

**UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION IX**

**75 Hawthorne Street
San Francisco, CA 94105-3901**

IN THE MATTER OF:

Docket No. PWS-AO-2020-6005

Oasis Mobile Home Park,
Scott Lawson
Public Water System, PWS ID. No. 090605129
Respondents.
Proceedings pursuant to Section 1431(a) of the
Safe Drinking Water Act, 42 U.S.C. § 300i(a).

EMERGENCY ADMINISTRATIVE ORDER

AUTHORITY

1. The Enforcement and Compliance Assurance Division for Region 9 of the U.S. Environmental Protection Agency (“EPA”) issues this Emergency Administrative Order (“Order”) to Oasis Mobile Home Park and Scott Lawson (“Respondents”) pursuant to EPA’s authority under Section 1431(a) of the Safe Drinking Water Act (“SDWA”), 42 U.S.C. § 300i(a). The undersigned officials have been properly delegated this authority.
2. EPA has primary enforcement responsibility for the SDWA public water system supervision program on the Torres Martinez Desert Cahuilla Indian Reservation (“Reservation”). No other governmental authority has applied for and been approved to administer the program on the Reservation.
3. EPA may issue an Order pursuant to Section 1431(a) of the SDWA, 42 U.S.C. § 300i(a), when a contaminant is present or is likely to enter a public water system, which may present an imminent and substantial endangerment to the health of persons, and appropriate state and local authorities have not acted to protect the health of such persons.

FINDINGS OF FACT AND CONCLUSIONS OF LAW

4. Respondents are individuals and/or corporation, company, association, and officers and agents of said corporation, company or association and therefore each is a “person” as that term is defined in the Act. 42 U.S.C. § 300f(12), and 40 C.F.R. § 141.2, for purposes of federal enforcement under the SDWA.

5. Respondents own and operate a “public water system” within the meaning of Section 1401(4) of the SDWA, 42 U.S.C. § 300f(4), and 40 C.F.R. § 141.2, known as the Oasis Mobile Home Park Public Water System (“System” or “Oasis”), which serves water for human consumption through approximately 390 service connections to approximately 1,900 persons located on the Torres Martinez Desert Cahuilla Indian Reservation at 88740 Avenue 70, Thermal, California 92274.
6. Respondents’ ownership and operation of a public water system makes each a “supplier of water” within the meaning of Section 1401(5) of the SDWA, 42 U.S.C. § 300f(5), and 40 C.F.R. § 141.2, and subject to the requirements of Part B of the SDWA, 42 U.S.C. § 300g, and its implementing regulations at 40 C.F.R. Part 141.
7. The System, which regularly serves at least 25 year-round residents, is a “community water system” (“CWS”) within the meaning of Section 1401(15) of the SDWA, 42 U.S.C. § 300f(15), and 40 C.F.R. § 141.2.
8. The System’s arsenic treatment is an Environgen Technologies coagulation filtration system that uses a proprietary media. The source water is pumped through a LAKOS sand separator to remove most of the particles from the flow stream and then chlorine is added to the water to oxidize arsenic from arsenic 3 to arsenic 5 to help in the arsenic removal process. Afterwards, in the coagulation process, the water is injected with ferric chloride solution to produce arsenic-containing floc, a solid. The water is then piped through eight filter vessels, each containing a proprietary manganese oxide media, to remove the floc. The treatment process has a backwash component that cleans the filters by removing the arsenic saturated iron oxides and other particulates that may have been in the filtered water. After the water is filtered through the vessels, it is discharged to storage tanks and then pumped to distribution.
9. The SDWA’s National Primary Drinking Water Regulations (“NPDWRs”) at 40 C.F.R. § 141.62(b)(16) establish the Maximum Contaminant Level (“MCL”) for arsenic, which is set at 10 parts per billion (“ppb”).
10. The System is solely supplied by groundwater that has naturally occurring arsenic levels above the MCL of 10 ppb.
11. EPA has brought previous enforcement actions against Respondents. In September 2004, EPA issued an Administrative Order for failure to monitor and report for numerous SDWA chemical and microbiological contaminants. In September 2007, EPA and Respondents entered into a Consent Agreement and Final Order regarding SDWA monitoring and reporting violations, among others, that included an \$18,000 penalty. In August 2019, EPA issued an Emergency Administrative Order to Respondents due to arsenic levels after treatment at the Entry Point to the Distribution System (“EPDS”) from 89 ppb to 97 ppb, which were also considered violations of the arsenic MCL.

12. Prior to issuing this Order, EPA consulted with tribal and local authorities and confirmed they have not acted to protect the health of persons in this instance.
13. EPA has determined that the following conditions at the System may present an imminent and substantial endangerment to the health of persons, based on the facts indicated in paragraphs 14 through 24 below. The EPA has determined this Order is necessary to protect public health.

Risks Posed by Arsenic Exposure

14. Exposure to people by arsenic may result in both acute and chronic health effects. Arsenic is a known carcinogen and drinking high levels over many years can increase the chance of lung, bladder and skin cancers, as well as heart disease, diabetes and neurological damage.

Arsenic in the Distribution System

15. A sanitary survey taken on February 25, 2020 indicates that the distribution system is made up of 1, 2, 3, 4, 6 and 8-inch PVC pipe. Many of the homes served by the distribution system have galvanized pipe, PVC, and copper.
16. On July 13, 2020 a community group conducted monitoring and submitted information to EPA regarding arsenic tests at Oasis showing arsenic levels in the homes sampled at 70, 40 and 30 ppb. These results were obtained using a HACH 280000 Low Range test taken at the tap in the homes.
17. On July 30, 2020, the same community group conducted another round of sampling and had the samples tested at Babcock Laboratories, Inc., a California certified laboratory. The arsenic levels in three of the homes at Oasis were at 84, 83, and 86 ppb. The community group submitted the certified results to EPA on August 17, 2020.
18. On August 26, 2020, Respondents' representatives took samples in individual homes, a water storage tank and EPDS at Oasis and had them analyzed at Babcock Laboratories, Inc. EPA and Torres Martinez representatives were present to oversee the sampling. The arsenic levels taken at the taps of residential homes ranged from 78 to 90 ppb, water storage tank at 87 ppb, and EPDS at 80 ppb, respectively.
19. Since October 31, 2019, the System collected 29 compliance samples at the EPDS and all results, other than the August 26, 2020 sampling event, were below the MCL. The System conducted weekly sampling through May 2020 and then monthly sampling up to July 2020.
20. Based on data collected by the Respondents, the community group, and in light of research papers on arsenic in distribution systems, EPA has determined that arsenic-containing precipitate is likely collecting in the System's piping and storage of the distribution system as well as the plumbing infrastructure of Oasis residential homes and is being released at

concentrated levels. EPA believes this to be occurring because arsenic remaining in the water precipitates and concentrates due to iron or other chemicals that can precipitate arsenic present in the water or in galvanized piping. This phenomenon would also explain the discrepancy between recent sampling events showing elevated levels of arsenic within the homes while, at least until the August 26, 2020 sampling event, levels of arsenic at the EPDS have remained below the MCL. The elevated levels of arsenic resulting from physical and chemical changes within the distribution system may be exposing the residents to arsenic concentrations above the MCL.

High Arsenic Levels in Well #2

21. On August 24, 2020, Respondents reported to EPA that Well #1, the primary source of water for the System, had failed due to a greatly reduced flow and a high level of sand and clay accumulation at the sand trap filter and the treatment system. As a result, Respondents had switched to another well as the primary source of water for the System, Well #2, on August 22, 2020. This well has raw water with arsenic up to 100 ppb. EPA had previously informed Respondents that they needed to notify and coordinate with EPA prior to using Well #2 to ensure that all required testing be completed but Respondents failed to do so before switching wells.
22. Respondents' arsenic treatment, the Environgen Technologies coagulation filtration system, was only designed to treat arsenic at a range of 10 to 19 ppb in water, which was the range of arsenic in the raw water for Well #1.
23. Given that Well #2 has naturally high levels of arsenic up to 100 ppb, there is a likelihood that Respondents' treatment system, based upon its design, may not reliably and consistently treat the arsenic at Well #2 below the arsenic MCL. This has been demonstrated by the recent sampling on August 26, 2020, showing high levels of arsenic at the EPDS after the switch to Well #2.
24. Based upon the arsenic treatment system not being designed to remove levels of arsenic above 19 ppb, there is a risk of exposure of the residents to arsenic concentrations above the MCL as a result of use of Well #2.

EMERGENCY ORDER

Intent to Comply

25. Within 24 hours of receipt of this Order, Respondents must notify EPA in writing of their intent to comply with the terms of this Order. To satisfy this requirement, Respondents must email the EPA points of contact identified below in Paragraph 46.

Alternative Water

26. Respondents shall provide an alternative source of water (e.g., bottled water) to customers no later than September 12, 2020, by 5:00 pm, that meets all applicable SDWA requirements at 40 C.F.R. Part 141. Respondents shall provide alternative source of water to its customers at no direct cost to customers (including as rent increases) until at least such time as EPA notifies Respondents in writing that they may discontinue supplying alternative source of water to the System's customers.
27. Notwithstanding the requirement of Paragraph 26, within forty-eight (48) hours of the effective date of this Order, Respondents shall develop, and submit to EPA for approval in accordance with Paragraph 47 an Alternative Water Source Plan ("AWSP") wherein Respondents detail how and where they will provide at least one gallon of potable water per day, per person. This per person daily allotment of alternative water must be made accessible to all persons served by the System. Additionally, the AWSP will outline how Respondents plan to inform every person served by the System of how to obtain the alternative water. If bottled water is going to be used by Respondents as alternative water in accordance with this Order, Respondents must ensure that the bottled water is certified by the International Bottled Water Association ("IBWA") or NSF International.
28. Once this AWSP is approved by EPA in writing, Respondents shall implement the AWSP within 24 hours as the method to ensure compliance with the ongoing alternative water requirement of Paragraph 26. The implementation of the AWSP shall remain in effect until EPA provides written notification to Respondents that AWSP implementation is no longer required.
29. In accordance with 40 CFR Part 141, Subpart Q, Respondents shall provide timely public notice (in English and Spanish) to System users regarding the alternative source of water, along with a description of the health effects associated with arsenic in drinking water. Respondents shall notify System users no later than 24 hours after implementing the AWSP.

Technical Provider

30. Within seven (7) days of the Order's effective date, Respondents must identify and request EPA's approval to retain one or more properly certified, technical providers with sufficient technical and/or engineering knowledge and experience in the areas of drinking water system operations and design to assess the operation of the treatment system in regard to addressing concerns presented by the presence of arsenic in the distribution system and in the raw water being provided by Well #2. The technical providers shall be qualified to assess short- and long- term System compliance. Respondents must request approval via email to EPA points of contact identified in Paragraph 46.
31. Upon EPA's approval of the technical provider(s), Respondents have forty-eight (48) hours to retain the technical provider(s).

Short Term Compliance Plan

32. Within thirty (30) days of the Order's effective date, Respondents shall submit to EPA for approval in accordance with Paragraph 47 a Short Term Compliance Plan prepared by their technical providers that identifies short term measures described in Paragraphs 33-41 to address the risks posed by arsenic identified in this Order with its current arsenic treatment system.

Increased Arsenic and Iron Distribution System Sampling and Analysis

33. The Short Term Compliance Plan shall include a distribution system sampling plan ("Sampling Plan") to identify throughout the distribution system at Oasis on an ongoing basis levels of arsenic, iron, and any other inorganic constituent that the Technical Provider or other reliable source of technical information identifies as potentially precipitating or concentrating arsenic. The Sampling Plan shall also be crafted to verify the efficacy of any measures put in place to control arsenic within the distribution system. The Sampling Plan shall identify locations for samples representative of all parts of the distribution system and all types of premise plumbing to identify levels of constituents being sampled for throughout the system by measuring levels at tap samples of individual homes within the System. The Sampling Plan, at a minimum, shall require monitoring consistent with this paragraph no less than once per week commencing upon EPA's approval of the Sampling Plan, alone or in conjunction with EPA's approval of the Short Term Compliance Plan, at the sampling locations identified in the Sampling Plan.
34. The Sampling Plan shall require that samples shall be taken after the tap is flushed on full flow for 1-2 minutes and then the sample shall be collected while on full flow and that all arsenic samples shall be sent to a State-certified laboratory for analysis. The Sampling Plan shall also require that Respondents provide all results to EPA within twenty four (24) hours of receiving them.
35. Respondents shall implement the Sampling Plan within two (2) days of EPA's approval and continue implementation until they receive notice from EPA that it is no longer necessary.
36. Respondents shall comply with any additional and/or more frequent sampling and analysis requirements determined necessary by EPA following written notice by EPA of any such requirements.
37. Respondents shall continue to comply with all applicable monitoring and reporting requirements of the SDWA and NPDWRs in accordance with 40 C.F.R. Part 141.

Flushing of the System

38. The Short Term Compliance Plan shall include a System-wide (including homes) plan to intermittently flush sitting water from the entire system ("Flushing Plan"). The Flushing Plan shall include a schedule of implementation and be designed in coordination with the results

of the Sampling Plan to remove all iron and arsenic from the distribution system and plumbing within each home.

39. Respondents shall implement the Flushing Plan within two (2) days of EPA's approval pursuant to Paragraph 47, alone or in conjunction with EPA's approval of the Short Term Compliance Plan, and continue implementation until EPA notifies Respondents in writing that flushing is no longer necessary.

Assessment and Corrective Action Plan

40. The Short Term Compliance Plan shall include an Assessment and Corrective Action Plan that analyzes and provides short term corrective actions for both arsenic precipitating or concentrating in the distribution system and the high levels of arsenic found in Well #2. At a minimum, the Short Term Compliance Plan shall include the following measures to be implemented as quickly as possible:

- a. For arsenic precipitating or concentrating within the distribution system:
 - i. An identification of the reason for precipitation or concentration of arsenic within the distribution system, including references to data, studies, or scientific articles forming the basis for the reasoning.
 - ii. A detailed plan how the Respondents can address the reasons for precipitation or concentration of arsenic in the distribution system, through either physical and/or operational changes at the System, including an implementation schedule for any corrective action found to be necessary.
 - iii. A discussion of how samples taken under the Sampling Plan will demonstrate the efficacy of any corrective action efforts.
 - iv. A discussion of any contingencies to be taken in case the identified corrective action is not effective at reducing or eliminating the precipitation or concentration of arsenic within the distribution system.
- b. For the control of high level of arsenic contained in Well #2:
 - i. An identification of any bottlenecks or operational reasons why the current arsenic treatment technology would be limited from being able to treat the arsenic contained in the water from Well #2 sufficiently so that Respondents could comply with the arsenic MCL.
 - ii. A detailed plan how the Respondents can address any limitations identified for the arsenic control technology not being able to control the arsenic in the water from Well #2 to below the arsenic MCL, through

either physical and/or operational changes at the System, including an implementation schedule for any corrective action found to be necessary.

- iii. A discussion of how samples taken under the Sampling Plan will demonstrate the efficacy of any corrective action efforts.
 - iv. A discussion of any contingencies to be taken in case the identified corrective action is not effective at allowing the current arsenic treatment plan being able to remove arsenic from Well #2 sufficiently so that the System could meet the arsenic MCL.
41. Respondents shall implement the approved Assessment and Corrective Action Plan within two (2) days EPA's approval pursuant to Paragraph 47, alone or in conjunction with EPA's approval of the Short Term Compliance Plan.
42. Within six (6) months of the effective date of this Order, Respondents shall develop and submit to EPA for approval in accordance with Paragraph 47, a standard operating procedures ("SOP") to implement, on an ongoing operational basis, any measures identified in the Assessment and Corrective Action Plan that have been demonstrated to be effective at maintaining arsenic at or below the MCL in the distribution system and at the point of entry into the distribution system.
43. If implementation of the Corrective Action Plan fails to correct excess arsenic and iron in the System, the EPA may order further steps.

Long Term Compliance Plan

44. Within Ninety (90) days of the Order's effective date, Respondents shall submit to EPA for review and comment a Long Term Compliance Plan prepared by their technical providers that identifies measures and strategies for ensuring the long term and sustainable provision of water to the Oasis community meeting the arsenic MCL.
45. The Long Term Compliance Plan shall consider and recommend one of the following as a long-term solution to address the risks identified in this Order: (1) identification and development of one or more additional wells that contain arsenic below or close to the arsenic MCL to serve as the raw water source for the System and/or (2) a plan for consolidation of the System with an outside provider of water, such as the Coachella Valley Irrigation District. In considering these two long term options, the Long Term Compliance Plan shall also include the following components:
- a. New Production Well Requirements: As part of the evaluation of one or more new wells for the System, Respondents shall follow the requirements of the Attachment to this Order for consideration and development of any new wells, and the Long Term Compliance Strategy shall describe how these requirements

will be met. The Attachment addressed various aspects of new well development, including *Zone Testing*, *Well Production* and *Well Capacity*.

- b. Consolidation Consideration Study: As part of the evaluation of consolidation, Respondents shall provide a Study on the feasibility of consolidating the System with public water systems and facilities within a five (5) mile radius of the System, analyzing both the physical consolidation of Respondents' System to participating water systems (physical consolidation) and/or the management of the participating water system of Respondents' System (managerial consolidation). This Study shall include the following components:
- i. A description of how contact will be initiated with possible public water system candidates for consolidation;
 - ii. An evaluation of the cost of construction of required infrastructure improvements;
 - iii. An evaluation of the cost differential and pros and cons of both impacted systems and communities (customers);
 - iv. A discussion of how preliminary agreements/commitments will be prepared for parties to participate in consolidation of facilities;
 - v. A discussion of water service agreements will be drafted including easements and possible transfer of water rights to restructured water system;
 - vi. An evaluation of federal and tribal laws, policies and procedures (i.e., Torres Martinez Desert Cahuilla Tribe) for access, water rights and easement requirements as well as operation, construction and water infrastructure right of ways;
 - vii. A discussion of how agreements authorizing to act on the behalf of the participating water system will be drafted if such authorizations are needed; and
 - viii. A description of how long it will take to complete the consolidation project.

GENERAL PROVISIONS

Notifications

46. Respondents must notify EPA within twenty (24) hours after learning of a violation or situation with the potential to have serious adverse effects on human health as a result of short-term exposure to contaminants. 40 C.F.R. § 141.202(b)(2).

Reporting

47. Within five (5) business days of this Order's effective date, Respondents must begin and continue to submit weekly updates to EPA on Respondents' progress complying with this Order. At a minimum, the update should include any measures Respondents have taken to identify and address the problems with the System, any sample data, and a summary of all efforts to meet the requirements of this Order, including the provision of alternative water. These reports must be submitted via email to both of the following points of contact for EPA:

Everett Pringle
SDWA Enforcement Section
U.S. Environmental Protection Agency
75 Hawthorne Street (ENF-3-3)
San Francisco, CA 94105
Phone: (415) 972-3548
E-mail: pringle.everett@epa.gov

Jason Gambatese
Tribal Drinking Water Team
U.S. Environmental Protection Agency
75 Hawthorne Street (WTR-4)
San Francisco, CA 94105
phone: 415-972-3571
Email: gambatese.jason@epa.gov

Review and Approval of Submissions

48. For any submission required under this Order for EPA approval, EPA may approve or disapprove in writing the submission, in whole or in part. If EPA disapproves a submission, or any component of a submission, Respondents shall address all deficiencies identified by EPA and resubmit the submission or relevant components for EPA's review within fourteen (14) days of receipt of EPA's disapproval. Respondents shall immediately implement those components of a submission that have been approved by EPA. Any submission or component of a submission approved by EPA become enforceable conditions of this Order.

Bi-weekly Meetings

49. No later than 30-days after the receipt of this Order, Respondents shall convene bi-weekly meetings by teleconference and/or other web based/virtual communication platforms and invite the Technical Provider, EPA or other pertinent stakeholders to discuss implementation of this Order. Respondents shall provide invitations at least seven (7) days in advance.

Effects of this Order

50. This Order does not affect any legal requirement or EPA's legal enforcement options in this matter. This Order constitutes final agency action. Under Section 1448(a) of the SDWA, 42 U.S.C. § 300j-7(a), Respondents may seek federal judicial review of SDWA Section 1431 emergency orders.
51. This Order does not relieve Respondents from its obligation to comply with any applicable federal, state, tribal, or local law.

52. Pursuant to SDWA Section 1431(b), 42 U.S.C. § 300i, in the event Respondents violate, fail or refuse to comply with any of the terms or provisions of this Order, EPA may commence a civil action in U.S. District Court to require compliance with this Order and to assess a civil penalty of up to \$23,963 per day of violation under the SDWA, as adjusted by the Federal Civil Penalties Inflation Adjustment Act of 1990, amended by the Debt Collection Improvement Act of 1996, and the subsequent Civil Monetary Penalty Inflation Adjustment Rule, 40 C.F.R. Part 19.
53. EPA reserves all rights against the Respondents and all other persons to take any further civil, criminal, or administrative enforcement action pursuant to any available legal authority. Nothing in this Order shall preclude EPA from taking any additional enforcement actions, including modification of this Order or issuance of additional Orders, and/or additional actions as the EPA may deem necessary, and/or from requiring Respondents in the future to perform additional activities pursuant to the SDWA or any other applicable law.

Modification and Termination of this Order

54. EPA may modify this Order pursuant to its authority under Section 1431 of SDWA. EPA will communicate any modification(s) to Respondents in writing and they shall be incorporated into this Order.
55. The provisions of this Order shall be deemed satisfied upon Respondents' receipt of written notice from EPA that Respondents have demonstrated, to the satisfaction of EPA, that the terms of this Order, including any additional tasks determined by EPA to be required under this Order or any continuing obligation or promises, have been satisfactorily completed.

Issued and effective this 11th day of September 2020.

Amy C. Bowen-Miller, Director
Enforcement & Compliance Assurance Division
U.S. Environmental Protection Agency, Region 9

Of counsel:

Ivan Lieben
Office of Regional Counsel
U.S. EPA – Region 9

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U.S. EPA – Region 9

ATTACHMENT

New Production Well Requirements

A. Zone Testing

1. To ensure optimal water production and water quality is achieved by new or rehabilitated well construction, Respondents shall conduct zone testing (e.g., initiate a test well) prior to drilling large diameter boreholes and installing permanent casing of a production well. Zone testing shall be conducted at water producing zones to reduce the risk of delivering water that exceeds Federal SDWA standards. Among other things, the zone test will include geophysical logging to aid in the selection of optimal water producing zones and adhere to American Water Works Association (AWWA) Standard A100-06 for Water Wells. The following zone testing requirements must be submitted to EPA within ten (10) days of Respondents receiving the test well design information from the well driller and/or analytical results from a state certified laboratory
 - a. Zone testing shall include NPDWRs water quality monitoring and any other chemical, biological or radiological monitoring deemed necessary, in writing by EPA, based on high-risk hydrogeological identifiers or geographic identifiers within 5 miles of the zone testing source.
 - b. All test wells drilled for the purpose of zone testing must provide EPA the following information:
 - i. Depth of test well(s);
 - ii. Water quality sampling;
 - iii. Pump testing;
 - iv. Test well log(s); and
 - v. Test well report summarizing findings.
 - c. EPA may require, in writing, that chemical analysis of the clay strata bounding at the target water producing zones be conducted in elevated-arsenic risk areas, in addition to zone testing.
 - d. EPA must approve, in accordance with Paragraphs 46-47, the efficacy of the zone testing prior to Respondents constructing a production well.

B. Production Well(s)

1. Respondents shall conduct a source water assessment as defined in EPA’s Ground Water Rule Source Water Assessment Guidance Manual that, and at a minimum, meets the following criteria:

Potential Pollution or Contaminated Source	Minimum Horizontal Separation Distance Between Well and Known or Potential Source
Any sewer line (sanitary, industrial, or storm water; main or lateral)	50 feet
Watertight septic tank or subsurface sewage leaching field	100 feet
Cesspool or seepage pit	150 feet
Recycled water use area	50-150 feet depending on level of treatment of recycled water
Animal or fowl enclosure	100 feet

2. Respondents shall provide documentation demonstrating that a well site control zone with a 50-foot radius around the site can be established for protecting the water source from vandalism, tampering, or other threats at the site by easement, zoning, lease, or an alternative approach based on its potential effectiveness in providing protection of the source from contamination. At a minimum, the documentation shall include:
 - a. Design plans and specifications for the well (Well Log);
 - b. Results of all required water quality analyses;
 - c. As-built plans, if available;
 - d. Description of all operation, maintenance, and removal equipment;
 - e. Plans to protect against flooding by ensuring the wellhead terminates a minimum of 18 inches above the finished grade;
 - f. Plans to ensure wellhead and electrical controls are not installed in vaults;
 - g. Plans to provide fittings and electrical connections to enable chlorination facilities to be readily installed;
 - h. Instructions to install non-threaded down-turned sampling tap(s) located on the discharge line between the wellhead and the check valve. Sampling taps used for obtaining samples for bacteriological analysis shall not have a screen, aerator, or other such appurtenance;
 - i. Instructions to allow the well to be pumped to a waste or discharge line that is

- protected against backflow;
- j. Instructions to install a flow meter at a location between water source wellhead casing and the entry point to the distribution, treatment system or water blending location.

C. Well Capacity

1. Respondents shall submit to EPA for approval in accordance with Paragraphs 46 and 47 a Well Capacity Report (“Capacity Report”) proposing appropriate well capacity for new production wells used at the System. Among other things, appropriate well capacity shall be based on well tests and the evaluation and management of the aquifer from which the well draws its source water. The Capacity Report shall be signed off by a registered geologist with groundwater hydrology experience, a licensed engineer with groundwater hydrology experience, or a certified hydrogeologist.
2. Prior to EPA’s review of the Capacity Report, at a minimum, Respondents must ensure that well capacity is based on the operational needs of the water system to effectively deliver reliable and consistent safe drinking water to its customers for human consumption. Respondents must incorporate the following information in the Capacity Report:
 - a. The rationale for the selected well test method and the results;
 - b. The geological environment of the well;
 - c. The historical use of the aquifer;
 - d. Data used from monitoring of other local wells;
 - e. A description of the health risks of contaminants identified in a Source Water Assessment and the likelihood of such contaminants being present in the well’s discharge;
 - f. Design specifications needs of wellhead, point of entry or point of use treatment systems units and/or devices, including backwash flow demands;
 - g. Adjustments made to the estimated capacity based on drawdown, length of the well test, results of the wells test, discharge options, and seasonal variations and expected use of the well; and
 - h. The well test(s) results and capacity analysis.