



COMMONWEALTH of VIRGINIA

Karen Shelton, MD
State Health Commissioner

Department of Health
P O BOX 2448
RICHMOND, VA 23218

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STATE BOARD OF HEALTH ORDER BY CONSENT ISSUED TO THE SES Mid Atlantic Utilities, Inc. FOR THE SESMA Utilities Waterworks PWSID No. 2109265

This is a Consent Order issued under authority granted by Va. Code § 32.1-26 between the State Board of Health and SES Mid Atlantic Utilities, Inc., for the SESMA Utilities waterworks for the purpose of resolving certain violations of the Public Water Supplies law and the applicable regulations.

Section A. Definitions

Unless the context clearly indicates otherwise, the following words and terms have the meaning assigned below:

1. "Board" means the State Board of Health, a permanent citizens' board of the Commonwealth of Virginia, as described in Va. Code § 32.1-5.
2. "Commissioner" means the State Health Commissioner, who supervises and manages the Department, as described in Va. Code §§ 32.1-16 and 17.
3. "Department" or "VDH" means the Department of Health, an agency of the Commonwealth of Virginia, as described in Va. Code § 32.1-16.
4. "Human consumption" means drinking, food preparation, dishwashing, bathing, showering, hand washing, teeth brushing, and maintaining oral hygiene.
5. "Notice of Alleged Violation" or "NOAV" means a type of notice of alleged violation issued under 12VAC5-590-110 of the Regulations.
6. "ODW" means the VDH Office of Drinking Water.
7. "Order" means this document, also known as a "Consent Order" or "Order by Consent," which the Board is authorized to issue to require any person to comply with the provisions of any law administered by it, the Commissioner or the Department or any regulations promulgated by the Board or to comply with any case decision, as defined in Va. Code § 2.2-4001, of the Board or Commissioner.

8. "Owner" means SES Mid Atlantic Utilities, Inc..
9. "Permit" means Waterworks Operation Permit No. 2109265.
10. "Public Water Supplies Law" or "PWSL" means Chapter 6, Article 2 of Title 32.1 of the Va. Code.
11. "Pure water" means water fit for human consumption that is (i) sanitary and normally free of minerals, organic substances, and toxic agents in excess of reasonable amounts and (ii) adequate in quantity and quality for the minimum health requirements of the persons served.
12. "PWSID" means Public Water System Identification.
13. "Regulations" means the Waterworks Regulations, 12VAC5-590-10, *et seq.*
14. "RFO" means the ODW Richmond Field Office, located in Richmond, Virginia.
15. "SESMA Utilities" means the SESMA Utilities waterworks.
16. "Va. Code" means the Code of Virginia (1950), as amended.
17. "VAC" means the Virginia Administrative Code.
18. "Waterworks" means a system that serves piped water for human consumption to at least 15 service connections or 25 or more individuals for at least 60 days out of the year. Waterworks includes all structures, equipment, and appurtenances used in storage, collection, purification, treatment, and distribution of pure water except the piping and fixtures inside the building where such water is delivered.

Section B. Findings of Fact and Conclusions of Law

1. The Owner owns and operates SESMA Utilities, which is also known as the Jerdone Island Water System. The Owner meets the definition of "owner" in Va. Code § 32.1-167.
2. SESMA Utilities is located in Louisa County, Virginia. SESMA Utilities serves piped water for human consumption to a total of approximately 35 metered and unmetered residential connections. SESMA Utilities is a community waterworks as defined in 12VAC5-590-10 of the Waterworks Regulations. SESMA Utilities consists of one drilled well, one 5,000-gallon hydropneumatic tank and one 20,000-gallon atmospheric storage tank, a duplex booster pump system, pH adjustment by soda ash addition treatment, chlorine disinfection treatment, and the distribution system. A new well was permitted, drilled, tested and has been approved by ODW for connection. On March 21, 2024, VDH issued the Owner a construction permit to connect the new well to the system.
3. On May 23, 2014, ODW issued the Permit to operate SESMA Utilities in compliance with the PWSL and Regulations with a design capacity of 39,200 gallons per day and not to exceed 49 connections.
4. On February 4, 2021, RFO conducted a sanitary survey of SESMA Utilities and observed:
 - a. There was no Emergency Management Plan.

