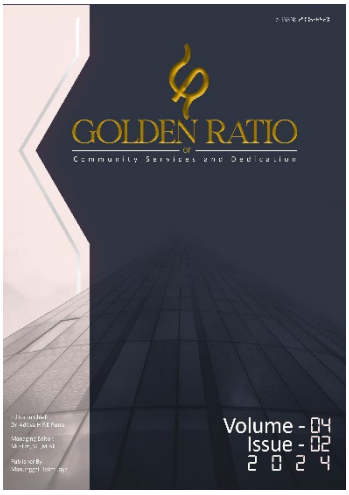
https://doi.org/10.1080/10.52970/grcsd.v4i2.761

Website: https://goldenratio.id/index.php/grcsd

OPEN ACCESS

ISSN [Online] 2776642X



Received: 14 March 2024
Revised: 12 June 2024
Accepted: 17 October 2024

*Corresponding author: Puspa Ningsih, Department of Management, Faculty of Economics, Universitas Terbuka, Indonesia.

E-mail: puspaningsih980@gmail.com

COMMUNITY SERVICE | RESEARCH ARTICLE

Management System for Waste Handling and Processing at Final Processing Site Pematangsiantar City

Puspa Ningsih[1], Sri Prilmayanti Awaluddin[2]

[1] Department of Management, Faculty of Economics, Universitas Terbuka, Indonesia.
Email:puspaningsih980@gmail.com
[2] Department of Management, Institute Teknologi dan Bisnis Nobel, Makassar Indonesia.

Abstract: Waste is the remaining waste from human activities in a product or item that is no longer used, but can still be recycled into valuable and useful items. Pematangsiantar City is one of the cities that connects the cross-Sumatra road with its increasingly high population so that it is undeniable that the results of waste generation are increasing and resulting in the condition of landfills (TPA) in Pematangsiantar City becoming overloaded and having an impact on environmental health. The lack of resources and facilities and infrastructure is an obstacle to the smooth running of tasks in terms of waste management in Pematangsiantar City. for this reason, it is hoped that it is necessary to implement a management system for handling and processing waste in landfills that is more effective and efficient with the aim of creating creative human resources (HR) and community participation in clean and healthy environmental awareness. according to the local government logo "LISA" See Trash Take.

Keywords: Waste, Population, Landfill Overload, Barriers, Management System, Objectives, Community Role, LISA.

JEL Code: 3, Q56, Q58, D74, H83

1. INTRODUCTION

Waste Management is a combination of the process of controlling the amount of waste generated, collecting, moving, transporting, processing and landfilling waste in landfills that meet the principles of health, economics, engineering, conservation and environmental considerations that are also responsive to existing conditions that aim to reduce negative impacts on the environment and human health. The general condition of waste in Indonesia and in some regions is very alarming, one of the problems that should be considered. Waste is an inseparable part of human life, because basically all humans must produce waste. Waste is a waste that is generated from every human activity. In general, the problem with waste is that the amount of waste that exists exceeds the amount of capacity. So that the Final Processing Site (TPA) is getting minimal and overloaded. So that the mainstay of a city in solving its waste problem is destruction by landfilling in a landfill. This condition will get worse if the government's capture power is lacking in handling this waste management. (Notoatmodjo, 2011). This is actually not very effective in terms of handling waste, because waste is the result of the side effects of human activities in the form of household activities and industrial activities. As time goes by, the number of residents in an area will certainly increase and technology will develop and industrial growth is also quite rapid, resulting in various kinds of waste. (Riswan et al, 2011).

a. Law No. 18/2008 on Waste Management and Government Regulation No. 81/2012 on waste management;
b. Regulation of the Minister of Public Works of the Republic of Indonesia Number 03/PRT/M/2013 concerning the Implementation of Waste Infrastructure and Facilities in Handling Household Waste and Waste Similar to Household Waste;
c. Minister of Home Affairs Regulation (Permendagri) No.33/2010 on Waste Management Guidelines;

https://doi.org/10.1080/10.52970/grcsd.v4i2.761
Website: https://goldenratio.id/index.php/grcsd ISSN [Online] 2776642X

d. Pematangsiantar City Regional Regulation Number 11 of 2012 concerning Waste Management.

