



REPORT ON THE INSPECTION OF PACKAGED WATER COMPANIES IN FREETOWN

(14TH OCTOBER – 15TH NOVEMBER) 2019

Water Department, EWRC



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1.0 BACKGROUND & INTRODUCTION

Owing to the fact that various stakeholders are regulating various aspects of the packaged water business, the Commission established a harmonized regulatory approach that includes all the co-regulators (Standards Bureau, Ministry of Health). The Sierra Leone Standards Bureau (SLSB) looks into water quality standards, the monitoring of the physical factory setup is done by the Ministry of Trade and Industry (also Factory inspectorate is also involved in this aspect of regulation) and Ministry of Health and Sanitation (MoHS) deals with the Sanitary aspect. One of the key deliverables from the harmonized approach is to organize a joint inspection activity, to mainly raise the awareness of the water producers on sound regulatory requirement, inspect all packaged water businesses in the country, so that the existing database will be updated and hence commence a proper and organized regulatory system as opposed to the prevalent piecemeal approach. Considering the fact that the majority of packaged water Companies are based in Freetown, it was jointly agreed that the first inspection exercise should cover Freetown and similar activity will be done in other parts of the Country.

The joint monitoring exercise was done in Freetown, and the team comprised of the SLEWRC, the Sierra Leone Standards Bureau (SLSB), Ministry of Health and Sanitation (MoHS) and the Salone Water Packeters and Bottling Organization. The inspection exercise commenced **on Monday 14th October 2019 and ended on Friday 15th November 2019. During this period, about 167 water companies were inspected accordingly. Various aspects of their operations as it pertains to production and supply of quality water was considered by the team, with the individual parties detailing their observations accordingly.** Our joint inspection exercise revealed that most companies do not know the regulatory requirements, especially the licensing procedures. Most of them do obtain a certificate from Ministry of Health and or Standards Bureau and thought they are already licenced to produce and sell packaged water products without going through the Commission.



Two teams of all the mentioned stakeholders were setup, one inspected the Eastern part of Freetown and the other team covered the Western area.

1.1 AIMS AND OBJECTIVES

The aim of the exercise was to obtain a comprehensive list of all the new and existing Packaged Water Companies and their facilities within Freetown, develop a clear understanding of their operations for proper evaluation and recommendation for best practice and finally, to update the existing database.

The overall objectives of the joint inspection in Freetown includes the following:

- To locate all Packaged Water Companies and ensure that they are licenced with the commission, and that their operation is in conformity with their terms of licence – Section 29(1) of the SLEWRC Act 2011.
- Identify and evaluate newly established packaged water companies
- To update the existing database that the commission has developed over the years.
- Inspect all the facilities and collect adequate information about their treatment/purification (methods), capacity of raw water storage tanks, capacity and average daily production of all the packaged water companies.
- Monitor quality of water produced to the specified standards and mode of operations.
- Categorize all the companies
- Design a harmonized database of all packaged water companies
- To adequately inform all the packaged water companies about the specific roles and responsibilities of SLEWRC and other related regulatory bodies.
- Render hands-on support or advice on operation to the water producers during the inspection.
- Conduct training workshops for packaged water companies on best practice



2.0 METHODOLOGY

Existing data, reports of previous inspections were collected and reviewed.

A schedule was prepared for effective monitoring, an existing water inspection questionnaire was restructured and tested before use, with key focus on water quality compliance, licence status, number of processing machines, hygiene and sanitary compliance, average daily production and treatment type (See Appendix B).

Daily field visit and supervision of the water companies was carried out by locating all packaged water companies that are currently in operation. The teams had their checklists, recording all relevant data, including water quality test results, treatment and processing methods by direct observation.

3.0 RESULTS AND DISCUSSIONS

3.1 LICENCING

Section 29 of the SLEWRC Act 2011 requires any person(s) providing water services to consumers to obtain a license from the Electricity and Water Regulatory Commission.

However, out of the 167 companies that were inspected, only (26) 16% of those companies have paid their licence fee to the commission for the year 2019, (See Figure 3-1). Most of them claim they are not aware that they should be licenced by the commission.

