions of the Burden of Proof , whether it is the use of proof of letters, expert evidence tools or evidence tools Instructions.

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