Each region must have a commitment to solve the waste problem. Waste problems can not only be solved by equipment grants but also require regional willingness to manage them. The problem of waste is not only a problem that exists in urban areas or capitals but almost all regions in Indonesia, cannot be separated from the waste problem, including the Pematangsiantar City area of North Sumatra. Pematangsiantar City is one of the cities that is not free from problems regarding waste. Pematangsiantar City is one of the cities in the province of North Sumatra, Indonesia which is an enclave of Simalungun Regency. Because Pematangsiantar City is strategically located, Pematangsiantar City is traversed by the Cross Sumatra Highway. Pematangsiantar City has an area of 79.97 km^2 or 7,997, 1 Ha. Pematangsiantar City consists of 8 sub-districts with a total of 53 villages. (Wikipedia.com). Based on the Central Statistics Agency (BPS), in 2022, the population of Pematangsiantar City was 274,056 people with a population density of 3,400/km^2 . Pematangsiantar City is an intermediary city from various surrounding areas. This should be an important note for the community and government that the development of Pematangsiantar City must pay attention to aesthetic, cleanliness and comfort factors so that its strategic position as a gateway between districts can have a positive impact on the city and its people. The growth of Pematangsiantar City each year is estimated to be around 2.2% with a population density of 3,400/km^2 . Along with population growth, human activity also increases by itself. The place and location of the garbage disposal is increasingly unfit for existence such as unpleasant odors and garbage around Tanjung Pinggir also spread to the streets. Because the land used for garbage disposal is only 2.5 hectares while the actual land for landfill is around 12 hectares, so people are very complaining who live around the landfill (Kompasnasional.com).

Figure 1. Location of Tanjung Pinggir Landfill Pematangsiantar City Year 2024

Based on the picture above, we can see that environmental pollution is increasing, where the landfill conditions are overloaded. Lack of community cooperation or participation, community understanding of waste reuse and community indifference to waste. Also the lack of facilities and infrastructure in the Pematangsiantar City Landfill. This causes a decrease in environmental quality which harms society. Therefore, the efforts of the Pematangsiantar City Government through the Pematangsiantar City Environmental Service are very optimistic and need to carry out good and efficient waste management, not to forget the cooperation between the community, especially as well as the ranks of related agencies, of course, about handling waste. Good waste management aims to serve the community in managing waste generated by the community itself, because it directly and indirectly contributes to maintaining health in the community, as well as creating a clean and beautiful environment.

https://doi.org/10.1080/10.52970/grcsd.v4i2.761

Website: https://goldenratio.id/index.php/grcsd

ISSN [Online] 2776642X

Table 1. Waste Generation in Pematangsiantar City in 2020 - 2022

Year	Province	City	Daily Waste Generation (Ton)	Annual Waste Generation (Tons)
2020	North Sumatra	Pematangsiantar	231.40	84.460,96
2021			233.02	85.052,00
2022			238.09	86.902,01

Source: National Waste Management Information System (SIPSN)

Based on the table above, we can see that the amount of waste generation from 2020 to 2022 continues to increase. The Pematangsiantar City Environmental Service (DLH) is an agency that deals with waste handling in terms of transportation and waste processing. Local governments have a role and responsibility for waste management. In handling waste DLH uses the method of collecting, transporting, and disposing of to the final disposal site where the usual system is for the community to dispose of waste in the place provided by DLH and will be transported by waste collection officers and disposed of in the final disposal site. The author also conducted research for comparison in measuring household waste generation using the Load-count method, namely waste collected by transportation officers from temporary landfills (TPSS) and then weighed by one cart or fleet so that the waste generated is known. Sampling of waste generation was carried out for the last 8 days in May 2024 from the source of the Pematangsiantar City Environmental Service.