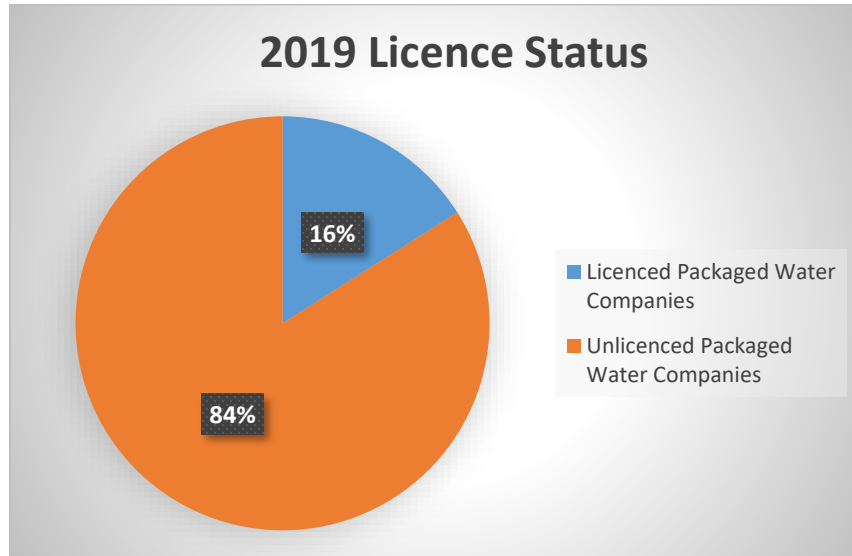


Figure 3-1: Licence status

Furthermore, the inspection was also done to identify and evaluate newly established packaged water companies. On that note, 27% (45) of the companies inspected were established in the year 2019, but only 2 out of the 45 companies were registered with the commission, (See Figure 3-2). Given rise to more than 90% unregistered companies in total.

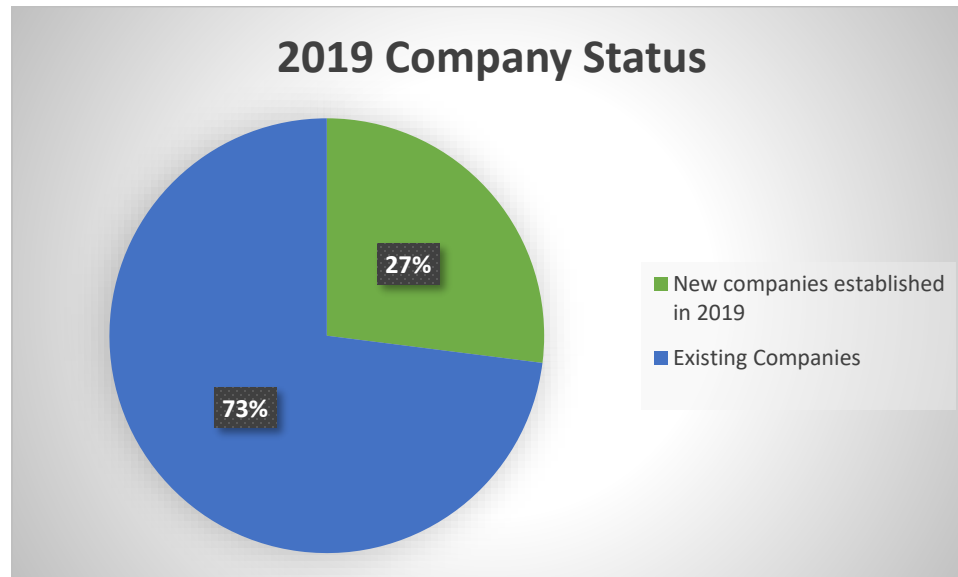


Figure 3-2: Number of companies

3.2 WATER QUALITY TESTING

From the data collected during the inspection, it was observed that from the total 167 companies inspected, only 19% of these companies had done the water quality test, and obtained a Certificate of Analysis from Sierra Leone Standards Bureau, (See Figure 3-3).

Out of the 64 companies inspected in the West, only 16% of these companies had done the water quality test, and obtained a Certificate of Analysis from Sierra Leone Standards Bureau. In the East, 79 companies were inspected, but 23% of them had tested their product, and 13% out of the 24 companies inspected in the Central part of Freetown had tested their products and obtained a certificate of analysis from the SLSB.

