



DOI: <https://doi.org/10.38035/jgsp.v3i4>
<https://creativecommons.org/licenses/by/4.0/>

Legal Update on the Role of Government Supervision of Nickel Smelters from the Perspective of State Administrative Law

Hermawan Sutanto¹, Megawati Barthos²

¹Universitas Borobudur, Jakarta, Indonesia, hermawanpdih@gmail.com

²Universitas Borobudur, Jakarta, Indonesia, megawati_barthos@borobudur.ac.id

Corresponding Author: hermawanpdih@gmail.com¹

Abstract: The nickel smelter industry is a strategic pillar in Indonesia's downstream mining program, according to the provisions of Law Number 3 of 2020, which amends Law Number 4 of 2009, which deals with coal and mineral mining (Minerba Law). Its presence is anticipated to promote sustainable development and raise natural resources' added value. However, the practice of monitoring nickel smelters still faces various issues, both related to the division of authority between the central and regional governments, as well as company compliance with occupational health and safety (K3) standards. From a State Administrative Law perspective, monitoring is a crucial instrument to ensure legal compliance. However, from the standpoint of Natural Resources Law, monitoring is necessary to guarantee that nickel management complies with the values of environmental sustainability and intergenerational fairness. Recent regulations such as Law Number 23 of 2014 concerning Regional Government in conjunction with Law Number 9 of 2015 and Government Regulation Number 96 of 2021 in conjunction with Government Regulation No. 25 of 2024 concerning the Implementation of Mineral and Coal Mining Business Activities highlight the division of powers between the central and regional governments. However, Law Number 6 of 2023 on Job Creation serves as the foundation for OHS's implementation. This study demonstrates that regulatory discord and inadequate coordination among governmental levels result in unsatisfactory government monitoring. Regulatory harmonization and strengthening of oversight capacity are needed to ensure the sustainability of equitable nickel smelter management that prioritizes worker and environmental protection.

Keyword: Nickel Smelter, State Administrative Law, Natural Resources Law, Supervision, Occupational Health and Safety (OHS).

INTRODUCTION

The Indonesian government's larger plan to accomplish sustainable downstream mining includes the establishment of a nickel smelter industry (Wau et al., 2024). This activity is especially governed by the need of raising the added value of natural resources emphasized by Law Number 3 of 2020 concerning Amendments to Law Number 4 of 2009

concerning Mineral and Coal Mining (Minerba Law) through refining and processing of domestic mining products (Rahayu & Faisal, 2021). Smelter development is expected to drive Indonesia's economic transformation from a mere raw material exporter to a technology-based, high-value-added industrial nation (Dirgantara et al., 2025). This downstreaming policy is also expected to expand employment opportunities, increase regional income, and strengthen national economic competitiveness in the global market (Widjaja, 2025). However, its implementation poses serious challenges in terms of regulation, oversight, and environmental and labor protection. The increasing number of nickel smelter projects in various regions, particularly in Sulawesi and Maluku, demonstrates a strong economic dependence on this industry (Fauziyyah & Paksi, 2023). This development has a positive impact on regional economic growth and non-tax state revenue. However, this dependence also has the potential to create vulnerabilities if legal governance is not clearly and equitably regulated. Many regions face a dilemma between encouraging investment and maintaining environmental sustainability and worker safety (Hutajulu et al., 2024). This imbalance demands a strong and responsive administrative legal system to ensure that all smelter business activities operate in accordance with the principles of legality and social responsibility.

Indonesia is currently the world's largest nickel producer, with total production reaching approximately 1.8 million metric tons per year, equivalent to 50 percent of total global production. (Tangkudung, 2024) This position makes Indonesia a strategic player in the international nickel trade. However, this dominance has also given rise to geopolitical economic dynamics, particularly related to competition between the European Union and China for control of raw material supplies for the battery and electric vehicle industries. The Indonesian government prefers to establish trade and investment cooperation with China through the construction of various smelter projects, both in Central Sulawesi, Southeast Sulawesi, and North Maluku, because it offers financial and technological support that is more quickly realized. (Simatupang, 2024) This situation has given rise to various legal and supervisory governance issues. Supervision of nickel smelter projects has not been optimal due to regulatory disharmony, overlapping authority between the central and regional governments, and weak company compliance with Occupational Health and Safety (OHS) standards. Many cases of environmental pollution and workplace accidents demonstrate the weak implementation of accountability and the ineffectiveness of supervision. This situation shows that although Indonesia has a relatively comprehensive legal framework, its implementation still faces challenges in cross-institutional coordination and consistent implementation in the field.