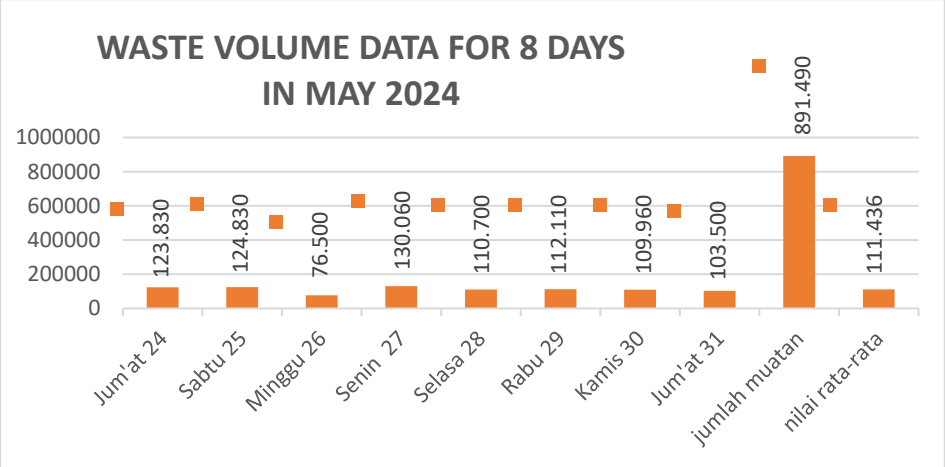


Figure 2. Comparison Diagram of Waste Generation at the Landfill for 8 days

Researchers see that based on the data above, the waste generated per day reaches an average of 111,436 kg with the strength of 49 units of transportation fleet and 1 unit of bulldozer at the landfill. Not to mention if there are obstacles in repairing the waste transportation fleet and the spike in waste generation that occurs during big days such as Eid, Christmas and New Year. When viewed in terms of the provision of basic facilities that can support the implementation of waste handling activities in Pematangsiantar City, the availability of transportation is very inadequate. Pematangsiantar City's waste management policy has been regulated in the Pematangsiantar City Regional Regulation. Where in the regional regulation it is clear that waste management includes 3 aspects, namely reduction, decomposition and handling of waste or the 3R Principle (Reduce, Reuse, Recycle) so that the Environmental Service creates a Training and Education Center (Pusdiklat) program in terms of waste processing, organic fertilizer (compost), management through 3R, making briquettes, botot, and following the program from the mayor of Pematangsiantar, namely LISA "See Trash Take" made to reduce waste problems in Pematangsiantar City.

Previous research is an attempt by researchers to find comparisons and then to find new inspiration for further research, besides that previous studies help researchers to position research. Previous research aims to obtain comparison and reference materials. In addition, to avoid the assumption of similarity with this research. In this section the researcher lists various previous research results related to the research to be carried out, then summarizes the previous research. Here are previous studies that are still related to the theme that the author studies.

https://doi.org/10.1080/10.52970/grcsd.v4i2.761
Website: https://goldenratio.id/index.php/grcsd ISSN [Online] 2776642X

Based on previous research from M.Akbar Rahman (2018) examining the management of android-based waste management, by bringing up an application called Recycling. With this application it is much easier to help manage waste better and more optimally. Meanwhile, in previous research Fauzul Hayat and Titin Nasiatin (2023) examined the Management of Household Hazardous and Toxic Waste (B3) during the Covid-19 Pandemic, where the low awareness and concern of the community in sorting and reusing waste so that B3 waste and non-B3 waste are mixed together which causes the accumulation of this waste to continue and end up piling up in the Final Processing Site (TPA). Furthermore, previous research by Gita Monica Ponomban, F.D.J. Lengkong, and Very Londa (2019) Household Waste Management. Where there are still many people in some communities who do not comply with the procedures that have been implemented by the government. This study uses four indicators, namely: planning, organizing, mobilizing, monitoring. Based on the results of the study, it states that planning and organizing have gone well but there is still a lack of movement and supervision from the government so that there are still people who still litter and lack of public awareness in terms of reusing waste. The difference between the research studied by the author and previous research is about how the management process of handling and processing waste at the Pematangsiantar City Landfill is focused on starting from planning to final disposal of waste which includes aspects of operational techniques through collection, transportation, processing and final disposal. Management of waste management in landfills with overloaded land conditions and what obstacles and supporters are experienced during waste management.

