

# Analysis Of The Legal Protection Of Health And Safety (K3), B3 (Toxic Hazardous Material) Waste Disposal Employees Royal Prima Hospital Medan

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## Abstract

*Hospitals are health service industries/workplaces with a high risk to human resources' safety and health, such as patients, visitors, and the hospital environment. In this case, one of the hospital's human resources is B3 (Toxic Hazardous Material) waste disposal employee. This study analyzes the Legal Protection of Occupational Safety and Health (K3) of Employees of B3 Waste Disposal (Toxic Hazardous Materials) Royal Prima Medan Hospital. This type of research is qualitative field research which in legal research is called empirical research and is descriptive—primary data sources from informants totaling nine people. The results of Royal Prima Hospital have a health and safety management system (SMK3) by government regulation No. 50 of 2012. RS Royal Prima Medan complies with implementing legal protection against health insurance by Presidential Regulation 82 of 2018 concerning health insurance. All employees of B3 (Hazardous Toxic Material) waste disposal at Royal Prima Hospital receive BPJS health insurance. Where the payment contribution is also by Presidential Regulation No. 82/2018 Article 30 point 2, the gift is paid with the provisions of 3% (three percent) produced by the employer and 2% (two percent) made by the participant. In conclusion, Royal Prima Hospital Medan complies with work safety law No. 1 of 1970, regulating work safety in all workplaces, both land, sea, and air, within the territory of the Republic of Indonesia—the legal basis of Personal Protective Equipment in work is contained in Law No. 1 of 1970.*

**Keyword:** Legal Protection, Health And Safety, Disposal Employees

## I. INTRODUCTION

The World Health Organization reports that almost 80% of waste generated by health services (hospitals) is general waste and 20% is hazardous waste that may be infectious, toxic or radioactive. 15% of healthcare-generated waste is infectious waste or body tissue waste, 1% is sharps waste, 3% is chemical and pharmaceutical waste, and 1% is genotoxic and radioactive waste. Developed countries generate 0.5 kg of hazardous waste per hospital bed per day (1). Approximately 70-90% of solid waste from healthcare installations is general waste that resembles household waste and poses no risk. The remaining 10-25% is waste that can cause various health impacts because it is considered hazardous. The national production of hospital solid medical waste in Indonesia is 376,089 tons/day. Hospital waste is generally divided into two groups: medical waste and non-medical waste (2). Hospital medical waste is categorized as Hazardous and Toxic (B3) waste, as mentioned in Appendix I of PP No. 101/2014, that medical waste has infectious characteristics. Therefore, B3 waste can harm the environment and impact public health and other living things when disposed directly into the atmosphere. In addition, B3 waste has characteristics and properties that are not the same as waste in general, mainly because it has unstable, reactive, explosive, flammable, and toxic properties (3).

Legal Protection is all efforts made consciously by every person and government institution, which aims to seek security, control, and fulfillment of the welfare of life by existing human rights as stipulated in Law Number 39 of 1999 concerning Human Rights (4). Every Indonesian citizen has the right to obtain good health and welfare for himself and his family. This is stated in the 1945 Constitution Article 28H "Everyone has the right to live in physical and mental prosperity, to live, and to get a good and healthy living environment and has the right to obtain health services; everyone has the right to receive facilities and special treatment to obtain the same opportunities and benefits to achieve equality and justice, Everyone has the right to social security that allows for the full development of himself as a human being with dignity, Everyone has the right to have private property rights, and these property rights may not be taken over arbitrarily by anyone" (5).

Occupational safety is "safety related to equipment, workplace, work environment and ways of doing work. Meanwhile, occupational health is to protect or protect workers from events or conditions of work relations that are detrimental to their health and decency in terms of workers doing their jobs. Law Number 13 of 2003 concerning Manpower, article 86 3 paragraph (1) letter a explains that: "every worker or laborer has the right to obtain protection for

occupational safety and health (6). Organizing occupational safety and health aims to protect workers in building quality and optimal work productivity and to provide guarantees in preventing work accidents and occupational diseases" (7); (8).

Hospitals are health service industries/workplaces with a high risk to human resources' safety and health, such as patients, visitors, and the hospital environment (9). One of the hospital's human resources is B3 (Hazardous Toxic Material) waste disposal employees in this case. Employees of B3 (Toxic Hazardous Material) waste disposal in hospitals are an essential concern. One is in receiving legal protection of work safety when working in hospitals because their work is at high risk of occupational accidents and diseases. This study aims to analyze the Legal Protection of Occupational Safety and Health (K3) of Employees of B3 Waste Disposal (Toxic Hazardous Materials) Royal Prima Medan Hospital.

