

CONSUMER PROTECTION | RESEARCH ARTICLE

How to Ensure Consumer Safety for Unbranded Refill Drinking Water Depots?

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Abstract: Drinking water is water that has been processed to meet health standard regulations. However, some water can be consumed directly without several processes if it meets health safety requirements. This research aims to ensure the safety, health, and hygiene of unbranded refilled drinking water by looking at the quality of the drinking water content following SNI (Indonesian National Standard) standards and providing recommendations to the government to protect consumers of unbranded drinking water. This research applied qualitative methods through data collection techniques Focus Group Discussion (FGD), literature studies, and field observations in Semarang and Balikpapan. This study found that some refilled drinking water depots violated applicable safety regulations. However, no legal sanctions were applied for the business actors who violated it, and no regional regulations or Mayor Regulations regulate the unbranded refilled drinking water. Therefore, efforts need to be made to foster actors, educate consumers to be smart in choosing drinking water, and the establishment of implementing regulations from the Regulation of the Minister of Health Number 492 of 2010 in supervising business actors from this research is expected to be an effort to increase consumer protection in Indonesia.

Keywords: government regulations, refill water depot, security

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PUBLIC INTEREST STATEMENT

All humans need water for daily needs such as drinking, cooking, washing, transportation, agricultural industry, etc. However, there are still business actors who violate will violate consumers, business actors should meet technical standards so that consumer rights can be protected and the price obtained can still be achieved. It is also necessary to educate consumers about the hygiene of refilled drinking water, which is not only cheap.

Drinking water can be considered hygienic if it already has a Sanitary Hygiene Eligibility Standard Certificate (SLHS) owned by a bottled water depot business actor, which is a sign that it has met administrative and technical requirements. However, there are still obstacles experienced in the field, such as the limited number of available laboratories and the absence of local regulations regarding quality standards for unbranded drinking water.



1. Introduction

Water is something that all humans need. Water and the increasing human population will be increasingly needed (Putra & Lestari, 2018). Humans use water for drinking, cooking, washing, transportation, agriculture, or industry. Clean water production in Indonesia in 2020 was 5.262 million m³, with 204.803 social customers and 14.182.154 non-commercial customers (BPS, 2020). Clean water can come from nature, such as river water, rainwater, and water above or below the ground surface. About three-quarters of the human body is water, and cannot survive more than 4-5 days without drinking water (Maulana et al., 2022). Humans must get proper water for the body to meet their drinking water needs. Household needs in Indonesia for adequate and sustainable drinking water sources until 2019 only amounted to 84.91 percent (BPS, 2019). Water used for drinking must be clean, i.e., odorless, tasteless, and colorless (Sari & Huljana, 2019). The requirements for drinking water suitable for consumption must be following the Regulation of the Minister of Health of the Republic of Indonesia No. 492/MENKES/IV/2010 concerning Requirements for Drinking Water Quality (Minister of Health of the Republic of Indonesia, 2010).

The need for drinking water leads consumers to meet their drinking water needs practically and quickly. This also affects the number of businesses providing mineral water, one of which is the Refill Drinking Water Depot (DAMIU). The high demand for drinking water has encouraged the growth of unbranded DAMIU in various places with lower prices than branded Bottled Drinking Water (AMDK) (Febriwani, Elliyanti, & Reza, 2019). the Refill Drinking Water Depot (DAMIU) raw water sources must comply with the Minister of Health Regulation No. 416 of 1990, where water treatment installations and distribution pipelines must be well maintained. Refilled drinking water is obtained through a long sales chain, from natural water sources to raw water agents, suppliers, and consumers. During the trip, the raw water carrying tank may be unhygienic, the valve needs to be closed properly, or the raw water is taken from water that does not meet the drinking water requirements. Therefore, the refilled drinking water sold may have been previously contaminated. Drinking contaminated water with harmful metals or microbes can negatively impact human health (Febriwani et al., 2019). The Joint Monitoring Program (JMP) for Water Supply, Sanitation, and Hygiene reports that by 2020, a quarter of the world's population will not have safe drinking water (Alwali, Torrijos, & Walsh, 2022).

