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Forest and Land Fire Prevention Obligations and Legal Accountability of Concessionaires in Central Kalimantan in 2026

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ABSTRACT

Forest and land fires (forest and land fires) are still a recurring environmental crisis in Indonesia, including in Central Kalimantan Province by 2026. The high number of hotspots and the extent of the affected areas confirm the urgency of implementing prevention and countermeasures obligations, especially for concessionaire corporations that manage forest areas, plantations, and peatlands. This study aims to analyze the legal framework regarding the obligation to prevent forest and land fires, as well as examine the basis and limits of concessionaire environmental responsibility in the context of the 2026 event. Through normative legal research methods with legislative and conceptual approaches, this study examines various legal instruments, literature, and official reports. The results of the study show that national legislation has essentially expressly required concessionaires to protect their working areas and provide fire control facilities. However, the determination of absolute legal liability requires a very careful evidentiary process. Satellite data (hotspots) only serve as preliminary indicators and cannot automatically prove the location of factual hotspots or the level of corporate negligence. Therefore, it is absolutely necessary to verify the field related to the boundaries of area control, compliance audits, and analysis of causality relationships. In conclusion, strengthening preventive supervision, comprehensive evidentiary standards, and the application of the principle of responsibility in precision are essential to ensure legal certainty and ecological restoration.

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1. INTRODUCTION

Forest and land fires (karhutla) are one of the environmental problems that continue to recur in Indonesia and have an impact on ecosystems, public health, and economic activities. This problem becomes even more complex when fires occur in peatland areas. The characteristics of peatlands allow

fires to persist and spread below the ground surface even though the fire on the surface has been successfully extinguished. This condition causes the extinguishing process to require more intensive handling because embers can still trigger fires again if the wetting and cooling process has not been carried out thoroughly (Ministry of Forestry, 2026a). Thus, the handling of forest and land fires is not only oriented towards extinguishing, but also requires efforts to prevent, supervise, and restore ecosystems in a sustainable manner.

The impact of forest and land fires is not only felt by the environment, but also poses an economic and health burden on the community. Based on CELIOS estimates (2026), the potential economic losses and health costs due to forest and land fires from January to August 2026 are estimated to reach IDR 39.29 trillion to IDR 123.1 trillion. The magnitude of this estimate shows that forest and land fires can have consequences that go beyond the damage to burned areas, including disruption of economic activities and increased public health risks (CELIOS, 2026). This impact shows that forest and land fires are not solely technical problems of forest or plantation management, but environmental issues related to the interests of the wider community. Therefore, it is necessary to regulate and implement preventive obligations that are able to reduce the risk of fire before causing greater damage.

This problem will again become a concern in Central Kalimantan in 2026. Based on a press release from the Ministry of Forestry on October 10, 2026, SiPongi monitoring shows 122 hotspots with a high level of trust in Central Kalimantan based on monitoring data on October 9, 2026 at 21.00 WIB. This number increased from 86 points the previous day and became the highest among the six priority provinces for forest and land fire control (Ministry of Forestry, 2026a). In addition, BPBD-Damkar data published by the East Barito Police recorded as many as 796 incidents of forest and land fires with an affected land area of 1,205 hectares during the period from January 1 to October 18, 2026 (ANTARA Central Kalimantan, 2026). The East Barito Regency Government also extended the emergency response status for forest and land fires until October 31, 2026 (ANTARA Central Kalimantan, 2026). The data series shows that forest and land fires are still a real problem in Central Kalimantan and require handling that is not only reactive, but also prioritizes prevention.

However, the use of hotspot data needs to be placed carefully in legal analysis. The Ministry of Forestry explained that hotspots are an indication of surface temperature anomalies detected through satellites and cannot be directly equated with the number of fire incidents or the area burned. One fire incident can even produce several hot spots, so a direct field check (ground check) is required to confirm the actual condition (Ministry of Forestry, 2026a). In addition, hot spot data does not automatically indicate whether the location of the fire is within a particular company's concession area. Thus, the existence of hotspots can only be used as preliminary information to detect potential fires and determine the need for further investigations. The data is not enough to directly conclude that there is a violation of the concessionaire's legal obligations or liabilities.

The risk of forest and land fires is also related to the management of forests, plantations, and peatlands, some of which are within the business licensing area. The CELIOS report (2026) shows that around 50.7% of the total 667,133 hectares of land burned until August 2026 are in areas that already have permits. The data provides an overview of the importance of monitoring areas managed based on business licenses. However, the existence of fires in licensed areas must still be analyzed based on area control, type of permits, inherent legal obligations, and the results of inspections of each permit holder. This is important because concessionaires not only obtain the right to utilize the area, but also have the obligation to maintain and protect the area under their management.

These obligations have been regulated in a number of laws and regulations. Article 48 paragraph (3) of Law Number 41 of 1999 concerning Forestry requires permit holders to protect forests in their work areas, while Article 49 paragraph (1) regulates the obligations of rights or permits holders to carry out forest fire prevention efforts in their work areas. Furthermore, Article 49 paragraph (2) regulates the responsibility of rights holders or Business Licenses for the occurrence of forest fires in their work areas. The regulation of forest and land fire prevention and control obligations for concessionaires is spread across several complementary laws and regulations. Article 48 paragraph (3) and Article 49 paragraph

(1)–(2) of Law Number 41 of 1999 concerning Forestry require rights or permits holders to protect their working areas and be responsible for the occurrence of forest fires in their work areas. Article 56 of Law Number 39 of 2014 concerning Plantations prohibits land clearing by burning and requires plantation business actors to provide fire control systems, facilities, and infrastructure. Meanwhile, Article 69 paragraph (1) letter h of Law Number 32 of 2009 concerning Environmental Protection and Management (PPLH Law) prohibits everyone from clearing land by burning, with limited exceptions for communities who practice based on local wisdom. Qamariyanti et al. (2023) emphasized that the obligations of permit holders are not only formal-normative, but also include operational obligations, namely: (a) preventing fires at business sites; (b) having early detection systems, facilities, and infrastructure; (c) developing standard preventive operating procedures; (d) forming a responsible organization; (e) conducting training; and (f) conducting counseling to the surrounding community. These obligations show that forest and land fire prevention is an integral part of concession governance, not just a moral obligation.