## II. RESEARCH METHODS

This type of research is qualitative field research which in legal research is called empirical research, namely a study that describes the complexity of problems that occur in reality, primarily related to the issue of the legal protection of labor safety of employees of B3 (Toxic Hazardous Material) waste disposal, provision of labor rights of employees of B3 (Toxic Hazardous Material) waste disposal, suitability of the implementation of the legal protection of labor safety of employees of B3 (Toxic Hazardous Material) waste disposal at Royal Prima Medan Hospital. This research is descriptive, namely research that describes a symptom, event, or event that occurs now. The research approach used in the discussion of this research is the system, namely:

1. Statutory approach is an approach taken by examining the laws and regulations related to the discussion in the thesis and their suitability for the problem being studied. In addition, it also examines theories and concepts that link to and build on this thesis.
2. The sociological approach is conducting research in practice related to the research problems using research and interviews at Royal Prima Medan Hospital to obtain opinions to support this research. If it is related to the issues raised, this approach is commonly referred to as a case approach.

Data sources were obtained from informants totaling 9 people, namely as follows:

1. Human Resources Director: 1 Person
2. Head of B3 (Hazardous Toxic Material) waste disposal section: 1 person.
3. Employees of B3 (Hazardous Toxic Material) waste disposal as many as 7 people.

Data analysis techniques aim to reduce data and solve problems based on the data obtained. Meanwhile, from data analysis, there can be the possibility of finding new problems that require new data. The data analysis used is qualitative descriptive analysis research, namely collecting, sorting, clarifying, and recording the resulting field notes and providing codes so that the data source can be traced and described.

## III. RESULTS AND DISCUSSION

### *Occupational safety management system (SMK3) government regulation No. 50 Year 2012*

As is known, the purpose of implementing the Occupational Safety and Health Management System (SMK3) is in the context of:

1. To increase the effectiveness of OHS protection by means of: planned, measured, structured, integrated.
2. To prevent occupational accidents and reduce occupational diseases, by involving: management, labor/workers and trade unions.

The occupational safety management system (SMK3) is mandatory for companies employing more than 100 people and having high potential hazards. For this reason, companies must develop an OHS Plan; in developing the OHS plan, employers involve OHS Experts, the occupational safety and health advisory committee (P2K3), workers' representatives, and other related parties. SMK3 is part of the company's overall management system to control risks associated with work activities and create a safe, efficient, and productive workplace (Government Regulation No. 50/2012).

Based on the results of interviews with the Director of Human Resources and the head of B3 (Hazardous Toxic Material) waste disposal employees at the Emergency Room of Royal Prima Medan Hospital, it is stated that occupational safety management (SMK3) has been made based on applicable regulations. Where in the process of planning the work safety management system (SMK3) at Royal Prima Hospital involves K3 experts, the occupational safety and health advisory committee (P2K3), worker representatives, and other related parties.

***Implementation of legal protection against Health Insurance for employees of B3 (Hazardous Toxic Material) waste disposal at Royal Prima Hospital.***

Government Regulation No. 14 of 1993 Concerning the Implementation of the Social Security System for Workers as contained in Article 2 concerning social security for workforce as intended in this Government Regulation covers:

1. Collateral in the form of money which includes:
  - a) Guaranteed work accidents
  - b) Guaranteed death
  - c) Antichity guarantee
2. Guarantee in the form of services, i.e. guarantee of medical assistance.

Workers' social security can address occupational risks while providing security to people, which helps improve work efficiency. Social protection for the working population supports people's self-esteem and pride faced with different social risks, creating job security. In addition, funds are used to support national development financing from the labor social security fund. The benefits of labor social security are fundamental to maintaining workers' dignity. With this primary benefit, financing can be kept to a minimum for all employers and workers with greater financial capacity and can increase essential use through other forms. Indonesian Presidential Regulation No. 82/2018 on health insurance:

Article 6 point 1 : Every Indonesian resident is obliged to participate in the Health Insurance program.

Article 13 point 1 : Employers must register themselves and their employees as health insurance participants to BPJS Kesehatan by paying contributions.

Article 28 point 3 : Contributions for PPU participants are paid by employers and workers and

Article 30 point 2 : Contributions are paid with the following provisions:

- a) 3 % (tiga persen) dibayar oleh pemberi kerja dan
- b) 2 % (dua persen) dibayar oleh peserta.