Based on Article 7 Letter of Law Number 8 of 1999 concerning the Consumer Protection Law or UUPK, business actors are obliged to guarantee the quality of goods and/or services produced and traded based on the applicable quality standards of goods or services 161-170 (Law of the Republic of Indonesia, 1999). In Article 8, it is known that business actors are prohibited from producing and or trading and or services letter a that does not meet or does not meet the required standards and provisions of laws and regulations; (b) does not include the expiration date or period of best use or utilization of certain goods. In addition, article 4 of the UUPK also regulates one of the rights of consumers: the right to comfort, security, and safety in consuming goods and/or services. However, in reality, there are still DAMIU's that have problems in their operations. Some of the problems that exist are DAMIU's efforts that do not pay attention to water quality, do not have safety and health standards, do not have hygiene standards for cleaning and filtering equipment used, and the location of drinking water depots on the side of the road so that it is possible to be contaminated with water pollution and dust.

Based on the above phenomenon, previous research found that there were still DAMIUs that did not meet the bacteriological quality requirements according to the Minister of Health Regulation No.492/Menkes/per/IV/2010 based on the results of the study (Azhar, 2020; Puspitasari, Hikmah, & Rahman, 2020; Winandar, Muhammad, & Irmansyah, 2020). Therefore, this research on the safety of unbranded refill drinking water has the objectives of (1) ensuring the safety, health, and hygiene of unbranded refill drinking water to the public; (2) ensuring the quality of refill drinking water content following SNI standards; and (3) provide recommendations to the government to protect consumers of unbranded refilled drinking water from meeting health, safety and hygiene standards and SNI.

2. Literature Review

2.1 Drinking water

Minister of Health of the Republic of Indonesia (2010) article 1 point 1 of the Minister of Health Regulation No. 492/MENKES/PER/IV/2010 states that drinking water is water that has been processed or without processing that meets health requirements and can be drunk directly. Types of drinking water and drinking water quality standards have been regulated in Article 1 points 1 and 4 of the Regulation of the Minister of Industry No. 96/M-IND/PER/12/2011), which states that refilled drinking water is drinking water that has met the drinking water requirements refill set by the Ministry of Health in the attachment to the Regulation of the Minister of Health Number 492/MENKES/PER/IV/2010.

2.2 Drinking Water Quality

Water consumed as drinking water must meet the quality requirements that have been set. Drinking water quality requirements must meet the provisions stipulated in SNI-3553-2015 with 27 test criteria for mineral water quality (Nisah & Nadhifa, 2020). The drinking water quality standards that must be met to be declared as drinking water consider the physical, microbiological, and chemical parameters following the Minister of Health Regulation 492/2020. The color and turbidity of the water determine the physical parameters of refilled drinking water. The chemical parameters of refilled drinking water are determined by pH and heavy metals such as lead, mercury, cadmium, copper, and arsenic. The permissible pH value in drinking water is 6,5 to 8,5. Parameters of microorganisms in the form of bacteria in water come from various sources such as air, soil, garbage, mud, living and dead plants, living and dead animals, human waste, animal waste, and human skin. Pathogenic bacteria in water generally come from environmental pollution, such as industrial and human waste. The microbiological standard stipulated in Permenkes 492/2010 is 0 per 100 ml for *E. Coli* bacteria, and the maximum limit for total coliform bacteria in drinking water is 0 per 100 ml.

Minister of Health of the Republic of Indonesia (2014) with regulation Number 43 of 2014 concerning Hygiene Sanitation of Drinking Water Depots Article 2 paragraphs 1 and 2 states that each DAMIU is obliged to (a) ensure that the drinking water produced has met the quality standards or requirements for drinking water quality following statutory regulations, and (b) meet the requirements of sanitation hygiene in managing drinking water. In addition, DAMIU must also ensure that drinking water has met the quality standards or requirements for drinking water quality as regulated in paragraph (1) letter that drinking water depots are obliged to carry out the management of drinking water quality supervision in accordance with the provisions of the legislation.