Legal issues in the implementation of smelter industry supervision arise from disharmony between regulations and overlapping authority between the national and local administrations (Hikam, 2025). The regions lost some of their strategic significance when Regional Government Law Number 23 of 2014, which was subsequently amended by Law Number 9 of 2015, moved certain regulatory authority in the mining sector to the central government (Kalo & Rini, 2023). This imbalance has weakened the effectiveness of field supervision due to limited coordination and resources at the regional level. This situation creates legal uncertainty for business actors and hinders the achievement of sustainable mining development goals. This regulatory disharmony also highlights the need for administrative law reform to improve the synchronization of authority structures between the central and regional governments.

Occupational Health and Safety (OHS) standards are a crucial aspect of smelter industry activities, which involve high technology and significant work risks (Rusdinah & Tobing, 2025). Numerous incidents in this sector demonstrate that compliance with OHS has not been fully enforced. Regarding the provisions of the Job Creation Regulation in lieu of

law, Law Number 6 of 2023 (Perppu Cipta Kerja) also regulates strengthening aspects of labor protection, but its implementation still requires a more stringent oversight mechanism. Occupational health and safety (K3) supervision must be supported by an accountable administrative system and involve synergy between technical ministries, labor agencies, and local governments (Lukman et al., 2025). Effective law enforcement against K3 violations will reflect the government's commitment to the principles of justice and the protection of workers' human rights (Puannandiniet al., 2025).

State Administrative Law serves as a normative framework governing how the government exercises its authority in managing public affairs (Ibad, 2021). This branch of law ensures that every administrative action has a clear, rational, and proportional legal basis. In smelter supervision activities, administrative law regulates the licensing process, controls, and administrative sanctions for violations (Rachmawati et al., 2024). The principle of legality in administrative law serves as the primary basis for ensuring that any policy or supervisory action is not carried out arbitrarily (Putri et al., 2025). The existence of administrative law also guarantees legal safeguards against possible misuse of authority by public servants and corporate players.

The connection between citizens and the government, which holds public authority, is covered by state administrative law, as parties subject to legal obligations (Resmadiktia et al., 2023). In supervising nickel smelter activities, this relationship is realized through the government's obligation to ensure business actors' compliance with laws and regulations. The government plays a role in establishing administrative standards and procedures and imposing sanctions when violations occur. Every administrative action taken must adhere to the principles of proportionality, efficiency, and protection of the public interest (Haris, 2015). Implementing these principles is a concrete manifestation of good governance and a focus on social justice.

The theory of authority (bevoegdheid) serves as an important foundation for discussing the government's role in the mining sector. Authority is the right held by government organs to act in certain areas based on law (Qamar & Rezah, 2023). In supervisory practice, government authority is limited by laws and regulations to prevent arbitrary action. Administrative discretion can be exercised in cases of legal vacuum or urgent circumstances but must remain guided by the principles of the AUPB (General Principles of Good Governance) (Aviano, 2022). This concept of authority and discretion serves to maintain a balance between legal certainty and flexibility in public policy, particularly in rapidly developing sectors such as the nickel smelter industry.

The General Principles of Good Governance (AUPB) serve as ethical and legal guidelines for state officials in exercising their authority (Rahmania & Umam, 2025). The AUPB comprises the principles of legality, accountability, proportionality, openness, and legal certainty. These principles require that every administrative action, including supervision of nickel smelters, be carried out transparently and responsibly. The implementation of the AUPB ensures that government decisions do not harm any particular party and remain oriented towards the public interest (Suniapril & Suharno, 2023). The application of these principles also encourages the government to be more open to public scrutiny and ensures that policies can be audited legally and morally.

Oversight in Administrative Law serves as an instrument to ensure that every policy implementation is carried out in accordance with regulations and state objectives. Preventive supervision is carried out before activities begin, repressive supervision is carried out after implementation, and evaluative supervision is conducted to assess the effectiveness and compliance of business actors with legal provisions (Kennedy et al., 2024). These three types of supervision have complementary roles and must be implemented consistently to maintain good governance in the smelter industry. Effective supervision will strengthen public trust in

the government and encourage a healthy investment climate. Enforcing administrative norms is key to creating legal certainty and corporate accountability.