2. RESEARCH METHOD

2.1. Research Location

This research was conducted at the Tanjung Pinggir Landfill (Final Processing Site), Siantar Martoba District, Pematangsiantar City and the Environmental Service Jl. Rakutta Sembiring No. 86, Naga Pita, Siantar Martoba District, Pematangsiantar City, where the state of the landfill has been overloaded so that the garbage falls onto public roads and makes residents who live around the landfill uncomfortable including the people who pass the route. This research location was chosen because it is the most important flow in capturing the phenomenon of the object under study in obtaining research data that is accurate and in accordance with existing facts.

2.2. Research Approach

In this research the author uses a descriptive type of qualitative research because it will provide an overview of the problem through analysis using a scientific approach in accordance with the actual situation. With the reason that the data obtained in the form of oral, written, documents come from sources or informants that are researched and can be trusted which are carried out in library research, namely research based on theoretical references related to waste and its management taken from books, journals, articles and supporting data from related agencies. Using this research approach can examine in depth the management process of handling and managing waste at the landfill and knowing what obstacles are experienced when carrying out the management process of handling and managing waste at the Pematangsiantar City Landfill. According to Bogdan and Taylor (in Moleong, 2012: 248), define qualitative research as a research procedure that produces descriptive data in the form of written or spoken words from people and behaviors observed from the phenomena that occur. Researchers emphasize notes with detailed, complete, in-depth sentence descriptions that describe the actual situation to support data presentation.

2.3. Research Informants

According to Sugiono (2016: 300), informant research that is often used in qualitative research is purposive sampling. In this study, the determination of informants was selected by purposive sampling. Purposive sampling is a data source sampling technique with certain considerations and objectives, in order to select informants who are considered to know all information and problems in

https://doi.org/10.1080/10.52970/grcsd.v4i2.761
Website: https://goldenratio.id/index.php/grcsd ISSN [Online] 2776642X

depth. Certain considerations mean choosing data sources or people who are considered to know best about what is expected. In the implementation of data collection, the selection of information can be developed according to the research needs in finding data and obtaining data. Informants in this study are 6 (six) people who really know the problems that exist in the place, who have worked in the Office related to the Tanjung Pinggir Urban Landfill in Pmatangsiantar City, namely:

Table 2. Research Informants

Research Informants	Methods	Total
Head of Waste Management and Hazardous Toxic Waste (B3) DLH Kota Pematangsiantar	Purposive Sampling	1 person
Head of Tanjung Pinggir Urban Village, Pematangsiantar City.		1 person
DLH Field Coordinator Staff at Tanjung Pinggir Landfill, Pematangsiantar City.		1 person
Pematangsiantar City Tanjung Pinggir Landfill Scavengers.		1 person
Waste transportation workers		1 person
People who live around the landfill.		1 person

Source: Processed by researchers, 2024

Research informants are people who are used to provide information about the situation and conditions of the research background. So, the research must have a lot of experience about the research setting informants are obliged to voluntarily become members of the research team even though it is only informal. Based on the table above, the informants were selected based on the informants' knowledge of the information needed by the researcher and are expected to provide complete and clear data.

2.4. Data Source

Accuracy in choosing and determining the type of data source will determine the accuracy, depth and feasibility of the information obtained. Data sources come from documents, interview results, field notes and observation results. Research data sources are divided into two areas, namely primary data sources and secondary data sources (Sugiyono, 194).

1) Primary Data Sources, primary data is a data source that directly provides data to data collection. This primary data is specifically collected by researchers to answer research or research questions.
2) Secondary Data Sources, secondary data in this study were also carried out by obtaining data from the Tajung Pinggir Village Office, the Pematangsiantar City Environmental Service Office and also references from related research.