Quality supervisors for drinking water depots must supervise raw water quality as indicated by the results of laboratory tests from suppliers. Based on Article 3 of the Decree of the Minister of Industry and Trade No. 651/MPP/Kep/10/2004, it is known that testing the quality of raw water must be carried out at least 1 (one) times in 3 (three) months for coliform analysis and two times in 1 year for chemical analysis and complete physics. The test must be conducted in a laboratory with an examination appointed by the Regency/City Government or an accredited institution.

2.3 Drinking Water Depot

Provisions related to drinking water depots are regulated in the Minister of Health Regulation No. 43 of 2014 concerning Sanitation Hygiene for Drinking Water Depots, which states that drinking water depots are businesses that process raw water into drinking water in bulk and sell directly to consumers (Minister of Health of the Republic of Indonesia, 2014). Meanwhile, the Decree of the Minister of Industry and Trade of the Republic of Indonesia Number 651/MPP/KEP/10/2004 concerning Technical Requirements for Drinking Water Depots and their Trade states that drinking water depots are industrial businesses that process raw water into drinking water and

sell directly to consumers (Minister of Industry and Trade of the Republic of Indonesia, 2004).

2.4 Drinking Water Management Process

Drinking water management must be carried out with a process established in the applicable regulations. Accordingly, drinking water is managed in a sequence of production processes based on the Decree of the Minister of Industry and Trade No. 651/MPP/Kep/10/2004, namely:

1. Raw water from the source is transported using a tank and stored in a tank or storage tank. The reservoir must be made of food-grade material and free from materials that can contaminate the water. Raw water must be sampled, and raw water supply documents must be available at the drinking water depot. The contents of the raw water procurement document include the name of the supplier or owner of the water source, the amount of water, and the date of procurement;
2. Water filtration is carried out in stages consisting of a sand filter or other effective filter with the same function. Then, filter-activated carbon derived from coal or coconut shells functions as an absorbent of odor, taste, color, residual chlorine, and organic matter. Finally, it is filtered using a sieve or other filter that functions as a fine sieve with a maximum size of 10 microns;
3. Disinfection is done to kill pathogenic germs. Processes using ozone (O₃) take place in tanks or other ozone mixers. The disinfection stages are rinsing, washing, and sterilizing containers made of food grade and clean. First, the container to be filled must be sanitized using ozone or ozone water. When washing is carried out, it must be done using food-grade detergent, clean water with a temperature ranging from 60-85°C, then rinsed with drinking water or enough water on the product to remove residual detergent used for washing. Water used for washing and rinsing must not be reused as raw material for production, so it must be disposed of. Then, the filling of the container is carried out using tools and machines and is carried out in a hygienic filling place. Finally, the closure of the container can be done with a lid brought by consumers and/or provided by a drinking water depot.

2.5 Drinking Water Depot Sanitation Hygiene

Business actors must pay attention to sanitation hygiene in DAMIU's business. This is in accordance with Permenkes 43/2014, which states that every drinking water depot is required to fulfill sanitation hygiene to ensure the cleanliness of drinking water quality in (a) that business actors must ensure that the drinking water produced meets quality standards or drinking water quality requirements according to the provisions of the legislation; and (b) business actors must meet hygiene and sanitation requirements in drinking water management (Minister of Health of the Republic of Indonesia, 2014).

Article 3 concerning Sanitation Hygiene Requirements shows that the sanitation hygiene requirements for drinking water management at least cover aspects of place, equipment, and handlers (Permenkes 43/2014). Article 3 paragraph (1) states that a) the aspect of the place in question is that the location of DAMIU is in an area free from environmental pollution and disease transmission; b) the equipment aspect in question is the equipment and supplies used, including raw water filling pipes, raw water reservoirs, suction and suction pumps, filters, micro filters, containers or gallons of raw or drinking water, drinking water filling faucets, washing/washing faucets. Rinsing containers or gallons, connecting faucets, and disinfection equipment must be made of food grade or non-toxic, non-absorbent odor and taste, rust-resistant, wash-resistant, and re-disinfection resistant. Ensure that the microfilter and disinfectant are not expired. Raw water reservoirs must be properly covered and protected. Before filling, containers or gallons of raw or drinking water must be cleaned by rinsing with production water for at least 10 seconds and filling with a clean lid. Containers or gallons filled with drinking water must be given directly to consumers and must not be stored in DAMIU for more than 1x24 hours; c) aspects of the handlers at least include being healthy and free from infectious diseases and not

being carriers of pathogenic germs (carriers); behave hygienically and sanitary whenever serving consumers, namely by always washing hands with soap and running water serving consumers, using clean and neat work clothes, and not smoking every time serving consumers. Each DAMIU must carry out health checks for handlers at least 1 (once) time a year.

