



# ANALYSIS OF WASTE MANAGEMENT AT THE PON EVENT AT THE MULTIPURPOSE ASTAKA MEDAN PANCING SPORT CENTER

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#### Abstract

The 2024 National Sports Week (PON) has the potential to increase the amount of waste generated at the Astaka Medan Pancing Multipurpose Sport Center because this event will increase the number of visitors in the area around the competition location. This study aims to analyze waste management at the Astaka Medan Pancing Multipurpose Sport Center during the 2024 National Sports Week (PON). The research method used is descriptive qualitative, with data collection through observation, in-depth interviews, and documentation. The results of the study indicate that although there was an increase in the frequency of waste collection during the event, the existing trash bin facilities were inadequate and with a waste sorting pattern between wet and dry waste. A lot of trash was scattered in public areas, indicating ineffective waste management. This study advocates for the organizers or the government in this case the Environment and Forestry Service to add waste management facilities (trash cans, plastic sacks) in areas where there are many gatherings of people and make posters appealing to dispose of trash in its place, as well as improving coordination with volunteers and related agencies. With these steps, it is hoped that waste management at the Astaka Medan Pancing Multipurpose Sport Center can be improved, creating a cleaner and healthier environment during major events such as PON XXI Aceh-Sumut 2024.

Keywords: Management, PON, Waste

## Introduction

In 2023, the amount of waste generated in Indonesia will reach 38,795,897.60 tons, an increase of 162,191.07 tons from the previous year. This figure is certainly not a small number, so we must prevent further additions to waste. If we assume that every year there is an increase in waste of more than 100,000 tons, then in 2030 Indonesia's waste generation could reach 39.5 million tons. (SIPSN, 2024).

In North Sumatra itself, as many as 1,827,494.37 tons of waste have been recorded in 2023, making North Sumatra the 6th largest contributor of waste to Indonesia. This should be enough to make the community able to reduce the amount of waste in North Sumatra. Medan City is the largest contributor of waste to North Sumatra Province, with a figure of 645,661.28 tons of waste. (SIPSN, 2024).

Household waste management has been regulated in Government Regulation of the Republic of Indonesia No. 81 of 2012 concerning Management of Household Waste and Waste Similar to Household Waste. In the regulation it is written that household waste is waste originating from daily activities in households that does not include feces and specific waste. Meanwhile, waste similar to

household waste in question is household waste originating from residential areas, commercial areas, industrial areas, special areas, social facilities, public facilities, and/or other facilities.

Based on research conducted by (Difla Nadjih, 2020), stated in his article that the amount of waste at the research location increased during the season and crowded with visitors. This means that an increase in population in a place can increase the amount of waste in that place. Similar to research conducted by (Gita Prajati, 2019), the article states that the most influential factor in waste generation is population density.

The National Sports Week (PON) is one of the sports activities in Indonesia, the purpose of which is as a national-level sports competition event where all participants come from various regions in Indonesia. In the 2024 PON which will be held in the provinces of North Sumatra and Aceh, there will be 11,618 athletes and 5,809 officials from each branch of the competition. This does not include volunteers who are participants in making this PON event a success, with the addition of athletes and officials and volunteers from various regions, it will potentially increase the amount of waste produced. (Finaka, 2024)

Several places to hold PON matches are in Medan City, one of which is the Astaka Medan Pancing Multipurpose Sport Center. Medan City is the largest contributor of waste in North Sumatra Province, as much as 645,661.28 tons of waste in 2023. With the holding of this PON, there is the potential for increasing waste in Medan City. Therefore, proper waste management is certainly needed, so that the amount of waste in Medan City, especially at the Astaka Medan Pancing Multipurpose Sport Center, does not increase. For this reason, researchers want to know how to manage waste at the Astaka Medan Pancing Multipurpose Sport Center.

