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FACTORS RELATED TO WORK ACCIDENTS ON WASTE MANAGEMENT WORKERS (CASE STUDY IN FINAL PROCESSING PLACE: PECUK INDRAMAYU DISTRICT AND GUNUNG SANTRI **CIREBON DISTRICT) IN 2020**

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ABSTRACT

The role of waste management personnel who work every day to overcome the dangers of environmental pollution due to waste, these workers are at risk of work accidents. The aim is to find out the factors related to work accidents in waste management personnel. Using cross sectional and focus group discussion. The total sampling is 33 respondents. Workers who have an accident will be treated with First Aid in Accidents, even the Environmental Service will follow up. Variables related to work accidents are working hours $(\rho=0.023)$, age $(\rho=0.005)$, fatigue $(\rho=0.027)$. Working hours variable with regression coefficient value = 0.061, age variable with regression coefficient value = 0.020. First Aid in Accidents at work still does not meet the requirements, and workers also do not use complete Personal Protective Equipment. Variable hours of work, age, fatigue associated with work accidents. There is no dominant factor associated with work accidents. It is necessary to hold an Occupational Health and Safety program.

Keyword: Work Accident Factors, Waste Management Personnel, Final Processing Place.

I. INTRODUCTION

Occupational safety is safety related to engines, aircraft, work tools, processing materials and foundations, processes, work environments as well as ways of doing work and production processes. Thus that work safety is the main means to prevent the occurrence of work accidents that can cause losses in the form of injuries/injuries, defects/deaths, property losses, and damage to equipment/machinery and the environment at large (Tarwaka, 2016). Work accidents are accidents that occur related to work, including diseases arising from work relationships, as well as accidents that occur on the way to and from work. Work accidents are unexpected and unwanted events, both accidents due to direct work and accidents that occur while the work is being done (Buntarto, 2015).

According to the ILO (International Labour Organization), 2.78 million workers die each year from work accidents and occupational diseases. About 2.4 million (86.3%) of these deaths were due to occupational diseases, while more than 380,000 (13.7%) were due to work accidents (ILO, 2018).

In 2017 the number of reported work accidents as many as 123,041 cases, in 2018 reached 173,105 cases in Indonesia (BPJS, 2019). Based on data from BPJS Employment of West Java Province, work accidents in West Java in 2016 amounted to 21,296 people and in 2017 as many as 22,878 people (Disnakertrans Jabar, 2018). While throughout 2018 there were 33,740 people (Disnakertrans Jabar, 2019).

From the data of landfill (Final Processing Place) Pecuk the number of work accidents in 2018 has a percentage of accident incidence that is 5%, in 2019 has a percentage of accident incidents that are 21% (TPA Pecuk, 2020). While from Mount Santri landfill the number of work accidents in 2018 has a percentage of accidents that are 7%, in 2019 there is a percentage of accidents that are 14% (TPA Gunung Santri, 2020).

Based on the description above, the researchers are interested in taking the title "Factors related to work accidents on waste management workers (case study in final processing place: Pecuk Indramayu District and Gunung Santri Cirebon District) in 2020".

II. LITERATURE REVIEW

Work safety is a state of avoiding danger while doing work. Work safety is one of the factors that must be done while working. No one in this world wants an accident to happen. Work safety is very dependent on the type, form, and environment in which the work is carried out (Buntarto, 2015).

Work accidents are unexpected and unexpected events. Unexpected because behind the incident there was no intentional element, especially in the form of planning, therefore sabotage events or criminal acts are outside the scope of the actual accident. Not expected because of the accident accompanied by material loss or suffering from the lightest to the heaviest. Work accidents that occur can be caused by two factors, namely: human factors, mechanical and environmental factors (Sucipto, 2014).