Reforming administrative law in the mining sector has become a necessity following the enactment of Law Number 6 of 2023, which introduced major changes to the licensing and oversight mechanisms. These reforms aim to simplify the licensing bureaucracy and enhance the role of post-permit oversight. These changes are expected to create a more efficient, adaptive legal system capable of responding to the challenges of global industrial dynamics. Implementing this new policy requires increased capacity of supervisory officials to carry out their oversight functions professionally and free from political or economic interests. Reforming administrative law is a crucial step to ensure that smelter industry development proceeds in an orderly, transparent, and sustainable manner.

METHOD

Normative legal research, which adopts a conceptual and statutory approach, is the research methodology employed in this work. Positive legal standards that limit the authority and responsibility of the government in policing nickel smelters, as well as pertinent administrative law changes, are the main subjects of normative legal research. The statute-regulatory approach is implemented through the examination of various regulations. Additionally, the study incorporates technical criteria for Occupational Health and Safety (K3) requirements as specified in the Minister of Manpower Regulation Number 5 of 2018 for Occupational K3 in the Work Environment. Meanwhile, the core concepts of State Administrative Law, such as the general principles of good administration (AUPB), the philosophy of power (bevoegdheid), and the legality principle, are understood through a conceptual approach, and the principle of good governance as a normative basis for updating the supervisory system. The use of these two approaches is intended to provide a comprehensive analysis of the applicable legal substance while outlining the ideal construction for administrative law updates that are fair, effective, and adaptive to the dynamics of the nickel smelter industry in Indonesia.

RESULTS AND DISCUSSION

The Role and Authority of the Government in Supervising Nickel Smelters

The central government plays a central role in establishing national policies that guide the development of the nickel smelter industry as part of the national downstream mining sector. The responsibility of holders of mining company permits Articles 102 and 103 of Law Number 3 of 2020 concerning Amendments to Law Number 4 of 2009 concerning Mineral and Coal Mining give the legal foundation for this, which underline the need to process and refine mining products locally. The national government, through its technical ministries, establishes norms, standards, procedures, and criteria for mining activities and ensures their consistent implementation throughout Indonesia. This policy positions the central government as the primary controller of the management of nickel resources, which are strategic for the national economy.

The main organization with the authority to control, provide permits, and oversee mineral mining enterprises, including nickel smelters, is the Energy and Mineral Resources Ministry (ESDM). According to Government Regulation Number 96 of 2021 concerning the Implementation of Mineral and Coal Mining Business Activities in conjunction with Government Regulation Number 25 of 2024, the Ministry of Energy and Mineral Resources is authorized to grant Mining Business Permits (IUP), Special Mining Business Permits (IUPK), and Mining Services Business Permits (IUJP). According to the Government Regulation's Article 6, paragraph (1), the Minister is empowered to create technical policies, provide guidance, and supervise mining business activities. This authority demonstrates the

central government's dominant role in overseeing the governance of the nickel sector, which has high strategic value for national downstream processing.

The nickel smelter licensing process involves a series of administrative stages that must be completed before production can commence. Based on Articles 42 to 48 of Government Regulation No. 96 of 2021, companies are required to obtain approval for the construction of refining facilities, meet technical and environmental requirements, and report project progress periodically. Smelter construction must also obtain an Environmental Permit or Environmental Approval, in accordance with Law No. 6 of 2023 for Job Creation and Article 36 of Law No. 32 of 2009 concerning Environmental Protection and Management, which simplifies licensing procedures through a risk-based business licensing mechanism. Administrative compliance with these provisions is the basis for the operational legitimacy of any smelter project.

The Ministry of Environment and Forestry (KLHK) plays a role in overseeing the performance of environmental obligations related to nickel smelter activities. Based on Articles 71 and 72 of Law No. 32 of 2009, the KLHK has the authority to oversee compliance by business managers with environmental regulations. The central government, through the KLHK, also has the right to take administrative action, including issuing written warnings, government coercion, freezing, or revoking environmental permits. In practice, coordination between the Ministry of Energy and Mineral Resources (ESDM) and the Ministry of Environment and Forestry (KLHK) is crucial because smelter activities impact not only mineral production but also the ecosystem, air quality, and health of surrounding communities.

