

## **Evaluation of the Feasibility and Sustainability of the Building Blitar Ministry of Environment and Forestry in Meeting Environmental Standards Based on Operational Functions**

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### **ABSTRACT**

*This study evaluates the functional feasibility and environmental sustainability of the KLHK Blitar Guard Post Building. The research methodology employed is qualitative descriptive, focusing on the primary document analysis of the Environmental Inspection Report, followed by an empirical comparison of field conditions against national regulatory frameworks and standards. The specific regulatory standards utilized include Government Regulation (PP) No. 16 of 2021 on Building Construction (as the basis for the Certificate of Functional Feasibility), Minister of Environment and Forestry Regulation (Permen LHK) No. 6 of 2021 regarding Hazardous Waste Management, Minister of Public Works and Housing Regulation (Permen PUPR) No. 21 of 2021 on Green Buildings, and specific technical references from Indonesian National Standards (SNI). These include SNI 03-7065-2005 for plumbing systems, SNI 03-2453-2002 for infiltration wells, SNI 03-6572-2001 for ventilation systems, and SNI 7231:2009 for noise measurement. The results indicate that the building is technically and administratively feasible. The facility has secured the SPPL document, produces no industrial hazardous waste, and possesses plumbing and drainage infrastructure that exceeds minimum standards (such as a 3,600-liter septic tank and a 12 m<sup>3</sup> infiltration well). Although material usage is deemed safe, this research identified a methodological flaw in the previous audit regarding the incorrect use of SNI references for acoustic noise evaluation. In conclusion, the building operates in compliance with regulations, yet it requires further interventions, such as 3R-based domestic waste management and energy efficiency integration, to fully satisfy the ideal criteria of a Green Building.*

**Keywords: Functional Feasibility, Environmental Regulations, Green Building, Plumbing, Building Safety.**

### **INTRODUCTION**

Public buildings are an important means that not only function as a space for human activities, but must also meet technical standards, safety, health, comfort, and environmental sustainability (Cahyono, Saefudin, et al., 2025). The Government of Indonesia through Government Regulation (PP) No. 16 of 2021 concerning the Implementation of Buildings emphasizes that every building must meet the Functional Feasibility Requirements (SLF) before it can be used officially. This SLF covers various aspects ranging from structure, architecture, mechanical, electrical, to environmental utility systems such as waste management, sanitation, drainage, and building materials used (Kurniawan & Luthfi, 2023). In the context of sustainability, the concept of green building also emerges which emphasizes efficiency in the use of resources (energy, water, and materials) as well as efforts to minimize negative impacts on the environment. This concept is in line with the direction of global sustainable development outlined in the Sustainable Development Goals (SDGs), especially goal 11 (Sustainable Cities and Communities) (Sutaryono et al., 2021). The implementation of green buildings in Indonesia has begun to be accommodated through the

regulation of the Minister of Public Works and Housing Regulation No. 21 of 2021 concerning the Performance Assessment of Green Buildings, as well as through the Greenship voluntary certification mechanism developed by the Green Building Council Indonesia (GBCI). These two regulatory frameworks encourage public buildings to be more environmentally friendly, energy-efficient, and sustainable (Arwani et al., 2022).



**Figure 1.** The Research Location is on Jl. Telaga Pacuh, Sumber Kecek, Ds. Penataran, Nglegok District, Blitar.

The Blitar Ministry of Environment and Forestry Guard Post Building (LPHM Guard Post) is one of the operational support facilities of the Ministry of Environment and Forestry which functions as a control center, security, as well as a service point in supporting environmental protection activities (Puspawati et al., 2024). With its vital function, this building must not only be structurally feasible, but must also ensure compliance with environmental standards. This includes several important aspects, such as (Maulana, 2023):

1. Plumbing and sanitation, which deals with the provision of clean water and the disposal of dirty water so as not to pollute the environment.
2. Management of liquid waste and B3 waste, which refers to regulations on the management of hazardous and toxic waste so as not to cause health impacts or environmental damage.
3. The use of building materials, which must be ensured to be free of harmful substances, does not cause excessive glare, does not significantly increase the temperature, and complies with indoor comfort standards.
4. Drainage systems, which play an important role in rainwater runoff control, inundation prevention, and water conservation through infiltration wells.