According to the ILO (International Labor Organization) work-related accidents are classified based on 4 types of classification, namely: According to Accidents (such as falling, being hit by objects, being hit or hit by objects, being pinched by objects, movements beyond their capabilities, the influence of high temperatures, being exposed to electric currents, and so on), According to Cause (such as the result of machinery, hazardous materials/substances and work environment), According to the nature of the wound or abnormality (such as broken bones, dislocations/sprains, strains of muscles/veins, bruises and other internal injuries, amputations, surface wounds, burns, and so on), According to the Location of Abnormalities or Body Wounds (eg head, stomach, and so on) (Buntarto, 2015).

III. METHODOLOGY

The type of qualitative research is an analytical observational research design with a cross-sectional approach, and qualitative research using FGD (Focus Group Discussion). The research location is in the Pecuk Final Processing Site Indramayu District, and Gunung Santri Cirebon District. The population is the waste management staff totaling 33 respondents. The sampling technique is total sampling.

Data was collected through direct interviews using a questionnaire. Data processing and analysis were carried out using the SPSS program including univariate analysis, bivariate analysis, multivariate analysis.

This research has obtained research ethics permit numbered 13/EP/STIKKU/2021 from the Health Research Ethics Council of the Kuningan School of Health Sciences, research permits from the Indramayu District Environmental Service with the number 660.1/176/Sekre, and from the Cirebon District Environmental Service with number 660.1/90/Sekre.

IV. RESULT AND DISCUSSION

Table 1. Univariate Analysis

Vai	n	%	
Working Hours	≤8 Hours	13	39,4
	>8 Hours	20	60,6
Age	15-40 Years	15	45,5
	>40 Years	18	54,5
Long Work	<5 Years	24	72,7
	≥5 Years	9	27,3
Edication	Elementary School- Junior High School	17	51,5
	High School-College	16	48,5
Fatigue	Mild	18	54,5
J	Heavy	15	45,5
Work Accidents	Mild	20	60,6
	Heavy	13	39,4

Source: Primary Data, 2021

4.1. FGD (Focus Group Discussion) Fatigue

- 1. Complaints that are felt when tired at work are that almost the entire body feels pain when tired. Here's one quote: "Calves, hands, bodies, shoulders, yes all seem to hurt" (X, 25 years old).
- 2. Long-time workers experience fatigue at work that one-day experiencing fatigue. Here's one quote: "Most days, rest then the next day go to work again, yes enter again" (X, 31 years old).
- 3. The part of the body that often experiences fatigue while working is the back, hands, and feet that often experience fatigue while working. Here's one quote: "Between the back, legs, and hands" (X, 41 years old).
- 4. The action was taken by workers if there is fatigue while working is going to rest if necessary take medicine. Here is one of the quotes: "If combed because in the Final Processing Place there is no holiday, so most

- cooperation helps each other, and most take drugs just keep sleeping" (X, 31 years old).
- 5. Prevention of workers from getting tired easily while working is adequate rest, and exercise. Here's one quote: "Yes enough rest, light gymnastics like sports so" (X, 43 years old).
- 6. The actions taken by the Final Processing Place on the evaluation of worker fatigue are by setting work breaks, setting work schedules, and setting workloads. Here's one quote: "The work schedule is arranged in the sense of intervention, if not sick told to rest, continue to regulate workload as well" (X, 41 years old).

4.2. Work Accidents

- 1. Actions taken by workers in the event of a work accident at work, namely workers will handle First Aid in accidents, and if necessary taken to a Community Health Center or other health facilities. Here is one quote: "If there is first aid, if the weight is carried by a Public Health Center or health facility" (X, 41 Years old).
- 2. Aspects of worker protection from workplace accidents are Personal Protective Equipment, insurance such as health insurance, and the Social Security Organizing Agency. Here is one quote: "Given masks, gloves, yes standards so from the service, there is a helmet is also that" (X, 43 years old).
- 3. How to import work accidents at work is to report to the field supervisor and the head of the Final Processing Place. Here's one quote: "Yes if it's pasted there's a foreman and ahead, so just report it to them" (X, 32 years old).
- 4. The steps taken by the Final Processing Place in the event of a work accident are handling the victims, then reporting to the Environment Agency. Here's one quote: "The first one we hand first the person, continue to report to the superior or the Environment Agency" (X, 28 years old).
- 5. People involved in work accident investigation activities will involve witnesses to the incident, the head of the Final Processing Place if necessary the head of the Environment Agency. Here is one of the quotes: "Yes involved officers of the Final Processing Place all, head of the Final Processing Place, head of the office if