The implementation of these obligations is also a concern for the government in enforcing forest and land fires laws in 2026. The Ministry of Forestry announced the freezing of permits accompanied by the forced restoration of ecosystems for six companies in Central Kalimantan on October 21, 2026. The six companies are located in several districts, with a total concession area of around 201,391 hectares and a reported area of 7,531 hectares (Ministry of Forestry, 2026b). This action shows that supervision of permit holders is not only related to the existence of fires, but also includes inspections of the fulfillment of control and recovery obligations. In this case, the Ministry of Forestry said that the handling includes checking the readiness of fire control squads, the availability of extinguishing equipment, water sources, monitoring towers, and other fire control facilities. Especially in peatlands, restoration can also include improving hydrological functions through water management and peat rewetting (Ministry of Forestry, 2026b). However, these administrative actions must still be distinguished from the determination of civil and criminal liability because each has its own legal basis and mechanism.

Legal problems then arise in determining the extent to which concessionaires can be held accountable for fires that occur in or related to their work area. Article 49 paragraph (2) of the Forestry Law regulates the responsibility of rights holders or Business Licenses for forest fires that occur in their work area. Meanwhile, in the realm of environmental protection and management, Article 87 of Law Number 32 of 2009 concerning Environmental Protection and Management regulates the obligation to provide compensation and/or take certain actions against parties who commit unlawful acts that result in pollution or environmental damage. In addition, Article 88 of the PPLH Law regulates the principle of strict liability for losses arising from activities that fall within the scope of these provisions. After the amendment through Law Number 6 of 2023, the formulation of Article 88 no longer explicitly contains a phrase about responsibility without the need to prove elements of error as in the previous formulation. The change raises the question of how the principle of absolute responsibility must be understood and applied in cases of environmental damage, especially related to forest and land fires (Maulana & Annisa, 2024).

The application of strict liability also needs to be distinguished from the assumption that the concessionaire is automatically responsible for every fire that occurs in his permit area. In its application, it is necessary to consider whether the activities carried out are included in the scope of Article 88 of the PPLH Law, whether there is environmental loss, and whether there is a causal relationship between the activity and the losses that arise. Maulana and Annisa (2024) emphasized that the principle of absolute responsibility removes the need to prove the element of fault, but does not remove the need to prove activities, losses, and causal relationships. This issue is important because the determination of the liability of concessionaires is not enough based only on the existence of fires or hot spots, but must consider the provisions of applicable law and evidence that can show a link between business activities and environmental damage.

The difference in the application of the principle of absolute responsibility can be seen in the case of PT Kumai Sentosa in Central Kalimantan. The case is related to a fire that burned around 2,358 hectares of land. In the judicial process, there are differences in considerations regarding the application of strict

liability to the company. The Supreme Court through Review Decision Number 527 PK/Pdt/2023 determined the company's liability by requiring the payment of compensation of IDR 175.18 billion and the implementation of environmental remediation. Furthermore, the second request for review through Decision Number 297 PK/Pdt/2024 was rejected. One of the issues of concern in the case is the assessment of the adequacy of the company's extinguishing efforts (Review Decision Number 527 PK/Pdt/2023; Decision Number 297 PK/Pdt/2024). This case shows that the determination of the liability of the concessionaire is not only related to the location of the fire, but also to the application of environmental liability norms and the assessment of the actions that have been taken by the company. Therefore, the decision is relevant to be studied in looking at the relationship between preventive obligations, countermeasures efforts, and the application of absolute liability.

Based on these conditions, there are several issues that need to be studied further. First, Article 49 of the Forestry Law regulates the obligation to prevent and responsibility of rights holders or Business Licenses for forest fires in their work areas, but the scope and limits of their application still need to be analyzed, especially when it is related to the type of licensing and control of the area. In addition, these provisions need to be studied in relation to Article 88 of the PPLH Law which regulates the principle of absolute responsibility. The difference in the formulation and scope of the two provisions raises questions about the proper basis of liability when fires occur in concession areas. Second, the application of strict liability still raises problems in determining the elements of activities, environmental losses, and causal relationships. Rachma and Triwibowo (2023) highlight the problem of limiting the meaning of serious threats to the environment, while Adinata et al. (2025) point out that there is a problem with judges' interpretation in determining the relationship between business activities and environmental damage. Third, Heriamariaty et al. (2025) highlight the problem of interpretation between Article 69 paragraph (1) letter h and Article 69 paragraph (2) and its explanation. According to the two authors, the exception provision needs to be interpreted in a limited way so as not to eliminate the main purpose of the prohibition of land burning. This inconsistency creates legal uncertainty for concessionaires and the community, so clearer interpretation guidelines are needed to distinguish between prohibited burning and exempt burning based on local wisdom.