2.6 Management of Drinking Water Quality Supervision

In order to be safely consumed, the quality of drinking water has to be ensured from the beginning of the process. Based on the Regulation of the Minister of Health Number 736/MENKES/PER/VI/2010, there are rules regarding the management of drinking water quality supervision contained in Article 2, that drinking water supervision is the scope of the regulation of drinking water quality supervision including external and internal supervision. External supervision is carried out by the District/City Health Office and the Ministry of Marine Affairs and Fisheries, while internal control must be carried out by drinking water providers for commercial purposes. Meanwhile, Article 6 states that external supervision and internal control are carried out in 2 (two) ways, including periodic monitoring and monitoring of pollution indications.

Periodic external monitoring for drinking water with a piped network system is carried out at the farthest point in the distribution unit (article 7). Periodic external supervision for drinking water depots is carried out at gallon filling units or drinking water containers, and external monitoring for drinking water has not piped networks is carried out at each drinking water facility. Periodic internal monitoring for drinking water with a system for drinking water with a piped network system is carried out in each production and distribution unit (article 8). Periodic internal supervision for drinking water depots is carried out by production and filling units for gallons or drinking water containers. Internal monitoring for drinking water not piped is carried out at each drinking water facility. In the event of an indication of pollution, it is necessary to carry out external and internal monitoring of all units of the drinking water supply provider. The hypotheses answered in this study are for efforts to develop actors, educate consumers in choosing drinking water, and determine the implementation of the Minister of Health Regulation No. 492 of 2010 concerning fostering business actors.

3. Methods

3.1 Participant

This research was conducted online and offline. The online method was organized using the Zoom platform, while the offline was conducted in Semarang and Balikpapan. The research location was selected due to several reasons, including easy access for researchers and the number of complaints regarding the refill water depot in Balikpapan (Aditya, 2021). The study was conducted using a qualitative approach through data collection techniques, Focus Group Discussion (FGD), literature study, and field observations. The informant determination technique was carried out using a non-probability technique by purposive sampling. The informant consists of policymakers, namely the Ministry of Trade and the Ministry of Health, and the experts on consumers who have served in the last five years. The offline FGD was conducted on March 30, 2021, together with assistants to the Mayor of Balikpapan, the Health Office of Balikpapan City, the City of Semarang, the Department of Trade, Food and Drug Administration (BPOM), Indonesian Consumers Foundation Indonesia (YLKI), the National Consumer Protection Agency (BPKN) and business actors. In addition, field observation techniques were also carried out in the cities of Semarang and Balikpapan to record all the information obtained during the study.

3.2 Measurement

This study uses several legal documents to be able to analyze related to consumer protection including Law Number 8 of 1999 concerning Consumer Protection; Government Regulation Number 122 of 2015 concerning Drinking Water Supply

System; Government Regulation Number 82 of 2001 concerning Water Quality Management and Water Pollution Control; Regulation of the Minister of Public Works Number 18/PRT/M/2017; Regulation of the Minister of Health Number 492/MENKES/PER/2010 concerning Drinking Water Quality Requirements; Regulation of the Minister of Health Number 736/MENKES/PER/VI/2010 concerning Management of Drinking Water Quality Supervision; Regulation of the Minister of Health Number 43 of 2014 concerning Hygiene and Sanitation of Water Depots; Regulation of the Minister of Industry No. 78 of 2016 concerning the Enforcement of Indonesian National Standards, Mineral Water, Demineralized Water, Natural Mineral Water, and Dew Drinking Water; Decree of the Minister of Industry and Trade of the Republic of Indonesia Number: 651/MPP/Kep/10/2004 concerning Technical Requirements for Drinking Water Depots and their Trade; as well as other relevant laws and regulations.