They claim some staffs of SLSB always visit their facilities to test the quality of the water they produce, however, the representative from SLSB in the joint monitoring process stated that those people are imposters and that SLSB do not test the quality of water at the various water companies. She mentioned that the only way a company's water quality is tested is after the companies take



their samples to the lab at SLSB. They were urged to stop allowing people to ‘test’ for water quality in the name of SLSB at their factories.

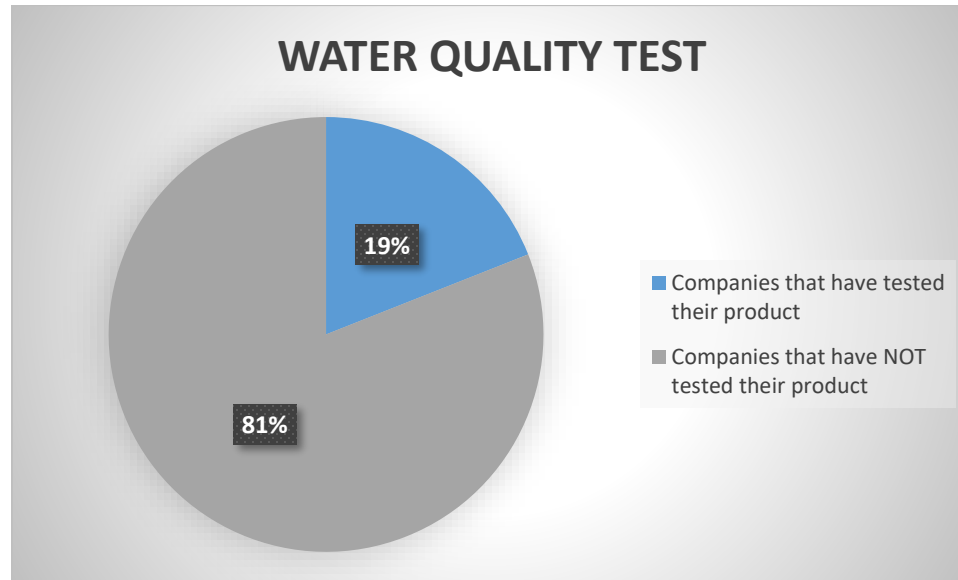


Figure 3-3: Water Quality Certificates

3.3 SOURCE OF WATER

The main source of raw water for the packaged water factories is Guma Valley Water Company. Other sources include, boreholes, springs and dams. 69% of the companies obtain the water they produce from Guma Valley Water Company, and the remaining 31% obtain their raw water from springs, dams and boreholes (See Figure 3-4). Table 3-1 below shows the companies that obtains their water from springs, dams and boreholes.

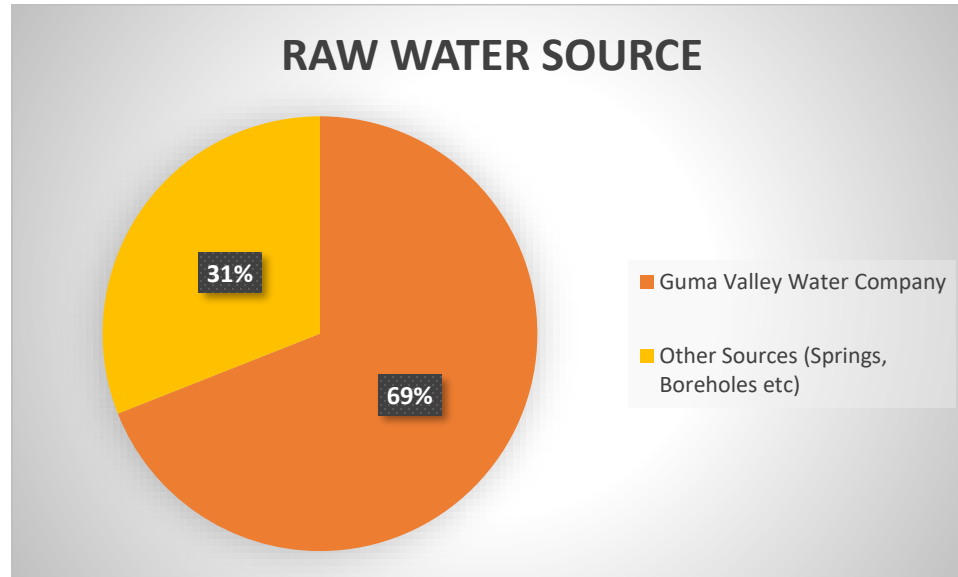


Figure 3-4: Raw Water Source

Special attention needs to be paid to companies that do obtain their raw water from other sources, other than GVWC, because their source is unsafe and they have never tested the water they produce to know whether it is fit for purpose.