A number of previous studies have discussed the application of the principles of strict liability and corporate responsibility in forest and land fire cases, including cases that occurred in Central Kalimantan (Martono & Suriani, 2025). Other studies discuss the issue of accountability from the perspective of civil procedure law (Syabina et al., 2026), the limits of the application of absolute responsibility (Ali et al., 2026), and the accountability model based on environmental prevention, control, and restoration obligations (Jana, 2026). These studies provide an important foundation for understanding the application of environmental responsibility. However, studies on the obligation to prevent forest and land fires based on Article 49 paragraph (1) of the Forestry Law in the context of events in Central Kalimantan in 2026 still need to be developed. In addition, the relationship between preventive obligations under the Forestry Law and the application of strict liability principles based on the PPLH Law needs to be analyzed more specifically. Another aspect that cannot be ignored is the position of hotspot data as preliminary information in the process of determining legal liability, considering that the data has not directly proven the location of the fire or the link of business activities to environmental damage.

Based on this description, this study focuses on a juridical analysis of the obligation to prevent forest and land fires and the environmental responsibility of concessionaires in Central Kalimantan in the context of the events of 2026. The novelty of this research lies in the study of the relationship between preventive obligations based on Article 49 of the Forestry Law, the application of the principle of strict liability based on Article 88 of the PPLH Law, and the limits of the use of hotspot data in analyzing the liability of concessionaires. This research uses a normative juridical method with a statutory approach and a conceptual approach. Through this research, it is hoped that a clearer understanding of the scope of prevention obligations and the basis of legal accountability of concessionaires can be obtained, as well as contribute to legal certainty and environmental protection as guaranteed in Article 28H paragraph (1) of the 1945 Constitution of the Republic of Indonesia.

2. METHODS

This research uses a normative legal research method, which is research conducted by examining legal rules, principles, and expert opinions related to the problems being studied. Marzuki (2021) explained that legal research does not only aim to know the law (know-about), but also to find answers to legal problems (know-how). In line with this, Benuf and Azhar (2020) explained that normative legal research is carried out through literature studies and emphasizes that research methods need to be adjusted to the problems being studied. Therefore, the normative legal research method is used to analyze the suitability between the legal provisions governing the obligation to prevent forest and land fires and the basis of environmental responsibility of concessionaires in Central Kalimantan in the context of the 2026 events.

The approach used in this study consists of a statute approach and a conceptual approach. The legislative approach is carried out by examining various regulations related to forest and land fires, environmental protection, forestry, plantations, and peat ecosystem management. These regulations include Law Number 32 of 2009 as amended by Law Number 6 of 2023, Law Number 41 of 1999, Law Number 39 of 2014, Government Regulation Number 4 of 2001, Government Regulation Number 71 of 2014 as amended by Government Regulation Number 57 of 2016, and Government Regulation Number 23 of 2021 as amended by Government Regulation Number 8 of 2026. The review of these regulations was carried out to determine the scope of the obligation to prevent and control forest and land fires and the basis of legal liability that can be imposed on concessionaires. Meanwhile, a conceptual approach was used to examine the concepts of environmental responsibility, strict liability, the polluter pays principle, and the principle of prudence. These concepts were studied through various relevant legal sources, including the study of Martono and Suriani (2025), to understand the basis and limits of the legal liability of concessionaires for forest and land fires.

The materials used in this study consist of primary legal materials, secondary legal materials, and factual supporting data. Primary legal materials are in the form of laws and regulations related to the obligation to prevent forest and land fires and environmental responsibility, including regulations in the fields of forestry, plantations, environmental protection, and peat ecosystem management. Secondary legal materials include books, scientific journal articles, and expert opinions discussing legal and environmental law research. One of the studies used as a reference is the research of Martono and Suriani (2025) on the application of strict liability in forest and land fire cases in Central Kalimantan. In addition, the official government report in 2026 is used as factual supporting data to obtain an overview of the condition of forest and land fires, such as data on hotspots, burned land area, and administrative actions against companies. The report is not placed as primary legal material, but is used to provide factual context in connecting legal provisions with the events that are the object of the study.

The collection of legal materials is carried out through literature studies by tracing and collecting laws and regulations from official sources, books, scientific journal articles, and government reports relevant to the research topic. The collected materials are then selected and grouped based on their relevance to each problem formulation. Furthermore, the materials are analyzed qualitatively by examining the content of regulations, legal principles, and the concept of environmental responsibility. The analysis is carried out through several stages, namely identifying legal provisions regarding the obligation to prevent and manage forest and land fires, examine the relationship between these obligations and the principle of environmental responsibility, and link the results of the legal review with official information regarding forest and land fire incidents in Central Kalimantan in 2026. In this stage, hotspot data and fire incident reports are analyzed carefully because the information does not automatically prove the location of the fire or the fault of the concessionaire. Through these stages, this study seeks to find the compatibility and problems between the applicable legal provisions and the context of the events being studied, so that conclusions can be drawn about the basis, scope, and limits of environmental responsibility of the concessionaire.

3. FINDINGS AND DISCUSSION

3.1. Regulation of Forest and Land Fire Prevention and Management Obligations for Concessionaires

Forest and land fires (forest and land fires) are fire events that can cause environmental damage, air pollution, and disruption to people's lives. The problem of forest and land fires is not only related to the emergence of fires, but also to regional conditions, human activities, and environmental management in areas prone to fire. In peat ecosystems, fires can even survive and spread below the ground surface even if the fire on the surface has been successfully extinguished. This condition makes the process of extinguishing and restoring the environment more difficult (Parsaulian, 2022).

In this study, the term concessionaire is used to refer to business actors who obtain business rights or licenses to manage forest areas or carry out plantation activities in certain areas. The term is used as a general term in the discussion, although each sector has different forms of licensing and legal obligations. With the right or permit to manage an area, business actors also have an obligation to maintain and protect the area for which they are responsible.