The feasibility of building functions in environmental aspects is not only determined by the fulfillment of technical regulations, but also by the integration of utility systems that are able to support environmentally friendly principles (Maryanti, 2023). Therefore, this study is focused on evaluating the feasibility of the function of the Blitar Ministry of Environment and Forestry Guard Post Building in fulfilling environmental standards, by analyzing technical inspection documents that have been officially prepared and comparing the results with applicable regulations and standards, such as the Minister of Environment and Forestry Regulation No. 6 of 2021 concerning Procedures for B3 Waste Management, Government Regulation No. 22 of 2021 concerning the Implementation of Environmental Protection and Management, and Indonesian National Standards (SNI) related to plumbing, drainage, and building comfort systems (Keristian et al., 1997).



**Figure 2.** Research Object of the Blitar Ministry of Environment and Forestry Guard Building.

With this approach, this study is expected to provide a comprehensive picture of the extent to which the Blitar Ministry of Environment and Forestry Guard Post Building has met environmental standards (Suraswat et al., 2023), At the same time, identify aspects that still need improvement to improve the quality and sustainability of building functions.

## LITERATURE REVIEW

### 2.1. Feasibility of Building Functions and Regulatory Framework

Conceptually and legally-technically, the functional feasibility of a building or realized through the Certificate of Functional Fitness (SLF) instrument is a benchmark that assesses whether a building has met the criteria of safety, health, comfort, and in accordance with its intended use (Cahyono, Alfin, et al., 2025). In the evaluation of the Blitar Ministry of Environment and Forestry Guard Post, the fulfillment of the SLF is not only seen as a bureaucratic process, but also a form of integral compliance with the legal framework and guarantees public safety and ecological preservation.

#### a. Definition and Basic Concept of Functional Fitness Certificate (SLF)

A Certificate of Functional Fitness (SLF) is a legal certificate issued by the local government to state that a building is suitable for use according to its function after the construction process is completed. SLF is not just an administrative document, but a form of legal protection and certainty for owners that the built assets have passed the technical reliability test and are safe to operate. The feasibility of this function proves that the building meets the requirements for building reliability which includes aspects of safety, health, comfort, and convenience for its users (Sutaryono et al., 2021).

#### b. Legal Basis for Building Implementation (PP No. 16 of 2021)

In Indonesia, the main legal framework that regulates the implementation of buildings and SLFs is contained in Government Regulation (PP) No. 16 of 2021. This regulation is a derivative implementation of the Job Creation Law which redefines the licensing regime from the previous use of Building Permits (IMB) to Building Approvals (PBG) and SLF maintenance. This regulation dictates that every implementation of buildings must be administratively and technically orderly in order to ensure the continuity and improvement of people's lives at large. Through this legislation, audits and field inspections are stipulated as absolute requirements before the government grants functional status to a public facility (Maulana, 2023).

### **c. Integration of Environmental Administrative Compliance (SPPL) and Technical Feasibility**

Building feasibility compliance requires a strong synchronization between the completion of field technical requirements and environmental conservation administrative requirements. Based on the evaluation of the feasibility of the Blitar Ministry of Environment and Forestry Guard Post, the environmental administration mechanism for small to medium-scale activities is precisely realized through the registration of a Statement of Environmental Management and Monitoring Capability (SPPL) which is digitally integrated through *the Online Single Submission* (OSS) system. The use of SPPL proves that the operation of small-scale building facilities—even if exempted from the obligation to compile thick documents such as AMDAL or UKL – UPL – is still firmly bound by formal legal obligations to manage their impact on the environment. SPPL's administrative compliance must go hand in hand with technical operational reliability such as the management of plumbing and sanitation utility systems (Cahyono, Saefudin, et al., 2025).