Table 3-1: Companies obtaining water from springs & boreholes

No	Name	Address
1	Walcos Spring	17 Emerson Bockarie Drive, Adonkia
2	Precious Natural Spring Water	293 Kamayama, Regent road, Lumley
3	Happiness Pure Water	25 Blue Bell, Spur Road
4	Sierra Spring	8 D Sumaila Town
5	Rugsan Pure Water	15 Wilson drive off Benguma Road, Waterloo
6	JC Purified Water	During Town, Tombo
7	Max Pure Water	Tombo Looking Town
8	Life Care Pure Water	12 Cline Town (Hastings
9	Classic Pure Water	35b Max Street Hasting



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10	Best Life water	Amputee Camp Hastings
11	Blama Pure Water	Amputee Camp Hastings
11	Home Leone Pure Water	Destiny Village Newton
13	Newton Pure Water	15 Main Motor Rd Newton
14	Bakma Care Multi Filtered Pure water	Old Dam Road New London Kossohtown
15	Family concern multi filterred drilling water	19 Old dam road new london kossoh town
16	Sheba pure water	58 new london kossoh town
17	Ya Koyah	Amputee Camp
18	Mama Care multi filtered water	11 Savage Avenue
19	Family Fresh	Amputee Camp Hastings
20	Always Care pure water	33 Phitz street
21	Saman's Pure drinking water	1 Hasting Market Road
22	Crystal Diamond	Amputee Camp
23	Family Spring pure water	Savage Avenue
24	Good faith pure water	5 kissy town waterloo
25	Liz Rom Pure Water	39 York Road Waterloo
26	Crystal Ice Pure Water	4 K K Drive Fullah Town Hastings
27	G. Samba Pure Water	5A Stationary Road Hastings
28	Ultimate Pure Water	9 Sawson Street Hastings
29	Mark Pure Water	Macdonald New Site Tombo Road
30	J. C. Pure Water	15 During Town Tombo Road
31	Welfare Water Company	5 Filling Street Tombo
32	Evsumo Ice Company	Madina Tombo
33	Sahara Spring Water	Big Water Pennisulla
34	Elba Spring Water	33 Old Motor Road Newton
35	Agape Spring Water	Turay Street Bondo Water Newton
36	Evsumo Pure water	24 Mansaray Street
37	Family brand Hopanda	New site devil hole



3.4 SANITARY ASPECTS

In general, the toilet facilities in these companies are not properly maintained and the facilities are poorly ventilated. In other cases, the environment is polluted and not ideal for a packaged water business. During the inspections, we discovered many facilities without toilet facilities and do not have the correct compartments, but some of these companies have already secured Certificate of Fitness from the Ministry of Health. There were also several complaints from packaged water owners about harassment for money by staff from the Ministry of Health, Standards Bureau, Consumer protection Unit, and one Mr. Dauda from the EWRC.

In the Ministry of Health and Sanitation guidelines, in setting up a packaged water industry, the facility is supposed to have at least five compartments: production room, storage room, finished product room, office space and changing room. Only 17% of all the companies inspected have all these compartments, the others operate in a single room and in some cases two.

3.5 TREATMENT METHOD

Treatment of packaged water within Freetown follows the following sequence:

From sources, the water goes through micro thread filters, then to the storage tank, from the storage tank through other set of micro thread, carbon and foam filters. In some cases it goes through activated carbon filtration and pressurized sand filtration, Reverse Osmosis and finally through UV light before packaging. A summarized schematic production procedure is given below, (See Figure 3-5).