Forest and land fire control includes prevention, preparedness, extinguishing, and post-fire handling activities. Technical arrangements regarding this are contained in the Regulation of the Minister of Environment and Forestry Number 32 of 2016 concerning Forest and Land Fire Control. Rinaldi, Saad, and Marwoto (2023) explained that forestry and plantation business actors are one of the stakeholders who have a role in forest and land fire control, both at the prevention, countermeasures, and handling stages after fires occur. This shows that forest and land fire control is not only the responsibility of the government, but also requires the active involvement of business actors who manage the area.

The obligations of concessionaires in preventing forest and land fires are regulated through several laws and regulations. In the forestry sector, Article 48 paragraph (3) of Law Number 41 of 1999 concerning Forestry requires holders of forest utilization business licenses to protect forests in their work areas. This obligation is then clarified through amendments to Article 49 of the Forestry Law based on Law Number 6 of 2023. Article 49 paragraph (1) requires rights holders or Business Licenses to carry out efforts to prevent forest fires in their work areas, while paragraph (2) regulates the responsibility of rights holders or Business Licenses for the occurrence of forest fires in their work areas.

Both paragraphs show the relationship between the obligation of prevention and the responsibility of the concessionaire. Paragraph (1) places prevention as an obligation that must be carried out before a fire occurs, while paragraph (2) regulates responsibility when a fire occurs in the work area. Thus, it is not enough for the concessionaire to only handle after a fire appears, but also to have adequate preventive measures.

In the plantation sector, Article 56 of Law Number 39 of 2014 concerning Plantations prohibits business actors from clearing and/or cultivating land by burning. This provision also requires business actors to have systems, facilities, and infrastructure to control land and garden fires. This means that the obligation of plantation companies is not only in the form of a prohibition of burning, but also includes the provision of a control mechanism in the event of a fire.

More technical regulations are contained in Government Regulation Number 4 of 2001 concerning Environmental Damage and/or Pollution Control Related to Forest and/or Land Fires and Minister of Environment and Forestry Regulation Number 32 of 2016. These controls include organizational readiness, human resources, infrastructure, prevention and extinguishing activities, and post-fire handling. Rinaldi, Saad, and Marwoto (2023) also emphasized the importance of fulfilling human resources and control facilities by business actors so that forest and land fire control activities can run effectively.

This obligation becomes more specific if business activities are located in peat ecosystem areas. Article 26 paragraph (1) of Government Regulation Number 71 of 2014 as amended by Government Regulation Number 57 of 2016 prohibits several activities that can damage peat ecosystems, including creating drainage channels that cause peat to dry out, burning peatlands, and allowing burning. This regulation is important because drying peat can increase the risk of fires, while recovery requires efforts

to restore the hydrological condition of the land. Setyorini and Azhari (2020) explained that peatland damage due to fire requires environmental management and restoration as well as adequate funding mechanisms. Thus, the obligation of concessionaires in peat areas is not enough to only extinguish, but also to pay attention to water management and ecosystem function restoration.

In addition to regulations in the fields of forestry, plantations, and peat, the obligation to prevent forest and land fires is also related to Law Number 32 of 2009 concerning Environmental Protection and Management (PPLH Law). Article 69 paragraph (1) letter h prohibits everyone from clearing land by burning. This provision needs to be read together with Article 69 paragraph (2) and its explanation which regulates limited exceptions to land clearing by burning based on local wisdom. This exception does not mean that every business actor is free to use burning to clear land, but must be understood according to the limits and requirements specified in the law.

Heriamariaty et al. (2025) highlight the problem of interpretation between Article 69 paragraph (1) letter h and Article 69 paragraph (2) and its explanation. According to the author, the exception provision needs to be interpreted in a limited way so as not to eliminate the main purpose of the prohibition of land burning. Moreover, exceptions based on local wisdom cannot be used as a justification for land clearing activities by companies carried out outside the legal requirements.

When examined systematically, the PPLH Law provides a general basis for the prohibition of actions that can cause environmental damage, while the Forestry Law and the Plantation Law provide more specific obligations in accordance with the business activity sector. Meanwhile, Government Regulation No. 4 of 2001, Government Regulation No. 71 of 2014 as amended by Government Regulation No. 57 of 2016, and Regulation of the Minister of Environment and Forestry No. 32 of 2016 provide technical regulations regarding fire control and ecosystem protection. Thus, these provisions complement each other in forming a legal framework for the prevention and management of forest and land fires.

According to the author, these regulations basically include a ban on burning, the obligation to protect the work area, the provision of control facilities, and the management of environmental damage. However, the large number of regulations does not necessarily guarantee that these obligations have been implemented effectively. Rinaldi, Saad, and Marwoto (2023) found that there is a difference in the level of fulfillment of obligations between forestry and plantation business actors in Batang Hari Regency. These findings show that the effectiveness of forest and land fire control is not only determined by the completeness of the rules, but also by the level of compliance of business actors in carrying out their obligations.

The implementation of the concessionaire's obligations needs to be accompanied by government supervision. Article 71 and Article 74 of the PPLH Law provide a basis for the government to supervise the compliance of the person in charge of the business and/or activity and conduct inspections according to their authority. In the context of forest and land fire control, supervision can include checking the readiness of personnel, the availability of extinguishing facilities, monitoring systems, the implementation of patrols, and the fulfillment of environmental management obligations.

Supervision should be carried out before and after a fire occurs. Before a fire, the government needs to ensure that the company has adequate prevention systems and control facilities. After a fire occurs, an inspection is needed to determine the condition of the area, the implementation of the obligations of permit holders, and the possibility of violations. This approach is in line with the research of Rinaldi, Saad, and Marwoto (2023), which places the fulfillment of business actors' obligations as an important part of the effectiveness of forest and land fire control.