2.5. Data Collection Technique

Data collection techniques are used to collect information in accordance with research methods to obtain the necessary information. Collecting data is an important and very decisive process in a study. The use of appropriate data collection techniques in research allows objective data to be obtained. According to (Sugiyono, 2019). Data collection techniques are the most important stage of research because the main purpose of research is to collect information. In (Sugiyono, 2016) data collection techniques are the most important step in research, because they aim to get data. Without knowing the data collection technique, the researcher will not get the expected data. The data collection techniques used in this study are observation, interview and documentation, as supporting material with the problem to be studied regarding the management system for handling and processing waste at the Pematangsiantar City Landfill.

https://doi.org/10.1080/10.52970/grcsd.v4i2.761
Website: https://goldenratio.id/index.php/grcsd ISSN [Online] 2776642X

3. RESULTS AND DISCUSSION

3.1. Management / Management Functions

According to Hanafi Mamduh (2020) defines management as a planned process, planning, organizing, directing, and controlling activities which are often referred to as management functions. Coordination of activities, organizational goals to be achieved through these activities, organizational resources used to achieve these goals, achieving goals effectively and efficiently. The management principles/functions that were born in this phase are known as the acronym POSDCORB (Planning, Organizing, Staffing, Directing, Coordinating, Reporting, Budgeting). Management is essential for every individual or group activity in an organization to achieve the desired goals. Management is process oriented, which means that management requires human resources, knowledge and skills so that activities become more effective or can produce actions in achieving success. Therefore, no organization will be successful if it does not use good management. (Torang, 2013).

Humans as management actors where what is regulated by humans are all activities generated in the management process which are always related to the factors of production called 6M. According to Geogre R. Terry in Abd. Rohman (2017) and in his book Principes of Management, the elements of management are called "the six M in Management" namely, Man (Human), Money (Money), Materials (Material), Machines (Machines), Methods (Methods), Market (Market). Based on the description above, management has a basis for the implementation of activities with the intention of completing / achieving goals and implementing policies. Management is also related to the way the government or public institutions manage existing resources to meet the needs of society. because public administration does not only limit itself to the implementation of government management, but also includes political, social, cultural and legal aspects that affect public institutions. Management functions and processes that apply to both the public sector (government) and sectors outside of government that are not aimed at making a profit. Every success of an activity program is inseparable from management. Management is a way that many people use in managing something so that it becomes organized, directed, controlled, and more systematic. Likewise with the management of waste handling and processing, a management is needed starting from where the waste originates, until the waste is disposed of in the Final Processing Site (TPA). By using the concept of management as explained that Management in English is "manage" which means taking care of, managing, how to control and strive.

3.2. Management Process Waste Handling and Processing

The management process of waste handling and processing is the process of carrying out the management functions contained in the definition of management, there are five (5) that make up the management process, among others: Planning, Organizing, Motivating, Controlling, Evaluating according to Sondang P. Siagian, 2002. In the overall management process, community participation and transparency influence a good's success. Involving the community in the planning, implementation and evaluation process will ensure that policies and programs are more accurate.

3.3. Management inhibiting factors Handling and processing

Several inhibiting factors in the management of waste handling and processing can affect the effectiveness and efficiency of government policies. Some of them are as follows:

1) Lack of Resources: One of the main factors that can hinder the management of waste handling and processing at the Pematangsiantar City Landfill is the lack of resources such as budget, labor and infrastructure.
2) Lack of Community Participation: the lack of community participation and involvement in the decision-making process can also be an inhibiting factor. Lack of community participation can reduce government accountability and undermine the legitimacy of policies.

https://doi.org/10.1080/10.52970/grcsd.v4i2.761
Website: https://goldenratio.id/index.php/grcsd ISSN [Online] 2776642X

3.4. Waste Management

Waste management is often defined as a field that deals with the regulation of waste generation, storage, collection, transfer, transportation, processing and development in a way that is in accordance with the best principles of health and other considerations and also takes into account public attitudes. (Rachim, 2008) Soekidjo Notoatmodjo (2002) states that waste management includes aspects of operational techniques ranging from collection, transportation, management and final disposal. Chotimah (2020), state waste is waste generated in a production process both in industry and in households (Domestic). Waste management is an effort to organize, manage and control the process, collection, sorting, processing and disposal of waste effectively and efficiently. Waste management also includes strategic planning, policy implementation, resource management, and monitoring of the entire waste life cycle. Waste management is the process of managing and organizing all aspects related to waste handling from start to finish, which aims to reduce its negative impact on the environment and human health. Waste management includes various stages, from collection, sorting, transportation, management, recycling, to final disposal.

Policies and strategies in waste management are policy directions in reducing and handling waste problems and programs for reducing and handling waste problems. Based on the regulations that the government has prepared in major cities in Indonesia, it is aggressively socializing various alternatives in waste management such as community-based waste management, through waste management with the 3R method (Reduce, Reuse, Recycle), waste banks and others (Setyaningrum, 2015). When it comes to waste, there is no end to it. Waste is one of the problems faced by many cities in the world. The bigger the population and its activities, the bigger the amount of waste generated. As a result, waste management requires a lot of money and an ever-increasing amount of land. Furthermore, waste is harmful to health and the environment if not disposed of properly. (Elma, S, 2017).

According to (Elma, 2017), as for the waste management mechanism, there are two important components, namely waste management includes reducing and handling waste that can be utilized or returned to nature and active processing of waste or residue from previous processing so that it can be returned to the environmental media. Based on the above statement, waste management is a systematic, comprehensive, and sustainable activity that includes waste reduction and handling. Waste management involves various processes and activities carried out by the government and other public institutions to manage waste effectively and efficiently through planning, collection, processing, final disposal to meet people's needs for a clean and healthy environment. Waste management has a very important link in the context of environmental sustainability and community welfare. The waste management system is also responsible for ensuring proper regulations and rules are in place for safe and sustainable waste management and educating the public on the importance of waste management. Thus, waste management and treatment are closely related and mutually supportive, as both aim to create a safe, healthy and sustainable environment for the community.

3.5. Landfill (Final Processing Site)

The final stage of waste management is disposal. A landfill is a place where waste is isolated safely so as not to disturb the surrounding environment. Most landfill waste management uses Open Dumping, Control Landfill and Sanitary Landfill methods, namely piling up waste in a sunken location and then filling it with soil to accelerate decay. The land can then be used for green open space. In Damanhuri (2010), for waste to reach the landfill, the stages that must be passed are Waste containerization, Waste collection, Waste transfer, Waste transportation, and Waste processing; this is done so that the potential for waste entering the disposal environment can be minimized.

4. CONCLUSION

From the above statement it can be concluded that in the face of these inhibiting factors, it is important to find the right strategy to improve the management system for handling and processing waste at the Peamatangsiantar City Landfill. This can involve improving resources, strengthening governance, empowering communities and increasing managerial capacity. By overcoming these

https://doi.org/10.1080/10.52970/grcsd.v4i2.761
Website: https://goldenratio.id/index.php/grcsd ISSN [Online] 2776642X

inhibiting factors, it is hoped that the management of waste handling and processing management at the Peamatangsiantar City Landfill can run more effectively and efficiently in providing good public services to the community. Waste management factors by the Pematangsiantar City Environmental Service include socio-cultural, technical, and policy aspects. In addition, community participation is also an important factor in sustainable waste management.

REFERENCES

Abd. Rohman. (2017). Dasar-Dasar Manajemen, Malang: Intelegensa Media

Chotimah, C. (2020). Pengelolaan Sampah dan Pengembangan Pesisir pantai Selatan Tulungagung. Tulungagung: Akademia pustaka.

Citra Pratiwi Sidebang. (2022). Analisis Dampak Timbunan Sampah di Sekitar Lokasi Tempat Pembuangan Akhir (Tpa) Tanjung Pinggir Kota Pematangsiantar. Universitas Efarina, Pematang Siantar. Jurnal Pengabdian Masyarakat Vol.1, No.1.

Damanhuri, Enri. 2010. Diktat PengelolaanSampah. Bandung: InstitutTeknologi Bandung

Departemen pendidikan kebudayaan, Kamus Besar Indonesia, (Jakarta: balai Pustaka, 2000).

