# Collaboration of Actors (Government, Private, Community) in Handling Environmental Impacts from Waste Disposal by PT. Obsidian Stainless Steel

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#### Abstract

The environmental crisis is a phenomenon that occurs in various parts of the world. Environmental activists also highlight various issues related to environmental damage by campaigning for the public to understand how damaged the earth is as a result of the actions and negligence of irresponsible individuals and corporate groups. PT. Obsidian Stainless Steel, which is a leading company in Southeast Sulawesi, has recently violated the management and sustainability of natural resources. The impacts arising from waste disposed of haphazardly by PT. OSS have resulted in clean air being polluted, rice fields drying out, crop failure and worsening public health. For this reason, collaborative governance between government, citizens and other groups is needed which is expected to increase cooperation and good coordination in dealing with environmental issues, so as to create sustainable environmental conditions.

Keywords: Environmental Crisis; Waste Management; Collaborative Governance

#### INTRODUCTION

The environmental crisis is a phenomenon that is occurring in various parts of the world. This then makes environmental problems become the spotlight of problems in the world, considering the discomfort and insecurity felt by the world's people living on earth with a natural condition that is already worrying. Environmental activists also highlight various issues related to environmental damage by campaigning for the public to understand environmental damage as a result of the negligence of irresponsible individuals and corporate groups. Environmental damage cannot be considered trivial because its existence is like a disease that can be contagious and cause extraordinary impacts. In fact, environmental damage is also very worrying because the negative impacts it causes can have an impact on the local scale as well as the world environment (Silfia Ainurrohmah, 2022). As time goes by, more and more actors are involved in it, such as individual and group roles. The role of individuals and groups cannot be underestimated because it can influence the attention of the world community regarding several global issues that are currently occurring. One of the issues that is of concern to the world community is environmental issues. Current environmental problems are very complex due to their nature which is no longer just a problem for each country but is a problem and responsibility of the global community without exception. In achieving the main goals in environmental matters, participation is required from all stakeholders involved.

One of the environmental damages that often occurs locally is environmental problems related to industrial waste pollution. Indonesia itself has legal regulations that regulate and also supervise companies in managing natural resources which must uphold Article 2 of Law Number 32 of 2009 which regulates environmental management and protection which must be based on several things, namely (1) responsibility state responsibility, (2) preservation and continuity, (3) harmony and balance, (4) integration, (5) benefits, (6) precaution, (7) justice, (8) ecoregion, (9) biodiversity, (10) polluter pays, (11) participatory, (12) local wisdom, (13) good governance and (14) regional autonomy (BPK, 2009).

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Furthermore, there are other articles which also regulate environmental management and protection, namely Article 3 of Law Number 32 of 2009 which has various main objectives, namely (DLH, 2009):

- a. Protect the territory of the Unitary State of the Republic of Indonesia from environmental pollution and/or damage
  - b. Guarantee safety, health and human life;
  - c. Ensure the continuity of life of living creatures and the preservation of ecosystems;
- d. Maintaining the sustainability of environmental functions, achieving environmental harmony, harmony and balance
  - e. Ensure that justice is met for present and future generations;
  - f. Ensure the fulfillment and protection of environmental rights as part of human rights;
  - g. Control the wise use of natural resources
  - h. Realizing sustainable development
  - i. Anticipating global environmental issues

PT. Obsidian Stainless Steel (PT. OSS) is a leading company based on nickel smelting located in Southeast Sulawesi. In its implementation PT. OSS has a focus on producing nickel ore smelting in large quantities every day. In the process of smelting nickel, a lot of very sophisticated international scale technology is needed to be able to produce optimally, such as Reduction Kiln-Electric Furnace (RK-EF) and Argon Oxygen Decarburization (AOD) through the application of Reduction Kiln-Electric Furnace (RK-EF) technology. EF) OSS achieves efficient and precise nickel ore smelting. This technology involves the use of reduction furnaces and electric furnaces to achieve the high temperatures required for the melting process. By carefully controlling temperature and other variables, OSS ensures the production of superior quality nickel metal (OSS, 2021).