Based on interviews with the Director of Human Resources, the head of the B3 (Hazardous Toxic Material) waste disposal section and B3 (Hazardous Toxic Material) waste disposal employees were sampled. All respondents said that B3 (Toxic Hazardous Material) waste disposal employees, other medical personnel, and all employees at Royal Prima Hospital received health insurance from the management. Where all employees receive BPJS health insurance facilities, as stipulated in Indonesian Presidential Regulation No. 82/2018 concerning health insurance. The payment of contributions is also by Presidential Regulation No. 82/2018, Article 30 point 2, with the provisions that the employer pays 3%, and the worker bears 2%. The class of health facilities received varies depending on the position, wage, and length of service of each B3 (Hazardous Toxic Material) waste disposal employee at Prima Medan Hospital.

Based on the above provisions, it can be said that Royal Prima Hospital has complied with Government Regulation No. 14 of 1993 concerning implementing the Tena lga Ke lra Social Security System, contained in Article 2 concerning social security for workers. And Presidential Regulation of the Republic of Indonesia No. 82 of 2018 Article 13 point 1 concerning Employers are obliged to register themselves and their workers as health insurance participants to BPJS Health by paying contributions, article Article 28 point 3 concerning Contributions for PPU participants are paid by employers and workers and Article 30 point 2: Contributions are born with the following provisions:

- a. 3% (three percent) paid by the employer and
- b. 2% (two percent) paid by the participant.

***Implementation of legal protection against Safety for employees disposing of B3 (Toxic Hazardous Materials) waste at Royal Prima Hospital***

Work safety law No. 1 of 1970 regulates work safety in all workplaces, whether it is land, sea, and air, within the territory of the Republic of Indonesia. Work safety laws aim to reduce accidents, reduce the danger of explosions, force an increase in the ability of workers to provide first aid in accidents and provide protective equipment to workers, especially for jobs that have a high risk, and help create a conducive work environment such as workplace lighting, cleanliness, air circulation, and harmonious relationships between workers, work environment, equipment, and work processes.

The work safety law contains technical instructions on what must be done by and to workers to ensure the safety of the workers themselves, public safety, and the products produced because so many processes are carried out with due regard to the development of science and technology, which causes changes in the occupational risks faced by workers in their workplace. The legal basis for Personal Protective Equipment in the workplace is contained in Law No. 1 of 1970:

1. Article 3 paragraph (1) point f:  
"Occupational safety requirements shall be established by law to provide workers with means of personal protection..."
2. Article 9 paragraph (1) item c:

"The management is required to show and explain to each new worker the..... means of personal protection for the worker concerned."

3. Article 12 point b:

"The obligation and/or right of workers to wear the required personal protective equipment shall be regulated by laws and regulations...".

4. Article 14 item b:

"Managers are obliged..... to install in the workplace under their supervision, all required safety drawings and all other guidance materials, in places that are easily visible and legible according to the instructions of supervisory employees or occupational safety experts..."

5. Article 14 point c:

As mentioned, OHS protective equipment is a device that partially or completely isolates parts of the body from potential hazards. If described in more detail, the objectives of using PPE include the following:

- a) Protect the workforce from potential OHS hazards.
- b) Increase work effectiveness and productivity.
- c) Create a safe working environment.

Based on Permenakertrans No. Per: 08/MEN/VII/2010, here are some types of K3 protective equipment and their functions:

1. Head protective equipment

Its function is to protect the head from being hit, knocked, dropped or collided with hard or sharp objects. Head protection also protects against exposure to heat radiation, microorganisms, chemical splashes and extreme temperatures. Equipment included in this are safety helmets, hair restraints, head hoods, and others.

2. Face and eye protective equipment

The function is to protect the eyes and face from direct exposure to hazardous chemicals. In addition, it also protects against exposure to particles in water and air as well as splashes of hot objects and hot vapors. Eye and face protective equipment is also able to provide protection from the impact of hard or sharp objects, light beams, and electromagnetic wave radiation. Equipment included are face shields, safety glasses (spectacles), diving masks, goggles, full face masks and face shields. Alat Pelindung Telinga

Its function is to protect the ears from noise or pressure. Equipment included are ear muffs and ear plugs.

3. Respiratory protective equipment and accessories

This tool works by channeling clean air or filtering pollution from entering the respiratory system. Its function protects the respiratory organs from microorganisms, chemicals, dust, fog (aerosols), smoke, vapor, gas, etc. This includes respirators, masks, canisters, catheters, Re-breathers, Air Hose Mask Respirators, Airline respirators, diving tanks, etc.

4. Hand-protective equipment

Its function is to protect hands and fingers to avoid direct exposure to fire, hot and cold temperatures, and radiation (electromagnetic and ionizing radiation). In addition, hand protective equipment can also protect against exposure to chemicals, electric currents, blows, collisions, and the risk of scratches. Another function is to prevent infection with pathogenic substances (bacteria, viruses) and microorganisms.