deemed necessary reviewed and handled" (X, 41 years old).

6. The Way the Final Processing Place devises a strategy so that similar events (work accidents) are not repeated, which will provide worker socialization to standard operating procedures and personal protective equipment. Here is one of the quotes: "Yes notice of Standard Operating Procedures, completeness of Personal Protective Equipment" (X, 31 years old).

Table 2. Bivariate Analysis

	Work Accident				
Variable	Mild		Heavy		- ρ
	n	%	n	%	_
Working Hours					
≤8 Hours	11	33,3	2	0,1	0,023
>8 Hours	9	27,3	11	33,3	
Age					
15-40 Years	13	39,4	2	0,1	0,005
>40 Years	7	21,2	11	33,3	
Long Work					
<5 Years	13	39,4	11	33,3	0,263
≥5 Years	7	21,2	2	6,1	
Edication					
Elementary					
School-Junior	8	24,2	9	27,3	
High School					0,101
High School-	1.0	26.4		10.1	
College	12	36,4	4	12,1	
Fatigue					
Mild	14	42,4	4	14,1	0,027
Heavy	6	18,2	9	27,3	

Source: Primary Data, 2021

Table 3. Multivariate Analysis

		Ехр	•	
Variabel	В	(B)	95% CI	ρ
Working	-2,801	0,061	0,004 - 0,829	0,036
Hours				
Age	-3,906	0,020	0,001 - 0,344	0,007

Source: Primary Data, 2021

4.3. Working Hour

Working hours ≤ 8 hours with minor work accidents as many as 11 (33.3%) respondents, working hours > 8 hours with heavy work accidents as many as 11 (33.3%) respondents. The value $\rho = 0.023 \leq 0.05$ means that there is a significant relationship between working hours and work accidents in the management of the land. The manager of the country who has working hours of ≤ 8 hours will experience a minor work accident, while the manager of the field who has working hours of > 8 hours will experience a heavy work accident. So the staff with working hours > 8 hours are likely to have a work accident compared to working hours ≤ 8 hours.

This study is in line with Tatroman and Herlina's research that working >8 hours per day had a

moderate accident as many as 35 respondents (58.3%). Working 8 hours per day who had a moderate work accident as many as 19 respondents (31.7%). A total p- value of 0.004 (<0.05) means that there is a significant influence between working hours and work accidents (Tatroman et al., 2018).

The results of Martini et al study showed that respondents who had work accidents had a working period of >8 hours (100%) of 23 respondents, human factors (workers) influenced the occurrence of work accidents, the length of working hours that exceeded normal working hours will affect the onset of work fatigue so that it will have an impact on increasing work accidents and decrease work productivity (Martiwi et al., 2017).

4.4. Age

Age 15-40 years with minor work accidents as many as 13 (39.4%) respondents, age >40 years with heavy work accidents as many as 11 (33.3%) respondents. The value $\rho = 0.005 \le 0.05$ means that there is a significant relationship between age and work accidents in the management of the land. The management of the land that has an age of 15 - 40 years will experience a minor work accident, while the management of the land that has a >40 years will experience a heavy work accident. So the manager of the field with older age is likely to have a work accident compared to a younger age.

This research is in line with the research of Salmawati et al namely obtained the result of a value of p = 0.002 (p<0.05) meaning that there is an age relationship with the incidence of work accidents (Salmawati et al., 2019).