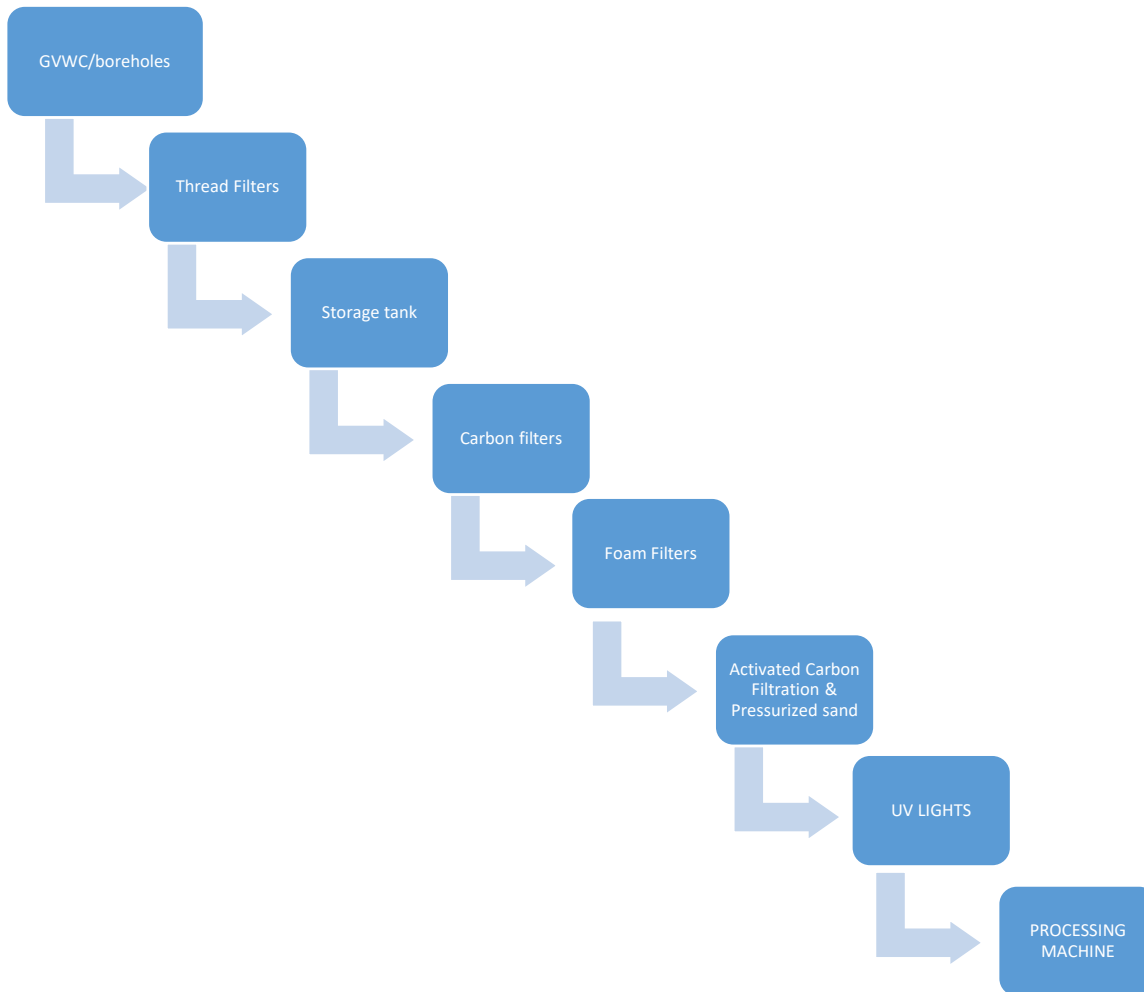


Figure 3-5: Typical Production Process

3.5.1 Advanced Treatment

14 out of the 167 Companies have an advanced form of treatment method (reverse osmosis), which is about 8% of the companies inspected.

Listed below in table 3-2 are the names of those with advanced form of treatment.



Table 3-2: List of Companies with Advanced Treatment Procedure

No	Name	Address
1	Refcon Pure Water	26 Dumbuya drive Hamilton
2	Walcos Spring	17 Emerson Bockarie Drive, Adonkia
3	Fabulous Purified Water	18 Adonkia road, Goderich
4	Havens Premium Water	16 Beach road, Agriculture Compound, Lumley
5	(Sierra Water) Capitol Foods SL Limited	14 Murray Town Road
6	Family Choice (Water Packaging Company Limited)	14 Murray Town Road
7	Gulf Beverages company limited	5 Smart Farm off Wilkinson road
8	Nour Pure drinking water	98 Wilkinson Road
9	FoodLand	8 Sir Samuel Lewis Road, Aberdeen
10	JC Purified Water	During Town, Tombo
11	Aqua Royal Drinking Water	3 Leah Street
12	Evsumo Pure water	24 mansaray street
13	Passion Crystal Clear	220 Bai Bureh Road
14	Bukum Pure Water	244 Kissy Bye Pass Road