The equipment included is leather, metal, rubber, canvas, coated fabric, and chemical-resistant gloves.

5. Foot Protection Equipment

The function protects the feet from exposure to hot or cold liquids, hot vapors, extreme temperatures, and harmful chemicals and microorganisms. In addition, foot protection can protect against the risk of being punctured by sharp objects, crushed by heavy objects, and slipping. Equipment that includes foot protection is safety shoes in industrial work, smelting, building construction, and metal casting. Safety shoes are also required for potentially hazardous and explosive work. Those working in slippery or wet areas, chemical and microorganism risks, and animal hazards also need foot protection.

6. Protective Clothing

Its function is to protect some or all body parts from the dangers of exposure to fire and hot objects, extreme hot or cold temperatures, hot liquids and metals, and hot steam.

Protective Clothing can also protect against the dangers of splashing chemicals and collisions, scratches, and radiation. Protective Clothing is also needed against animal hazards and pathogenic micro-organisms such as bacteria, viruses, and fungi. Jackets, aprons/coveralls, vests, and protective clothing covering part or all of the body are included.

7. Personal Fall Protection Equipment

Its function is to restrict movement to prevent potential falls. Fall protection equipment can keep workers in the desired position, for example, tilted or suspended. It can also arrest a fall so that it does not hit the ground floor. Body harnesses, lanyards, carabiners, safety ropes, descenders, rope clamps, and mobile fall arresters are included.

#### 8. Buoy

Its function is to protect the working user from sinking into the water. Buoys can also regulate buoyancy so that users are in a negative buoyant (sinking) or neutral positive (floating) position in the water. This includes a safety vest (life vest), a safety jacket (life jacket), and a Buoyancy Control Device vest.

The results of interviews with the Director of Human Resources and the head of the B3 (Hazardous Toxic Material) waste disposal section of B3 (Hazardous Toxic Material) waste disposal employees at Royal Prima Medan Hospital said that for B3 (Hazardous Toxic Material) waste disposal employees and those in contact with patients, the hospital has provided and required to use complete PPE when carrying out work. The regulations for the use of PPE have also been stated in the work agreement of each hazardous waste disposal employee, as well as the sanctions and fines that hazardous waste disposal employees receive if they do not comply with the rules for wearing PPE. Furthermore, in every corner of the room, leaflets are also posted to warn about the use of PPE for medical personnel. Especially in the changing rooms of medical personnel, there are also posted regulations on the obligation to use PPE and how to use PPE properly and correctly. This is done to improve preventive measures for disease transmission to B3 (Hazardous Toxic Material) waste disposal employees and other medical personnel.

Based on the results of interviews with 7 B3 (Toxic Hazardous Material) waste disposal employees who were sampled, they said that PPE is indeed provided and required for all medical personnel working at Royal Prima Hospital. This minimizes B3 (Toxic Hazardous Material) waste disposal employees and other medical personnel being exposed to or infected by diseases from patients handled directly by B3 (Toxic Hazardous Material) waste disposal employees. From the results of the researchers' observations, all health workers on duty wore complete PPE, such as gloves, headgear, masks, uniforms, and shoes.

So based on the above provisions, Royal Prima Hospital fulfills the requirements of the work safety law No. 1 of 1970, regulating work safety in all workplaces, both land, sea, and air within the territory of the Republic of Indonesia. The legal basis for Personal Protective Equipment in the workplace is contained in Law No. 1 of 1970: Article 3 paragraph (1) point f, namely providing personal protective equipment to workers, Article 9 paragraph (1) point c, the management is required to show and explain to each new worker, Article 12 point b the obligation and right of workers to wear the required personal protective equipment, Article 14 point c about installing in the workplace he leads, all required work safety drawings and all other guidance materials.

## IV. CONCLUSION

Based on the discussion and research that has been done, the following conclusions can be drawn:

1. Royal Prima Hospital has a health and safety management system (SMK3) by government regulation No 50 of 2012.
2. RS Royal Prima Medan complies with the implementation of the legal protection of health insurance by Presidential Regulation No 82 of 2018 concerning health insurance. Therefore, all B3 (Hazardous Toxic Material) waste disposal employees at Royal Prima Hospital receive BPJS health insurance. Furthermore, where the payment contribution is also by Presidential Regulation No. 82/2018 Article 30 point 2, the gift is paid with the provisions of 3% (three percent) produced by the employer and 2% (two percent) made by the participant.
3. Royal Prima Hospital Medan complies with work safety law No. 1 of 1970, regulating work safety in all workplaces, both land, sea, and air, within the territory of the Republic of Indonesia. Furthermore, the legal basis for Personal Protective Equipment in the workplace is contained in Law No. 1 of 1970.

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