According to the author, supervision that is only carried out after a fire occurs is not enough to provide protection for areas that are prone to fire. The government needs to ensure that prevention obligations are carried out in a sustainable manner, especially in peat areas and areas with a history of fires. Thus, supervision not only serves to find violations, but also to prevent environmental damage from the beginning.

The legal obligations of concessionaires need to be assessed based on the type of permit, work area boundaries, and environmental characteristics managed. Forestry permit holders have forest protection

obligations, plantation business actors are required to run land and garden fire control systems, while those in charge of activities in peat ecosystems must comply with the provisions for the protection and management of peat damage. Therefore, the obligations of each permit holder cannot be equalized without paying attention to the basis of the permit and the characteristics of their area.

In relation to the responsibility of permit holders for forest fires, the Explanation of Article 30 paragraph (1) of Government Regulation Number 45 of 2004 concerning Forest Protection once interpreted the liability of permit holders as absolute responsibility, with possible exceptions if the permit holder can prove his innocence. However, Government Regulation Number 45 of 2004 has been repealed by Government Regulation Number 23 of 2021 concerning the Implementation of Forestry. Therefore, this explanation cannot be used as a valid legal basis to determine the liability of forest and land fires in 2026. Nevertheless, this provision can still be discussed as part of the historical development of the regulation of the responsibility of permit holders in the forestry sector.

Government Regulation Number 23 of 2021 itself has been amended by Government Regulation Number 8 of 2026. However, the amendment adds Article 293A related to forestry regulations in the Batam Free Trade Zone and Free Port. Thus, the change does not directly change the basis of the obligation to prevent forest and land fires that is the focus of this research.

Fires that occur in the concession area do not necessarily prove that the permit holder is the first party to start the fire or automatically responsible for all losses. The determination of liability must still take into account the applicable legal provisions, the results of field inspections, the obligations attached to the permit holder, and relevant evidence. Setyorini and Azhari (2020) show that peat damage due to fire requires environmental handling and restoration, but the determination of the responsible party still needs to be based on legal basis and provable facts.

Based on this description, according to the author, Indonesian law has established a framework for the obligation to prevent and manage forest and land fires through various complementary instruments. The main challenge lies in the implementation of obligations, supervision, and the determination of responsibilities according to the type of permits and regional conditions. This framework is the basis for analyzing the environmental responsibility of concessionaires in the forest and land fire incident in Central Kalimantan in 2026.

3.2. Legal Liability of Concessionaires for Forest and Land Fires

The legal liability of concessionaires for forest and land fires is not only related to the party who directly started the fire, but can also be related to the company's failure to carry out its obligations to prevent, supervise, and control fires. The basis for these obligations is contained in Article 67 of the PPLH Law which requires everyone to maintain the preservation of environmental functions and control pollution and/or environmental damage. In addition, Article 69 paragraph (1) h prohibits land clearing by burning.

In the forestry sector, Article 49 paragraph (1) and paragraph (2) of the Forestry Law as amended by Law Number 6 of 2023 becomes a special provision that regulates the obligation to prevent and the responsibility of rights holders or Business Licenses for forest fires in their working areas. This provision shows that the responsibility of concessionaires can not only be seen from the act of burning directly, but must also be linked to the legal obligations inherent in the management of the area.

According to the author, it is important to distinguish preventive obligations from liability after environmental damage occurs. Preventive obligations are preventive, which requires companies to take action before a fire occurs. Meanwhile, liability after a fire occurs is repressive and remedial because it is related to the provision of sanctions, compensation payments, and environmental restoration. Failure to carry out preventive obligations can be the basis for examination and imposition of sanctions in accordance with applicable regulations, while damage that has occurred can give rise to compensation and recovery obligations if the basis for liability is met.

Administrative liability is a form of law enforcement against concessionaires who do not meet their environmental and licensing obligations. Based on Article 76 of the PPLH Law and its implementation

provisions in Government Regulation Number 22 of 2021, the government can impose administrative sanctions according to the type of violation and applicable provisions. These sanctions can be in the form of written reprimands, government coercion, administrative fines, freezing of business licenses, or revocation of business licenses. In the context of forest and land fires, administrative sanctions can be applied if the results of supervision show that the company does not carry out its fire prevention or control obligations as required.

Civil liability is related to the obligation to pay compensation and/or take certain actions due to pollution or environmental damage. Article 87 paragraph (1) of the PPLH Law states that every person in charge of a business and/or activity that commits unlawful acts in the form of pollution and/or environmental destruction that causes harm to others or the environment is obliged to pay compensation and/or take certain actions. Damanik (2023) analyzed the Jambi District Court Decision Number 107/Pdt.G/LH/2019/PN.Jmb which sentenced PT Agro Tumbuh Gemilang Abadi (PT ATGA) to be absolutely responsible for the 1,500-hectare land fire. The judge argued that the defendant had posed a serious threat to the environment, as evidenced by the decrease in peatland thickness (subsidence), the death of flora and fauna, and the disruption of the hydrological function of the land. The decision was upheld at the appeal level through the Jambi High Court Decision Number 64/PDT-LH/2020/PT. JMB. The calculation of ecological losses and environmental restoration costs can refer to the Regulation of the Minister of Environment Number 7 of 2014 concerning Environmental Losses Due to Pollution and/or Environmental Damage.