3.5.2 Without Ultra Violet (UV) Light

23% of the companies produce water without sterilizing with UV light. This is a potential health hazard for consumers, as the UV light serves as the last stage for disinfection. These companies are to be shut down temporarily along with others that are not maintained in a hygienically sound environment. (See table 3-3 & 3-4)



Table 3-3: List of Companies without UV

No	Name	Address
1	Bafa Pure Drinking Water	6 Hadel Street Kingtom
2	May Spring	27 Femi Turner Drive, Goderich
3	Premium Pure Water	5c kaningo drive Juba
4	Happiness Pure Water	25 Blue Bell, Spur Road
5	Foe Pure Drinking Water	52 Babadorie Lumley
6	Pure Healthy Enterprise	2 Jones Lane Aberdeen
7	Wimro Pure Water	7 Adelaide Street
8	Diamond Pure Water	13 Vinell Dive, Congo Cross
9	Family Health Care	1B Main Motor Road, Congo Town
10	Access For Life Pure Water	51`C Assension Town
11	Amazing Water	1 Neigh Street, Murray Town
12	Isal Water Company	40 A Macauley Street, Murray Town
13	Sierra Spring	8 D Sumaila Town
14	Home Leone Pure Water	Destiny Village Newton
15	Newton Pure Water	15 Main Motor Rd Newton
16	Regent Spring Pure water	1 wilberforce road Regent village
17	Family concern multi filtered drilling water	19 Old dam road new london kossoh town
18	Good faith pure water	5 kissy town waterloo
19	Too Pure Water Company	19 Kissy Bye pass Road Fisher Lane
20	Crystal Ice Pure Water	4 K K Drive Fullah Town Hastings
21	G. Samba Pure Water	5A Stationary Road Hastings
22	Imam Sadiq Investment Hayat Pure Water	21B Kissy Bye Pass Road
23	Ultimate Pure Water	9 Sawson Street Hastings
24	Ramadan's Purified Water	9 Samson Street Hastings
25	Mark Pure Water	Macdonald New Site Tombo Road
26	Destiny Crystal Pure Water	156 Liverpool Street, Waterloo
27	J. C. Pure Water	15 During Town Tombo Road
28	Welfare Water Company	5 Filling Street Tombo



29	Evsumo Ice Company	Madina Tombo
30	Sahara Spring Water	Big Water Pennisulla
31	Elba Spring Water	33 Old Motor Road Newton
32	Flamingo Pure Water	58 Main Motor Road Newton
33	Agape Spring Water	Turay Street Bondo Water Newton
34	M. K. Group	Okra Hill
35	Super Fresh water	66b peace village upper allen town
36	Family brand Hopanda	New site devil hole
37	Wellington Pure Water	367 Bai Bureh Road
38	MAG Pure Water	44 Kelsey Road Kissy Dockyard
39	Aqua Sombodu	5 Ross Road

Table 3-4: Companies with UV, but to be Closed Down

No	Name	Address
1	Gbetgbo Pure Water	8 Adonkia road, Goderich
2	M M Jay	14 Solo B drive, Goderich
3	Foe Pure Drinking Water	52 Babadorie, Lumley
4	Pure Healthy Enterprise	2 Jones Lane, Aberdeen
5	Amiza	62 George Brook, Dwazark
6	Fereh Enterprise Pure Water	71 Cockerill North, Wilkinson road

3.6 WATER QUANTITY

The quantity of raw water being stored ranges from 2,000 litres to 360,000 litres.



3.7 AVERAGE DAILY PRODUCTION & CATEGORISATION

The average daily production from the packaged water companies inspected ranges from 450 litres to 200,000 litres. The categorization of packaged water will be done considering the capacity of the factory and not the type of product.

Using the average daily production from the inspection, utilities have been categorized as follows; (a) Very Large, (b) Large, (c) Medium and (d) Small packaged water companies as per the thresholds indicated below, (See **Figure 3-6**).

Table 3-5: Proposed categorization

ID	Category	Average Daily Production (Litres)	Percentage
A	Very Large	More than 50,000	3%
B	Large	Between 30,000 to 49,999	2%
C	Medium	10,000 to 29,999	22%
D	Small	Less than 10,000	71%

The daily production is significant as it dictates the capacity and level of income generation of the companies.