PT. OSS has recently violated Law Number 32 of 2009 concerning environmental management and protection, where PT. This OSS is suspected of having illegally disposed of waste in residential areas which had a direct impact on the environment and communities around the company located in various districts in the Southeast Sulawesi region. There are many impacts that arise from activities at PT. OSS such as the emergence of dust pollution resulting from the coal process (PENASULTRA, 2021). This is certainly very disturbing for residents, especially children under five who are very vulnerable to ARI and other clinical diseases that arise from irresponsible work activities. This incident has been going on for a very long time and there has been no goodwill from PT. OSS in solving this problem. Apart from pollution problems, residents together with other groups also urge PT. OSS to immediately regulate the disposal of PLTU waste which is often thrown into the river and has resulted in the surrounding river becoming polluted (METROKENDARI.ID, 2023). Based on the facts in the field, the impact arising from waste that is disposed of carelessly by PT. OSS in the Southeast Sulawesi region has resulted in clean water being polluted, rice fields experiencing drought resulting in crop failure, worsening health, smelly air due to waste released by PT. OSS so that local people are disturbed from carrying out their daily activities.

The environmental impact damage produced by PT. This OSS also attracted the attention of the environmental non-profit organization, WALHI. The Indonesian Forum for the Environment (WALHI) Southeast Sulawesi stated that since its operations this company has contributed greatly to the damage to pond land in the villages of Labota, Tani Indah, Lilimbue and Kapoiala Baru (WALHI, 2023). This shows that the environmental problems caused by PT. OSS invited a massive response from various elements of society. The special report from WALHI opens up great opportunities for the concept of collaborative governance. As stated by Ansell, collaborative action that regulates decisions in the policy process carried out by several public institutions with other related parties can solve public problems (Ansell & Gash, 2008).

The need for increased cooperation from each actor in dealing with problems of environmental damage, including waste pollution, is increasingly relevant after knowing the magnitude of the negative impacts resulting from environmental problems. It is hoped that collaboration between government, citizens and other groups can increase cooperation and good coordination in dealing with environmental issues, thereby creating sustainable environmental conditions.

Looking at the waste disposal problem situation of PT. OSS and how it impacts environmental conditions and public health, the researchers formulated the problem as follows:

1) How effective is the collaboration mechanism between the Government, the Private Sector and the Community in dealing with the issue and impact of PT waste disposal. Obsidian Stainless Steel?

The aim of this research is to describe and review the effectiveness of collaboration mechanisms between the government, the private sector and the community in dealing with the issue and impact of PT waste disposal. Obsidian Stainless Steel.

The environment is of course an inseparable part of society, where the quality of the environment in a place can influence many aspects, from environmental management and protection to even the lives of the people themselves. PT. Obsidian Stainless Steel, which is a leading nickel smelting company in Southeast Sulawesi, can certainly have a big influence on the surrounding environment. On the one hand, people think that PT. OSS has succeeded in opening up new job opportunities, but on the other hand, PT. OSS has many negative impacts on the quality of the environment around which the company produces. The use of advanced technology which is thought to be able to produce high quality nickel smelting actually creates large amounts of waste. PT. OSS is often suspected of illegally dumping waste into local communities without prior environmental impact analysis. This waste has a massive impact on the environment, starting from river pollution, drought in rice fields and even crop failure.

#### RESEARCH METHODS

In this research the author used a qualitative-descriptive research design. This research is explained by the author using a descriptive analytical method which is used to describe an ongoing condition or situation with the aim of being able to provide information about the research object so that it can explore things that are ideal.

The object of the research is the collaboration of actors (Government, Private, Community) in dealing with the environmental impacts of waste disposal by PT. Obsidian Stainless Steel. The sources for this research were obtained from secondary data using library research techniques such as book literature, journals, theses, official documents and official media platforms related to this research. The conditions that occurred during the author's research tried to find facts from various secondary data which were then analyzed and correlated with the theoretical framework used by the author to comprehensively describe the cooperation of several state components (government, private sector and society) in dealing with the environmental impact of waste that is disposed of carelessly, by PT. OSS.