Local governments play a crucial operational role in overseeing smelter activities located within their jurisdictions. This role includes administrative oversight of compliance with local permitting requirements, monitoring environmental impacts at the local level, and coordinating with affected communities. Provincial and district/city governments also serve as liaisons between companies and local communities in facilitating public spaces and socio-economic mitigation. The existence of technical regional regulations and bylaws can enrich the oversight framework, as long as they align with national norms. The role of local governments requires sensitivity to local conditions and the ability to translate national policies into concrete oversight practices.

Limited human resources, technical capacity, and budget often pose real challenges for local governments in carrying out their oversight functions. Regional oversight teams require specific expertise related to smelting technology, process chemistry, and environmental risk assessments, which are not always adequately available. This shortage can impact the frequency and quality of field inspections and the ability to effectively follow up on findings. The availability of adequate testing laboratories and environmental monitoring facilities also impacts on the region's ability to assess technical compliance. The need for training, technology transfer, and logistical support is a practical element that determine the effectiveness of oversight work at the local level.

Regional governments, particularly provincial governments, have a role in implementing oversight at the regional level. Government operations in the energy and natural resources sectors are regarded as concurrent government matters under Law Number 9 of 2015 and Law Number 23 of 2014 respecting Regional Government, divided between the federal and provincial governments. Provincial governments have the power to supervise the conduct of mining operations within their jurisdictions, according to Article 14, paragraph (2). This authority includes administrative and technical oversight, as well as monitoring the social and environmental impacts of smelter activities.

Synergy between the central and regional governments emerges through formalized technical and administrative coordination procedures in various working forums. Regular

inter-institutional meetings, the formation of joint inspection teams, and data exchange mechanisms provide concrete tools that facilitate cross-government oversight. Integrated information management facilitates the identification of cross-regional issues and helps respond to violations requiring integrated action. Technical coordination also allows for adjustments to operational inspection procedures, resulting in more comprehensive field inspections. These forms of coordination function as an administrative network connecting national authorities with implementation at the regional level.

Potential conflicts of authority arise when the boundaries of administrative duties are not interpreted uniformly between central and regional government institutions. Unclear roles can lead to duplication of tasks, differing interpretations of licensing requirements, and difficulties in determining the party responsible for following up on administrative violations. The interaction between national norms and technical regional regulations often requires procedural clarification to prevent overlapping oversight actions. Differing fiscal interests and investment incentives at the regional level can influence oversight priorities, creating structural coordination challenges. These issues require clear communication channels between relevant authorities.

Administrative dispute resolution surrounding supervisory authorities generally occurs through internal administrative mechanisms and legally established oversight channels. Inspections of government actions can be submitted through internal administrative processes, complaints to public oversight bodies, or through state administrative courts if legally challenged. The role of independent oversight bodies and public complaints bodies provides an alternative for addressing procedural issues without directly bringing cases to litigation. At the operational level, routine coordination practices and clarification of duties between institutions help reduce the potential for technical administrative disputes. Alignment of central and regional roles is reflected when dispute resolution procedures are implemented clearly and are accessible to all relevant parties.

Evaluation of Administrative Law Supervision and Updates

An evaluation of the nickel smelter project supervision shows that implementation in various regions of Indonesia still faces inequalities and structural weaknesses. In Central Sulawesi, for example, several smelter projects operate with low levels of oversight of liquid waste disposal and air emissions, resulting in environmental pollution around the industrial areas. A similar situation occurs in Southeast Sulawesi and North Maluku, where oversight of environmental permit compliance and Environmental Impact Analysis (AMDAL) documents remains suboptimal. This situation confirms that the existing oversight system is unable to guarantee industry compliance with environmental and occupational safety regulations.

Occupational accidents in several nickel smelter areas demonstrate the weak implementation of Occupational Health and Safety (OHS) standards. According to 2024 data from the Ministry of Manpower, several fatal incidents were recorded in the Morowali and Konawe regions, demonstrating companies' negligence in implementing Ministerial Regulation No. 5 of 2018 concerning Occupational Health and Safety (OHS). Article 3 of this regulation requires every employer to conduct hazard identification and risk assessments for all production processes. Failure to comply with this provision poses a serious threat to worker safety and reduces industrial productivity. In many cases, routine inspections are not performed according to standards due to the limited number of labor inspectors at the regional level. This situation highlights the gap between normative regulations and actual supervision practices in the field.