3.3 Analysis

The overall results of the qualitative analysis were analyzed descriptively to get an overview of monitoring the circulation of refilled drinking water in the 2 (two) locations mentioned above. The analysis is used with a braid or flows analysis model related to the harmonious relationship of three main components in qualitative analysis: data reduction, data presentation, and concluding with verification and data collection processes in the field. In this analysis, the analysis process is carried out in the following steps: (1) data collection, (2) preparation of data reduction, (3) presenting data and drawing temporary conclusions, and (4) verification to obtain data stability.

4. Findings

4.1 Results of Focus Group Discussion (FGD) with Policy Stakeholders

The results of the Focus Group Discussion (FGD) with practitioner expert, which was carried out on February 16, 2021, concluded that there is a need for synergy between relevant ministries and institutions that issue regulations regarding standard security and health standards that DAMIU business actors must meet. It is hoped that the standard standards will not burden SMEs with refilling drinking water, but on the other hand, the right of consumers to obtain proper and healthy drinking water must also be fulfilled. Business actors who have implemented standards under SNI are still lacking in maintaining the hygiene of drinking water, and there are still business actors who violate it because there are several requirements that are not met, so it is doubtful to guarantee the drinking water sold. SNI must be seen in the refill drinking water business, and production involving distillation machines must have standards, and the Ministry of Industry can enter related to supervision of the standardization of these machines.

Based on the results of the FGD with the Director General of Environmental Health, Ministry of Health on March 3, 2021, it was found that education was needed for business actors and consumers. Business actors must meet the requirements of drinking water standards by Permenkes 492/2010 and Permenkes 43/2014, not only taking big profits. Consumers must also be aware of the selection of DAMIU certified as Hygiene Appropriate for Sanitation and care about the safety of drinking refilled water, which is not only cheap. Therefore, it is necessary to consider the existence of a label on unbranded refilled drinking water. However, this is contrary to Kepmenperindag 651/2004, which should not be labeled, although, in the UUPK, business actors should provide true, clear, and honest information regarding the conditions and guarantees for goods, as well as the responsibility to provide compensation or compensation for consumers who are harmed (Article 7 No. 19 UUPK). As a result, if there is no label on the refilled water packaging, consumers cannot or at least find it difficult to object or sue for violations related to these obligations.

According to the Ministry of Health regulations, there has never been a legal sanction for DAMIU business actors that can cause a deterrent effect to fulfill the obligation to meet drinking water standards. Therefore, it is necessary to review and revise

Permenkes 43/2014 to include UUPK in the consideration section so that the provision of clear sanctions is an effort to deter business actors from guaranteeing legal certainty for the community. In this case, it is necessary to guide business actors implementing DAMIU to understand consumer protection's meaning before imposing sanctions. Prevention efforts are more effective than law enforcement, especially for micro and small business actors (UMK).

4.2. Field Observation Results

Business actors must ensure that the quality of drinking water meets the requirements. Therefore, drinking water depots are required to monitor the quality of water ready to be put into gallons or containers of drinking water. Supervision is carried out by testing the sample and drinking water frequency adjusted to the minimum requirement. The details of the sample and the frequency of raw water are shown in Table 1.

Table 1. Raw water test

Parameter	Test Frequency	Number of samples
Microbiology	Once a month	1
Fisika	Once a month	1
Compulsory Chemistry	Once every six months	1
Additional chemistry *	Once every six months	1

Note: Additional chemical parameters set by local regulations ()

Based on the results of field observations conducted in Balikpapan, it was found that of the 3 (three) unbranded DAMIU's visited, all of them had permits for drinking water test results issued by the UPT and the Laboratory and Radiology of the Balikpapan City Health Office. DAMIU has checked drinking water quality by the Health Office of the City of Balikpapan using a Sanitarian KIT. However, it is known that there are obstacles to its implementation, namely budget constraints to carry out routine checks on all DAMIUs in Balikpapan. Of the three unbranded DAMIUs visited, only 1 (one) depot has a Sanitation Hygiene Eligibility Certificate (SLHS). In 2020, only 3 (three) Depots in Balikpapan will take care of extending the SLHS certificate. There is a problem because no local regulation (Perda or Perwali) regulates refilled drinking water, and a technical regulation (Perwali) will soon be made regarding unbranded refilled drinking water. It is known that 78 percent of the people of Balikpapan City use drinking water from DAMIU, and 98 percent of DAMIU water sources use PDAM. DAMIU does not check water quality regularly in accordance with regulations because the selling price of IDR 5,000 - IDR 7,000 per gallon cannot cover operational costs.