The results of Anwar and Sugiharto's research showed that respondents who had work accidents based on the most age were respondents with a ≥ 30 years (81.82%). Workers aged ≥ 30 years have a tendency to experience higher work accidents because the older a person's age will begin to experience a decrease in body function and optimal physical ability in a person achieved at the age of 30 years while a person's physiological capacity will decrease by 1% per year after the peak condition is exceeded (Anwar et al., 2018).

4.5. Long Work

Long work <5 years with minor work accidents as many as 13 (39.4%) respondents, long work <5

years with heavy work accidents as many as 11 (33.3%) respondents. Value $\rho = 0.263 > 0.05$ means there is no significant relationship between long work and work accidents in the management staff. Long-time staff workers working <5 years will have a minor work accident, and also the longworking land manager <5 years will have a heavy work accident. So the staff who have a long <5 years will have a work accident, although not all who have a long <5 years will have a work accident. This study is in line with the research of Salmawati et al showing that the value of p = 0.083 (p<0.05) means that there is no relationship between working hours and the incidence of work accidents (Salmawati et al., 2019).

Working time is directly related to work experience, the longer a person's working life, the higher the worker's experience and flying hours so that workers will be able to better understand how to work safely to avoid them from work accidents. The new workforce generally does not know indepth the ins and outs of work. Conversely, with the increasing working life of a person's workforce, there is also an increase in the knowledge and skills that workers have and the safety aspects of the work done (Prawirakusumah, 2009).

4.6. Education

High School-College education with minor work accidents as many as 12 (36.4%) respondents, elementary-junior high schools with heavy work accidents as many as 9 (27.3%) respondents. The value of $\rho = 0.101 > 0.05$ means that there is no significant relationship between education and work accidents in the management of the land. The management of the field who has a High School-College education will have a minor work accident, while the management of the field who has an education of Elementary-Junior High School has a heavy work accident. So the management of the department who has an elementary school education-Junior High school will have a work accident, although not all who have an elementary school education-Junior High school will have a work accident.

This research is in line with Ramadhany and Pristya's research showing that from the relationship between education level and unsafe action in workers of Banten Energi Lestari Limited Company obtained there is no significant relationship between education level and unsafe act (Ramadhany et al., 2019).

A person's education affects the way of thinking in the face of work, as well as in receiving work training in both practice and theory including ways of prevention or how to avoid the occurrence of work accidents (Sucipto, 2014).

4.7. Fatigue

Mild fatigue with mild work accidents as many as 14 (42.4%) respondents, severe fatigue with heavy work accidents as many as 9 (27.3%) respondents. The value of $\rho = 0.027 \leq 0.05$ means that there is a significant relationship between fatigue and work accidents in the management of the land. The manager of the field who is lightly exhausted will experience a mild work accident, while the manager of the field who is severely exhausted will have a heavy work accident. So the manager of the field with severe fatigue is likely to have a work accident rather than mild fatigue.

This study is in line with tension et al research showing that the analysis obtained a significance value (ρ) of 0.001, the value of significance of the analysis of the relationship between work fatigue and work accidents < 0.05, it can be concluded that there is a meaningful relationship between work fatigue and work accidents in motorcycle taxi drivers in Bitung City (Tanriono et al., 2019).

The level of work fatigue with a high level can affect the incidence of work accidents due to the level of lack of concentration levels, feelings of inaction and reluctance to each do a work activity so that it is disturbed and hampered, lack of passion both physically working psychologically, all feel heavy and sleepy. The existence of various conditions when fatigue, in general, is one of which is muscle fatigue, the muscle of one of our bodies that we often use for the movement of organs, so that the lack of muscle performance when loading and also make movement performance slow so that it becomes the impaired ability of energy while working so that it can increase the incidence of accidents in doing work, so that it can affect the productivity of work decreases and will result in There are work accidents experienced by workers (Hidayat et al., 2021).