In the case of forest and land fires, compensation can be related to community losses and environmental losses. Meanwhile, restoration actions can include land rehabilitation, replanting, water system improvement, rewetting peatlands, canal control, and monitoring of environmental conditions. Article 90 of the PPLH Law also gives the government and local governments the authority to file lawsuits for compensation and certain actions against businesses or activities that cause pollution and/or environmental damage. Thus, civil law enforcement is not only oriented towards the payment of a sum of money, but also on the restoration of damaged environmental functions.

In addition, civil liability can be based on the principle of strict liability as stipulated in Article 88 of the PPLH Law. The provision states that every person whose actions, business, and/or activities use hazardous and toxic materials (B3), produce and/or manage B3 waste, and/or pose a serious threat to the environment are absolutely responsible for losses incurred from their business and/or activities.

Maulana and Annisa (2024) discuss changes in the regulation of Article 88 after the enactment of the Job Creation Law. However, when viewed from the formulation of the article and its explanation after the amendment through Law Number 6 of 2023, the principle of absolute responsibility is still recognized. The explanation of Article 88 explains that the element of fault does not need to be proven by the plaintiff as the basis for payment of damages. Thus, the change in the formulation of the article cannot be interpreted as the elimination of the principle of strict liability in environmental law.

However, the application of strict liability does not mean that every company whose concession area is affected by a fire must automatically pay compensation. The party filing the lawsuit still needs to show the existence of relevant activities, loss or environmental damage, as well as the causal relationship between the activity and the impact caused. In other words, this principle eliminates the need to prove the element of fault, but does not remove the need to prove other elements that are the basis of the claim. Rachma and Triwibowo (2023) show that in Indonesian judicial practice, the application of strict liability still needs to pay attention to the scope of the activity, the dangerous nature of the activity, and the causal relationship with the losses incurred. A review of Decision Number 50/PDT/2014/PT. BNA jo. Number 12/PDT. G/2012/PN. MBO shows that strict liability is applied in conjunction with the precautionary principle and the polluter pays principle.

Criminal liability can be applied if there are acts that meet the elements of environmental crimes. Relevant provisions include Article 98 and Article 99 of the PPLH Law regarding acts that intentionally or due to negligence result in exceeding environmental quality standards or standard criteria for environmental damage, as well as Article 108 regarding land clearing by burning. In the event that a

criminal act is committed by or on behalf of a business entity, Article 116 and Article 119 of the PPLH Law regulate the basis for liability to business entities and related parties as well as additional types of criminal or disciplinary actions that can be imposed according to the provisions.

According to the author, the three forms of liability have different functions, but they can be related to each other. Administrative responsibility serves to ensure that concessionaires fulfill environmental management obligations. Civil liability serves to provide compensation and restore environmental damage. Meanwhile, criminal responsibility serves to provide sanctions for acts that meet the elements of criminal acts. Therefore, the determination of the form of liability must be carried out based on the type of violation and evidence found, not only based on the occurrence of fires. Mubarak and Syahrin (2023) emphasized that law enforcement against perpetrators of forest and land burning can be carried out through three channels, namely administrative, civil, and criminal sanctions, each of which has a different function but can complement each other to create a deterrent effect.

One of the issues in the liability of concessionaires is determining the limit of the application of absolute responsibility. Article 49 paragraph (2) of the Forestry Law states that the holder of the right or Business License is responsible for the occurrence of forest fires in his work area. Sihombing and Nuraeni (2024) interpret this provision as a form of criminal liability with a strict liability system, where the company is automatically responsible for fires that occur in its work area without the need to prove elements of fault. On the other hand, Article 88 of the PPLH Law regulates absolute responsibility for losses arising from activities that meet the criteria in the article. These two provisions need to be read systematically so as not to lead to the conclusion that all fires that occur in the concession automatically prove the company's fault or civil liability.

As previously explained, the Explanation of Article 30 paragraph (1) of Government Regulation Number 45 of 2004 once provided the meaning of absolute responsibility for permit holders whose work areas experienced fires. However, because the Government Regulation has been revoked by Government Regulation Number 23 of 2021, these provisions can no longer be used as the legal basis applicable to the events of 2026. This is important to note so that the liability analysis is not based on regulations that are no longer in force. Therefore, the legal basis used needs to be focused on Article 49 of the Forestry Law after the amendment, the provisions in Government Regulation Number 23 of 2021, and Article 88 of the PPLH Law.

Differences in views on the implementation of strict liability are also a concern in previous research. Martono and Suriani (2025) discuss the application of the principle of absolute responsibility in forest and land fire cases in Central Kalimantan. Meanwhile, Ali et al. (2026) examine the limits of corporate liability in large-scale land fires. Syabina et al. (2026) discuss the issue of corporate liability from the perspective of civil procedure law. Adinata et al. (2025) also examine the application of strict liability in mangrove forest restoration cases. These various studies show that the application of environmental responsibility requires an analysis of the legal basis, evidence, and cause-and-effect relationship.

Maulana and Annisa (2024) also emphasized that strict liability is not the same as strict guilt. Absolute responsibility is not the same as automatically declaring a company guilty. In filing a lawsuit, the plaintiff still needs to prove the existence of relevant activities, the losses caused, and the cause-and-effect relationship between the two.

According to the author, the determination of the liability of concessionaires needs to pay at least attention to several things. First, whether the company has rights or permits that cover the area where the fire occurred. Second, what legal obligations are attached to the company based on the type of permit and the characteristics of its area. Third, whether there are actions, negligence, or neglect that indicate the non-implementation of these obligations. Fourth, whether there is environmental damage or loss and the causal relationship between the company's activities and the impact that occurs. These stages are necessary so that legal liability is not only based on the proximity of the location between the fire and the concession area.