- b. There was no certificate of inspection for the hydropneumatic tank.
 - c. The sight glass of the hydropneumatic tank was observed to be too discolored to see the water level.
 - d. The atmospheric tank and hydropneumatic tank were heavily corroded with peeling paint.
5. On March 9, 2021, RFO issued NOAVs in response to the Owner reporting a loss of pressure within the water distribution system from a winter storm causing an extended power outage across the east coast on February 12, 2021. RFO issued one NOAV for not having an emergency management plan, one NOAV for not maintaining 20 psig of pressure in the system, and one NOAV for insufficient waterworks reliability for providing unchlorinated water during the February 12, 2021, event.
6. On April 7, 2021, the Owner informed RFO there was a closed/broken check valve that led to a loss of pressure in the distribution system.
7. On May 6, 2021, ODW issued a well site approval to drill a well identified as Well No. 1A to supplement the existing well source for the waterworks.
8. On November 17, 2021, the Owner informed RFO of a loss in pressure in the distribution system due to a mechanical failure of a booster pump and hydropneumatic tank pressure switch. The equipment was repaired and the system was brought back online within 12 hours.
9. On December 2, 2021, SESMA Utilities experienced a loss in pressure due to a mechanical failure of both booster pumps. The equipment was repaired, and the system was brought back online.
10. On January 28, 2022, RFO conducted a sanitary survey of SESMA Utilities and observations included:
- a. There was no Emergency Management Plan.
 - b. The atmospheric tank and hydropneumatic tank were heavily corroded with peeling paint.
 - c. There was no certificate of inspection for the hydropneumatic tank.
 - d. There were elevated levels of iron and manganese at the entry point and in the distribution system.
 - e. The hydropneumatic tank water level could not be determined through the sight glass tube because the tube was significantly stained.
11. On February 3, 2022, RFO and the Owner's personnel held a conference call to discuss the recent sanitary survey findings and ongoing issues at the system.
12. On February 7, 2022, RFO sent a warning letter to the Owner for unresolved NOAVs related to reliability and maintaining pressure within the system.
13. On February 8, 2022, the Owner's personnel met with the Virginia Rural Water Association at SESMA Utilities and investigated the entire system and performed a leak detection investigation on the system. No significant leaks were identified during the investigation.
14. On February 25, 2022, the Owner drilled Well No. 1A at a location approved by ODW.
15. On March 14, 2022, RFO issued an NOAV for a lack of reliability due to the pressure loss events observed between December 2021 and January 2022. The NOAV required the submission of an Emergency Management Plan.

16. On April 29, 2022, a technician for the Owner cleaned the sight glass that was noted as a deficiency in previous sanitary survey reports.
17. On April 29, 2022, the Owner contacted RFO to report a loss in pressure due to a malfunctioning well pump. The pump was pulled and was found to have a significant amount of iron blocking the inlet screen. The pump was replaced and the system brought back online.
18. On August 3, 2022, the Owner's personnel met with Virginia Rural Water Association on site to complete a leak detection investigation. No leaks were detected during this investigation.
19. On January 10, 2023, ODW and the Owner's personnel held a preliminary engineering conference for the application of a Planning and Design Grant, as required for the submittal of the Drinking Water State Revolving Fund grant application.
20. On March 23, 2023, the Owner submitted a Drinking Water State Revolving Fund application to apply for funding for the development and engineering design to bring the previously drilled well online.
21. On July 7, 2023, ODW informed the Owner that ODW was awarding Planning and Design Grant funding to assess and engineer the connection of the new well.
22. On July 10, 2023, the Owner contacted RFO to report another loss of pressure in the distribution system due to consecutive mechanical failures in both booster pumps. One of the booster pumps was rebuilt and the system was back online in 18 hours.
23. On July 26, 2023, RFO issued an NOAV to SESMA Utilities for a lack of reliability due to a loss of pressure in the system on July 10, 2023.
24. The Owner reports the following items of concern at SESMA Utilities:
 - a. Well yield has decreased significantly from the permitted well yield of 57 gallons per minute to 10 gallons per minute or less in 2024;
 - b. There is a consistent unidentified loss of water during the overnight hours;
 - c. Water outages and low-pressure events have become more frequent, especially in times of high demand including over the summer and on holidays;
 - d. Significant changes in water quality were observed after the earthquake in 2011, including an increase in manganese, iron, and sediment in the water lines that result in customer complaints about the water quality, discoloration and more frequent flushing of SESMA Utilities;
 - e. Increased flushing adds to the lack of supply issue; and
 - f. Repeated high usage events since the earthquake caused the water level in the well to fall below the level of water bearing zones resulting in the accumulation of iron and manganese scale in the well when exposed to air which further reduced the yield over time.
25. The Owner reports it has retained and consulted with many experts and incurred many costs over the last 10 years to address the issues with the water system. The Owner reported there had been difficulties in assessing water losses given the lack of meters on every connection. The Owner reports its efforts include:

- a. Paying three private contractors in addition to enlisting assistance from the Virginia Rural Water Association technician to search for leaks to explain the unusual water usage/loss at SESMA Utilities;
 - b. Removing and cleaning or replacing the well pump three times within the last two years;
 - c. Installing three pump protection devices to limit the possibility of the pump running dry, burning out and causing a water outage;
 - d. Installing a remote monitoring system to constantly monitor system pressure and storage tank levels; and
 - e. Implementation of a text, email, phone call automated system to warn customers of an impending pressure loss or outage, provide updates on repairs, outages, boil water and other messages to limit use or check on their property for leaks.
26. The Owner reports that the above concerns, along with power outages, routine failure of pumps and other mechanical equipment issues, have been identified by the Owner, reported to customers, reported to ODW, and managed and repaired by the Owner as described above.
27. The Regulations, at 12VAC5-590-360.A, state in part, "The owner shall provide and maintain conditions throughout the entirety of the waterworks in a manner that will assure a high degree of capability and reliability to comply with Part II [of the Regulations]. This requirement shall pertain to the source water, transmission, treatment, storage, and distribution facilities and the operation thereof."
28. The Regulations, at 12VAC5-590-510.C, state in part, "All waterworks shall provide a minimum working pressure of 20 psigauge (psig) at all service connections."
29. Pursuant to Va. Code § 32.1-26, the Board may issue orders requiring compliance with any law or regulation administered by the Board.
30. Based on a review of ODW records, the Board concludes that the Owner has violated 12VAC5-590-360.A and 12VAC5-590-510.C of the Regulations, as described in paragraphs B.4 through B.28, above.

Section C. Agreement and Order

Accordingly, by virtue of the authority granted it in Va. Code §§ 32.1-26 and 32.1-27, the Board orders the Owner, and the Owner agrees, to:

1. Perform the actions described in Appendix A of this Order.
2. Pay a civil charge of \$1,232 within 30 days of the effective date of this Order in settlement of the violations cited in this Order.

Payment shall be made by check, certified check, money order or cashier's check payable to the "Treasurer of Virginia," and shall be delivered to:

Virginia Department of Health
Office of Drinking Water
109 Governor Street, 6th Floor
Richmond, Virginia 23219

The Owner shall indicate that the payment is being made in accordance with the requirements of this Order for deposit into the Virginia Water Supply Assistance Grant Fund. If VDH has to refer collection of monies due under this Order to the Department of Law, the Owner shall be liable for attorneys' fees of 30% of the amount outstanding.

Section D. Administrative Provisions

1. This Order addresses and resolves only those violations specifically identified in Section B of this Order. This Order shall not preclude VDH from taking any action authorized by law, including but not limited to taking any action authorized by law regarding additional, subsequent, or subsequently discovered violations or taking subsequent action to enforce this Order.
2. This Order does not suspend, minimize, or otherwise alter the Owner's obligation to comply with federal, state, and local laws and regulations. The Board waives no lawful means of enforcing the laws it administers, the regulations it has adopted, or this Order.
3. The Owner agrees that it has received fair and due process under the Administrative Process Act (Va. Code § 2.2-4000, *et seq.*) and waives its rights to further hearings or challenges, whether civil or administrative, regarding the terms, conditions, or issuance of this Order and specifically waives its rights to a hearing under Va. Code §§ 2.2-4019 or 2.2-4020 as a predicate for issuance of this Order. The Owner consents to the issuance of this Order freely, voluntarily, and after an opportunity to consult counsel of its choice.
4. Any plans, reports, schedules, or specifications submitted by the Owner and approved by the Department pursuant to this Order are incorporated into this Order. Any non-compliance with such approved documents shall be considered a violation of this Order.
5. To the fullest extent authorized by law, this Order is binding on the Owner and its agents and legal representatives, heirs, devisees, executors, administrators, and any successors in interest, jointly and severally as applicable.
6. The Board may modify, rewrite, or amend this Order with the consent of the Owner. Additionally, the Board may modify, rewrite, or amend this Order on the Board's own motion pursuant to the Administrative Process Act, Va. Code §§ 2.2-4000, *et seq.*, after the Owner has received notice and opportunity to be heard. Any request by the Owner for modification of this Order shall be submitted to VDH in writing to be considered for approval by the Board or its designee.
7. This Order shall not preclude the Board, the Commissioner, or the Department from taking any action authorized by law, including but not limited to: (1) taking any action authorized by law regarding any additional, subsequent, or subsequently discovered violations; (2) seeking subsequent remediation of the facility; or (3) taking subsequent action to enforce this Order.
8. Failure by the Owner to comply with any terms of this Order shall constitute a violation of an order of the Board. Nothing herein shall waive the initiation of appropriate enforcement actions or the issuance of additional orders as appropriate by the Board or Department as a result of such violations. Nothing herein shall affect appropriate enforcement actions by any other federal, state, or local regulatory authority.