Environmental supervision also shows administrative and technical weaknesses. According to Government Regulation Number 22 of 2021 on the Application of Environmental Management and Protection, Article 207 stipulates the obligation for

businesses to periodically report environmental monitoring results. However, most smelter companies have not submitted reports consistently or transparently to local governments. Limited data infrastructure and minimal verification capacity from relevant agencies mean that monitoring information is not integrated nationally. This situation weakens the effectiveness of administrative law enforcement and creates disparities between regions with strong supervisory resources and those with limited capacity.

The impact of weak supervision of the nickel smelter industry not only impacts the environment but also impacts the socio-economic conditions of communities surrounding mining and industrial areas. When waste management and occupational health and safety standards are neglected, local communities become the most vulnerable to exposure to air, water, and noise pollution. The right to a decent and healthy environment is emphasized in Law Number 32 of 2009, Article 65, paragraph (1). The government's failure to provide constitutional protection as outlined in Article 28H, paragraph (1) of the 1945 Constitution is demonstrated by violations of this right. This case shows that oversight is not just an administrative responsibility but also the state's constitutional obligation to preserve a balance between economic development and the protection of individuals' rights.

Numerous rules and regulations have established a thorough regulatory framework for occupational health and safety in smelting projects. According to Article 86 paragraph (1) of Law Number 13 of 2003 and Law Number 6 of 2023, which specify manpower requirements, every employee is entitled to protection for their health and safety at work. Furthermore, Minister of Manpower Regulation Number 5 of 2018 expands the scope of supervision to chemical, physical, biological, ergonomic, and psychological factors in the workplace. Government Regulation Number 50 of 2012 regarding the Implementation of the Occupational Health and Safety Management System is in accordance with this regulation, which requires companies to implement internal oversight mechanisms. However, implementation is often hampered by minimal training for regional supervisors and weak company commitment to consistently enforcing these standards.

The role of regional labor inspectors is crucial in ensuring compliance with OHS regulations. Based on Article 176 of Law Number 13 of 2003, in conjunction with Law Number 6 of 2023, grants labor inspectors the authority to conduct workplace inspections, request information, and take administrative action against violations. However, the reality on the ground shows that coordination between provincial Manpower Offices and the Ministry of Energy and Mineral Resources (ESDM) has not been effective. Inspection data is often not integrated, while follow-up on violations is slow. This situation creates legal loopholes that hamper the implementation of integrated supervision, especially in densely industrialized areas such as Sulawesi and North Maluku.

Obstacles to the implementation of the nickel smelter project supervision largely stem from a layered and overlapping bureaucratic structure. The large number of institutions with supervisory authority, such as the Ministry of Energy and Mineral Resources, the Ministry of Environment and Forestry, and the Ministry of Manpower, leads to slow coordination. Each institution has different reporting mechanisms and compliance criteria, leading to administrative duplication.

Transparency and accountability in supervision also remain fundamental issues. Many companies do not disclose operational data and environmental reporting to the public, despite Article 67 paragraph (1) of Law Number 32 of 2009 requiring public participation in environmental supervision. The lack of public disclosure of performance reports and audit results makes it difficult for the public to assess the extent to which companies comply with laws and regulations. Furthermore, the government lacks a digital mechanism capable of capturing and disseminating this information in real time. This lack of transparency has the

potential to undermine public trust in the government's commitment to ensuring sustainable industrial governance.

Another major challenge in overseeing mining activities and nickel smelter construction in Indonesia is the reluctance of companies to undertake mine reclamation after the exploitation period ends. In fact, Strict guidelines for reclamation and post-mining responsibilities are provided under Law Number 3 of 2020's Articles 99 and 100, which amend Law Number 4 of 2009 about Mineral and Coal Mining (Minerba Law). In addition to the Minister of Energy and Mineral Resources' Regulation Number 26 of 2018, Government Regulation Number 78 of 2010 about Reclamation and Post-Mining offers more information. Failure to implement reclamation causes ex-mining land to become critical, unproductive, and has social impacts on surrounding communities. The government should be more assertive in administrative supervision, including revoking mining business permits (IUP) for companies that do not carry out reclamation according to the approved plan, as mandated by Article 151 paragraph (1) of the Minerba Law.