Administrative documents also have an important function in the proof process. Concession maps, environmental approvals, EIA, UKL-UPL, work plans, operational standards for fire prevention

procedures, patrol reports, and blackout records can indicate the scope of the company's authority and obligations. However, these documents do not automatically prove that the company is the source of the fire. The document must be analyzed with evidence regarding the location of the fire, the chronology of the incident, the pattern of fire spread, the results of field examinations, the company's actions, and the cause of the damage.

Based on this description, according to the author, the concessionaire cannot be directly declared liable simply because a fire occurred in or around the territory of his concession. Liability must be based on relevant legal provisions and evidence showing the relationship between the company's obligations, the performance or violation of those obligations, and the environmental damage that occurred. Even in the application of Article 88 of the PPLH Law, the absence of the need to prove the element of fault does not remove the need to prove relevant activities, losses, and causal relationships.

3.3. Analysis of Obligations and Responsibilities of Concessionaires in the Context of Central Kalimantan Forest and Land Fires in 2026

The condition of forest and land fires in Central Kalimantan in 2026 shows that prevention and countermeasures are still facing challenges. Based on SiPongi monitoring by the Ministry of Forestry until October 10, 2026 at 21.00 WIB, there are 288 hot spots with high confidence in Central Kalimantan. This number increased from 122 points the previous day. This figure also includes more than half of the number of hot spots detected in the six priority provinces for forest and land fire control (Ministry of Forestry, 2026a).

The picture of conditions at the regional level can be seen from the data of East Barito Regency. The East Barito Regency Government has extended the emergency response status for forest and land fires until October 31, 2026 (ANTARA Central Kalimantan, 2026). In addition, based on BPBD and Fire Department data published by the East Barito Police, there were 796 incidents of forest and land fires with a burned land area of 1,205 hectares during the period from January 1 to October 18, 2026 (ANTARA Central Kalimantan, 2026). The data shows that forest and land fires have caused repeated incidents and require serious handling. However, the data does not show that all fires occurred in concession areas or were caused by the activities of certain companies.

In addition, the analysis of the CELIOS Report (2026) noted that the area of the Indicative Burned Area (AIT) nationally reached 667,133 hectares as of August 20, 2026. Of this number, around 338,459 hectares or 50.7% are in areas that have permits and concessions (CELIOS, 2026). This data provides an overview of the importance of monitoring licensed areas. However, this figure is national data and cannot be directly used to conclude the area of fires in the Central Kalimantan concession area.

Hotspot data has an important role as initial information to determine potential locations for fires. Alfalah et al. (2019) showed that the emergence of hotspots in Kalimantan is strongly correlated with climatic factors, especially rainfall and surface temperature, so hotspots can be used as an early indicator of forest fires. However, hotspot data must still be confirmed through ground checks or field examinations. Hot spots detected through satellites are an indication of surface temperature anomalies, not direct evidence that a fire has occurred. The Ministry of Forestry explains that one fire incident can be detected as several hot spots, so a direct examination (groundcheck) is needed to confirm the actual condition (Ministry of Forestry, 2026a).

In the context of concessionaire liability, the existence of hotspots in an area cannot be directly used as a basis for stating that the company has committed a violation. The data does not explain who caused the fire, how the fire occurred, or whether the company has carried out its prevention and countermeasures obligations. In addition, hotspot data does not always show the boundaries of the concession area precisely. Therefore, the use of this data must be accompanied by further examination so that the legal conclusions drawn are not only based on conjecture.

According to the author, hotspot data should be used as a basis for determining locations that need to be inspected by the government or related officers. The results of the inspection are then used to assess whether a fire has occurred, whether the location is within the concession area, and whether the

concessionaire has fulfilled its obligations. Thus, hotspot data has an important function in the process of supervision and early detection, but cannot stand alone to prove the company's legal liability.

To determine the liability of the concessionaire, other evidence is needed that can explain the circumstances of the fire and the company's actions. One of them is a map and coordinates of the concession boundary that can be used to ascertain whether the location of the fire is really within the company's work area. This check is important because hot spot data alone cannot confirm the relationship between the fire location and the area managed by the permit holder.

In addition, field inspection reports, documentation of land conditions after fires, environmental inspection results, and expert testimony are required if needed. Company supervision documents also need to be checked, such as patrol records, fire squad readiness, availability of equipment and water sources, early detection systems, and reports on handling when fires occur. These evidence can help show whether the concessionaire has carried out its prevention and countermeasures obligations as stipulated in laws and regulations.

The importance of checking the company's readiness is also seen in the Ministry of Forestry's supervision actions in 2026. The Ministry of Forestry imposed administrative sanctions on six companies holding Forest Utilization Business Licenses (PBPH) after the results of the inspection found fires in the area they managed with a total area of 1,511.55 hectares. The six companies are spread across West Kalimantan, Central Kalimantan, and East Kalimantan. Especially in Central Kalimantan, the company recorded is PT NES with a burned area of 70.38 hectares. Five companies were subject to government coercive sanctions, while PT MPK was subject to a freezing of business licenses as well as government coercion. The inspections include the readiness of fire control squads, extinguishing equipment, water sources, monitoring towers, canal blocks, and early detection and response systems (Ministry of Forestry, 2026b).

The findings show that supervision of concessionaires is not enough just to know the location of the fire, but it is also necessary to check the implementation of the company's obligations. In this case, the government's administrative actions are a form of law enforcement against the results of supervision that find non-conformity or violation of obligations. However, the imposition of these sanctions must be understood according to the results of the inspection of the company concerned and cannot be generalized as evidence that all concessionaires in Central Kalimantan have committed violations.