### **d. The Function of SLF as a Risk Control and Mitigation Instrument**

Maintaining building feasibility status through the obligation to have an SLF also has broad implications as an instrument for mitigating legal risks, structural failures, and environmental pollution. The government functions to manage and extend SLFs to ensure that every element of the building, including the feasibility of waste disposal facilities and disaster mitigation preparedness, works according to quality standards. Violations or omissions to maintain operational feasibility standards risk triggering the consequences of layered administrative sanctions, as strictly regulated in Government Regulation No. 16 of 2021; starting from the imposition of written warnings and warnings, operational restrictions, freezing of permits, to the permanent revocation of PBG and SLF. Therefore, compliance with SLF and SPPL is a preventive measure to ensure the operational reputation as well as the sustainability of the Guard Post environment in the long term (Triarma et al., 2025).

## **2.2. Green Building Concept and Implementation in Indonesia**

The green building concept focuses on energy efficiency, water conservation, reducing the environmental impact of materials, as well as improving air quality and occupant comfort. At the national level, the Ministry of PUPR's policies and voluntary certification initiatives such as Greenship (GBCI) develop assessment criteria that integrate technical indicators and operational behavior (Sutaryono et al., 2021). Previous research has generally shown that the achievement of green building scores does not only depend on the initial design but also on maintenance and management practices. This means that a simple building with a good design can lose performance to ordinary buildings that are well managed. In the context of Pos Jaga, literature review confirms that operational aspects (e.g. 3R waste management, plumbing system maintenance) are as important as the existence of technical facilities such as infiltration wells or septic tanks (Maulana, 2023).

## **2.3. Plumbing, Sanitation, and WWTP Planning (Evidence & Standard)**

Plumbing and small-scale WWTP planning standards are regulated in the relevant SNI (e.g. SNI plumbing system planning). Detailed technical literature describes the minimum dimensions of septic tanks, control tank requirements, and the relationship between occupancy/facility and storage capacity (Maryanti, 2023). In practical terms, a 3,600 L septic tank as recorded at the Guard Post is generally adequate for facilities with low to medium domestic loads, provided that periodic maintenance is carried out (periodic emptying, leak inspection). But the literature also warns that capacity alone is not a guarantee — pipeline system design, channel slope, septic ventilation and

discharge access determine the sustainability of WWTP functionality. In other words: sufficient volume must be accompanied by good operational procedures (Arnowo, 2023).

#### **2.4. Management of Liquid Waste and B3 Waste — Regulation and Practice**

Minister of Environment and Forestry Regulation No.6/2021 regulates the obligation to manage B3 waste; The rule is only fully valid when there is production or handling of B3. Many case studies show that small public facilities often go unnoticed by B3 audits because they do not produce them — but hidden risks arise from the temporary storage of unmanaged cleaning agents, oils, or lubricants (Keristian et al., 1997). The literature therefore suggests proactive prevention policies: emergency response SOPs, material labeling, and personnel training even if activities do not produce significant B3. For domestic waste management, regulations and waste management studies (PP 81/2012; PP 16/2021) emphasizes sorting at source, 3R volunteering, and the provision of proper facilities — a proven approach that reduces the final burden of landfills and increases environmental awareness (Sutaryono et al., 2021).

#### **2.5. Material Selection, Indoor Air Quality (IAQ), and Thermal/Acoustic Comfort**

SNI literature and building ergonomics research show that material selection has an impact on three main things: material emissions (VOCs, dust), light/glare reflection, and thermal behavior. The use of non-asbestos materials, low-lead paints, and tested finishes reduces long-term health risks. SNI compliant ventilation (e.g. SNI 03 – 6572:2001) plays a role in maintaining IAQ and controlling room temperature, while acoustic design and placement of mechanical equipment determine noise levels (Maryanti, 2023). The case of Pos Jaga that places the machine unit at the end of the room and has an exit vent is an example of a simple mitigation practice that is effective — but the literature review still suggests periodic measurements and sound isolation measures when the operating load increases (Keristian et al., 1997).

