Sanitation and Environmental Health of Mine Locations in Efforts to Handle the Spread of COVID-19 at PT. Alamjaya Bara Pratama

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Abstract: COVID-19 has become a major problem in recent years, so mining companies must make efforts to control disease and pay attention to the health of the community around the mine site. It is necessary to handle and prevent the spread of these infectious diseases, through sanitation and environmental health at the mine site. Community participation is very important in complying with mining site environmental health protocols and the company provides rewards and sanctions for employees who do not heed it without exception. Efforts to suppress the spread of COVID-19 can be done together and support each other in assisting government programs.

Key Words: Sanitation, Environment, Health, COVID-19.

INTRODUCTION

Health in the social life on this earth is very important to be considered by all parties, be it by stakeholders or the community itself. However, there are many people who do not apply healthy lifestyle behaviors. This can be caused by people's ignorance about the application of healthy living or even some who understand but do not apply it (Azétsop & Joy, 2013).

Health development and improvement aim to increase awareness, willingness, and the ability for every member of the community to live a healthy life in realizing the highest degree of public health. The high or low degree of public health can be determined through the parameters of the high incidence of illness experienced by the community (Kumar & Preetha, 2012).

In an area, environmental conditions are the main and most important determinant of the degree of public health. Environmental pollution due to technological developments and development also affects the variety and quality of the polluters, from basic sanitation problems, household waste disposal, domestic waste, and clean water supply, shifting to various pollutions of dust particles, materials, and chemical wastes, to radiation and electromagnetic waves magnetic (Manisalidis et al, 2020).

Adequate sanitation and environmental health are needed to maintain environmental sustainability and the application of community health behavior. Sanitation is a deliberate behavior in the culture of clean living to prevent humans from coming into direct contact with dirt and other hazardous waste materials in the
hope that this effort will maintain and improve human health. Sanitation aims to ensure the realization of conditions that meet health requirements in all efforts made (WHO, 2010).

Meanwhile, environmental health is a reciprocal relationship between humans and the environment that results in or affects the degree of human health. Environmental health is a science and skill that focuses on efforts to control all factors that exist in the human physical environment that are thought to cause or will cause things that are detrimental to their physical development, health or survival.

Below is the distribution of positive confirmed cases for each sub-district in Kutai Kartanegara Regency.

![Fig. 1 Cases of COVID-19 in Kutai Kartanegara Regency (http://dinkes.kukarkab.go.id) January 31, 2021.](image)

From the graph above, we can see that the spread of COVID-19 in Kutai Kartanegara Regency is still high and uneven, caused by transmission from previous cases, as stated by the Head of Disease Prevention and Control of the East Kalimantan Provincial Health Office Setyo Budi Basuki in Monday (14/12/2020) that there are still many cases of the spread of the COVID-19 pandemic in East Kalimantan due to local transmission.

Then day by day the cases of COVID-19 patients are increasing significantly in Indonesia, especially in the community in the PT. Alamjaya Bara Pratama, so it requires handling and prevention of the spread of the disease. Therefore, the question for the author is how is the relationship/role of sanitation and environmental health as a way and strategy for handling the spread of COVID-19 in the PT. Alamjaya Bara Pratama which is an indicator in efforts to reduce COVID-19 patients and even prevent it before it spreads. On this basis, the authors are interested in discussing how the sanitation and environmental health of the mine site at PT. Alamjaya Bara Pratama in handling the spread of COVID-19.

METHODS

The study observed the sanitation and health of the mining site environment in handling the spread of COVID-19 at PT. Alamjaya Bara Pratama, where these two things play an important role in reducing the number of COVID-19 patients in the mining environment, which begins with socialization first and foremost and follow-up treatment afterwards. All parties must familiarize and apply healthy living patterns and behaviors at mining sites without exception to suppress the spread of COVID-19.

Using a qualitative approach, the authors conducted in-depth interviews about how strong the role of environmental sanitation and health actors in handling the spread of COVID-19 at the mine site of PT. Alamjaya Bara Pratama. The author chooses informants who control and feel the impact of environmental
sanitation and health, namely the owners of capital or mining businesses, where the informant is the President Director of PT. Alamjaya Bara Pratama, while other informants are NGOs/NGOs engaged in these fields that discuss environmental issues or healthy living behavior along with medical parties who handle COVID-19 patients.

Then those who feel the impact of environmental sanitation and health are the people in the mining site environment, so the author also conducts interviews with people who directly feel the effects of environmental sanitation and health, to see how the impact or role of environmental sanitation and health is felt. local communities to suppress the growth rate of COVID-19.

RESULTS AND DISCUSSIONS

Sanitation and environmental health are things that are very much needed by all stakeholders in the PT. Alamjaya Bara Pratama, the fact is that both the community, business people or NGOs miss this, but getting used to yourself to implement healthy lifestyle behaviors is very difficult, sometimes they don't heed the directions or instructions of the authorities for their implementation, public participation is generally demanded in this regard. This is to reduce the number of COVID-19 diseases in the mining site environment. There are several general scopes of environmental health which include: drinking water supply, waste water management and pollution control, solid waste disposal, vector control, prevention/control of soil pollution by human excreta, food hygiene including milk hygiene, air pollution control, radiation control, occupational health, noise control, housing and settlements. In handling the spread of COVID-19, some of the above scopes are highly considered in terms of place, behavior, and strategy (Sendari et al, 2019).

In the picture above, we can see that there are several ways or strategies for handling the spread of COVID-19 in the mining site environment, including being seen from the human resources which include the front line, where the people who are the front line in handling the spread of COVID-19 are the community. as an example of an example of real action to reduce the rate of development of this virus. In addition, the community as the front line is expected to be able to become agents of change in a more advanced direction in handling the spread of COVID-19 and this is an achievement and proof to every related element that the community can survive and prevent the spread of the infectious virus.

Then to prevent the spread of COVID-19, which is more specific, is to change and apply 3M living behavior, namely washing clean hands with soap and running water, wearing masks, and maintaining distance. To get used to or care in 3M's behavior is still very low, many people ignore like the winds about changing from unhealthy behavior to healthy behavior and accompanied by its implementation. So there is such a thing as the last guard to prevent the spread of COVID-19 in the PT. Alamjaya Bara Pratama. This last guard is tasked with facilitating health facilities and infrastructure and also attaches importance to health workers as a whole. Health workers are valuable assets and are COVID-19 fighters for the mining site community, where they have full responsibility for the recovery of COVID-19 patients and are even expected to reduce the spread of this dangerous virus. All of the strategies mentioned above, starting from the front line to the last line, are strategies in fighting COVID-19 and handling the spread of COVID-19 in the PT. Alamjaya Bara Pratama.

To support or support the sustainability and success of these strategies, it is necessary to have behavioral policies from each mining site community to suppress the spread of COVID-19, where what we need to instill most is the term “Know yourself, know your enemy, know your battlefield, a thousand times you fight, a thousand times you win". The term implies that we should always recognize and be aware of the area where we are, whether we are in the red zone, orange zone, yellow zone, or green zone. Then we still have to be aware of places of high risk transmission such as markets, workplaces, schools, and so on. , so
that by recognizing ourselves, especially our enemies and our battlefield, we can know and anticipate what must be done to suppress the spread of COVID-19.

In addition, we must comply with health protocols in handling the spread of COVID-19 such as the continuation or development of the previous strategy, including: 1) Complying with 3M unconditionally; 2) Carry out environmental engineering in the workplace; 3) Monitoring the implementation of the protocol consistently; and 4) Implementing rewards and punishments. In addition to personal obligations, there is also a common obligation that we must comply with in realizing environmental sanitation and health at the mine site so that it is far from the spread of COVID-19, namely avoiding and reducing water pollution, where one of the main causes of water pollution from mining is leakage in ponds. waste storage. So to prevent water pollution at the mine site, the waste collection pond must: 1) Constructed away from water sources or sewers from watersheds; 2) Coated to avoid seepage into groundwater; 3) Built according to the best international standards; 4) Supervised to avoid leakage or seepage and spillage; and 5) When mining operations are completed, the waste collection pond must be closed and the toxic waste emptied.

In realizing the strategies and health protocols for handling the spread of COVID-19 at the mine site, PT. Alamjaya Bara Pratama requires adequate sanitation and environmental health in a sustainable manner and requires attention from all related parties, both the community, business people, and NGOs/NGOs. In order to support government programs and also the spirit of suppressing the spread of COVID-19, PT. Alamjaya Bara Pratama has complied with the policies or protocols directed by the government in order to handle the spread of COVID-19 and reduce the level of patients/communities affected by the infectious virus, in addition to sanitation and environmental health efforts.

PT. Alamjaya Bara Pratama has made a program protocol regarding an effort called GEMA (Joint Movement Against COVID-19) in preventing the spread of COVID-19 where the main activity is to provide a handwashing place in the form of a shower at the company office, thus supporting workers or the local community in general to implement the protocol so that it is far from the spread of this dangerous virus. In addition, the company also requires wearing masks in open or closed spaces in order to suppress the spread of the disease. Then the company also limits the number of people or employees in each room, then the company has also created a company cooperative which aims to prevent employees from going in and out of the work area and crowding in public places. In addition, the company has also prepared a clean, complete, and officially certified PT ABP Clinic with certified health technical personnel. In addition to vaccines, the PT ABP clinic has also been able to issue antigen SWAB results and can be used for trips out of town.

In addition, for sanitation and health, it is preferable to provide a smoking area so that employees who smoke do not smoke and dispose of their garbage carelessly. Then there is also a pantry that is always clean, so there is little chance of the spread of COVID-19. Not only the provision of facilities and infrastructure to support the handling of the spread of COVID-19, but also strict sanctions for employees who violate the company's policies, and either littering or those who do not comply with the health protocols enforced in the PT. Alamjaya Bara Pratama.

Furthermore, the company not only establishes health protocols and sanctions, but also supports government programs in terms of mass vaccination, the company contributes in participating in providing mass vaccines, called the mutual cooperation vaccine (VGR) in an effort to overcome Covid 19 where the PT Alamjaya Bara Pratama clinic held a Mutual Cooperation Vaccine (VGR) program for all PT ABP employees, contractors, and residents around the mine site. This is what ultimately brought PT. Alamjaya Bara Pratama received an award from the Central Government in order to assist government programs.
CONCLUSIONS

COVID-19 has become a major problem in recent years, so mining companies must make efforts to control disease and pay attention to the health of the community around the mine site. PT. Alamjaya Bara Pratama as one of the mining companies in East Kalimantan has assisted the government's program in suppressing the spread of COVID-19, in various ways, including making joint movements against COVID-19, by providing handwashing facilities in the form of showers at the company office, obligations wear masks in all rooms, limit the number of people or employees in each room, create a company cooperative that aims to prevent employees from going in and out of the work area and crowding in public places, preparing a clean, complete, and officially certified PT ABP Clinic with technical personnel certified health. Even the PT ABP clinic has also been able to issue the results of the Antigen SWAB and can be used for trips out of town, providing smoking areas and providing trash cans, provided a pantry that is always clean. These things make the chances of the spread of COVID-19 getting smaller. Not only the provision of facilities and infrastructure to support the handling of the spread of COVID-19, but also strict sanctions for employees who violate the company's policies, and either littering or those who do not comply with the health protocols enforced in the PT. Alamjaya Bara Pratama.

REFERENCES