## Method

This study uses a qualitative method with descriptive research, and data collection through direct observation, in-depth interviews, and documentation. The location of this research was conducted at the Astaka Medan Pancing Multipurpose Sport Center, North Sumatra Province. The key respondents in this study were the head of the cleaning staff of the Astaka Medan Pancing Multipurpose Sport Center, and officers from the Environment and Forestry Service (DLHK) of North Sumatra Province. The supporting respondents for this study were 2 cleaning staff and 2 visitors.

# Results Key Respondents



Figure 1. Interview with the Head of the Cleaning Staff of the Astaka Medan Pancing Multipurpose Sport Center

What types of waste are there around the sports center?

'The types of waste around the sports center are wet, dry, and leaves'

The researcher asked what kind of wet waste is there?

'Wet waste such as rice, wet lunch boxes, basically wet ones such as meatball plastic or the like'

The amount of waste generated during PON?

'For daily waste 15, around 15-17 plastic bags. because the waste is collected in the morning, in the morning there are around 7 plastic bags or 8 plastic bags along with 5 trash cans. In the afternoon it is collected again, it is different who collects it'

The researcher asked about the waste being transported by garbage trucks? 'Yes, using garbage trucks'

The researcher asked where the garbage trucks came from? 'From the city government and the bureau, it seems, the general bureau'

The researcher asked again if there were 2 garbage trucks? 'There are 2 for PON'

The researcher asked about garbage trucks outside PON? 'For normal days, we pay the sanitation or forestry department'

The researcher asked about when to collect the garbage on normal days? 'For the garbage truck, it is collected when the bin is full, there is no fixed schedule'

The researcher asked again when the garbage was collected during PON 'During PON, the garbage was collected by the garbage truck around 10, it could be 9, it varies every day'

The researcher asked whether there were indeed 2 collections every day?

'No, sometimes once, sometimes twice, it's not certain'

The researcher asked whether there had ever been a pile-up of garbage because the garbage truck didn't come?

'During PON it never happened, but during normal days it did'

Is the garbage collection place during PON and normal days the same?

'No, during PON and normal days it's different, during PON the garbage was collected in front near the water pump, on normal days it's near the UPT'

The researcher asked whether they knew where the garbage was disposed of by the truck? 'Marelan'

The researcher continued by asking who the cleaning staff were under? *'From Dispora'* 

The researcher asked about the number of sports center cleaners 'There are 10 permanent cleaners at the sports center.'

The researcher asked whether the 10 people were added during the PON or not? And the results the researcher got:

'For PON we have additions from the general bureau, there are additions from volunteers from the WF section'

The researcher asked how many additional volunteers? '10 people, so 20, from Building 10, from WF 10'

The researcher asked whether the additions were only from WF volunteers? 'Yes'

The researcher asked whether there were shifts in cleaning work? 'Usually before the match they work, and after the match they work'

The researcher asked whether that was for WF volunteers? *'Yes. the WF'* 

The researcher asked what about the shifts for DISPORA cleaners? 'DISPORA officers are on standby from morning until evening'

The researcher asked if DISPORA officers don't have shifts? 'All are immediately deployed, no shifts'

Is there a division of tasks between DISPORA officers and WF Volunteers?

'Those from DISPORA are in charge of the yard, bathroom, and main door. The WF section is specifically for the environment inside the building, the match arena'

The researcher asked how many trash cans are in the Sports Center?

'There are 11 trash cans in total'

The researcher asked if there was any additional time for the PON event?

'There were 11 trash cans during the PON event, initially before PON there were 6, we added 5, making it 11'

The researcher asked about the mechanism of waste collection?

'How it works, there is a part that sweeps, there is a part that collects. For example, there are 10 officers, 8 officers sweep and 2 officers collect trash into trash cans or plastic bags. After that, the waste is collected at the waste collection point during PON, which is at the front of the spectator entrance. Then wait for the garbage truck to come to collect the waste, so that it can be taken to the Marelan area final disposal site.'

The researcher asked where the trash cans are for the sport center?

'In the dining area, at the main door, that's all if it's in the multipurpose building'

The researcher asked if there were trash cans in the building?