9. If any provision of this Order is found to be unenforceable for any reason, the remainder of the Order shall remain in full force and effect.
10. The Owner shall be responsible for failure to comply with any of the terms and conditions of this Order unless compliance is made impossible by earthquake, flood, other acts of God, war, strike, or such other unforeseeable circumstances beyond his control and not due to a lack of good faith or diligence on its part. The Owner shall demonstrate that such circumstances were beyond its control and not due to a lack of good faith or diligence on its part. The Owner shall notify the Department in writing within three business days when circumstances are anticipated to occur, are occurring, or have occurred that may delay compliance or cause noncompliance with any requirement of this Order. Such notice shall set forth:
 - a. The reasons for the delay or noncompliance;
 - b. The projected duration of any such delay or noncompliance;
 - c. The measures taken and to be taken by the Owner to prevent or minimize such delay or noncompliance; and
 - d. The timetable by which the Owner will implement such measures and the date full compliance will be achieved.

Failure by the Owner to notify the Department verbally within 24 hours and in writing within three business days of learning of any condition above, which the Owner intends to assert will result in the impossibility of compliance, shall constitute a waiver by the Owner of any claim to inability to comply with a requirement of this Order.

11. This Order shall become effective on the 15th day after a copy of it is mailed to the Owner by certified mail. Va. Code § 32.1-26.
12. This Order shall continue in effect until:
 - a. The Commissioner or his designee terminates the Order after the Owner has completed all of the requirements of this Order;
 - b. The Commissioner or his designee terminates the Order after finding that the circumstances that led to the Order's issuance no longer exist, and that the Order is no longer needed to enforce the PWSL and Regulations to protect the public health;
 - c. The Owner petitions the Commissioner or his designee to terminate the Order after the Owner has completed all of the requirements of the Order and the Commissioner or his designee approves the termination of the Order; or
 - d. The Commissioner or his designee, or the Board, in their sole discretion, terminates the Order upon 30 days written notice to the Owner. Termination of the Order pursuant to this authority without the Owner having satisfied all terms of the Order may result in VDH pursuing further enforcement related to the violations identified in the Order.

The Commissioner or his designee, before finding the requirements of this Order to be completed and terminating the Order, may require demonstration of adequate reliability at SESMA Utilities for a period of up to two years after completion of the requirements in Appendix A.

13. Termination of this Order, or any obligation imposed in this Order, shall not operate to relieve the Owner from its obligation to comply with any statute, regulation, permit condition, other order, certificate, standard, or requirement otherwise applicable.
14. The undersigned representative of the Owner certifies that they are a responsible official authorized to enter into the terms and conditions of this Order and to execute and legally bind the Owner to this document. Any documents to be submitted pursuant to this Order shall also be submitted by a responsible official of the Owner.
15. By the Owner's signature below, the Owner voluntarily agrees to the issuance of this Order.

It is SO ORDERED this day, August 5, 2024

STATE BOARD OF HEALTH
Commonwealth of Virginia



Karen Shelton, MD
State Health Commissioner

SES Mid Atlantic Utilities, Inc., voluntarily agrees to the issuance of this Order.

Stanley M. L.
Name

[Signature]
Signature

Owner
Title

7-18-24
Date

Notary Public:

Commonwealth of Virginia

City/County of Prince William

The foregoing document was signed and acknowledged before me this 18th day of

July, 2024, by SES Mid Atlantic Utilities, Inc.