Based on data from field observations in Semarang, it was found that of the 3 (three) DAMIUs visited, all three met the requirements set by the Ministry of Health. The three depots also have SLHS certificates and laboratory test results, but the validity period of SLHS and sanitation varies based on the length of operation of DAMIU. If the depot has been operating for a long time, the certificate's validity period will last for three years, while for new drinking water depots, the certificate will last for the first six months to 1 year. The Semarang City Health Office has surveilled drinking water depots in Semarang City by visiting and testing drinking water samples with a sanitarian kit. However, there are obstacles because there are no regional regulations for the City of Semarang, which are derivatives of the Minister of Health Regulation and the Minister of Industry Regulation regarding DAMIU. The absence of local regulations has caused DAMIU supervision, which the health office and industry office should have synergistically carried out, and BPOM to be carried out only by the health department. There needs to be a quick follow-up from the Semarang City Government in making regional regulations regarding DAMIU so that those who violate it can be subject to sanctions. The details of the sample and the frequency of water that are ready to be put into gallons or containers of drinking water are shown in Table 2.

Table 2. Water that is ready to be put into gallons or drinking water containers

Parameter	Test Frequency	Number of samples
Microbiology	Once a month	1
Fisika	Once a month	1
Compulsory Chemistry	Once every six months	1
	Once every six months	1
Additional chemistry *		

Note: Additional chemical parameters set by local regulations ()

4.3 Focus Group Discussion Results in Balikpapan

According to the Assistant Mayor of Balikpapan, Balikpapan City does not have reliable springs with a raw water capacity of 1571 per second, so it can be said to be in deficit. There are 56 units of water sources in Balikpapan City. The Balikpapan Health Office conducts monitoring every month. The source of clean water used by the community is mostly clean water from PDAM. The people of Balikpapan City meet their water needs for IDR 5,000, which is used for bathing, and IDR 7,000, which is used for drinking water consumption. Physical and chemical water testing is carried out every 6 (six) months with a sanitary kit examination to maintain water quality more optimally, regular tools must be cleaned. Hygiene and sanitation training has been carried out at the Health Service, free of charge.

The discussion also revealed that according to representatives of the Balikpapan Health Service, the indicators for checking water sources had been carried out according to applicable standards. DAMIUs trained and inspected by the department will be given stickers and education at the Puskesmas. Based on Permenkes 43/2014, some regulations are required for proper sanitation, but the facts on the ground found that mandatory cost constraints are microbiological and chemical. Small MSMEs are free of charge, while large MSMEs are still charged. There will be education for MSMEs to collaborate with certified depots. The association for refilling drinking water businesses in Balikpapan has been vacuumed due to the association's leadership agreement between business actors.

According to a representative from the Department of Trade, the trade office's duties are simply to supervise and only provide socialization and education to DAMIU business actors. Furthermore, the Balikpapan City Consumer Dispute Resolution Agency (BPSK) will be formed and will wait for the Governor's Decree first. Representatives of the Food and Drug Administration (BPOM) stated that BPOM did not directly supervise DAMIU. BPOM only uses refilled drinking water samples.

From the side of business actors' representatives, it was revealed that in running a business, they should know and be educated regarding gallon storage and refill drinking water storage. The water source is from PDAM because groundwater in Balikpapan cannot be used. So far, there have been no complaints from consumers to business actors regarding gallon caps and unbranded tissue. During the Covid-19 pandemic, sales of refilled drinking water decreased. The difference in the selling price of refilled drinking water is caused by the equipment used. Business actors have also yet to be educated regarding water storage. Only business actors will inform if it has been drunk and must be closed again. The equipment used by the business actor has had a permit from the beginning to buy a refilled drinking water package. Unbranded refill drinking water does not yet have a permit regulation but has certification related to engine standards and water quality with SLHS certification. Business actors hope there will be guidance from the local government for non-branded refill drinking water businesses actors. MSME business actors in Balikpapan mostly use PDAM sources. There has yet to be an establishment of a refill drinking water association. Currently, there is only guidance from the relevant agencies. Regarding water sources, it has been determined by region.