'Plastic trash, when it's collected, it's immediately lowered, there's no one on standby for the point'

The researcher asked if anyone helped clean up the trash besides the officers and WF Volunteers?

'The committee is the most, helping out a little'

# **Supporting Respondents**

The researcher asked if there were trash bins at the location:

Officer 1: yes Officer 2: yes

Visitor 1: yes there were

**Visitor 2:** *yes there are* 

Researcher asked about scattered trash:

**Officer 1:** It's a big event, so there must be something

Officer 2: If there's trash scattered around at an event like this, it's normal Visitor 1: It's normal for trash to be scattered around at a big event like this

Visitor 2: It's not unusual for trash to be scattered around

The researcher asked if they saw a garbage truck carrying garbage:

**Officer 1:** *I didn't see any garbage trucks* 

Officer 2: Garbage trucks are rarely seen, suddenly the garbage will be picked up

Visitor 1: I didn't see any Visitor 2: I didn't see any

### **Discussion**

Based on the results of the interview above, waste management at the Astaka Medan Pancing Multipurpose Sport Center is not much different during the PON event or on weekdays. The most visible difference is only the ratio of garbage transport by garbage trucks, which is done once a week on weekdays, while during the event it is done every day.

After the interview, the researcher intended to conduct direct observation in the field. From the results of the observations that the researcher conducted for 3 consecutive days coming in the morning at 08.00-12.00 WIB, the conditions around the location were still full of garbage. The cleaning staff were only seen cleaning at 08.30 WIB. When the match was taking place, the researcher took the time to watch the match while looking at the conditions inside, the researcher found that the trash bins in the form of plastic trash around the audience seats were full and found food waste that was located and left on the audience seats.

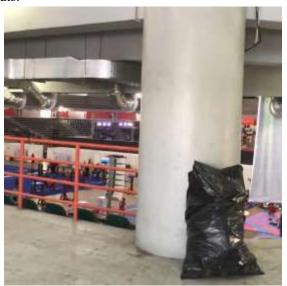


Figure 2. Plastic waste inside the multipurpose building

On the other hand, the researcher also aimed to wait for the garbage truck that would pick up the garbage, but until 12.00 WIB, there was still no garbage truck in sight. The researcher tried to ask one of the sellers to make sure if he saw the garbage truck coming, and the seller said there was none. The researcher also tried to find a cleaner to ask if he knew when the garbage truck would come, and the officer said he didn't know. 'The truck is rarely seen if you don't pay attention, suddenly the garbage will be picked up,' said the officer.

When walking around the main building, researchers found a lot of garbage scattered in the wrong place. Based on the explanation from an DLHK officer, he stated that 'the way to place waste management facilities (trash cans, plastic sacks) effectively has a method. Namely by seeing where the garbage is piling up? It means that many people sit there and eat there so that after eating they don't see the waste management facilities (trash cans, plastic sacks) so they throw garbage carelessly'. Trash cans are often placed in the athlete's dining area, even so the trash cans provided are not sufficient for the amount of garbage there, so they quickly fill up. Even though they are placed in strategic places, there is still a lot of garbage scattered in the dining area.

### Conclusion

Waste management at the Astaka Medan Pancing Multipurpose Sport Center faces significant challenges, especially during major events such as the National Sports Week (PON). The amount of waste generated increases drastically during the event, but the existing management is still ineffective. Although there is an increase in the frequency of waste collection, the available waste bin facilities are inadequate and there are no warning boards so that the pattern of sorting between organic and inorganic waste (wet waste, dry waste) cannot be optimal. This causes a lot of waste to be scattered in public areas, which creates greater cleanliness and environmental problems.

## **Suggestions**

Suggestions that researchers can provide are to advocate to the organizers or the government in this case the Environmental and Forestry Service of North Sumatra Province to add waste management facilities (trash bins, plastic trash) in areas where there are many gatherings of people and to create posters appealing to dispose of trash in its place.

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