Analysis of the relationship between research variables, namely the collaboration between several state components (government, private sector and society) as the dependent variable and the influence of collaboration between government, private sector and society in dealing with the environmental impact of waste that is disposed of carelessly by PT. OSS as the dependent variable. Later, this research will analyze what steps are taken by the government together with the private sector and also the community in dealing with environmental impacts through various policies issued.

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In the data analysis process, it is carried out after collecting data by looking for reading study sources, studying, reviewing and comparing with various other reading sources and strengthening literature collection by holding regular discussions with the research team. So it can answer all various problems. The final stage is to draw conclusions from each problem that has been answered through the descriptive research proposal.

#### RESULT AND DISCUSSION

In analyzing the behavior of the actors mentioned in the introduction, the researcher will focus on the strategies that the relevant actors might employ in dealing with environmental impacts resulting from PT's mining activities. OSS. In looking at this phenomenon, there are two focuses that researchers try to focus on, namely regarding how community groups, stakeholders, and especially the government formulate strategies for handling PT mining waste. OSS. This needs to be reviewed further considering the environmental impacts mentioned in the introduction. The second is related to how preventive steps will be taken regarding future activities of mining companies. This view is based on the complexity of how corporations handle their commitment to preserving the environment, especially in this research which focuses on mining companies.

Although in analyzing the company's complexity view in maintaining its commitment to the environment, it can be understood that there are internal company factors that cannot be ignored. Mining companies that have high operational complexity will affect their commitment to environmental sustainability. The complexity of company operations is related to the division of labor and the formation of departments that focus on a significantly different number of units, which can add challenges to audit and company management (Darmawan & Widhiyani, 2017). In the mining context, the complexity of operations can affect audit delay, namely the time required to complete financial reports (Darmawan & Widhiyani, 2017). Departing from this reality, it actually gives rise to two views, namely that there are indeed factors outside of moral matters related to the environment within companies that hinder the conformity of mining corporate behavior with environmental conservation commitments. Talking about environmental ethics, it is known that there are at least 3 principles, namely sustainability, proportionality, and the responsibility of the cause (Hariadi, 2015). These three principles will be hampered by the internal processes of corporations which are centered on technocratic-capitalistic principles which view nature solely as an object of control and nature is considered a mine of wealth and energy that needs to be exploited (Hariadi, 2015). The second view is that existing problems are easily identified and can be described in the form of solution steps to adjust the corporation's internal bureaucracy so that it is in line with sustainability principles.

Apart from the problems of mining bureaucracy, there are facts that are quite contradictory and burdensome for the community's hopes of relying on the government to suppress corporations such as PT. OSS for commitment to environmental conservation efforts. Nickel mining companies in Indonesia have been proven to contribute to the realization of relatively high Non-Tax State Revenue (PNBP) revenues. Based on data that researchers managed to collect from Minerba One Data Indonesia (MODI), the realization of PNBP from mining exceeded the target with a figure of Rp. 172.96 trillion in 2023 or reaching 118% of the specified target (MODI, 2023). The coal and mineral mining sector contributes greatly to state income, with coal mining contributing around 70% -80% of total revenue, while the remaining portion comes from minerals such as nickel, copper, gold, tin and various others. The existing data can also be seen from the following picture:

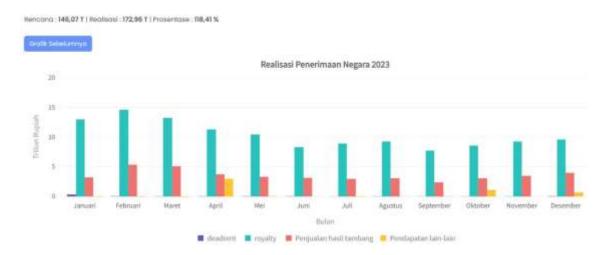


Figure 1: Realization of State Revenue 2023, (source: (MODI, 2023))