The National Consumer Protection Agency (BPKN) has provided a balance between Business Actors and Consumers. It is hoped that there will be further coordination regarding consumer protection as well as a legal umbrella related to regional regulations regarding DAMIU and adapted to the needs of Balikpapan. It is necessary to increase the basic needs of drinking water quality in Balikpapan to reflect the quality of Human Resources and efforts to advance the City of Balikpapan. It is hoped that MSME licensing in Balikpapan can be simplified and should not be adjusted to the licensing of large companies.

5. Discussion

The results showed that DAMIU business actors were still found using contaminated water. Business actors did not have a license as drinking water suitable for consumption, did not have SLHS, water containing Coli bacteria, E. coli, and coliform bacteria, and did not routinely check DAMIU security. Water from nature can be used as drinking water, but there is a risk of bacteria or harmful substances because it has been polluted (Mutia et al., 2020). In addition, research shows that there are DAMIU business actors who do not take care of the equipment used, so the water quality is not good. Maintaining equipment is important for DAMIU business actors not to affect drinking water quality (Azis et al., 2019).

In addition, there are still refilled drinking water depot business actors experiencing obstacles in complying with regulations related to the drinking water business. On the other hand, the knowledge of business actors is still lacking in understanding the rules related to business permits, not knowing or even intentionally not applying SNI rules, and using machines with spare parts that are not in accordance with SNI. The price of refilled drinking water which is relatively cheap is one of the factors that cause business actors not to meet proper drinking water standards following the applicable Ministry of Health Regulations or lack of supervision from the government or related parties that regulate business licenses for refill drinking water depots. Permenkes 492/2010 microbiological parameters of safe drinking water have a maximum total Coliform and E. Coli levels of 0 per 100 m so that drinking water is safe and not contaminated by microbiology or disease-causing bacteria.

Based on the primary study data on the quality of household drinking water in 2020, it was found that 7 out of 10 households in Indonesia consume drinking water from contaminated facilities (Pranita, 2021). The Ministry of Trade found 31,553 DAMIUs were unfit for Food Sanitation Hygiene out of 60,272 DAMs recorded (Judge, 2021). Until April 2021, there were around 254 DAMIU businesses in Semarang, and only a few routinely received permits for security checks (Babel, 2021). The study's results in Minahasa Regency found the presence of coliforms in DAMIU (Sumampouw, 2019).

Drinking water can be said to be hygienic if it already has a Sanitation Hygiene Eligibility Certificate (SLHS) owned by a refill drinking water depot business actor, which is a sign that it has met administrative and technical requirements. This is following Article 4 paragraphs (1) and (2), Article 5 paragraph (1), and Article 8 of the Minister of Health 43/2014 concerning Hygiene and Sanitation of Drinking Water Depots. The Sanitation Hygiene Eligibility Certificate (SHLS) can be evidence of a business license issued from the Investment and One Stop Integrated Services Agency (DPMPTSP) and can meet the administrative and technical requirements of the health office. However, the field has many obstacles, such as the limited number of available laboratories. Business actors must also have an SLHS, which states that each DAMIU must have a business license in accordance with the provisions of the legislation and issue a DAM business license. In addition, the city must require the existence of a Sanitary Hygiene Eligibility Certificate. Based on Article 6 of Permenkes 43/2014, SLHS applies to 1 (one) DAMIU's place of business. In Article 7, SLHS must be installed in a place that is visible and easy to read by consumers. It is also known that SLHS is only valid for three years and can be extended as long as it meets the requirements.