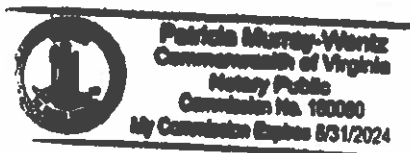
[Signature]
Notary Public

160080

Registration No.

My commission expires: 08-31-2024

Notary seal:



Appendix A

Corrective Action Plan and Schedule for Compliance

The Owner shall:

- a. Within 30 days of the effective date of this Order, submit to ODW a Corrective Action Plan (CAP) and Schedule for review and approval. The Owner is encouraged to consult with RFO in drafting the CAP and Schedule prior to submission thereof. The CAP and Schedule shall set forth actions that the Owner has taken or plans to take, and a schedule within which to take them, to comply consistently with the PWSL and the Regulations and to accomplish the following:
 1. Continue to haul water from a reputable source as needed to provide a minimum working pressure of 20 psig at all service connections.
 2. Notify customers of the use of water hauling at least every 45 days that water hauling operations are taking place. This notification shall include the need for water hauling, the potential for higher-than-normal levels of chlorine in the water, and encourage customers to conserve water. A copy of this notification and a certification of distribution must be submitted to RFO within 10 days of distribution.
 3. Increase monthly bacteriological sampling to two samples each month at approved sample site locations per the Bacteriological Sample Siting Plan for any month where water hauling has occurred.
 4. Measure the chlorine residual at the entry point of the water system weekly. The chlorine shall be maintained at 1.0 mg/L or above, but less than 4.0 mg/L, when water hauling operations are taking place.
 5. Report the amount of water hauled, days of water deliveries, and weekly chlorine residual readings on the monthly operation reports for any month where water hauling has occurred.
 6. Provide a summary of actions taken to improve water system reliability, scheduled activities, and future planned actions to SESMA Utilities' customers every 180 days at a minimum. A copy of this summary and a certification of distribution must be submitted to RFO within 10 days of its distribution to customers.
 7. Provide a notice of status updates and water hauling in annual Consumer Confidence Reports.
 8. Notify SESMA Utilities' customers and RFO within 24 hours of any instances of water pressure below 20 psig in the distribution system.
 9. Provide adequate source capacity for SESMA Utilities to meet estimated maximum daily demands as determined by the maximum monthly water usage over the past 24 months

and a peaking factor of two or approximately 19,000 gallons per day (13 gallons per minute).

10. Provide equipment and facilities with adequate reliability to consistently maintain 20 psig at each service connection in the distribution system at all times. SESMA Utilities must meet all Primary Maximum Contaminant Levels and Secondary Maximum Contaminant Levels pursuant to the Regulations. Reliability and water quality issues to address include:
- i. Minimize delivery of discolored water to customers;
 - ii. Increase equipment reliability including booster pumps, storage tanks, and distribution system piping; and
 - iii. Minimize unaccounted for water that may include leaks and unauthorized usage of water.

Upon ODW's approval of the CAP and Schedule, the Owner can begin implementing the CAP in accordance with the Schedule. The approved CAP and Schedule shall become a part of, and enforceable under, the terms of this Order. If the Owner does not present a CAP and Schedule with terms that are acceptable to ODW such that ODW cannot approve it, and the Owner and ODW are unable to reach agreement on the terms of a mutually agreeable CAP and Schedule, the Commissioner or his designee, or the Board, may terminate this Order subject to Section D.12.d of this Order, which may result in further enforcement action against the Owner as stated therein.

- b. After initial approval of the CAP and Schedule by ODW, submit any proposed modifications to the CAP and Schedule to RFO for review, discussion and consideration for approval prior to the Owner taking any action. The Owner shall submit any proposed modification of the CAP and Schedule to RFO at least 30 days prior to expiration of a deadline that the Owner seeks to modify.
- c. Submit to RFO quarterly reviews relating progress to the CAP and Schedule. The Owner shall send quarterly submissions to RFO by the 10th of the month following the end of the reported quarter.
- d. Upon completion of the CAP, submit to RFO a final report verifying that the CAP has been completed in accordance with the terms of this Order.
- e. Mail all submittals and reports required by this Order to:

Laura Taylor, Compliance Specialist
Richmond Field Office
109 Governor Street, 6th Floor
Richmond, Virginia 23219