These facts and data then lower the public's expectations of the government regarding efforts to enforce mining corporations' commitment to environmental preservation. The problem doesn't just stop there, but there is research that says that to carry out a green transition, as part of the principles of environmental conservation in the 2050 emission-free agenda, expensive costs are required in switching from high-emission assets to low-mission assets (McKinsey Global Institute, 2022). This then adds to the view of the complexity in aligning the interests of actors to commit to environmental preservation. Thus, in this discussion the author will outline what strategies there are for identifying existing problems.

Implementation of Collaborative Governance in dealing with mining waste from PT. OSS the concept of collaborative governance in formulating policies for handling mining industry waste involves collaboration between government, society and the private sector to achieve common goals in a formal, consensus and synergistic manner. In the context of industrial waste management, collaborative governance enables the participation of non-public actors in the public policy decision-making process. Case studies show that this participatory approach has been successful in controlling environmental pollution, such as in managing palm oil waste in Rokan Hulu Regency (Handoko & Tiyas Tinov, 2018). Collaborative governance differentiates itself from partnerships by involving the government directly in the decision-making process. This allows the creation of policies that are more participatory and have a wider impact on society. In this context, collaborative governance also includes joint activities, joint structures and shared resources to achieve common goals in industrial waste management (Handoko & Tiyas Tinov, 2018b). Based on this view, the author believes that the government must provide policy leeway in waste management strategies in mining industrial areas. In its implementation, collaborative governance requires building networks, coalitions and partnerships aimed at creating effective services by involving government, the private sector and elements of society. Through this collaboration, it is hoped that policies will be created that are more responsive to community aspirations and programs that can be formulated, implemented and evaluated effectively.

Collaborative governance, translated into Indonesian, means collaborative governance, and in practice there are several elements, including the government. So it is important to look at this collaboration strategy from the rules that enable this collaborative governance scheme to be implemented. The implementation of collaborative governance in Indonesia in the context of legislation shows significant potential to improve government governance that is more effective and responsive. Several case studies, such as in environmental pollution control and industrial

waste management, highlight the success of collaboration between government, society and the private sector in achieving common goals (Deniar, 2021). The law in question is Law number 6 of 2014 concerning Villages which explains local self-government and self-governing communities which allows for empowerment of village communities regarding governance in villages. Then there is also Law Number 25 of 2009 concerning Public Services in article 13 regarding cooperation with other parties in implementing public policies. The existence of this regulation opens up opportunities for collaboration within the community in the context of handling mining industry waste.

PT. Obsidian Stainless Steel (PT. OSS) is a nickel mining company in Southeast Sulawesi that produces large amounts of industrial waste. Handling this waste is an important issue that needs to be managed effectively and sustainably. The Collaborative Governance approach offers innovative solutions by involving various parties in the decision-making and waste management process. After learning that implementing collaboration by involving the community and nongovernmental organizations makes it possible to suppress corporate behavior, such as PT. OSS in managing its waste, then the next challenge is how to develop this strategy. The community is also an important element that must be considered, considering that the community is the actor most affected by the behavior of the mining industry. As is the case with people in Southeast Sulawesi who are directly affected by the impact of environmental pollution due to waste from PT. OSS. It needs to be understood that in the collaborative governance model, community participation has a crucial role. The collaborative governance model according to Ansell and Gash is divided into 3 phases, namely starting conditions, institutional design, and facilitative leadership (Ansell & Gash, 2008). The model of collaborative governance by Ansell and Gash can be seen in the following picture:

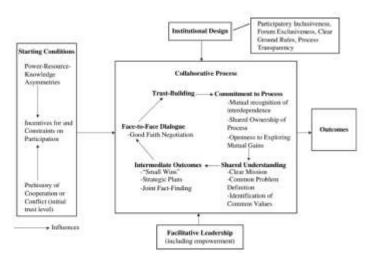


Figure 2: Ansell and Gash's Collaborative Governance Model.

## a. Starting Conditions

In the starting condition or initial conditions it is explained that there are 3 processes that must be considered, namely related to resources, obstacles, and the history of cooperation and conflict. Seeing the conditions that occur in the industrial waste issue of PT. The author's OSS sees that there is potential for discrepancies at the historical level of cooperation. This is proven by testimony submitted by the Coastal Communities Alliance (AMP) that waste from industrial activities of PT. OSS has polluted and disrupted the activities of Motui residents and polluted

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the Motui river, but there has never been any mediation effort from PT. OSS (Mind of Southeast Sulawesi, 2023). The same thing was also reported by one of the local media which stated that residents had long felt the impact of pollution produced by PT. OSS but there has never been any accountability from companies operating in the mining sector (metro kendari, 2023). Due to public pressure on PT. OSS then the process you want to achieve in starting conditions becomes increasingly difficult to achieve. There is a history of conflict between stakeholders, which in this case is PT. OSS with community elements involved in it is the pressure of AMP so it is felt necessary to analyze whether the role of government can do much in the context of the history of conflict and cooperation in this starting condition process.

Besides ecological problems, PT. OSS is also problematic in other sectors. The Corruption Eradication Commission (KPK) reported that PT. OSS was proven to be in tax arrears amounting to Rp. 60 Billion (Senong, 2023a). Another problem being investigated by the Natural Resources task force of the Corruption Eradication Committee is the issue of licensing. The KPK reported that there was data that was not in sync between that provided by the Ministry of Energy and Mineral Resources and the Regional Government of Southeast Sulawesi, the data in question was related to Mining Business Permit (IUP) data (Senong, 2023a). There are seven IUPs that do not have a NPWP in North Sulawesi (Senong, 2023a). The Konawe Regency DPRD and the Regional Revenue Agency (Bapenda) also provided a report regarding PT. OSS. From the results of the APBD Amendment meeting, it was stated that PT. OSS is in tax arrears amounting to Rp. 6.9 Billion since 2021 (Asia Today, 2023). From these reports it can be understood that the government has also contributed to the problems caused by PT. OSS, however, does not focus on the problems that are the focus of this research, namely environmental sustainability issues.

It is important to understand this starting condition on the other hand, namely related to Incentives to Participate, namely reciprocal efforts felt by actors. This incentive talks about what good impacts can or have occurred between actors in a system. Although collaborative approaches may be mandated by courts or legislative bodies, stakeholder participation is usually voluntary (Ansell & Gash, 2008). Apart from the problems presented by PT. OSS, Radio Republik Indonesia (RRI) reported that at the Konawe Regency Government Performance Exposure event, the event was organized by the Konawe regent. In this event an award was given to PT. OSS for its contribution to society, one of which is in the form of assistance amounting to Rp. 70 billion in Original Regional Income (PAD) (Musyafir, 2023). This gives hope for collaboration between actors in building common interest to create joint efforts in managing PT waste. OSS. These incentives can influence decisions regarding collaborative governance and influence the success of collaboration. Government, society and the private sector can understand and optimize some of these to build effective and responsive collaboration in industrial waste management.

## b. Facilitative Leadership

Leadership is critical to establishing and maintaining clear ground rules, building trust, facilitating dialogue, and exploring mutual benefits (Ansell & Gash, 2008). This point is not much different from what was done by the Southeast Sulawesi DPRD when holding a Hearing Meeting (RDP) regarding problematic salaries from PT. OSS (Senong, 2023b). Mediation and dialogue spaces like this can be a catalyst factor in the collaborative governance process. Facilitative leadership in the context of collaborative governance at PT OSS involves strategies that promote the participation of all parties in all levels of decisions. As a leader facilitator, PT OSS leaders become collaborative thinkers and managers who minimize conflict and help everyone participate in the decision process.

PT OSS leaders can facilitate the participation of all parties, including government, society and the private sector, to achieve effective common goals. This initiation must involve and come from the ranks of PT leaders. OSS. This is considered crucial considering the conflict

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and impact that has already been felt by the community. PT OSS leaders can build trust between parties and help overcome problems that arise. In the process, collaborative governance requires the establishment of trust building between actors (Ansell & Gash, 2008). Only in this way can the facilitative leadership process be achieved, in addition to the formation of regulations by the government and enforcement of legislation to facilitate the trust building process between society and the government. By optimizing facilitative leadership, PT. OSS can build effective and responsive collaboration in industrial waste management.

### c. Institutional Design

Institutional design here refers to the basic protocols and ground rules of collaboration, which are essential for the procedural legitimacy of collaborative processes. Access to the collaborative process itself is perhaps the most fundamental design issue (Ansell & Gash, 2008). The institutional design process can build an effective waste management system, including collection, processing and sustainable waste management. In this context, actors who are more competent in their field, such as Walhi, are needed. Walhi actively continues to follow and investigate every activity that has the potential to disrupt environmental sustainability. Walhi's role in this case is quite crucial. Bearing in mind that efforts to create collaborative governance require the participation of community groups as pressure groups. In this case, Walhi was recorded as being quite massive in reporting cases that occurred at PT. OSS in Southeast Sulawesi. The presence of institutions like Walhi can help the institutional design process in building educational and community development programs to understand and reduce the negative impacts of industrial waste.

The presence of Walhi can also encourage the creation of dialogue forums between actors in formulating strategic steps in responding to waste resulting from PT activities. OSS. Creating forums is also an important part of the collaborative governance model. Dialogue forums are used to find common values in looking at PT waste management problems. OSS. From this forum, it is hoped that a trust building process will be created that can produce joint commitment. From the process of forming this commitment, it is hoped that three things will be achieved, namely, building an understanding of interdependence between actors, togetherness in carrying out the process of creating collaborative governance, and openness to exploring mutual benefits. Then, if these things are achieved, shared understanding will be built. Where in shared understanding problem points are formulated and identification of shared interests in PT's waste management process. OSS. If all of these things have been passed, the result will be an intermediate outcome or agreement on strategic steps in PT waste management. OSS

## **CONCLUSION**

Collaborative governance promises that if we govern collaboratively, we can avoid the high costs of adversarial policymaking, expand democratic participation, and even restore rationality in public management (Ansell & Gash, 2008). What the author has narrated regarding the collaborative management model above is not much promising that PT waste management. OSS in Southeast Sulawesi can run optimally. However, there is hope that comes from implementing a good collaborative governance process that will bring environmental problems caused by PT. OSS into heavier sanctions against PT. OSS. This is from the initial analysis in the starting condition phase where not many significant things were created between the actors. Collaborative governance ultimately brings one party, namely PT. OSS to a cornered position. This is considering the focus of this research, namely environmental moral principles, where PT. OSS does not appear to have taken the initiative to compromise more on environmental sustainability issues based on consideration of the company's internal processes which are

burdensome for PT. OSS to be able to easily compromise on environmental moral matters.

Control over two things that are inversely proportional to the ideals of society regarding environmental preservation and the technocratic-capitalistic attitude of mining companies is increasingly difficult to establish if the government as the power holder cannot be present in the process. The regional government of North Sulawesi does exist, but its support is hampered solely by the profits brought in from the existence of mining companies. In the end, the concept of collaborative governance cannot provide much insight into controlling the behavior of mining companies that are corrosive to the environment, but the concept of collaborative governance can open up opportunities for inter-community institutions such as AMP and Walhi to urge PT. OSS because it is community institutions that can answer the challenges of power imbalances because there is a clear structure within these community institutions. The goal of preserving the environment cannot be considered a normative effort but must go through a clear and organized process. That is where collaborative governance can provide hope for efforts to manage waste from PT. OSS.

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