Increased mineral added value and job creation for Indonesians are the main goals of the nickel downstreaming policy, it strengthened the provisions of the Mineral and Coal Mining Law and was created by Articles 102 and 103 of Government Regulation No. 96 of 2021 on the Implementation of Mineral and Coal Mining Business Activities. However, in practice, a paradox has emerged, as the majority of workers employed in the nickel smelter sector are foreign workers (TKA), particularly from China. It raises serious questions about the effectiveness of the downstreaming policy in achieving economic equality and protecting the national workforce. Yet, Together with Government Regulation No. 34 of 2021 concerning the Use of Foreign Workers, laws pertaining to the use of foreign workers are strictly outlined in Law No. 6 of 2023 concerning the Stipulation of Government Regulation rather than Law No. 2 of 2022 concerning Job Creation into Law, which prioritizes local workers. The government needs to strengthen its administrative oversight function over smelter companies to ensure that technology transfer and training obligations for Indonesian workers are met. The construction of nickel smelters also has a serious impact on the air, land, and the surrounding ecosystem. Nickel smelting activities produce solid waste such as slag and hazardous emissions such as sulfur dioxide (SO₂) and carbon monoxide (CO₂), which pollute the air and harm public health.

Furthermore, chemical residues from the production process have the potential to pollute soil and water bodies. It contradicts Article 65 paragraphs (1) and (2) Federal Law Number 32 of 2009 concerning Environmental Protection and Management (PPLH), which requires corporate actors to uphold environmental sustainability and guarantees everyone the right to a good and healthy environment. Through the Ministry of Environment and Forestry (KLHK), the government, should strengthen its environmental compliance audit-based monitoring system and implement administrative sanctions under Articles 76 to 82 of the PPLH Law, including government coercion, administrative fines, or permit revocation.

Furthermore, the massive issuance of mining permits without adequate analysis of environmental carrying capacity and regional capacity has contributed to the deterioration of national natural resource governance. Based on Article 8A paragraph (2) of the Mineral and Coal Mining Law and Article 3 paragraph (1) of Government Regulation No. 96 of 2021, mining businesses are required to consider regional spatial plans (RTRW), strategic environmental studies (KLHS), and the environment. However, in practice, many permits are issued through accelerated investment mechanisms without rigorous verification. It has the potential to lead to overlapping land use, social conflict, and ecological damage. The government must strengthen its administrative oversight role in accordance with the principle of due process of law, so that each mining permit meets not only formal requirements, but also substantive requirements related to environmental sustainability and social justice.

Law enforcement against illegal mining and environmental damage caused by nickel smelters has not been optimal. Weak coordination between law enforcement officials, such as the Police, the Prosecutor's Office, and the Ministry of Environment and Forestry, has resulted in many cases of illegal mining (PETI) not being fully processed. It is even though criminal sanctions for illegal mining perpetrators are expressly stipulated in Article 158 of the Mineral and Coal Mining Law, with a maximum prison sentence of five years and a fine of up to 100 billion rupiah. On the other hand, violations of environmental provisions are subject to criminal penalties under Articles 98 to 103 of the Environmental Management and Management Law. Therefore, strengthening data-integrated law enforcement systems, increasing the capacity of civil servant investigators (PPNS) in the mining sector, and implementing the principle of strict liability are essential to improve legal compliance and accountability in nickel resource management in Indonesia.

Efforts to reform the legal oversight of nickel smelter projects need to be directed at strengthening the principles of good governance and sustainable development. Government Regulation No. 96 of 2021 in connection with Government Regulation No. 25 of 2024 about the Implementation of Mineral and Coal Mining Business Activities are examples of derivative regulations that have been revised, could reaffirm integrated supervisory authority and strengthen administrative sanctions for non-compliant companies. Regulatory reforms need to be directed at clarifying inter-agent roles to avoid overlapping roles and strengthening oversight responsive to industry dynamics.

Strengthening human resource capacity in the supervisory sector is also a crucial part of administrative law reform. The government needs to establish competency standards and provide ongoing training for industrial, environmental, and labor supervisors, as stipulated in Minister of Manpower Regulation No. 2 of 2023 concerning Indonesian National Work Competency Standards. This strengthening must be accompanied by increased budgets and supporting facilities for regional supervisors. Integration of cross-ministerial information systems will create more effective and accountable supervisory synergy. Supervisory reform aims not only to improve bureaucratic mechanisms but also to ensure that nickel smelter development aligns with the principles of social justice, environmental sustainability, and labor protection.