Business actors must fulfill the obligations in Articles 2 and 3 of the Minister of Health Regulation 492/2010 concerning Drinking Water Quality Requirements. DAMIU business actors have fulfilled their obligations and responsibilities as described in

Article 7 of the UUPK regarding the obligations of business actors to "Provide true, clear and honest information regarding conditions" and "Guarantee the quality of goods and/or services produced and/or traded." Business actors must provide guarantees that consumers can trust. The drinking water depot business actor must first ensure that the water that is the source of his business must be completely safe for consumption because water containing various substances that are not necessarily safe if consumed will certainly have a negative impact on health. Therefore, to ensure safe drinking water, DAMIU must conduct a health laboratory examination to check the chemical and bacterial content, which will later be used as a water source for DAMIU's business. The inspection results must show that the water can be used as a source of DAMIU and is safe from chemicals, bacteria, and other contaminants.

There are still DAMIU business actors who violate regulations, indicating that the government's licensing and supervision are still not optimal. The absence of standard safety and health standards that form the basis for DAMIU business actors has resulted in the absence of more comprehensive regulations regarding this matter. Based on the Decree of the Minister of Industry and Trade of the Republic of Indonesia Number 651/MPP/KEP/10/2004, it has not been explained regarding the business label that can be used as a reference for consumers based on the UUPK, so that if there is a violation the consumer can complain. Furthermore, there are no clear sanctions from the applicable regulations, so violations are still found that do not create a deterrent effect for business actors.

Business actors and consumers have the same relationship because they need and benefit each other (Herlina & Santi, 2018). However, business actors and consumers must carry out their rights and obligations. One form of obligation that business actors and consumers must carry out is to educate themselves. Education is also needed for business actors and consumers. Educated business actors will understand the terms, conditions, and regulations that must be implemented to protect consumer rights. Consumers who have been educated will be more careful in choosing the drinking water to be consumed.

Consumers can safely consume drinking water without worrying about the water consumed if the implementation of licensing and supervision of DAMIU can be done synergistically. Consumers, business actors, and the government must cooperate in supervising and caring if they find indications of fraudulent business actors. In addition, legal protection for unbranded refilled drinking water consumers must be improved so that business actors and consumers get their respective rights without harming anyone.

6. Conclusions

Based on the study results, it is known that there are still business actors who violate the regulations for safe drinking water quality for consumers. The government needs to protect business actors and consumers. Business actors must meet technical standards so that consumer rights can be protected and the prices obtained are still affordable. It is also necessary to educate consumers about the hygiene of refilled drinking water, which is not only cheap. There needs to be optimization in educating business actors so they do not only make big profits. Business actors must also meet the requirements of drinking water standards in accordance with Permenkes 492/2010 and Permenkes 43/2014.

There are no legal sanctions for DAMIU business actors that can have a deterrent effect if they violate the Ministry of Health regulations. However, based on the UUPK, there are clear legal sanctions related to consumer safety. Therefore, it is necessary to review and revise Permenkes 43/2014 to include UUPK in the reference considerations so that clear provisions for legal sanctions can be made so that they can be a deterrent effect for business actors. However, as a last resort, coaching should be carried out before sanctions are given to business actors who violate it.

There are obstacles faced by the competent office in the field, such as the absence of local regulations governing the quality standards of unbranded refilled drinking

water. In addition, the absence of a regional regulation which is a derivative regulation of the Minister of Health Regulation Number 43 of 2014, causes coordination of the agencies authorized to carry out supervision cannot be carried out.

7. Recommendation

Suggestions for further research can be to conduct tests on more business actors. The government must provide guidance and supervision to refill drinking water business actors by coordinating with the competent authorities and regional governments. Then, it is necessary to formulate a comprehensive development strategy for refilling drinking water depots scattered in various regions regarding the importance of compliance with laws and regulations and consumers who can be smarter in choosing the drinking water consumed. Furthermore, the Regional Government can implement regulations from Minister of Health Regulation No. 492 of 2010.

It is hoped that there will be further coordination regarding consumer protection as well as a legal umbrella related to regional regulations regarding DAMIU and adapted to the needs of Balikpapan. It is necessary to increase the basic needs of drinking water quality in Balikpapan to reflect the quality of Human Resources and efforts to advance the City of Balikpapan. It is hoped that MSME licensing in Balikpapan can be simplified and should not be adjusted to the licensing of large companies.

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