In this study, the staff manager of the agency did his job almost every day without holidays because everyday garbage in all regions is always there, therefore workers who work every day feel less healthy such as dizziness, soreness, lethargy, muscle pain, fever, and others. The results of Fahmi's research showed that the fatigue experienced by long-distance night bus drivers of The Otobus Restu Mulya Company was moderate and severe fatigue with complaints in the form of weakening of activities and physical fatigue. Symptoms of fatigue that are felt include feeling heavy and pain in the head, fatigue in the whole body, yawning, feelings of drowsiness, spasm and feeling of burden in the eyes, feeling like lying down, pain and stiff feeling in the back and shoulders (Fahmi, 2015).

In this study, the staff of the retainer who experienced fatigue for only a short time or one day later the day began working again, or two days where the sick permit worker did not enter work to the head of the Technical Implementation Unit of the Final Processing Area for rest at home because of the fatigue.

According to Ramdan, acute fatigue results from short-term sleep deprivation or strenuous physical or mental activities in the short term, impacting usually only in short periods and can be restored by sleep or rest (Ramdan, 2018).

In this study, the management of the staff who experienced fatigue had different complaints, there was only one complaint on part of his body, there was even more than one complaint or almost all parts of his body experienced fatigue.

The results of Andarini and Prasetya's research that working as a weaving machine operator requires a high level of rigor, monotony in work, as well as a standing work attitude that can cause fatigue in the workforce. Static work attitude on labor that is done for a long time, will cause fatigue and result in workers experiencing health problems. Fatigue that arises faster, accompanied by disorders of back pain, back

pain, neck and shoulders that will eventually reduce workability and decrease work productivity (Andarini et al., 2017).

In this study, the management of the staff who experienced fatigue utilized the hours of rest to eat, sleep, relax the body by massaging the part of the body that felt sick, even taking the stall medicine if the pain had not subsided.

According to Ramdan, the time and length of rest can significantly restore the condition of the body from fatigue. Sleep is the most effective way to reduce fatigue because during sleep there will be recovery and can help the return of social and mental functions (Ramdan, 2018).

In this study, the management of the staff stretched or light exercise before carrying out his work, also maintaining a pattern of adequate rest so that the next morning in carrying out his work was not sleepy or sick.

According to Ramdan, work fatigue is bad for both individual workers and the company, so work fatigue needs to get medical treatment by the cause and psychological treatment. Work fatigue management can be in the form of the provision of drugs according to medical indications, cognitive therapy and work behaviors concerned, mental guidance, improvement of the work environment, improvement of work attitudes, improvement of work equipment, and improvement of occupational nutrition (Ramdan, 2018).

In this study, the management of the field that experienced fatigue will hamper the process of the offramp, although there will replace the work, it will still replace the work of other workers, therefore the Final Processing Place takes further action if there are workers who experience severe fatigue, which will regulate the rest time, schedule, and also workload for all workers.

According to Ramdan, efforts to control fatigue at work can be done by managing work time, work schedule, rest, work, or work procedures that are safer and lighter so that the contact of individual workers with the source of work fatigue can be reduced. This effort includes the examination of labor health lexically and psychologically (Ramdan, 2018).

4.8. Accident

In this study, the staff of the staff did first aid if anyone suffered a minor injury to a work accident, but the contents of the First Aid box in the accident are still not qualified or incomplete such as plaster and bandages are not there, the contents of betadine and alcohol are almost exhausted, and also seem unkempt. If you experience severe injuries to work accidents, it will be brought by the Community Health Center or other health facilities, where the health facilities are not too far away can still be reached using motorcycle vehicles or cars, in addition, the Environment Agency also knows the Final Processing Place has cooperated with the health facility in handling emergencies both from accidents and the health of workers.