CONCLUSION

The government's role in overseeing nickel smelter projects continues to face serious challenges, primarily due to regulatory disharmony, overlapping authority, and weak coordination between central and regional agencies. Regulations regarding licensing and supervision, which are scattered across various regulations, For example, Law Number 13 of 2003 as part of Law Number 6 of 2023 about Manpower; Law Number 4 of 2009 as part of Law Number 3 of 2020 about Mineral and Coal Mining; and Law Number 32 of 2009 as part of Law Number 6 of 2023 about Environmental Protection and Management, have not been harmoniously integrated. As a result, oversight of smelter companies' compliance with environmental and occupational health aspects is not uniform across regions. This situation poses risks to worker safety, environmental pollution, and imbalances in industrial governance. Reform of administrative law is urgently needed to clarify the boundaries of authority between the central and regional governments and strengthen an efficient, transparent, and data-driven oversight system. Cross-sectoral regulatory harmonization needs to be followed by the development of integrated technical supervision guidelines that bind all relevant institutions, including the Ministry of Energy and Mineral Resources, the Ministry of Environment and Forestry, and the Ministry of Manpower. Strengthening supervisory capacity through ongoing training and human resource development should also be a public policy priority. Transparency can be enhanced through the digitization of technology-based

reporting and supervision systems, in accordance with Government Regulation No. 5 of 2021 on the Application of Risk-Based Business Licensing. Implementing good governance principles in the smelter supervision system will not only strengthen the legitimacy of the national downstream policy but also support the achievement of sustainable development goals (SDGs), particularly in the areas of clean energy, decent work, and terrestrial ecosystem protection. Reforming supervisory laws will ultimately serve as a strategic instrument to ensure that nickel industry development aligns with the principles of social justice, environmental balance, and national legal sovereignty.

REFERENCE

Aviano, M. S. (2022). Pertanggungjawaban pejabat pemerintah yang menggunakan diskresi menurut hukum positif di Indonesia. *Jurnal Hukum dan Kenotariatan*, 6(2), 1297-1325.

Dirgantara, M., Mandasari, N., Septiani, E., & Nebi, O. (2025). Analisis Kebijakan Hilirisasi Nikel Indonesia: Antara Kedaulatan Ekonomi dan Kepatuhan Pada Aturan WTO (2017-2022). *Jurnal Ilmiah Muqoddimah: Jurnal Ilmu Sosial, Politik, dan Humaniora*, 9(2), 1173-1179.

Fauziyyah, P. Z., & Paksi, A. K. (2023). Dampak Kerja Sama Indonesia-China Dalam Proyek Investasi Nikel Terhadap Pertumbuhan Ekonomi Kedua Negara. *Jurnal Ilmiah Dinamika Sosial*, 7(1), 86-105.

Haris, O. K. (2015). Good governance (Tata kelola pemerintahan yang baik) dalam pemberian izin oleh pemerintah daerah di bidang pertambangan. *Yuridika*, 30(1), 58-83.

Hikam, B. A. (2025). HARMONISASI DAN KEPASTIAN HUKUM REGULASI SEBAGAI UPAYA EFEKTIVITAS HILIRISASI MINERAL DI INDONESIA. *Jurnal Rechts Vinding: Media Pembinaan Hukum Nasional*, 14(1).

Hutajulu, H., Runtunuwu, P. C., Judijanto, L., Ilma, A. F., Ermanda, A. P., Fitriyana, . . . Wardhana, D. H. (2024). *Sustainable Economic Development: Teori dan Landasan Pembangunan Ekonomi Berkelanjutan Multi Sektor di Indonesia*. Jambi: PT. Sonpedia Publishing Indonesia.

Ibad, S. (2021). Hukum Administrasi Negara Dalam Upaya Penyelenggaraan Pemerintahan Yang Baik. *HUKMY: Jurnal Hukum*, 1(1), 55-72.

Kalo, A. M., & Rini, W. S. (2023). Politik Hukum Pengaturan Retribusi Perizinan dalam Hubungan Keuangan Pusat dan Daerah. *Interdisciplinary Journal on Law, Social Sciences and Humanities (IDJ)*, 4(2), 138-154.

Kennedy, A., Surya, W. H., Mustika, S. R., & Wartoyo, F. X. (2024). Sumber-Sumber Hukum Administrasi Negara dalam Kerangka Good Governance di Indonesia. *Iuris Studia: Jurnal Kajian Hukum*, 5(2), 558-569.