#### **2.6. Drainage Systems and Rainwater Management**

Urban hydrology studies and SNI guidelines on drainage emphasize the importance of adequate infiltration wells, control basins, and gutters to prevent overrunoff and erosion. A 12 m<sup>3</sup> infiltration well and a 0.5×0.5 m control basin at Pos Jaga are the basic elements recommended by sustainable water management practices (Suraswat et al., 2023). But the literature also emphasizes field validation: local soil permeability, groundwater level and rainfall patterns should be the basis of the design—not just nominal capacity. This signifies the need for light geohydrological surveys when planning improvements or replication of designs at other locations (Arnowo, 2023).

#### **2.7. Risk Management, Safety, and Fire Protection Systems**

Building safety standards require the installation of fire protection systems, smoke detectors, alarms, and surveillance cameras to support a quick response to incidents. Implementation studies in various public facilities show that the absence of these tools often does not result in major problems under normal conditions, but becomes a critical weakness in the event of an incident (Wahyuni et al., 2024). Thus, the literature suggests that it tends to be preventive: the installation of CCTVs, smoke detectors, and alarms should be seen as a risk management investment, not just regulatory compliance (Cahyono, Saefudin, et al., 2025).

## 2.8. Sintesis Literatur: Kesenjangan Pengetahuan dan Kontribusi Studi Ini

A summary of the literature review shows two patterns: (1) many technical standards are available and have been tested (SNI, Percan, PP), but their practical application often depends on operational management; (2) small-scale public buildings tend to be "quite good" on basic technical aspects but weak on sustainability management and innovation aspects (energy efficiency, rainwater harvesting, continuous performance measurement) (Cahyono, Saefudin, et al., 2025). This research on the feasibility of the function of the Blitar Ministry of Environment and Forestry Guard Post fills this practical gap by combining the examination of technical documents and regulatory compliance analysis — thus resulting in recommendations that are implementive (not just theoretical). This study provides a useful case model for other agencies that want to conduct similar environmental audits of supervision/administrative facilities (Kurniawan & Luthfi, 2023).

## RESEARCH METHODOLOGY

This study uses a qualitative descriptive approach that focuses on document analysis and interpretation of the factual condition of the building against applicable regulatory standards (Arnowo, 2023). The descriptive method was chosen because the main purpose of the study was to evaluate the feasibility of the function of the Blitar Ministry of Environment and Forestry Guard Post building in the context of meeting environmental standards, not to test a quantitative hypothesis, but to provide a comprehensive picture based on documented field evidence (Wahyuni et al., 2024).

### 3.1. Data Sources

This research relies on two categories of data, namely primary data and secondary data:



**Figure 3.** Survey and Research Implementation

#### 1. Data primer

The main data was obtained from the Environmental Feasibility Examination Report of the Blitar Ministry of Environment and Forestry Guard Post. The document contains the results of field surveys, technical observations, and checklists for meeting building environmental standards, covering aspects of plumbing, sanitation, liquid waste management and B3, the use of building materials, and drainage systems. This document also includes the results of visual inspections, technical measurements, and improvement recommendations that are the basis for the functional feasibility analysis (Maulana, 2023).

## 2. Data seconds

Supporting data is obtained from relevant regulations, national standards, and academic literature. Some of these include (Puspadewi et al., 2024):

- a. Government Regulation No. 16 of 2021 concerning the Implementation of Buildings, which regulates the requirements for functional feasibility (SLF).
- b. Regulation of the Minister of Environment and Forestry No. 6 of 2021 concerning Procedures and Requirements for B3 Waste Management, which is relevant for the management aspect of hazardous waste.
- c. Government Regulation No. 22 of 2021 concerning the Implementation of Environmental Protection and Management, which affirms the obligation of building owners/managers to have environmental documents such as SPPL.
- d. Indonesian National Standards (SNI), for example SNI 03 – 6572:2001 on ventilation design procedures, SNI 03 – 7065:2005 on plumbing systems, and SNI 7062:2019 on noise measurement.
- e. Academic literature on the concept of green building in Indonesia, especially those that connect the feasibility of building functions with environmental and sustainability aspects.