The results of the study Chairunnisa et al showed that the contents of the First Aid box on accidents scattered in the company are incomplete. From the observations found the amount of sterile gauze, mitela, pins, gloves, glasses for eye washing is not by the should, there are several boxes of First Aid In Accidents that do not have bandages and plaster in them, the number of bandages and plaster is also not appropriate, there is a First Aid box in accidents that do not have a mask, flashlight, alcohol, notebook, and manual of First Aid In Accidents. The contents of an incomplete First Aid box can hinder the process of carrying out first aid when the required tool is not in the First Aid box in an accident (Chairunnisa et al., 2016).

In this study, Personal Protective Equipment has been prepared by the Environment Agency and distributed to the Final Processing Place for all staff, but some workers do not use complete Personal Protective Equipment such as there are workers who do not use their sarongs, there are also workers who do not use their helmets. Where personal protective equipment is mandatory for workers to use while in the working environment so that there are no unwanted things during work such as scratching, falling hard objects, and others. Workers are also either Civil Servants and not Civil Servants or Labor Supply already have Health Insurance or Social Security Organizing Agency, for Civil Servants have been registered by the state, not civil servants or Labor Supply that is already known by the Environment Agency.

The results of Riyadi and Talib's research, based on the results of interviews with the executive manager of the Gorontalo Provincial Construction Services Supervisory Agency, information obtained from workers, and also findings in the field that the company had prepared several Personal Protective Equipment to the workers of construction workers, but many found that it turned out that the construction worker did not use personal protective equipment provided by the company in carrying out his work. The lack of awareness of the leadership of construction services companies to enroll their workers into the Labor Social Security program, the lack of awareness in question is that the company leadership voluntarily comes to register workers without first being reminded by the Social Security And Health Organizing Agency, although in the end, the company registers its workers with the Social Security Organizing Agency, However, this is only as a consequence after the Social Security Organizing Agency issued a warning letter to the company to immediately register its workers (Riyadi, 2020).

This study has a field supervisor who is in charge of a monitoring or supervising and if there is an accident on the staff of the management of the unit will report to the head of the Technical Implementation Unit of the Final Processing Area either directly or by phone, so that the head of the Technical Implementation Unit of the Final Processing Area is aware of the accident and follow up on the incident.

Based on Sumindo Pratama Limited Liability Company that the reporting of incidents, accidents, and near-miss, namely: initial reporting can be done verbally using telephone or direct communication, incidents or accidents reported to HSE Department, the deadline for reporting is 1x24 hours after the incident occurs, the complainant of incidents or accidents then fills out the Incident and Accident Report form, Health Safety Environment Department assists the Complainant of incidents or accidents in making accident reports and coordinating with the relevant Departments to act on incident reports (PT. Sunindo Pratama, 2017).

In this study, the staff of the management of the land that had a minor accident immediately carried out first aid at work, but if the weight is immediately taken to the place of health facilities and the head of the Technical Implementation Unit of the Final Processing Area reports to the Environment Agency for immediate action to follow up on the incident.

The results of Syafrial and Ardiansyah's research showed that in this case if there is a work accident, then the handling of the first work accident is done with first aid by co- workers to workers who have an accident. If indeed the accident is declared serious and needs a medical team then the company immediately contacts the nearest hospital where the accident works to send an ambulance. Every accident that occurs engineering leader must notify the Coordinator Safety which will be submitted to the Project Manager. The accident involved all workers. After an accident, an Occupational Health and Safety Officer must fill out a work accident form to be used as a document (Syafrial et al., 2020).

In this study, the Final Processing Place does not have an Occupational Safety and Health team or Occupational Safety and Health program where if there is a minor accident that follows up is the supervisor or head of the Technical Implementation Unit of the Final Processing Area, if the accident is severe or until someone dies then the Environment Agency will also follow up on the

incident. To carry out the investigation conducted by the Final Processing Place or the Environment Agency the first is to conduct an examination of the scene of the accident and gather information from both victims and witnesses who know the incident, then analyze to find out the cause of the incident, and take remedial and preventive measures so that the incident does not happen again.