Lukman, L., Latif, I. N., & Wongso, R. (2025). Pengaruh Keselamatan Dan Kesehatan Kerja (K3) Dan Komitmen Organisasi Terhadap Kinerja Dengan Disiplin Kerja Sebagai Variabel Intervening:(Studi Kasus Pada Operation Pt Pelayaran Muara Kaltim Perkasa). *Paradoks: Jurnal Ilmu Ekonomi*, 8(3), 125-142.

Puannandini, D. A., Dzulfqar, D. A., Sandika, A., & Pradipta, M. A. (2025). KESEJAHTERAAN PEKERJA SEBAGAI UPAYA PERLINDUNGAN HAK ASASI MANUSIA. *Jurnal Media Akademik (JMA)*, 3(7).

Putri, S. A., Triono, A., & Kasmawati, K. (2025). Diskresi Pejabat Administrasi Dalam Pelayanan Publik Terhadap Batasan Dan Pengawasan Diskresi. *Lex Stricta: Jurnal Ilmu Hukum*, 4(1), 33-42.

Qamar, N., & Rezah, F. S. (2023). Wewenang Sebagai Instrumen Penyelenggararaan Pemerintahan Dalam Sistem Negara Hukum. *Asas Wa Tandhim: Jurnal Hukum, Pendidikan Dan Sosial Keagamaan*, 2(2), 201-222.

Rachmawati, A. R., Kusuma, A. P., & Manggala, F. P. (2024). Kewajiban Hukum Perusahaan Tambang Dalam Penyedian Fasilitas Smelter Sebagai Upaya Mendukung Program Hilirisasi. *Inicio Legis*, 5(1), 65-75.

Rahayu, D. P., & Faisal, F. (2021). Eksistensi pertambangan rakyat pasca pemberlakuan perubahan undang-undang tentang pertambangan mineral dan Batubara. *Jurnal Pembangunan Hukum Indonesia*, 3(3), 337-353.

Rahmania, A., & Umam, M. K. (2025). Implikasi Terhadap Normatifisasi Asas-Asas Umum Pemerintahan yang Layak terhadap Praktik Administrasi Pemerintahan. *Journal of Dual Legal Systems*, 2(2), 137-151.

Resmadiktia, N. M., Utomo, Y., & Aiman, L. (2023). Pertanggungjawaban Pemerintah dalam Mewujudkan Good Governance sesuai Hukum Administrasi Negara. *Jurnal Ilmiah Wahana Pendidikan*, 9(11), 685-697.

Rusdinah, R., & Tobing, C. N. (2025). Analisis Kecelakaan Kerja pada Pekerja Smelter di PT Indonesia Morawali Industrial Park dalam Perspektif Hukum Ketenagakerjaan. *Jurnal sosial dan sains*, 5(6), 1760-1776.

Simatupang, H. Y., & Wulandari, D. A. (2024). Dampak Investasi Nikel China Di Indonesia Ditinjau Dari Perspektif Pembangunan Berkelanjutan dan Ekonomi Politik Hijau. *Global and Policy Journal of International Relations*, 12(02).

Suniaprily, F. G., & Suharno, S. (2023). Pertanggungjawaban Diskresi Pemerintah dan Hubungannya dengan Asas Umum Pemerintahan Yang Baik (AUPB) Menurut Undang-Undang Nomor 30 Tahun 2014 Tentang Administrasi Pemerintahan. *Klausula (Jurnal Hukum Tata Negara, Hukum Adminitrasi, Pidana Dan Perdata)*, 2(1), 32-46.

Tangkudung, A. G., & Kaseger, J. Y. (2024). Hilirisasi nikel sebagai nilai tambah dalam penguatan perekonomian Indonesia. *Jurnal Syntax Admiration*, 5(10), 3946-3955.

Wau, F. T., Kiton, M. A., Wau, M., & Fau, J. F. (2024). Analisis strategis kebijakan hilirisasi mineral: Implikasi ekonomi dan pengaruhnya terhadap perekonomian Indonesia. *Journal Publicuho*, 7(3), 1215-1224.

Widjaja, G. (2025). OPTIMALISASI HILIRISASI, KETAHANAN PANGAN, DAN REFORMASI FISKAL SEBAGAI PILAR TRANSFORMASI EKONOMI MENUJU INDONESIA EMAS 2045. *NETIZEN: JOURNAL OF SOCIETY AND BUSSINESS*, 1(9), 412-422.