Mamduh Hanafi (2020). Materi Pokok Manajemen, Tangerang Selatan, Universitas

Sahya Anggara. (2015). Metode Penelitian Administrasi. Bandung: CV Pustaka Setia.

Elamin, M. Z., Ilmi, K. N., Tahrirah, T., Zarnuzi, Y. A., Suci, Y. C., Rahmawati, D. R., Dwi P., D. M., Kusumaardhani, R., Rohmawati, R. A., Bhagaskara, P. A., & Nafisa, I. F. (2018). Analysis of Waste Management in The Village of Disanah, District of Sreseh Sampang, Madura. Jurnal Kesehatan Lingkungan, 10(4), 368. https://doi.org/10.20473/jkl.v10i4.2018.368-375.

Elma, S. (2017). Strategi Program 3R (Reduce, Reuse, Recycle) Dalam Pengelolaan Sampah Di Kota Tembilahan. Jurnal Ilmu Lingkungan.

Fauzul Hayat., Titin Nasiatin (2023). Manajemen Pengelolaan Sampah Bahan Berbahaya Dan Beracun (B3) Rumah Tangga Di Masa Pandemi Covid-19. Sebuah Tinjauan Literatur Vol.2, No. 2 Juli.

Gita Mokika Panombean., F. D. J Lengkong., Very Londa. (2019). Manajemen Pengelolaan Sampah Rumah Tangga Di Kelurahan Kindi Kecamatan Kawangan.

https://bangzul.com/manajemen-pengelolaan-sampah-berkelanjutan/. Diakses 23 Januari 2024

https://id.wikipedia.org>wiki>Kota_Pematangsiantar. Dikases pada 20 Agustus 2023.

https://katadata.co.id/agung/ekonopedia/637cc40364b-unsur-unsur manajemen sampah menurut para ahli dan fungsinya. 20 November 2023.

https://news.kompas.com Produksi Sampah di Siantar naik 15 Persen, TPA Tanjung Pinggir Menggunung. Diakses pada 20 Agustus 202

Husman Husaini. (2011). Manajemen Teori Praktik dan Riset Pendidikan, Jakarta: PT Bumi Aksara.

Kamus Besar Bahasa Indonesia. (2014). Dipetik 10 9, 2021, dari kbbi.kemdikbud.go.id/entri/religious

Notoatmodjo, Soekidjo. (2011). Pengelolaan Sampah, Jakarta: Rineka Cipta

Petunjuk Teknis Tempat Pengolahan Sampah 3R Kementrian Pekerjaan Umum dan Perumahan Rakyat. (2017).

Rachim Armando. (2008). Penanganan dan pengelolaan Sampah, Jakarta: Penebar Swadaya.

Riswan, Hena Raya Sunoko, Agus HAduyarto, (2011). Pengelolaan Sampah Rumah tangga. Jakarta: Rineka Cipa.

Setyaningrum, I. (2015). Karakteristik Peningkatan Pengelolaan Sampah oleh Masyarakat Melalui Bank Sampah. Jurnal Teknik PWK Volume 4 Nomor 2.

Siagian, S.P. (2002). Manajemen Sumber Daya Manusia. Jakarta: Bumi Aksara.

Simalungun

Sugiyono, (2016). Metode Penelitian Kuantitatif, Kualitatif, dan R&D. Alfabeta cv. Stuart, H. (1980). Encoding/Decoding. In D.H Stuart Hall (ED), Culture, Media, Language.

Sumantri, a. (2017). Kesehatan lingkungan. Depok: kencana.

Torang, Syamsir, (2013), Organisasi dan Manajemen (Perilaku, Struktur, Budaya & Perubahan Organisasi, Bandung: Alvabeta.

Woloyo, S.Sos, M.Si. (2007). Manajemen Publik (Konsep, Aplikasi dan Implementasinya Dalam Pelaksanaan Otonomi Daerah). Mandar Maju.

Yun Iswanto, Adie Yusuf (2021). Materi Pokok Manajemen Sumber Daya, Universitas Terbuka