### 3.2. Analytical Techniques

The analysis is carried out by a comparative analysis method, which is to compare the factual condition of the building as recorded in the primary document with the technical requirements listed in regulations and standards. The stages of analysis include (Arwani et al., 2022) :

- a. Identification of Technical Components

Each aspect examined (plumbing/sanitation, waste management, building materials, drainage, and environmental support facilities) was identified based on the results of the field examination.

- b. Matching With Standards

Factual conditions compared to the minimum requirements in national regulations (e.g. septic tank capacity compared to SNI provisions).

- c. Gap Evaluation

Any discrepancies between actual conditions and technical standards are analyzed to determine the level of compliance. If a discrepancy is found, a categorization is carried out whether it requires minor repairs, renovations, or additional recommendations.

- d. Conclusion Formulation

From the results of the analysis, the status of the feasibility of building functions in an environmental perspective was determined. This assessment not only emphasizes administrative compliance, but also pays attention to sustainability practices according to green building principles.

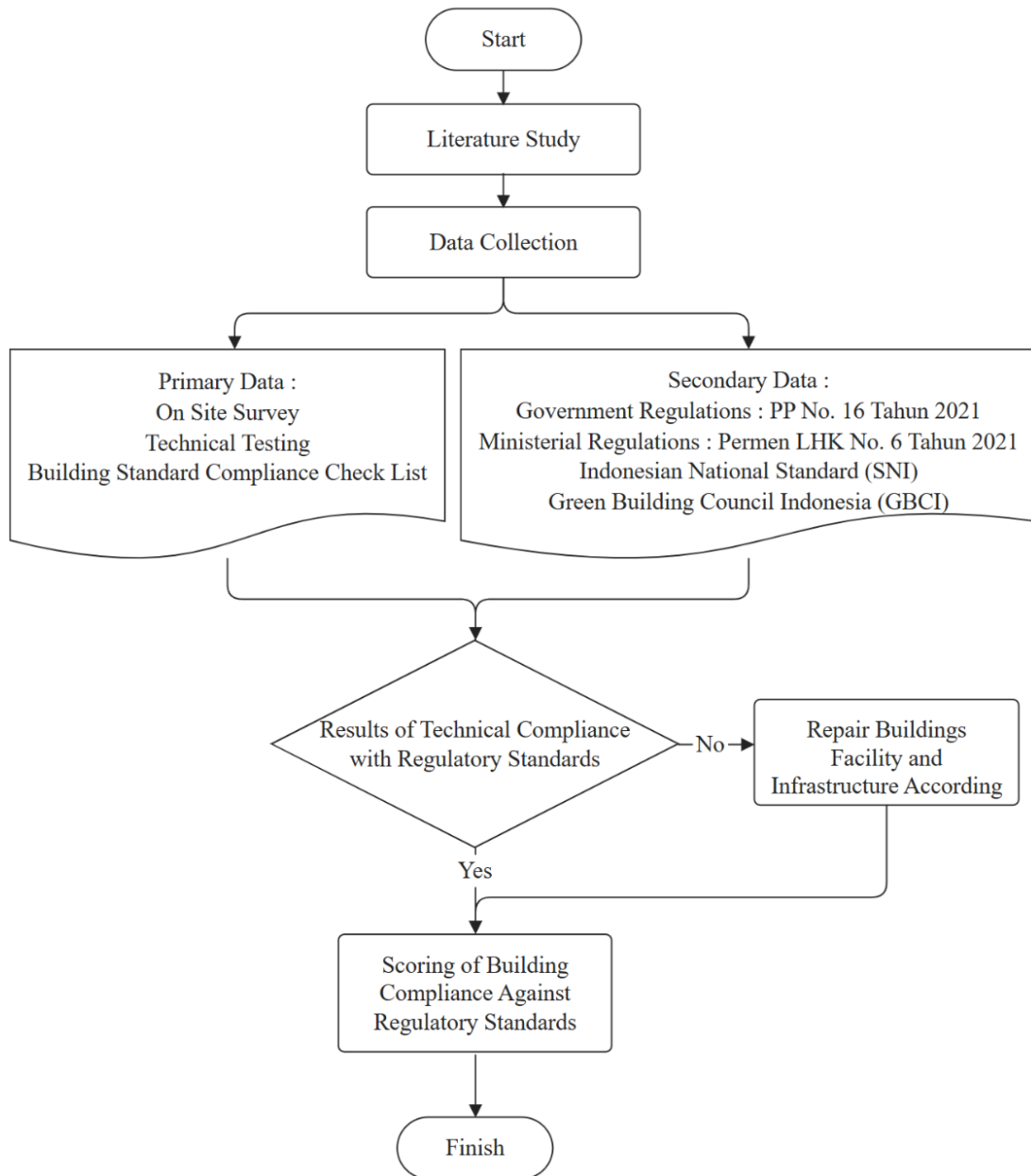
### 3.3. Reasons for Method Selection

The selection of a qualitative descriptive method based on document studies is considered the most appropriate because (Sutaryono et al., 2021):

- a. Field examination data is already available in official documents, so the research does not need to conduct a re-field test.
- b. The nature of research is more evaluative and interpretive than experimental.
- c. With a document approach, research results can be directly focused on regulatory analysis and relevant implementable recommendations for improvement.

- d. Thus, this research methodology is expected to be able to produce a comprehensive analysis of the level of compliance of the Blitar Ministry of Environment and Forestry Guard Post Building with environmental standards, as well as provide an argumentative basis in assessing whether the building can be declared functional from an environmental point of view (Alfin et al., 2025).

### 3.4. Research Flow Diagram



**Figure 4.** Research Flow Chart

## RESULTS AND DISCUSSION

### 4.1. Plumbing and Sanitation Systems

The results of the technical inspection in the Inspection Report noted that the Blitar Ministry of Environment and Forestry Guard Post Building did not produce a significant amount of domestic dirty water (black water), considering that activities in the building were relatively limited to supervision and administrative functions. However, basic sanitation facilities are still available, including a 3,600-liter septic tank that serves to accommodate domestic waste from toilets. This capacity is in accordance with the planning guidelines for small-scale wastewater treatment plants (WWTP) as listed in the SNI, which recommends septic tanks with a minimum volume of 2,000–3,000 liters for low-capacity buildings. With the septic tank, domestic liquid waste disposal can take place safely without the risk of groundwater pollution or the surrounding environment.