As explained in the previous discussion, Article 48 paragraph (3) and Article 49 paragraph (1) of the Forestry Law require permit holders to protect their work areas and make efforts to prevent forest fires. This obligation not only means that companies must have extinguishing equipment, but also must ensure the readiness of human resources, monitoring systems, patrols, and quick action when potential fires are found. In the plantation sector, the obligation to provide fire control systems, facilities, and infrastructure is also regulated in Article 56 of the Plantation Law.

When compared to the condition of forest and land fires in 2026, the existence of these rules needs to be followed by supervision of their implementation. The increase in hot spots and the number of fire incidents in East Barito show that the handling of forest and land fires still requires stronger efforts. However, this condition does not in itself prove that all concessionaires have neglected their obligations.

According to the author, the assessment of the company's compliance must be carried out by looking at the concrete actions that have been taken before, during, and after the fire. The government needs to check whether the company has conducted periodic patrols, provided functioning extinguishing facilities, maintained the availability of water sources, and extinguished quickly when fires occur. In peat areas, inspections also need to pay attention to the condition of the water system and efforts to maintain soil moisture so that it is not flammable. In this way, the legal obligations that have been regulated can be assessed based on their implementation, not only based on the administrative documents owned by the company. Based on this description, according to the author, Indonesian laws and regulations have basically regulated the obligation to prevent and control forest

and land fires for concessionaires. These regulations are found in the fields of forestry, plantations, and environmental protection. Article 49 paragraph (1) of the Forestry Law regulates the obligation to prevent, while paragraph (2) regulates responsibility for fires in the work area. Meanwhile, Article 88 of the PPLH Law regulates absolute responsibility for losses arising from activities that use B3, produce and/or manage B3 waste, as well as activities that pose serious threats to the environment.

However, the implementation of these provisions still requires careful monitoring and proof. Hotspot data can help the government detect potential fires early, but it needs to be followed by field inspections and evidence tracing regarding the location, environmental conditions, and actions of concessionaires. In addition, supervision should not only be carried out after a fire has occurred, but also through periodic checks on the readiness of extinguishing facilities, early detection systems, patrols, and water management on peatlands.

If the fire is proven to cause environmental damage and meets the basis of legal liability, the concessionaire may be subject to obligations in accordance with applicable regulations, including compensation and environmental restoration. This is in line with the polluter pays principle as stated in Article 2 letter j of the PPLH Law. Almaajid (2026) emphasized that the polluter pays principle places the cost of prevention, countermeasures, and environmental restoration on the responsible party according to the law, so that the burden of damage is not unfairly transferred to the community or the state. Recovery is not enough only to extinguish fires, but also needs to pay attention to the condition of damaged land, restoration of ecosystem functions, and water management in peat areas. Ilma, Nurjaya, and Afandi (2024) show that the calculation of environmental restoration costs due to forest and land fires requires the application of the precautionary principle and the principle of in dubio pro natura, especially when there is scientific uncertainty or differences of opinion among experts. Judges in various decisions of forest and land corporations tend to side with the interests of the environment when there are doubts about the amount of damage.

The Jana study (2026) also emphasizes the importance of linking corporate responsibility with environmental prevention, control, and restoration obligations. Thus, corporate responsibility should not stop at imposing sanctions or paying compensation, but should also be directed at restoring damaged environmental functions. This is in line with the goal of environmental protection and the polluter pays principle.

Thus, the handling of forest and land fires in Central Kalimantan in 2026 needs to be carried out through more targeted supervision and evidence based on various sources of information. According to the author, an important thing that needs to be considered is the relationship between hotspot data, the implementation of prevention obligations, and the determination of concession holder liability. All three must be analyzed simultaneously so that law enforcement does not only focus on finding hot spots or fires, but is also able to determine the responsible party based on evidence and applicable legal provisions.

4. CONCLUSION

Based on the results of the research, it can be concluded that laws and regulations in Indonesia have basically regulated the obligation to prevent and control forest and land fires (karhutla) for concessionaires. These obligations include the protection of work areas, the prohibition of land clearing by burning, the provision of human resources and extinguishing facilities, and the implementation of fire prevention and control efforts. In peat areas, these obligations also include ecosystem protection and water management to prevent land from becoming dry and flammable. Thus, concessionaires are not only obliged to manage their permit areas for business purposes, but are also responsible for preserving the environment in the area they manage.

In the context of forest and land fires in Central Kalimantan in 2026, the determination of the environmental responsibility of the concessionaire must be carried out through thorough examination and proof. Hotspot data can be used as an initial indication to detect potential fires and determine the location of the supervision, but it cannot directly prove the location of the fire, its cause, or the

concessionaire's fault. Therefore, supporting evidence is needed such as the results of field inspections, concession boundary maps, land conditions, and records of the implementation of prevention and extinguishing obligations by the company. If based on evidence, it is found that there is a basis for legal liability, the concessionaire can be subject to sanctions in accordance with applicable regulations, including the obligation to compensate and restore the environment. This is in line with the polluter pays principle and the provisions of strict liability as stipulated in the PPLH Law, as long as the requirements for implementation are met.

The government needs to increase supervision of concessionaires through periodic checks on the readiness of fire brigades, the availability of water facilities and sources, early detection systems, patrol activities, and water management in peatlands. The use of hotspot data also needs to be followed by field verification so that surveillance and law enforcement actions are based on accurate information.

In addition, concessionaires need to carry out their obligations to prevent forest and land fires consistently, not only when fires have occurred. If environmental damage is found that gives rise to a basis for legal liability, law enforcement must be directed not only at the provision of sanctions, but also at the implementation of compensation and restoration of environmental functions. Thus, efforts to handle forest and land fires in Central Kalimantan can run more effectively while providing protection for the environment and the community.

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