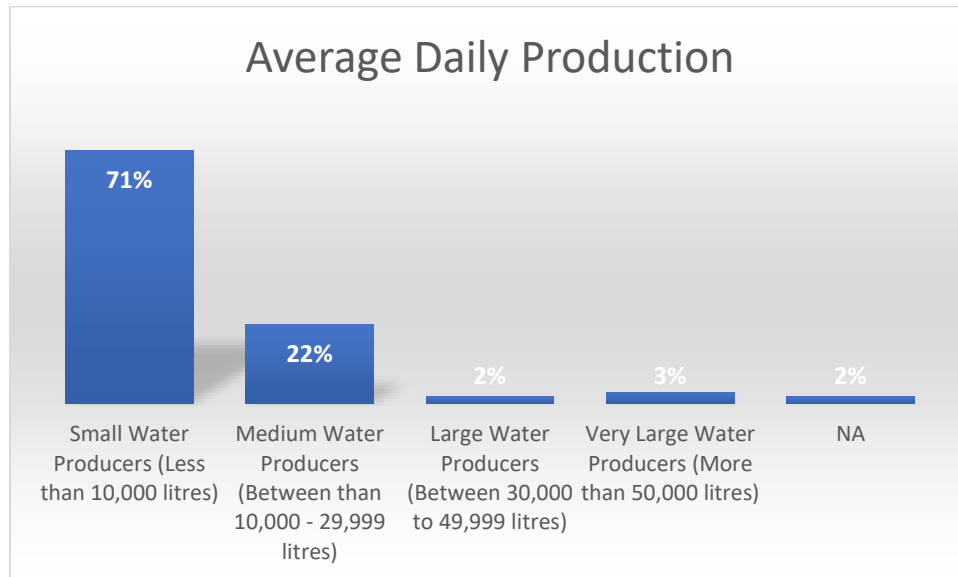


Figure 3-6: Average Daily Production

4.0 KEY FINDINGS

- Most of the facilities are not compartmentalized (Do not have the required five compartments: production room, storage room, finished product room, office space and changing room).
- **No UV light** - Sachet water produced daily by some companies is not sterilized as the UV light is faulty, and in some cases, the processing machine does not have a UV attached to it. This is a potential health hazard for consumers.
- The environmental condition of the production room at the time of visit was not good, as it was very unsightly to see empty sachets littered all around the production rooms and within the facilities (**See Appendix A**).
- Water producers operate in very poor hygienic conditions (Filthy environment), Ceiling leaks and water drops in the production room.



- **Wrong labelling** – Most companies label (250/500) ml on sachet, which is not reflective of the volume of water contained in the particular sachet. Also, the volume of water in the sachet not up to the required 500ml.
- Required Documentations (licence, certificate of fitness etc) are not available at the companies' premises when requested for. They claim the owners have all the documents but were not around to produce them and also provide answers relevant questions.
- Most of the Companies are not well ventilated
- No toilet facility at most of the Companies' premises (but some of these companies have the Ministry of Health and Sanitation's Certificate of Fitness)
- Most of the production rooms are filled with Unwanted items
- Impersonation of SLSB staff (fake testing on site). Companies complained of people always harassing them for money.

5.0 CHALLENGES:

- Identifying some of the companies was a major problem as there were no form of identification along the roads or junctions.
- Some companies were not aware of the mandate of the commission
- Some companies do not have any documentation, they claim their owners have all the relevant documents and it was also difficult to get the operators at the various factories to respond to questions.



6.0 CONCLUSION AND RECOMMENDATIONS

Following the inspection exercise, a water companies' database was created, evaluation of the results and analysis done, the following conclusions were drawn with the required recommendation for an improved system to be in place.

6.1 CONCLUSION

As a way forward, the database has been developed and there is a need to roll out a robust hands-on support to completely sanitize the packaged water industry.

After evaluating sachet water facilities in Freetown, there is a need for more attention to inclusive participation rather than suppressing packaged water in a bid to protect public health is advocated as residents may revert to unsafe sources which could lead to more dangerous conditions. In addition, there is a need for a modification from the traditional end-product focused regulatory method presently used by the all the regulator to one that involves the people who play active roles as manufacturers, distributors, owners, consumers and retailers in the packaged water industry. Regulatory actions that encourage core hygiene values such as hand washing, general cleanliness of storage environment and proper handling culture will produce the end product monitoring. To this end, the institutions that regulate the industry jointly need to harmonize their respective roles as this will ensure that there is sanity in the entire regulation procedures.