**Figure 4.** Plumbing and Sanitation System Inspection

In addition, this building already has a Statement of Environmental Management Capability (SPPL) submitted through the OSS (Online Single Submission) system. SPPL is an environmental document for small to medium-scale activities that do not require Environmental Impact Analysis (EIA) or UKL – UPL, in accordance with the provisions of Government Regulation No. 22 of 2021 concerning the Implementation of Environmental Protection and Management. This proves that the building has followed administrative procedures related to environmental permits, so that its formal legal status is strong. Thus, from the plumbing and sanitation aspect, the Pos Jaga Building is considered to meet technical requirements, both in terms of physical installation (duct pipes, gutters, and septic tanks) and in terms of legality of environmental documents.

### 4.2. Management of Liquid Waste and B3 Waste

In daily operations, this building does not produce industrial liquid waste or B3 waste (Hazardous and Toxic Materials). Therefore, buildings are not required to have a special liquid waste disposal permit or B3 waste treatment facility. This provision is in line with the Minister of Environment and Forestry Regulation No. 6 of 2021 which requires a B3 permit only if there are B3 production, storage, or processing activities. The results of the field verification also showed that there was no B3 waste storage place, no containers with special B3 symbols were found, and there was no need for the B3 emergency response SOP because the building did not produce this type of waste.



**Figure 5.** Inspection of Liquid Waste and B3 Waste Management System

For domestic waste, the evaluation emphasizes the need for management based on the principle of reduce, reuse, recycle (3R), as mandated by Government Regulation No. 81 of 2012 concerning the Management of Household Waste and Similar Waste of Household Waste and reaffirmed in Government Regulation No. 16 of 2021. The implementation of the 3Rs is important not only to reduce the volume of waste, but also to foster an eco-friendly culture among building users. The audit recommendations affirm the need for internal education on organic and inorganic waste sorting, as well as the provision of container facilities that support recycling. In this way, public buildings such as Pos Jaga can be an example of good waste management practices.

#### **4.3. Building Materials**

The results of the visual examination show that the building material does not contain toxic substances or harmful materials. No use of asbestos-based materials, paints with high lead content, or coatings that have the potential to produce harmful radiation or chemical vapors were found. This condition is in accordance with the provisions of the Minister of Environment and Forestry Regulation No. 6/2021 and environmentally friendly building standards.

In addition, no materials were found that caused the effect of glare and excessive reflection, so indoor lighting could take place comfortably. From the thermal aspect, although there is a potential for an increase in temperature from some materials, this has been anticipated through ventilation design in accordance with SNI 03 – 6572:2001 concerning Procedures for Designing Ventilation and Air Conditioning Systems in Buildings.



**Figure 6.** Building Material System Inspection

The only potential obstacle is the noise from the engine unit in the mechanical chamber. However, the building manager has placed the machine at the end of the room with open ventilation, so that the noise does not propagate to other rooms. The results of noise measurement show that the sound intensity level is still within safe limits according to SNI 7062:2019 concerning Noise Intensity Measurement in the Workplace. This confirms that from the acoustic aspect, the building still meets the standards of user comfort. Overall, the use of building materials can be declared environmentally friendly and in accordance with regulations.

#### **4.4. Drainage System**

The Ministry of Environment and Forestry Guard Post building is equipped with an adequate drainage system. Its main components include:

- a. The control tank is  $0.5 \times 0.5$  m in size, it serves to monitor the flow of domestic waste and facilitate cleaning in case of sedimentation.
- b. External channel outlet of the persil, which is connected to a general drainage network with dimensions of  $0.4 \times 0.3$  m.
- c. The infiltration well has a capacity of  $12 \text{ m}^3$ , which functions to collect rainwater and reduce surface runoff, while helping groundwater conservation.
- d. A 3,600 L septic tank, which functions to accommodate domestic waste before it undergoes natural infiltration.
- e. The rainwater gutter is made of PVC with a width of 80 cm, which channels water from the roof to the drainage channel without causing leaks or inundation.



**Figure 7.** Drainage System Inspection

All of these components are verified to be in good condition, in accordance with the design specifications and technical requirements of SNI 03 – 7065:2005 concerning Plumbing System Planning Procedures. With this drainage system, the risk of waterlogging can be minimized, so that it does not cause disturbances in comfort and potential diseases due to a humid environment.

#### **4.5. Comparison with Green Building Standards**

When compared to the green building criteria, the Blitar Ministry of Environment and Forestry can be said to meet most of the basic aspects, especially those related to sanitation, drainage, and material selection. The principles of green building emphasize six main aspects: land efficiency, energy efficiency, water conservation, material conservation, indoor air quality, and integrated environmental management. In practice, the Pos Jaga building has not implemented energy-saving technology innovations or rainwater harvesting systems.

However, in terms of the quality of the inner space, ventilation and natural lighting are adequate, thus supporting user comfort. In terms of material conservation, buildings do not use hazardous materials and encourage 3R-based waste management. The technical audit also recommends the addition of fire protection facilities such as CCTV, smoke detectors, fire alarms, and the provision of a pantry for employee needs.

This is important so that the building is not only technically functional, but also supports the welfare of users according to the principle of occupant well-being in green buildings. Overall, there were no major violations of environmental regulations or national standards. However, the implementation of sustainability principles can still be improved, especially through energy efficiency innovation, water management, and integrated waste management.



**Figure 8.** Green Building System Inspection

#### 4.6. Building Conformity Scoring to Regulatory Standards

As a comprehensive synthesis of the results of the observation of the Environmental Inspection Report of the Blitar Ministry of Environment and Forestry and the projection of the legal framework that has been dissected, the following is an analytical comparison table that quantitatively evaluates the level of compliance with the existing factual conditions of the building to the reference of regulatory standards, using a scoring scale of 1 to 10.

Table 1. Comparison of Existing Building Conditions with Regulation Standards

Aspects/Parameters	Existing Building Conditions	Regulatory Standards / Rules	Scoring (1-10)	Analysis and Justification of Assessment
<b>Plumbing and Sanitation Systems</b>	The capacity of the septic tank is 3,600 liters, without significant domestic liquid waste disposal.	SNI 03-7065-2005	9	The capacity is very adequate beyond the standard load of guard posts, ensuring that the anaerobic deposition process of gross waste runs perfectly.
<b>Water Drainage and Conservation Systems</b>	There is a 12 m <sup>3</sup> infiltration well, a 0.5 x 0.5 m control tank, and an 80 cm PVC gutter.	SNI 03-2453-2002	10	The infiltration infrastructure is very extensive, able to overcome the contribution of rainwater runoff while conserving groundwater in the land of persil.
<b>Waste Management (Domestic &amp; B3)</b>	It does not produce industrial waste, but it does not have a 3R waste sorting SOP and a special e-waste container.	Minister of Environment and Forestry Regulation No. 6 of 2021	6	Legally exempt from macro B3 waste management permits, but daily operational management is considered weak in managing 3R waste and office

Aspects/Parameters	Existing Building Conditions	Regulatory Standards / Rules	Scoring (1-10)	Analysis and Justification of Assessment
				equipment maintenance residue.
<b>Building Materials and Air Quality</b>	Free of toxic materials (such as asbestos/lead), glare-free, and cross-air ventilation works optimally with air conditioning.	SNI 03-6572-2001	9	The selection of interior material coating specifications is very safe; The circulation of air movement successfully maintains the humidity of the room at a healthy threshold for the occupants.
<b>Acoustic Comfort (Noise)</b>	The compressor/generator engine is kept away from the workspace, but the audit refers to the wrong standard (SNI lighting).	SNI 7231:2009	5	The isolation of the machine distance is physically correct and claimed to be safe, but the inspection assessment methodology is flawed because it uses the wrong lighting SNI reference.
<b>Environmental Administrative Compliance</b>	Have obtained and registered SPPL through the national licensing integration system (OSS).	Government Regulation No. 16 of 2021	8	The fulfillment of the initial permit (SPPL) strengthens the legality of low-risk buildings, but periodic technical maintenance schemes still need to be continued to secure the Certificate of Functional Worthiness.

## CONCLUSION

Based on the analysis of the Environmental Inspection Report document and its comparison with applicable regulations, the Blitar Ministry of Environment and Forestry Guard Post Building was declared to be technically and administratively feasible. The success of obtaining SPPL (Statement of Environmental Management and Monitoring Ability) proves the compliance of this facility with the building maintenance provisions in Government Regulation No. 16 of 2021.

Operationally, the facility meets feasibility standards through several key indicators:

**Plumbing and Drainage:** The infrastructure operates optimally and exceeds basic standards, as evidenced by the adequate capacity of septic tanks (3,600 liters) as well as large capacity infiltration wells (12 m<sup>3</sup>) which are crucial for water conservation and surface runoff prevention.

**Indoor Materials and Environmental Quality:** The use of non-toxic materials, combined with a hybrid ventilation strategy, successfully creates circulation and thermals in accordance with SNI 03-6572-2001. However, this evaluation found methodological weaknesses in the initial report related to the use of SNI 7062:2019 (lighting standards) to measure noise metrics that should have used SNI 7231:2009 reference.

**Waste Management:** In line with the Minister of Environment and Forestry Regulation No. 6 of 2021, this facility is low-risk and does not produce industrial B3 waste, so it is free from special disposal permits.

Even though it has met the minimum standards, further efforts are needed to encourage this guard post to become a *Green Building* standard facility. Improvement recommendations include the

implementation of 3R (*Reduce, Reuse, Recycle*) waste management, the placement of special e-waste containers, the use of integrated rainwater harvesting systems, and the improvement of energy efficiency through the installation of smart devices (sensory LEDs). With preventive and proactive facility management, the Blitar Ministry of Environment and Forestry will not only maintain the Certificate of Functional Fitness (SLF) in the future, but can also be a real example of public infrastructure that is fully resilient and eco-friendly.

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