Based on Sumindo Pratama Limited Liability Company, incidents that must be investigated include incidents that cause personnel moderate injury, severe or death, incidents that cause losses > 1,000,000 United States dollars. Investigations include: data collection conducted by examining the workplace and collecting information from victims (if possible) and witnesses, taking pictures or photographs looking for and collecting materials for investigation and making chronological accident events, analyzing data and information for each causal factor that has been identified to determine the direct cause and root cause of the accident, make recommendations for preventive and remedial measures (PT. Sunindo Pratama, 2017).

In this study, the Final Processing Place provides socialization about work procedures to all staff who work while at work, and the Environment Agency also provides Personal Protective Equipment for the Final Processing Place to be used to the staff of the retainer manager who is at work during work.

The results of Umamah et al's research showed that efforts to prevent and control work accidents at The Tuban 1 Factory of Semen Indonesia Limited Liability Company were prepared in the work accident prevention program, the program is Identification and Assessment of The Impact of Activities, carrying out safety inspection (unsafe action and unsafe condition), conducting safety talk (internal and contractor), conditioning and completing occupational safety and health norms, Occupational Safety and Health training (basics of Occupational Safety and Health), management and provision of Personal Protective Equipment, conducting 5R implementation assessments (Concise, Neat, Clean, Care and Diligent), equipment security activities (log out and tag out), and certification of factory equipment (Umamah et al., 2015).

V. CONCLUSION AND RECOMENDATION

5.1. Conclusion

- 1. Distribution of frequency of working hours >8 hours as many as 20 (60.6%) respondents, >40 years old as many as 18 (54.5%) respondents, long work <5 years as many as 24 (72.7%) respondents, elementary school education-junior high school as many as 17 (51.5%) respondents, mild fatigue as many as 18 (54.5%) respondents, mild work accidents as many as 20 (60.6%) respondents.
- 2. Fatigue problems through FGD (Focus Group Discussion): Complaints felt when tired at work that almost the entire body hurts. Long-time workers experience fatigue at work that is one day. Parts of the body that often experience fatigue while working are the back, hands, and feet. The actions taken by workers if there is fatigue while working are rest, and if necessary take medication. Prevention of workers from getting tired easily while working is adequate rest, and exercise. Actions taken by the Final Processing Place on the evaluation of fatigue in workers are the arrangement of work breaks, work schedule arrangements, workload arrangements.

The problem of work accidents through FGD (Focus Group Discussion): Actions taken by workers in the event of a work accident at work are handling First Aid in Accidents, and if necessary taken to a Public Health Center or another health facility. Aspects of worker protection from work accidents are Personal Protective Equipment, insurance such as health insurance, and the Social Security Organizing Agency. How to report work accidents at work is to the field supervisor and the head of the Final Processing Place. The steps taken by the Final Processing Place in the event of a work accident are handling the victims, then reporting to the Environment Agency. People involved in work accident investigation activities are witnesses to the incident, the head of the Final Processing Place if necessary the head of the Environment Agency. The Way the Final Processing Place devises a strategy so that similar events (work accidents) are not repeated, namely the socialization of

- workers to standard operating procedures and personal protective equipment.
- 3. There is a significant relationship between working hours, age, fatigue with work accidents on the waste management staff. There is no significant relationship between the length of work, education, and work accidents for waste management personnel.
- 4. There is no dominant factor associated with work accidents in the waste management personnel.

5.2. Recommendation

- 1. We recommend that the Final Processing Place or the Environment Agency strive for the holding of Occupational Safety and Health programs, provide training to staff related to Occupational Safety and Health, socialize and supervise the management of the staff in using Personal Protective Equipment, maintain and complete the contents of First Aid in Accidents, sports activities.
- 2. We recommend that the management of the company use Personal Protective Equipment that has been provided by the Final Processing Place or the Environment Agency, always follow the work procedure, even though the worker is skilled in his work.

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