6.2 RECOMMENDATION

It is a well-known fact that clean water is absolutely essential for healthy living. Hence, the following measures should be undertaken:

- A press conference should be held, to present the results and also present to the public all companies that are licensed and those that are not.



- A robust inspection unit must be established in order to be able to monitor and assess the quality of water produced. Regular monitoring and inspection will be required to ensure the existing regulations are enforced.
- All companies should endeavor to have a signboard of their business along the main road so that they can be easily identified.
- All companies to develop a daily log book where production, sanitary and other operations are recorded daily
- Companies that are not compartmentalized (Operating in a single room) should be given 90 days ultimatum to upgrade their facilities or be shut down until they ready to comply.
- Companies with defective UV should be cautioned to fix their systems with immediate effect.
- Assessment of water quality at some important stages of production; pre-production, production and post-production stages at the factories is therefore suggested in order to ensure their quality and safety.
- Standards Bureau need to get the producers of ‘packaged water’ to comply with the national drinking water guidelines. All water that fails WHO regulations should be withdrawn from the market.
- Ministry of Health and Sanitation should ensure that companies that do not have toilet facilities and those that do not comply with the sanitary requirements are not issued Certificate of Fitness.
- Communities on their own part should be educated and enlightened on the effects of patronizing packaged water companies that produce poor quality water.
- The inspection of water producing companies should be extended to the provinces
- Training sessions/workshops should be organized for all Water Companies in Freetown
- The commission should include safety guidelines when issuing licences package as a way of motivating the companies.



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- All institutions and large companies that buy water from these packaged water companies should ensure they have a licence from the commission.



7.0 APPENDIX A; PHOTOS



Poor sanitary, environment very filthy(Not ideal)

Typical Production room



Littered compound

Unwanted items in the production room



Wrong quantity labelling on Sachet



8.0 APPENDIX B; INSPECTION FORM

WATER INSPECTION FORM

General Information

1. Name of business.....
2. Address of business.....
3. Type of business.....
4. Do you know the Commission? Are you licenced with the Commission?
- Why are you licenced/ why not licenced?
.....
.....
.....
5. Name of business owner.....
6. Contact number..... email.....
7. Date of establishment of business.....
8. Date of survey...../...../.....
9. Number of employees Male Female
10. Permanent staff..... Casual.....
11. Name of person in charge..... Contact no.....
12. Area served.....
13. State source of water.....
14. Capacity of raw water storage tank.....
15. Frequency of testing of raw water.....
16. Number of Processing machines.....



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17. Do you have the standard operating procedure? Y/N.....
18. Do you have a display of your work schedule and cleaning schedule Y/N.....?
19. Date of most recent raw water source test.....
20. What is the average production per day?
21. Does the business have a Water Purification establishment Certificate of fitness from the
Ministry of Health and Sanitation?
22. **Indicate by circling the legal status of Applicant**
 1. Sole Proprietorship
 2. Partnership
 3. Public Limited Liability Company
 4. Private Limited Liability Company
 5. Cooperative Society
 6. Other (please specify)



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Other Details (Please tick and make comments where applicable)

Score Indicators: 1=V. Good, 2= Good, 3=Fairly Good, 4= Satisfactory, 5= Poor

No	Description	Yes	No	Comment	Score
1.	Water Company Compartments				
1.1	Is there a demarcation of the different compartments?				
2	Safety of Water Supply and Storage Facilities				
2.1	Is water obtained from a safe source?				
2.2	Is water supply adequate for the intended purpose?				
2.3	Is the reservoir or storage facility free of rust, corrosion and defect?				
2.4	Is it well covered and not easily accessible to animals?				
2.5	Is the facility easily accessible for cleaning?				
2.6	Is the water clean, free of dirt and growths?				
2.7	Is the water free of larvae?				
2.8	How often is the Tank cleaned?				
2.9	How often do you change your filters?				
3.0	How often do you change you UV light?				



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Flow diagram of treatment system (*insert diagram*)

Number of Thread Filter

Number of Carbon Filter

Number of foam Filter



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Name and signature of person in charge.....

Date:

Name and signature of inspector:

Date: