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Title 22@ Social Security

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Division 4@ Environmental Health

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Chapter 15@ Domestic Water Quality and Monitoring Regulations

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Article 20@ Consumer Confidence Report

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Section 64481@ Content of the Consumer Confidence Report

64481 Content of the Consumer Confidence Report

(a)

A Consumer Confidence Report shall contain information on the source of the water delivered, including:(1) The type of water delivered by the water system (e.g., surface water, ground water) and the commonly used name (if any) and location of the body (or bodies) of water; and (2) If a source water assessment has been completed, notification that the assessment is available, how to obtain it, the date it was completed or last updated, and a brief summary of the system's vulnerability to potential sources of contamination, using language provided by the State Board if the State Board conducted the assessment.

(1)

The type of water delivered by the water system (e.g., surface water, ground water) and the commonly used name (if any) and location of the body (or bodies) of water; and

(2)

If a source water assessment has been completed, notification that the assessment is available, how to obtain it, the date it was completed or last updated, and a brief summary of the system's vulnerability to potential sources of contamination, using language provided by the State Board if the State Board conducted the assessment.

(b)

For any of the following terms used in the Consumer Confidence Report, the water

system shall provide the specified language below: (1) Regulatory Action Level: "The concentration of a contaminant which, if exceeded, triggers treatment or other requirements that a water system must follow." (2) Maximum Contaminant Level or MCL: "The highest level of a contaminant that is allowed in drinking water. Primary MCLs are set as close to the PHGs (or MCLGs) as is economically and technologically feasible. Secondary MCLs are set to protect the odor, taste, and appearance of drinking water." (3) Maximum Contaminant Level Goal or MCLG: "The level of a contaminant in drinking water below which there is no known or expected risk to health. MCLGs are set by the U.S. Environmental Protection Agency." (4) Public Health Goal or PHG: "The level of a contaminant in drinking water below which there is no known or expected risk to health. PHGs are set by the California Environmental Protection Agency." (5) Primary Drinking Water Standard or PDWS: "MCLs, MRDLs, and treatment techniques for contaminants that affect health, along with their monitoring and reporting requirements." (6) Treatment technique: "A required process intended to reduce the level of a contaminant in drinking water." (7) Variances and exemptions: "State Board permission to exceed an MCL or not comply with a treatment technique under certain conditions." (8) Maximum residual disinfectant level or MRDL: "The highest level of a disinfectant allowed in drinking water. There is convincing evidence that addition of a disinfectant is necessary for control of microbial contaminants." (9) Maximum residual disinfectant level goal or MRDLG: "The level of a drinking water disinfectant below which there is no known or expected risk to health. MRDLGs do not reflect the benefits of the use of disinfectants to control microbial contaminants." (10) Level 1 Assessment: "A Level 1 assessment is a study of the water system to identify potential problems and determine (if possible) why total coliform bacteria have been found in our

water system." (11) Level 2 Assessment: "A Level 2 assessment is a very detailed study of the water system to identify potential problems and determine (if possible) why an E. coli MCL violation has occurred and/or why total coliform bacteria have been found in our water system on multiple occasions."

(1)

Regulatory Action Level: "The concentration of a contaminant which, if exceeded, triggers treatment or other requirements that a water system must follow."

(2)

Maximum Contaminant Level or MCL: "The highest level of a contaminant that is allowed in drinking water. Primary MCLs are set as close to the PHGs (or MCLGs) as is economically and technologically feasible. Secondary MCLs are set to protect the odor, taste, and appearance of drinking water."

(3)

Maximum Contaminant Level Goal or MCLG: "The level of a contaminant in drinking water below which there is no known or expected risk to health. MCLGs are set by the U.S. Environmental Protection Agency."

(4)

Public Health Goal or PHG: "The level of a contaminant in drinking water below which there is no known or expected risk to health. PHGs are set by the California Environmental Protection Agency."

(5)

Primary Drinking Water Standard or PDWS: "MCLs, MRDLs, and treatment techniques for contaminants that affect health, along with their monitoring and reporting requirements."

(6)

Treatment technique: "A required process intended to reduce the level of a

contaminant in drinking water."

(7)

Variances and exemptions: "State Board permission to exceed an MCL or not comply with a treatment technique under certain conditions."

(8)

Maximum residual disinfectant level or MRDL: "The highest level of a disinfectant allowed in drinking water. There is convincing evidence that addition of a disinfectant is necessary for control of microbial contaminants."

(9)

Maximum residual disinfectant level goal or MRDLG: "The level of a drinking water disinfectant below which there is no known or expected risk to health. MRDLGs do not reflect the benefits of the use of disinfectants to control microbial contaminants."

(10)

Level 1 Assessment: "A Level 1 assessment is a study of the water system to identify potential problems and determine (if possible) why total coliform bacteria have been found in our water system."

(11)

Level 2 Assessment: "A Level 2 assessment is a very detailed study of the water system to identify potential problems and determine (if possible) why an E. coli MCL violation has occurred and/or why total coliform bacteria have been found in our water system on multiple occasions."

(c)

If any of the following are detected, information for each pursuant to subsection (d) shall be included in the Consumer Confidence Report: (1) Contaminants subject to an MCL, regulatory action level, MRDL, or treatment technique (regulated contaminants), as specified in sections 64426.1, 64426.6, 64431,

64442, 64443, 64444, 64448, 64449, 64533, 64533.5, 64536, 64536.2, 64653, and 64678; (2) Contaminants specified in 40 Code of Federal Regulations part 141.40 (7-1-2007 edition) for which monitoring is required (unregulated contaminants); (3) Microbial contaminants detected as provided under subsection (e); and (4) Sodium and hardness.

(1)

Contaminants subject to an MCL, regulatory action level, MRDL, or treatment technique (regulated contaminants), as specified in sections 64426.1, 64426.6, 64431, 64442, 64443, 64444, 64448, 64449, 64533, 64533.5, 64536, 64536.2, 64653, and 64678;

(2)

Contaminants specified in 40 Code of Federal Regulations part 141.40 (7-1-2007 edition) for which monitoring is required (unregulated contaminants);

(3)

Microbial contaminants detected as provided under subsection (e); and

(4)

Sodium and hardness.

(d)

For contaminants identified in subsection (c), the water system shall include in the Consumer Confidence Report one table or several adjacent tables that have been developed pursuant to this subsection. Any additional monitoring results that a water system chooses to include in its Consumer Confidence Report shall be displayed separately. (1) The data in the table(s) shall be derived from data collected to comply with U.S. Environmental Protection Agency (USEPA) and State Board monitoring and analytical requirements during calendar year 2000 for the first Consumer Confidence Report and subsequent calendar years thereafter.

Where a system is allowed to monitor for regulated contaminants less often than once a year, the table(s) shall include the date and results of the most recent sampling and the Consumer Confidence Report shall include a brief statement indicating that the data presented in the table(s) are from the most recent testing done in accordance with the regulations. No data older than 9 years need be included. (2) For detected regulated contaminants referenced in subsection (c)(1), the table(s) shall include: (A) The MCL expressed as a number equal to or greater than 1.0; (B) For a primary MCL, the public health goal (PHG) in the same units as the MCL; or if no PHG has been set for the contaminant, the table shall include the USEPA maximum contaminant level goal in the same units as the MCL; (C) For a detected contaminant that does not have an MCL, the table(s) shall indicate whether there is a treatment technique or specify the regulatory action level or MRDL (and MRDLG) applicable to that contaminant, and the Consumer Confidence Report shall include the appropriate language specified in subsection (b); (D) For detected contaminants subject to an MCL, except turbidity and E. coli, the sample result(s) collected at compliance monitoring sampling points shall be reported in the same units as the MCL as follows: 1. When compliance is determined by the results of a single sample, an initial sample averaged with one or two confirmation sample(s), or an average of four quarterly or six monthly samples, results shall be reported as follows: A. For a single sampling point, or multiple sampling points for which data is being individually listed on the Consumer Confidence Report: the sample result and, if more than one sample was collected, the average and range of the sample results; B. For multiple sampling points, each of which has been sampled only once and for which data is being summarized together on the Consumer Confidence Report: the average and range of the sample results. If the waters from the sampling points are entering the

distribution system at the same point, a flow-weighted average may be reported; and C. For multiple sampling points, one or more of which has been sampled more than once and for which data is being summarized together on the Consumer Confidence Report: the average of the individual sampling point averages and range of all the sample results. If the waters from the sampling points are entering the distribution system at the same point, a flow-weighted average may be reported.

2. When compliance with the MCL is determined by calculating a running annual average of all samples taken at a monitoring location:

A. The highest running annual average of the monitoring location and the range of sample results or, if monitoring locations are summarized together for the Consumer Confidence Report, the highest running annual average of any of the monitoring locations and the range of sample results from all the monitoring locations; and

B. For TTHM and HAA5 monitored pursuant to section 64534.2(d): the highest locational running annual average (LRAA) for TTHM and HAA5 and the range of individual sample results for all monitoring locations. If more than one location exceeds the TTHM or HAA5 MCL, include the LRAA for all locations that exceed the MCL.

3. When compliance with the MCL is determined on a system-wide basis by calculating a running annual average of all monitoring location averages: the highest running annual average and the range of sample results from all the sampling points.

4. When compliance with the MCL is determined on the basis of monitoring after treatment installed to remove a contaminant: the average level detected in the water entering the distribution system and the range of sample results; and

5. If an MCL compliance determination was made in the year for which sample results are being reported and that determination was based on an average of results from both the previous and reporting years, then the compliance determination average shall be reported, but

the range shall be based only on results from the year for which data is being reported. (E) For turbidity: 1. When it is reported pursuant to the requirements of section 64652.5 (filtration avoidance): the highest value; and 2. When it is reported pursuant to section 64653 (filtration): the highest single measurement based on compliance reporting and the lowest monthly percentage of samples meeting the turbidity limits specified in section 64653 for the filtration technology being used; (F) For lead and copper: the 90th percentile value of the most recent round of sampling, the number of sites sampled, and the number of sampling sites exceeding the action level; (G) For E. coli: the total number of positive samples during the year; and (H) The likely source(s) of any detected contaminants having an MCL, MRDL, regulatory action level, or treatment technique. If the water system lacks specific information on the likely source, the table(s) shall include one or more of the typical sources for that contaminant listed in appendix 64481-A or 64481-B that are most applicable to the system. (3) The table(s) shall clearly identify any data indicating violations of MCLs, regulatory action levels, MRDLs, or treatment techniques and the Consumer Confidence Report shall give information on each violation including the length of the violation, potential adverse health effects (PDWS only), and actions taken by the system to address the violation. To describe the potential health effects, the system shall use the relevant language pursuant to appendices 64465-A through H; and (4) For detected unregulated contaminants for which monitoring is required (except *Cryptosporidium*), the table(s) shall contain the average and range at which the contaminant was detected.

(1)

The data in the table(s) shall be derived from data collected to comply with U.S.

Environmental Protection Agency (USEPA) and State Board monitoring and analytical

requirements during calendar year 2000 for the first Consumer Confidence Report and subsequent calendar years thereafter. Where a system is allowed to monitor for regulated contaminants less often than once a year, the table(s) shall include the date and results of the most recent sampling and the Consumer Confidence Report shall include a brief statement indicating that the data presented in the table(s) are from the most recent testing done in accordance with the regulations. No data older than 9 years need be included.

(2)

For detected regulated contaminants referenced in subsection (c)(1), the table(s) shall include: (A) The MCL expressed as a number equal to or greater than 1.0; (B) For a primary MCL, the public health goal (PHG) in the same units as the MCL; or if no PHG has been set for the contaminant, the table shall include the USEPA maximum contaminant level goal in the same units as the MCL; (C) For a detected contaminant that does not have an MCL, the table(s) shall indicate whether there is a treatment technique or specify the regulatory action level or MRDL (and MRDLG) applicable to that contaminant, and the Consumer Confidence Report shall include the appropriate language specified in subsection (b); (D) For detected contaminants subject to an MCL, except turbidity and E. coli, the sample result(s) collected at compliance monitoring sampling points shall be reported in the same units as the MCL as follows: 1. When compliance is determined by the results of a single sample, an initial sample averaged with one or two confirmation sample(s), or an average of four quarterly or six monthly samples, results shall be reported as follows: A. For a single sampling point, or multiple sampling points for which data is being individually listed on the Consumer Confidence Report: the sample result and, if more than one sample was collected, the average and range of the sample results; B. For multiple sampling points, each of which has been sampled only once and for which data is being summarized together on

the Consumer Confidence Report: the average and range of the sample results. If the waters from the sampling points are entering the distribution system at the same point, a flow-weighted average may be reported; and C. For multiple sampling points, one or more of which has been sampled more than once and for which data is being summarized together on the Consumer Confidence Report: the average of the individual sampling point averages and range of all the sample results. If the waters from the sampling points are entering the distribution system at the same point, a flow-weighted average may be reported.

2. When compliance with the MCL is determined by calculating a running annual average of all samples taken at a monitoring location:

A. The highest running annual average of the monitoring location and the range of sample results or, if monitoring locations are summarized together for the Consumer Confidence Report, the highest running annual average of any of the monitoring locations and the range of sample results from all the monitoring locations; and B. For TTHM and HAA5 monitored pursuant to section 64534.2(d): the highest locational running annual average (LRAA) for TTHM and HAA5 and the range of individual sample results for all monitoring locations. If more than one location exceeds the TTHM or HAA5 MCL, include the LRAA for all locations that exceed the MCL.

3. When compliance with the MCL is determined on a system-wide basis by calculating a running annual average of all monitoring location averages: the highest running annual average and the range of sample results from all the sampling points.

4. When compliance with the MCL is determined on the basis of monitoring after treatment installed to remove a contaminant: the average level detected in the water entering the distribution system and the range of sample results; and

5. If an MCL compliance determination was made in the year for which sample results are being reported and that determination was based on an average of results from both the previous and reporting years, then the compliance determination average shall be reported, but the

range shall be based only on results from the year for which data is being reported. (E) For turbidity: 1. When it is reported pursuant to the requirements of section 64652.5 (filtration avoidance): the highest value; and 2. When it is reported pursuant to section 64653 (filtration): the highest single measurement based on compliance reporting and the lowest monthly percentage of samples meeting the turbidity limits specified in section 64653 for the filtration technology being used; (F) For lead and copper: the 90th percentile value of the most recent round of sampling, the number of sites sampled, and the number of sampling sites exceeding the action level; (G) For E. coli: the total number of positive samples during the year; and (H) The likely source(s) of any detected contaminants having an MCL, MRDL, regulatory action level, or treatment technique. If the water system lacks specific information on the likely source, the table(s) shall include one or more of the typical sources for that contaminant listed in appendix 64481-A or 64481-B that are most applicable to the system.

(A)

The MCL expressed as a number equal to or greater than 1.0;

(B)

For a primary MCL, the public health goal (PHG) in the same units as the MCL; or if no PHG has been set for the contaminant, the table shall include the USEPA maximum contaminant level goal in the same units as the MCL;

(C)

For a detected contaminant that does not have an MCL, the table(s) shall indicate whether there is a treatment technique or specify the regulatory action level or MRDL (and MRDLG) applicable to that contaminant, and the Consumer Confidence Report shall include the appropriate language specified in subsection (b);

(D)

For detected contaminants subject to an MCL, except turbidity and E. coli, the sample

result(s) collected at compliance monitoring sampling points shall be reported in the same units as the MCL as follows:

1. When compliance is determined by the results of a single sample, an initial sample averaged with one or two confirmation sample(s), or an average of four quarterly or six monthly samples, results shall be reported as follows:
 - A. For a single sampling point, or multiple sampling points for which data is being individually listed on the Consumer Confidence Report: the sample result and, if more than one sample was collected, the average and range of the sample results;
 - B. For multiple sampling points, each of which has been sampled only once and for which data is being summarized together on the Consumer Confidence Report: the average and range of the sample results. If the waters from the sampling points are entering the distribution system at the same point, a flow-weighted average may be reported;
 - C. For multiple sampling points, one or more of which has been sampled more than once and for which data is being summarized together on the Consumer Confidence Report: the average of the individual sampling point averages and range of all the sample results. If the waters from the sampling points are entering the distribution system at the same point, a flow-weighted average may be reported.
2. When compliance with the MCL is determined by calculating a running annual average of all samples taken at a monitoring location:
 - A. The highest running annual average of the monitoring location and the range of sample results or, if monitoring locations are summarized together for the Consumer Confidence Report, the highest running annual average of any of the monitoring locations and the range of sample results from all the monitoring locations;
 - B. For TTHM and HAA5 monitored pursuant to section 64534.2(d): the highest locational running annual average (LRAA) for TTHM and HAA5 and the range of individual sample results for all monitoring locations. If more than one location exceeds the TTHM or HAA5 MCL, include the LRAA for all locations that exceed the MCL.
3. When compliance with the MCL is determined on a system-wide basis by calculating a running annual average of all monitoring location averages: the highest running annual

average and the range of sample results from all the sampling points. 4. When compliance with the MCL is determined on the basis of monitoring after treatment installed to remove a contaminant: the average level detected in the water entering the distribution system and the range of sample results; and 5. If an MCL compliance determination was made in the year for which sample results are being reported and that determination was based on an average of results from both the previous and reporting years, then the compliance determination average shall be reported, but the range shall be based only on results from the year for which data is being reported.

1.

When compliance is determined by the results of a single sample, an initial sample averaged with one or two confirmation sample(s), or an average of four quarterly or six monthly samples, results shall be reported as follows: A. For a single sampling point, or multiple sampling points for which data is being individually listed on the Consumer Confidence Report: the sample result and, if more than one sample was collected, the average and range of the sample results; B. For multiple sampling points, each of which has been sampled only once and for which data is being summarized together on the Consumer Confidence Report: the average and range of the sample results. If the waters from the sampling points are entering the distribution system at the same point, a flow-weighted average may be reported; and C. For multiple sampling points, one or more of which has been sampled more than once and for which data is being summarized together on the Consumer Confidence Report: the average of the individual sampling point averages and range of all the sample results. If the waters from the sampling points are entering the distribution system at the same point, a flow-weighted average may be reported.

A.

For a single sampling point, or multiple sampling points for which data is being individually listed on the Consumer Confidence Report: the sample result and, if more than one sample was collected, the average and range of the sample results;

B.

For multiple sampling points, each of which has been sampled only once and for which data is being summarized together on the Consumer Confidence Report: the average and range of the sample results. If the waters from the sampling points are entering the distribution system at the same point, a flow-weighted average may be reported; and

C.

For multiple sampling points, one or more of which has been sampled more than once and for which data is being summarized together on the Consumer Confidence Report: the average of the individual sampling point averages and range of all the sample results. If the waters from the sampling points are entering the distribution system at the same point, a flow-weighted average may be reported.

2.

When compliance with the MCL is determined by calculating a running annual average of all samples taken at a monitoring location: A. The highest running annual average of the monitoring location and the range of sample results or, if monitoring locations are summarized together for the Consumer Confidence Report, the highest running annual average of any of the monitoring locations and the range of sample results from all the monitoring locations; and B. For TTHM and HAA5 monitored pursuant to section 64534.2(d): the highest locational running annual average (LRAA) for TTHM and HAA5 and the range of individual sample results for all monitoring locations. If more than one location exceeds the TTHM or HAA5 MCL, include the LRAA for all locations that exceed the MCL.

A.

The highest running annual average of the monitoring location and the range of sample results or, if monitoring locations are summarized together for the Consumer Confidence Report, the highest running annual average of any of the monitoring locations and the range of sample results from all the monitoring locations; and

B.

For TTHM and HAA5 monitored pursuant to section 64534.2(d): the highest locational running annual average (LRAA) for TTHM and HAA5 and the range of individual sample results for all monitoring locations. If more than one location exceeds the TTHM or HAA5 MCL, include the LRAA for all locations that exceed the MCL.

3.

When compliance with the MCL is determined on a system-wide basis by calculating a running annual average of all monitoring location averages: the highest running annual average and the range of sample results from all the sampling points.

4.

When compliance with the MCL is determined on the basis of monitoring after treatment installed to remove a contaminant: the average level detected in the water entering the distribution system and the range of sample results; and

5.

If an MCL compliance determination was made in the year for which sample results are being reported and that determination was based on an average of results from both the previous and reporting years, then the compliance determination average shall be reported, but the range shall be based only on results from the year for which data is being reported.

(E)

For turbidity: 1. When it is reported pursuant to the requirements of section 64652.5 (filtration avoidance): the highest value; and 2. When it is reported pursuant to section 64653 (filtration): the highest single measurement based on compliance reporting and the lowest monthly percentage of samples meeting the turbidity limits specified in section 64653 for the filtration technology being used;

1.

When it is reported pursuant to the requirements of section 64652.5 (filtration avoidance): the highest value; and

2.

When it is reported pursuant to section 64653 (filtration): the highest single measurement based on compliance reporting and the lowest monthly percentage of samples meeting the turbidity limits specified in section 64653 for the filtration technology being used;

(F)

For lead and copper: the 90th percentile value of the most recent round of sampling, the number of sites sampled, and the number of sampling sites exceeding the action level;

(G)

For E. coli: the total number of positive samples during the year; and

(H)

The likely source(s) of any detected contaminants having an MCL, MRDL, regulatory action level, or treatment technique. If the water system lacks specific information on the likely source, the table(s) shall include one or more of the typical sources for that contaminant listed in appendix 64481-A or 64481-B that are most applicable to the system.

(3)

The table(s) shall clearly identify any data indicating violations of MCLs, regulatory action levels, MRDLs, or treatment techniques and the Consumer Confidence Report shall give information on each violation including the length of the violation, potential adverse health effects (PDWS only), and actions taken by the system to address the violation. To describe the potential health effects, the system shall use the relevant language pursuant to appendices 64465-A through H; and

(4)

For detected unregulated contaminants for which monitoring is required (except Cryptosporidium), the table(s) shall contain the average and range at which the contaminant was detected.

(e)

If the system has performed any monitoring for *Cryptosporidium* that indicates that *Cryptosporidium* may be present in the source water or the finished water, the Consumer Confidence Report shall include a summary of the monitoring results and an explanation of their significance.

(f)

If the system has performed any monitoring for radon that indicates that radon is present in the finished water, the Consumer Confidence Report shall include the monitoring results and an explanation of their significance.

(g)

For the year covered by the report, the Consumer Confidence Report shall note any violations of paragraphs (1) through (7) and give related information, including any potential adverse health effects, and the steps the system has taken to correct the violation. (1) Monitoring and reporting of compliance data. (2) Filtration, disinfection, and recycled provisions prescribed by sections 64652, 64652.5, 64653, 64653.5(b), or 64654. For systems that have failed to install adequate filtration or disinfection equipment or processes, or have had a failure of such equipment or processes that constitutes a violation, the Consumer Confidence Report shall include the health effects language pursuant to appendix 64465-B as part of the explanation of potential adverse health effects. (3) One or more actions prescribed by the lead and copper requirements in sections 64673, 64674, 64683 through 64686, and 64688. To address potential adverse health effects, the Consumer Confidence Report shall include the applicable language pursuant to appendix 64465-D for lead, copper, or both. (4) Treatment technique requirements for Acrylamide and Epichlorohydrin in section 64448; to address potential adverse health effects, the Consumer Confidence Report shall include the relevant language from appendix 64465-H. (5) Recordkeeping of compliance

data. (6) Special monitoring requirements prescribed by section 64449(b)(2) and (g). (7) Terms of a variance, an exemption, or an administrative or judicial order.

(1)

Monitoring and reporting of compliance data.

(2)

Filtration, disinfection, and recycled provisions prescribed by sections 64652, 64652.5, 64653, 64653.5(b), or 64654. For systems that have failed to install adequate filtration or disinfection equipment or processes, or have had a failure of such equipment or processes that constitutes a violation, the Consumer Confidence Report shall include the health effects language pursuant to appendix 64465-B as part of the explanation of potential adverse health effects.

(3)

One or more actions prescribed by the lead and copper requirements in sections 64673, 64674, 64683 through 64686, and 64688. To address potential adverse health effects, the Consumer Confidence Report shall include the applicable language pursuant to appendix 64465-D for lead, copper, or both.

(4)

Treatment technique requirements for Acrylamide and Epichlorohydrin in section 64448; to address potential adverse health effects, the Consumer Confidence Report shall include the relevant language from appendix 64465-H.

(5)

Recordkeeping of compliance data.

(6)

Special monitoring requirements prescribed by section 64449(b)(2) and (g).

(7)

Terms of a variance, an exemption, or an administrative or judicial order.

(h)

If a system is operating under the terms of a variance or an exemption issued under section 116430 or 116425 of the Health and Safety Code, the Consumer Confidence Report shall contain: (1) An explanation of the reasons for the variance or exemption; (2) The date on which the variance or exemption was issued; (3) A brief status report on the steps the system is taking to install treatment, find alternative sources of water, or otherwise comply with the terms and schedules of the variance or exemption; and (4) A notice of any opportunity for public input in the review, or renewal, of the variance or exemption.

(1)

An explanation of the reasons for the variance or exemption;

(2)

The date on which the variance or exemption was issued;

(3)

A brief status report on the steps the system is taking to install treatment, find alternative sources of water, or otherwise comply with the terms and schedules of the variance or exemption; and

(4)

A notice of any opportunity for public input in the review, or renewal, of the variance or exemption.

(i)

A Consumer Confidence Report shall contain the language in paragraphs (1) through (4). (1) "The sources of drinking water (both tap water and bottled water) include rivers, lakes, streams, ponds, reservoirs, springs, and wells. As water travels over the surface of the land or through the ground, it dissolves naturally-occurring minerals and, in some cases, radioactive material, and can

pick up substances resulting from the presence of animals or from human activity." (2) "Contaminants that may be present in source water include: Microbial contaminants, such as viruses and bacteria, that may come from sewage treatment plants, septic systems, agricultural livestock operations, and wildlife. Inorganic contaminants, such as salts and metals, that can be naturally-occurring or result from urban stormwater runoff, industrial or domestic wastewater discharges, oil and gas production, mining, or farming. Pesticides and herbicides, that may come from a variety of sources such as agriculture, urban stormwater runoff, and residential uses. Organic chemical contaminants, including synthetic and volatile organic chemicals, that are by-products of industrial processes and petroleum production, and can also come from gas stations, urban stormwater runoff, agricultural application, and septic systems. Radioactive contaminants, that can be naturally-occurring or be the result of oil and gas production and mining activities." (3) "In order to ensure that tap water is safe to drink, the U.S. Environmental Protection Agency (USEPA) and the State Water Resources Control Board (State Board) prescribe regulations that limit the amount of certain contaminants in water provided by public water systems. U.S. Food and Drug Administration regulations and California law also establish limits for contaminants in bottled water that provide the same protection for public health." (4) "Drinking water, including bottled water, may reasonably be expected to contain at least small amounts of some contaminants. The presence of contaminants does not necessarily indicate that water poses a health risk. More information about contaminants and potential health effects can be obtained by calling the USEPA's Safe Drinking Water Hotline (1-800-426-4791)."

(1)

"The sources of drinking water (both tap water and bottled water) include rivers, lakes,

streams, ponds, reservoirs, springs, and wells. As water travels over the surface of the land or through the ground, it dissolves naturally-occurring minerals and, in some cases, radioactive material, and can pick up substances resulting from the presence of animals or from human activity."

(2)

"Contaminants that may be present in source water include: Microbial contaminants, such as viruses and bacteria, that may come from sewage treatment plants, septic systems, agricultural livestock operations, and wildlife. Inorganic contaminants, such as salts and metals, that can be naturally-occurring or result from urban stormwater runoff, industrial or domestic wastewater discharges, oil and gas production, mining, or farming. Pesticides and herbicides, that may come from a variety of sources such as agriculture, urban stormwater runoff, and residential uses. Organic chemical contaminants, including synthetic and volatile organic chemicals, that are by-products of industrial processes and petroleum production, and can also come from gas stations, urban stormwater runoff, agricultural application, and septic systems. Radioactive contaminants, that can be naturally-occurring or be the result of oil and gas production and mining activities."

(3)

"In order to ensure that tap water is safe to drink, the U.S. Environmental Protection Agency (USEPA) and the State Water Resources Control Board (State Board) prescribe regulations that limit the amount of certain contaminants in water provided by public water systems. U.S. Food and Drug Administration regulations and California law also establish limits for contaminants in bottled water that provide the same protection for public health."

(4)

"Drinking water, including bottled water, may reasonably be expected to contain at

least small amounts of some contaminants. The presence of contaminants does not necessarily indicate that water poses a health risk. More information about contaminants and potential health effects can be obtained by calling the USEPA's Safe Drinking Water Hotline (1-800-426-4791)."

(j)

A Consumer Confidence Report shall prominently display the following language: "Some people may be more vulnerable to contaminants in drinking water than the general population. Immuno-compromised persons such as persons with cancer undergoing chemotherapy, persons who have undergone organ transplants, people with HIV/AIDS or other immune system disorders, some elderly, and infants can be particularly at risk from infections. These people should seek advice about drinking water from their health care providers. USEPA/Centers for Disease Control (CDC) guidelines on appropriate means to lessen the risk of infection by *Cryptosporidium* and other microbial contaminants are available from the Safe Drinking Water Hotline (1-800-426-4791)."

(k)

A Consumer Confidence Report shall include the telephone number of the owner, operator, or designee of the water system as a source of additional information concerning the report.

(l)

A Consumer Confidence Report shall contain information in Spanish regarding the importance of the report or contain a telephone number or address where Spanish-speaking residents may contact the system to obtain a translated copy of the report or assistance in Spanish. For each non-English speaking group other than Spanish-speaking that exceeds 1,000 residents or 10% of the residents in a community, the Consumer Confidence Report shall contain information in the

appropriate language(s) regarding the importance of the report or contain a telephone number or address where such residents may contact the system to obtain a translated copy of the report or assistance in the appropriate language.

(m)

A Consumer Confidence Report shall include information (e.g., time and place of regularly scheduled board meetings) about opportunities for public participation in decisions that may affect the quality of the water.

(n)

A Consumer Confidence Report shall: (1) If a water system is required to comply with a Level 1 or Level 2 assessment requirement that is not due to an E. coli MCL violation, contain the information indicated in Table 64481-A; Table 64481-A.

CCR Language Level 1 or Level 2 Assessment Not Due to an E. coli MCL Violation

CCR Language Coliforms are bacteria that are naturally present in the environment and are used as an indicator that other, potentially harmful, waterborne pathogens may be present or that a potential pathway exists through which contamination may enter the drinking water distribution system. We found coliforms indicating the need to look for potential problems in water treatment or distribution. When this occurs, we are required to conduct assessment(s) to identify problems and to correct any problems that were found during these assessments. The water system shall include the following statements, as appropriate: During the past year we were required to conduct [INSERT NUMBER OF LEVEL 1 ASSESSMENTS] Level 1 assessment(s). [INSERT NUMBER OF LEVEL 1 ASSESSMENTS] Level 1 assessment(s) were completed. In addition, we were required to take [INSERT NUMBER OF CORRECTIVE ACTIONS] corrective actions and we completed [INSERT NUMBER OF CORRECTIVE ACTIONS] of these actions. During the past year [INSERT NUMBER OF LEVEL 2 ASSESSMENTS] Level 2 assessments

were required to be completed for our water system. [INSERT NUMBER OF LEVEL 2 ASSESSMENTS] Level 2 assessments were completed. In addition, we were required to take [INSERT NUMBER OF CORRECTIVE ACTIONS] corrective actions and we completed [INSERT NUMBER OF CORRECTIVE ACTIONS] of these actions. If the water system failed to complete all the required assessments or correct all identified sanitary defects, the water system is in violation of the treatment technique requirement and shall include the following statements, as appropriate: During the past year we failed to conduct all of the required assessment(s). During the past year we failed to correct all identified defects that were found during the assessment. (2) If a water system is required to comply with a Level 2 assessment requirement that is due to an E. coli MCL violation, contain the information indicated in Table 64481-B; Table 64481-B. CCR Language Level 2 Assessment Due to an E. coli MCL Violation CCR Language E. coli are bacteria whose presence indicates that the water may be contaminated with human or animal wastes. Human pathogens in these wastes can cause short-term effects, such as diarrhea, cramps, nausea, headaches, or other symptoms. They may pose a greater health risk for infants, young children, the elderly, and people with severely compromised immune systems. We found E. coli bacteria, indicating the need to look for potential problems in water treatment or distribution. When this occurs, we are required to conduct assessment(s) to identify problems and to correct any problems that were found during these assessments. We were required to complete a Level 2 assessment because we found E. coli in our water system. In addition, we were required to take [INSERT NUMBER OF CORRECTIVE ACTIONS] corrective actions and we completed [INSERT NUMBER OF CORRECTIVE ACTIONS] of these actions. If a water system failed to complete the required assessment or correct all identified sanitary defects, the water system is in violation of the

treatment technique requirement and shall include the following statements, as appropriate: We failed to conduct the required assessment. We failed to correct all sanitary defects that were identified during the assessment. (3) If a water system detects E. coli and has violated the E. coli MCL, include one or more the following statements to describe any noncompliance, as applicable: (A) "We had an E. coli-positive repeat sample following a total coliform positive routine sample." (B) "We had a total coliform-positive repeat sample following an E.coli-positive routine sample." (C) "We failed to take all required repeat samples following an E. coli-positive routine sample." (D) "We failed to test for E. coli when any repeat sample tests positive for total coliform."; and (4) If a water system detects E. coli and has not violated the E. coli MCL, may include a statement that explains that although they have detected E. coli, they are not in violation of the E. coli MCL.

(1)

If a water system is required to comply with a Level 1 or Level 2 assessment requirement that is not due to an E. coli MCL violation, contain the information indicated in Table 64481-A; Table 64481-A. CCR Language Level 1 or Level 2 Assessment Not Due to an E. coli MCL Violation CCR Language Coliforms are bacteria that are naturally present in the environment and are used as an indicator that other, potentially harmful, waterborne pathogens may be present or that a potential pathway exists through which contamination may enter the drinking water distribution system. We found coliforms indicating the need to look for potential problems in water treatment or distribution. When this occurs, we are required to conduct assessment(s) to identify problems and to correct any problems that were found during these assessments. The water system shall include the following statements, as appropriate: During the past year we were required to conduct [INSERT NUMBER OF LEVEL 1 ASSESSMENTS] Level 1 assessment(s). [INSERT NUMBER OF LEVEL 1 ASSESSMENTS]

Level 1 assessment(s) were completed. In addition, we were required to take [INSERT NUMBER OF CORRECTIVE ACTIONS] corrective actions and we completed [INSERT NUMBER OF CORRECTIVE ACTIONS] of these actions. During the past year [INSERT NUMBER OF LEVEL 2 ASSESSMENTS] Level 2 assessments were required to be completed for our water system. [INSERT NUMBER OF LEVEL 2 ASSESSMENTS] Level 2 assessments were completed. In addition, we were required to take [INSERT NUMBER OF CORRECTIVE ACTIONS] corrective actions and we completed [INSERT NUMBER OF CORRECTIVE ACTIONS] of these actions. If the water system failed to complete all the required assessments or correct all identified sanitary defects, the water system is in violation of the treatment technique requirement and shall include the following statements, as appropriate: During the past year we failed to conduct all of the required assessment(s). During the past year we failed to correct all identified defects that were found during the assessment.

(2)

If a water system is required to comply with a Level 2 assessment requirement that is due to an E. coli MCL violation, contain the information indicated in Table 64481-B; Table 64481-B. CCR Language Level 2 Assessment Due to an E. coli MCL Violation CCR Language E. coli are bacteria whose presence indicates that the water may be contaminated with human or animal wastes. Human pathogens in these wastes can cause short-term effects, such as diarrhea, cramps, nausea, headaches, or other symptoms. They may pose a greater health risk for infants, young children, the elderly, and people with severely compromised immune systems. We found E. coli bacteria, indicating the need to look for potential problems in water treatment or distribution. When this occurs, we are required to conduct assessment(s) to identify problems and to correct any problems that were found during these assessments. We were required to complete a Level 2 assessment because we found E. coli in our water system. In

addition, we were required to take [INSERT NUMBER OF CORRECTIVE ACTIONS] corrective actions and we completed [INSERT NUMBER OF CORRECTIVE ACTIONS] of these actions. If a water system failed to complete the required assessment or correct all identified sanitary defects, the water system is in violation of the treatment technique requirement and shall include the following statements, as appropriate: We failed to conduct the required assessment. We failed to correct all sanitary defects that were identified during the assessment.

(3)

If a water system detects E. coli and has violated the E. coli MCL, include one or more the following statements to describe any noncompliance, as applicable: (A) "We had an E. coli-positive repeat sample following a total coliform positive routine sample." (B) "We had a total coliform-positive repeat sample following an E.coli-positive routine sample." (C) "We failed to take all required repeat samples following an E. coli-positive routine sample." (D) "We failed to test for E. coli when any repeat sample tests positive for total coliform."; and

(A)

"We had an E. coli-positive repeat sample following a total coliform positive routine sample."

(B)

"We had a total coliform-positive repeat sample following an E.coli-positive routine sample."

(C)

"We failed to take all required repeat samples following an E. coli-positive routine sample."

(D)

"We failed to test for E. coli when any repeat sample tests positive for total coliform."; and

(4)

If a water system detects E. coli and has not violated the E. coli MCL, may include a statement that explains that although they have detected E. coli, they are not in

violation of the E. coli MCL.

(o)

The Consumer Confidence Report prepared and delivered by July 1, 2022 shall, for bacteriological monitoring conducted from January 1, 2021 to June 30, 2021, inclusive, include the following additional information in the report:

(1) The total coliform MCL expressed as shown in Table 64481-C. Table 64481-C Total Coliform MCL for Consumer Confidence Report

Contaminant	MCL	Total Coliform
(A) For a water system collecting at least 40 samples per month:	5.0 percent of monthly samples are positive.	
(B) For a water system collecting fewer than 40 samples per month:	one positive monthly sample.	

Fecal coliform and E. coli

(2) For total coliform:

(A) The highest monthly percentage of positive samples for a water system collecting at least 40 samples per month; or

(B) The highest monthly number of positive samples for a water system collecting fewer than 40 samples per month.

(3) For fecal coliform and E. coli: the total number of positive samples during the year.

(4) The likely source(s) of any total coliform, fecal coliform, or E. coli detected. If the water system lacks specific information on the likely source, the table shall include the typical source for that contaminant listed in Table 64481-D.

Contaminant	Major Origins in Drinking Water	Total coliform
bacteria	Naturally present in the environment	
Fecal coliform and E. coli	Human and animal fecal waste	

(5) Information on any data indicating violation of the total coliform MCL, including the length of the violation, potential adverse health effects, and actions taken by the water system to address the violation. To describe the potential health effects, the water system shall use the relevant language in Table 64481-E.

Contaminant	Health Effects Language	Total
Microbiological Contaminants		

ColiformColiforms are bacteria that are naturally present in the environment and are used as an indicator that other, potentially-harmful, bacteria may be present. Coliforms were found in more samples than allowed and this was a warning of potential problems. Fecal ColiformFecal coliforms are bacteria whose presence indicates that the water may be contaminated with human or animal wastes. Microbes in these wastes can cause short-term effects, such as diarrhea, cramps, nausea, headaches, or other symptoms. They may pose a special health risk for infants, young children, some of the elderly, and people with severely compromised immune systems. E. coliE. coli are bacteria whose presence indicates that the water may be contaminated with human or animal wastes. Human pathogens in these wastes can cause short-term effects, such as diarrhea, cramps, nausea, headaches, or other symptoms. They may pose a greater health risk for infants, young children, some of the elderly, and people with severely-compromised immune systems. (6) For violation of subsection (g)(1), (5), or (7), note the violation and give related information, including any potential adverse health effects, and the steps the water system has taken to correct the violation.

(1)

The total coliform MCL expressed as shown in Table 64481-C. Table 64481-C Total Coliform MCL for Consumer Confidence Report Contaminant MCL Total Coliform(A) For a water system collecting at least 40 samples per month: 5.0 percent of monthly samples are positive. (B) For a water system collecting fewer than 40 samples per month: one positive monthly sample. Fecal coliform and E. coli0

(2)

For total coliform: (A) The highest monthly percentage of positive samples for a water system collecting at least 40 samples per month; or (B) The highest monthly number

of positive samples for a water system collecting fewer than 40 samples per month.

(A)

The highest monthly percentage of positive samples for a water system collecting at least 40 samples per month; or

(B)

The highest monthly number of positive samples for a water system collecting fewer than 40 samples per month.

(3)

For fecal coliform and E. coli: the total number of positive samples during the year.

(4)

The likely source(s) of any total coliform, fecal coliform, or E. coli detected. If the water system lacks specific information on the likely source, the table shall include the typical source for that contaminant listed in Table 64481-D. Table 64481-D Typical Origins of Microbiological Contaminants with Primary MCL Contaminant Major Origins in Drinking Water Total coliform bacteria Naturally present in the environment Fecal coliform and E. coli Human and animal fecal waste

(5)

Information on any data indicating violation of the total coliform MCL, including the length of the violation, potential adverse health effects, and actions taken by the water system to address the violation. To describe the potential health effects, the water system shall use the relevant language in Table 64481-E. Table 64481-E Health Effects Language for Microbiological Contaminants Contaminant Health Effects Language Total Coliform Coliforms are bacteria that are naturally present in the environment and are used as an indicator that other, potentially-harmful, bacteria may be present. Coliforms were found in more samples than allowed and this was a warning of potential problems. Fecal Coliform Fecal coliforms are bacteria whose presence

indicates that the water may be contaminated with human or animal wastes. Microbes in these wastes can cause short-term effects, such as diarrhea, cramps, nausea, headaches, or other symptoms. They may pose a special health risk for infants, young children, some of the elderly, and people with severely compromised immune systems. E. coli E. coli are bacteria whose presence indicates that the water may be contaminated with human or animal wastes. Human pathogens in these wastes can cause short-term effects, such as diarrhea, cramps, nausea, headaches, or other symptoms. They may pose a greater health risk for infants, young children, some of the elderly, and people with severely-compromised immune systems.

(6)

For violation of subsection (g)(1), (5), or (7), note the violation and give related information, including any potential adverse health effects, and the steps the water system has taken to correct the violation.

(p)

A Consumer Confidence Report issued after October 1, 2024 and prior to the applicable compliance date in Table 64432-B shall include the following information for chromium (hexavalent): (1) If chromium (hexavalent) is detected, the Consumer Confidence Report shall include information pursuant to subsections (c) and (d). (2) If chromium (hexavalent) exceeds the MCL, the Consumer Confidence Report shall include additional information indicated in Table 64481-F. Table 64481-F CCR Language Hexavalent Chromium MCL Exceedance CCR Language Chromium (hexavalent) was detected at levels that exceed the chromium (hexavalent) MCL. While a water system of our size is not considered in violation of the chromium (hexavalent) MCL until after [INSERT APPLICABLE TABLE 64432-B COMPLIANCE DATE], we are working to address this exceedance and comply with the MCL. Specifically, we are [INSERT ACTIONS TAKEN

AND PLANNED TO COMPLY WITH THE APPLICABLE COMPLIANCE DATE IN TABLE 64432-B]. Appendix 64481-A. Typical Origins of Contaminants with Primary MCLs, MRDLs, Regulatory Action Levels, and Treatment Techniques

Contaminant	Major origins in drinking water	Microbiological	Total coliform bacteria	Naturally present in the environment	E. coli	Human and animal fecal waste	Turbidity	Soil runoff	Surface water treatment	Giardia lamblia	Naturally present in the environment	Viruses	Heterotrophic plate count bacteria	Legionella	Cryptosporidium	
Radioactive	Gross Beta particle activity	Decay of natural and man-made deposits	Strontium-90	Decay of natural and man-made deposits	Tritium	Decay of natural and man-made deposits	Gross Alpha particle activity	Erosion of natural deposits	Combined Radium 226/228	Erosion of natural deposits	Total Radium (for nontransient noncommunity water systems)	Erosion of natural deposits	Uranium	Erosion of natural deposits	Inorganic Aluminum	Erosion of natural deposits; residue from some surface water treatment processes
Antimony	Discharge from petroleum refineries; fire retardants; ceramics; electronics; solder	Arsenic	Erosion of natural deposits; runoff from orchards; glass and electronics production wastes	Asbestos	Internal corrosion of asbestos cement water mains; erosion of natural deposits	Barium	Discharges of oil drilling wastes and from metal refineries; erosion of natural deposits	Beryllium	Discharge from metal refineries, coal-burning factories, and electrical, aerospace, and defense industries	Cadmium	Internal corrosion of galvanized pipes; erosion of natural deposits; discharge from electroplating and industrial chemical factories, and metal refineries; runoff from waste batteries and paints	Chromium (hexavalent)	Erosion of natural deposits; transformation of naturally occurring trivalent chromium to hexavalent chromium by natural processes and human activities such as discharges from electroplating factories, leather tanneries, wood			

preservation, chemical synthesis, refractory production, and textile manufacturing facilities. Chromium (total) Discharge from steel and pulp mills and chrome plating; erosion of natural deposits Copper Internal corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives Cyanide Discharge from steel/metal, plastic and fertilizer factories Fluoride Erosion of natural deposits; water additive that promotes strong teeth; discharge from fertilizer and aluminum factories Lead Internal corrosion of household water plumbing systems; discharges from industrial manufacturers; erosion of natural deposits Mercury Erosion of natural deposits; discharge from refineries and factories; runoff from landfills and cropland Nickel Erosion of natural deposits; discharge from metal factories Nitrate Runoff and leaching from fertilizer use; leaching from septic tanks and sewage; erosion of natural deposits Nitrite Runoff and leaching from fertilizer use; leaching from septic tanks and sewage; erosion of natural deposits Perchlorate Perchlorate is an inorganic chemical used in solid rocket propellant, fireworks, explosives, flares, matches, and a variety of industries. It usually gets into drinking water as a result of environmental contamination from historic aerospace or other industrial operations that used or use, store, or dispose of perchlorate and its salts. Selenium Discharge from petroleum, glass, and metal refineries; erosion of natural deposits; discharge from mines and chemical manufacturers; runoff from livestock lots (feed additive) Thallium Leaching from ore-processing sites; discharge from electronics, glass, and drug factories Synthetic organic 2,4-D Runoff from herbicide used on row crops, range land, lawns, and aquatic weeds 2,4,5-TP (Silvex) Residue of banned herbicide Acrylamide Added to water during sewage/wastewater treatment Alachlor Runoff from herbicide used on row crops Atrazine Runoff from herbicide used on row crops and along railroad and highway right-of-ways

Bentazon Runoff/leaching from herbicide used on beans, peppers, corn, peanuts, rice, and ornamental grasses Benzo(a)pyrene [PAH] Leaching from linings of water storage tanks and distribution mains Carbofuran Leaching of soil fumigant used on rice and alfalfa, and grape vineyards Chlordane Residue of banned insecticide Dalapon Runoff from herbicide used on right-of-ways, and crops and landscape maintenance Dibromochloropropane (DBCP) Banned nematocide that may still be present in soils due to runoff/leaching from former use on soybeans, cotton, vineyards, tomatoes, and tree fruit Di(2-ethylhexyl) adipate Discharge from chemical factories Di(2-ethylhexyl) phthalate Discharge from rubber and chemical factories; inert ingredient in pesticides Dinoseb Runoff from herbicide used on soybeans, vegetables, and fruits Dioxin [2,3,7,8-TCDD] Emissions from waste incineration and other combustion; discharge from chemical factories Diquat Runoff from herbicide use for terrestrial and aquatic weeds Endothall Runoff from herbicide use for terrestrial and aquatic weeds; defoliant Endrin Residue of banned insecticide and rodenticide Epichlorohydrin Discharge from industrial chemical factories; impurity of some water treatment chemicals Ethylene dibromide (EDB) Discharge from petroleum refineries; underground gas tank leaks; banned nematocide that may still be present in soils due to runoff and leaching from grain and fruit crops Glyphosate Runoff from herbicide use Heptachlor Residue of banned insecticide Heptachlor epoxide Breakdown of heptachlor Hexachlorobenzene Discharge from metal refineries and agricultural chemical factories; byproduct of chlorination reactions in wastewater Hexachlorocyclopentadiene Discharge from chemical factories Lindane Runoff/leaching from insecticide used on cattle, lumber, and gardens Methoxychlor Runoff/leaching from insecticide used on fruits, vegetables, alfalfa, and livestock Molinate [Ordram] Runoff/leaching from herbicide used on rice

Oxamyl [Vydate]Runoff/leaching from insecticide used on field crops, fruits and ornamentals, especially apples, potatoes, and tomatoes

PentachlorophenolDischarge from wood preserving factories, cotton and other insecticidal/herbicidal uses PicloramHerbicide runoff Polychlorinated biphenyls

[PCBs]Runoff from landfills; discharge of waste chemicals SimazineHerbicide runoff ThiobencarbRunoff/leaching from herbicide used on rice

ToxapheneRunoff/leaching from insecticide used on cotton and cattle

1,2,3-TrichloropropaneDischarge from industrial and agricultural chemical factories; leaching from hazardous waste sites; used as cleaning and maintenance solvent, paint and varnish remover, and cleaning and decreasing agent; byproduct during the production of other compounds and pesticides. Volatile organic

BenzeneDischarge from plastics, dyes and nylon factories; leaching from gas storage tanks and landfills Carbon tetrachlorideDischarge from chemical plants

and other industrial activities 1,2-DichlorobenzeneDischarge from industrial chemical factories 1,4-DichlorobenzeneDischarge from industrial chemical

factories 1,1-DichloroethaneExtraction and degreasing solvent; used in manufacture of pharmaceuticals, stone, clay and glass products; fumigant

1,2-DichloroethaneDischarge from industrial chemical factories

1,1-DichloroethyleneDischarge from industrial chemical factories

cis-1,2-DichloroethyleneDischarge from industrial chemical factories; major biodegradation byproduct of TCE and PCE groundwater contamination

trans-1,2-DichloroethyleneDischarge from industrial chemical factories; minor biodegradation byproduct of TCE and PCE groundwater contamination

DichloromethaneDischarge from pharmaceutical and chemical factories;

insecticide 1,2-DichloropropaneDischarge from industrial chemical factories;

primary component of some fumigants 1,3-DichloropropeneRunoff/leaching from

nematocide used on croplands Ethylbenzene Discharge from petroleum refineries; industrial chemical factories Methyl-tert-butyl ether (MTBE) Leaking underground storage tanks; discharge from petroleum and chemical factories

Monochlorobenzene Discharge from industrial and agricultural chemical factories and drycleaning facilities Styrene Discharge from rubber and plastic factories; leaching from landfills 1,1,2,2-Tetrachloroethane Discharge from industrial and agricultural chemical factories; solvent used in production of TCE, pesticides, varnish and lacquers Tetrachloroethylene (PCE) Discharge from factories, dry cleaners, and auto shops (metal degreaser) 1,2,4-Trichlorobenzene Discharge from textile-finishing factories 1,1,1-Trichloroethane Discharge from metal degreasing sites and other factories; manufacture of food wrappings

1,1,2-Trichloroethane Discharge from industrial chemical factories

Trichloroethylene (TCE) Discharge from metal degreasing sites and other factories

Toluene Discharge from petroleum and chemical factories; underground gas tank leaks Trichlorofluoromethane Discharge from industrial factories; degreasing solvent; propellant and refrigerant 1,1,2-Trichloro-1,2,2-Trifluoroethane Vinyl chloride Discharge from metal degreasing sites and other factories; drycleaning solvent; refrigerant Leaching from PVC piping; discharge from plastics factories; biodegradation byproduct of TCE and PCE groundwater contamination

Xylenes Discharge from petroleum and chemical factories; fuel solvent

Disinfection Byproducts, Disinfection Byproduct Precursors, and Disinfectant Residuals Total trihalomethanes (TTHM) Byproduct of drinking water disinfection

Haloacetic acids (five) (HAA5) Byproduct of drinking water disinfection

Bromate Byproduct of drinking water disinfection Chloramines Drinking water disinfectant added for treatment Chlorine Drinking water disinfectant added for treatment Chlorite Byproduct of drinking water disinfection Chlorine

dioxide Drinking water disinfectant added for treatment Control of disinfection byproduct precursors (Total Organic Carbon) Various natural and manmade sources

Appendix 64481-B. Typical Origins of Contaminants with Secondary MCLs

Contaminant Major origins in drinking water Aluminum Erosion of natural deposits; residual from some surface water treatment processes Color Naturally-occurring organic materials Copper Internal corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives Foaming Agents (MBAS) Municipal and industrial waste discharges Iron Leaching from natural deposits; industrial wastes Manganese Leaching from natural deposits Methyl-tert-butyl ether (MTBE) Leaking underground storage tanks; discharge from petroleum and chemical factories Odor--Threshold Naturally-occurring organic materials Silver Industrial discharges Thiobencarb Runoff/leaching from rice herbicide Turbidity Soil runoff Zinc Runoff/leaching from natural deposits; industrial wastes Total dissolved solids Runoff/leaching from natural deposits Specific conductance Substances that form ions when in water; seawater influence Chloride Runoff/leaching from natural deposits; seawater influence Sulfate Runoff/leaching from natural deposits; industrial wastes

(1)

If chromium (hexavalent) is detected, the Consumer Confidence Report shall include information pursuant to subsections (c) and (d).

(2)

If chromium (hexavalent) exceeds the MCL, the Consumer Confidence Report shall include additional information indicated in Table 64481-F.

Table 64481-F CCR Language

Hexavalent Chromium MCL Exceedance CCR Language Chromium (hexavalent) was detected at levels that exceed the chromium (hexavalent) MCL. While a water system of our size is not considered in violation of the chromium (hexavalent) MCL until after

[INSERT APPLICABLE TABLE 64432-B COMPLIANCE DATE], we are working to address this exceedance and comply with the MCL. Specifically, we are [INSERT ACTIONS TAKEN AND PLANNED TO COMPLY WITH THE APPLICABLE COMPLIANCE DATE IN TABLE 64432-B].

Appendix 64481-A. Typical Origins of Contaminants with Primary MCLs, MRDLs, Regulatory Action Levels, and Treatment Techniques

Contaminant	Major origins in drinking water
Microbiological	Total coliform bacteria Naturally present in the environment E. coli Human and animal fecal waste
Turbidity	Soil runoff
Surface water treatment	Giardia lamblia Naturally present in the environment Viruses
Heterotrophic plate count bacteria	Legionella
Cryptosporidium	Radioactive
Gross Beta particle activity	Decay of natural and man-made deposits
Strontium-90	Decay of natural and man-made deposits
Tritium	Decay of natural and man-made deposits
Gross Alpha particle activity	Erosion of natural deposits
Combined Radium 226/228	Erosion of natural deposits
Total Radium (for nontransient noncommunity water systems)	Erosion of natural deposits
Uranium	Erosion of natural deposits
Inorganic Aluminum	Erosion of natural deposits; residue from some surface water treatment processes
Antimony	Discharge from petroleum refineries; fire retardants; ceramics; electronics; solder
Arsenic	Erosion of natural deposits; runoff from orchards; glass and electronics production wastes
Asbestos	Internal corrosion of asbestos cement water mains; erosion of natural deposits
Barium	Discharges of oil drilling wastes and from metal refineries; erosion of natural deposits
Beryllium	Discharge from metal refineries, coal-burning factories, and electrical, aerospace, and defense industries
Cadmium	Internal corrosion of galvanized pipes; erosion of natural deposits; discharge from electroplating and industrial chemical factories, and metal refineries; runoff from waste batteries and paints
Chromium (hexavalent)	Erosion of natural deposits; transformation of naturally occurring trivalent chromium to hexavalent chromium by natural processes and human activities such as discharges from electroplating factories,

leather tanneries, wood preservation, chemical synthesis, refractory production, and textile manufacturing facilities. Chromium (total) Discharge from steel and pulp mills and chrome plating; erosion of natural deposits Copper Internal corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives Cyanide Discharge from steel/metal, plastic and fertilizer factories Fluoride Erosion of natural deposits; water additive that promotes strong teeth; discharge from fertilizer and aluminum factories Lead Internal corrosion of household water plumbing systems; discharges from industrial manufacturers; erosion of natural deposits Mercury Erosion of natural deposits; discharge from refineries and factories; runoff from landfills and cropland Nickel Erosion of natural deposits; discharge from metal factories Nitrate Runoff and leaching from fertilizer use; leaching from septic tanks and sewage; erosion of natural deposits Nitrite Runoff and leaching from fertilizer use; leaching from septic tanks and sewage; erosion of natural deposits Perchlorate Perchlorate is an inorganic chemical used in solid rocket propellant, fireworks, explosives, flares, matches, and a variety of industries. It usually gets into drinking water as a result of environmental contamination from historic aerospace or other industrial operations that used or use, store, or dispose of perchlorate and its salts. Selenium Discharge from petroleum, glass, and metal refineries; erosion of natural deposits; discharge from mines and chemical manufacturers; runoff from livestock lots (feed additive) Thallium Leaching from ore-processing sites; discharge from electronics, glass, and drug factories Synthetic organic 2,4-D Runoff from herbicide used on row crops, range land, lawns, and aquatic weeds 2,4,5-TP (Silvex) Residue of banned herbicide Acrylamide Added to water during sewage/wastewater treatment Alachlor Runoff from herbicide used on row crops Atrazine Runoff from herbicide used on row crops and along railroad and highway right-of-ways Bentazon Runoff/leaching from herbicide used on beans, peppers, corn, peanuts, rice, and ornamental grasses Benzo(a)pyrene

[PAH]Leaching from linings of water storage tanks and distribution mains

CarbofuranLeaching of soil fumigant used on rice and alfalfa, and grape vineyards

ChlordaneResidue of banned insecticide DalaponRunoff from herbicide used on right-of-ways, and crops and landscape maintenance Dibromochloropropane (DBCP)Banned nematocide that may still be present in soils due to runoff/leaching from former use on soybeans, cotton, vineyards, tomatoes, and tree fruit Di(2-ethylhexyl) adipateDischarge from chemical factories Di(2-ethylhexyl) phthalateDischarge from rubber and chemical factories; inert ingredient in pesticides DinosebRunoff from herbicide used on soybeans, vegetables, and fruits Dioxin [2,3,7,8-TCDD]Emissions from waste incineration and other combustion; discharge from chemical factories DiquatRunoff from herbicide use for terrestrial and aquatic weeds EndothallRunoff from herbicide use for terrestrial and aquatic weeds; defoliant EndrinResidue of banned insecticide and rodenticide EpichlorohydrinDischarge from industrial chemical factories; impurity of some water treatment chemicals Ethylene dibromide (EDB)Discharge from petroleum refineries; underground gas tank leaks; banned nematocide that may still be present in soils due to runoff and leaching from grain and fruit crops GlyphosateRunoff from herbicide use HeptachlorResidue of banned insecticide Heptachlor epoxideBreakdown of heptachlor HexachlorobenzeneDischarge from metal refineries and agricultural chemical factories; byproduct of chlorination reactions in wastewater HexachlorocyclopentadieneDischarge from chemical factories LindaneRunoff/leaching from insecticide used on cattle, lumber, and gardens MethoxychlorRunoff/leaching from insecticide used on fruits, vegetables, alfalfa, and livestock Molinate [Ordram]Runoff/leaching from herbicide used on rice Oxamyl [Vydate]Runoff/leaching from insecticide used on field crops, fruits and ornamentals, especially apples, potatoes, and tomatoes PentachlorophenolDischarge from wood preserving factories, cotton and other insecticidal/herbicidal uses PicloramHerbicide

runoff Polychlorinated biphenyls [PCBs]Runoff from landfills; discharge of waste
 chemicals SimazineHerbicide runoff ThiobencarbRunoff/leaching from herbicide used
 on rice ToxapheneRunoff/leaching from insecticide used on cotton and cattle
 1,2,3-TrichloropropaneDischarge from industrial and agricultural chemical factories;
 leaching from hazardous waste sites; used as cleaning and maintenance solvent, paint
 and varnish remover, and cleaning and degreasing agent; byproduct during the
 production of other compounds and pesticides. Volatile organic BenzeneDischarge
 from plastics, dyes and nylon factories; leaching from gas storage tanks and landfills
 Carbon tetrachlorideDischarge from chemical plants and other industrial activities
 1,2-DichlorobenzeneDischarge from industrial chemical factories
 1,4-DichlorobenzeneDischarge from industrial chemical factories
 1,1-DichloroethaneExtraction and degreasing solvent; used in manufacture of
 pharmaceuticals, stone, clay and glass products; fumigant
 1,2-DichloroethaneDischarge from industrial chemical factories
 1,1-DichloroethyleneDischarge from industrial chemical factories
 cis-1,2-DichloroethyleneDischarge from industrial chemical factories; major
 biodegradation byproduct of TCE and PCE groundwater contamination
 trans-1,2-DichloroethyleneDischarge from industrial chemical factories; minor
 biodegradation byproduct of TCE and PCE groundwater contamination
 DichloromethaneDischarge from pharmaceutical and chemical factories; insecticide
 1,2-DichloropropaneDischarge from industrial chemical factories; primary component of
 some fumigants 1,3-DichloropropeneRunoff/leaching from nematocide used on
 croplands EthylbenzeneDischarge from petroleum refineries; industrial chemical
 factories Methyl-tert-butyl ether (MTBE)Leaking underground storage tanks; discharge
 from petroleum and chemical factories MonochlorobenzeneDischarge from industrial
 and agricultural chemical factories and drycleaning facilities StyreneDischarge from

rubber and plastic factories; leaching from landfills 1,1,2,2-Tetrachloroethane Discharge from industrial and agricultural chemical factories; solvent used in production of TCE, pesticides, varnish and lacquers Tetrachloroethylene (PCE) Discharge from factories, dry cleaners, and auto shops (metal degreaser) 1,2,4-Trichlorobenzene Discharge from textile-finishing factories 1,1,1-Trichloroethane Discharge from metal degreasing sites and other factories; manufacture of food wrappings 1,1,2-Trichloroethane Discharge from industrial chemical factories Trichloroethylene (TCE) Discharge from metal degreasing sites and other factories Toluene Discharge from petroleum and chemical factories; underground gas tank leaks Trichlorofluoromethane Discharge from industrial factories; degreasing solvent; propellant and refrigerant 1,1,2-Trichloro-1,2,2-Trifluoroethane Vinyl chloride Discharge from metal degreasing sites and other factories; drycleaning solvent; refrigerant Leaching from PVC piping; discharge from plastics factories; biodegradation byproduct of TCE and PCE groundwater contamination Xylenes Discharge from petroleum and chemical factories; fuel solvent Disinfection Byproducts, Disinfection Byproduct Precursors, and Disinfectant Residuals Total trihalomethanes (TTHM) Byproduct of drinking water disinfection Haloacetic acids (five) (HAA5) Byproduct of drinking water disinfection Bromate Byproduct of drinking water disinfection Chloramines Drinking water disinfectant added for treatment Chlorine Drinking water disinfectant added for treatment Chlorite Byproduct of drinking water disinfection Chlorine dioxide Drinking water disinfectant added for treatment Control of disinfection byproduct precursors (Total Organic Carbon) Various natural and manmade sources Appendix 64481-B.

Typical Origins of Contaminants with Secondary MCLs Contaminant Major origins in drinking water Aluminum Erosion of natural deposits; residual from some surface water treatment processes Color Naturally-occurring organic materials Copper Internal corrosion of household plumbing systems; erosion of natural deposits; leaching from

wood preservatives Foaming Agents (MBAS)Municipal and industrial waste discharges
IronLeaching from natural deposits; industrial wastes ManganeseLeaching from natural
deposits Methyl-tert-butyl ether (MTBE)Leaking underground storage tanks; discharge
from petroleum and chemical factories Odor--ThresholdNaturally-occurring organic
materials SilverIndustrial discharges ThiobencarbRunoff/leaching from rice herbicide
TurbiditySoil runoff ZincRunoff/leaching from natural deposits; industrial wastes Total
dissolved solidsRunoff/leaching from natural deposits Specific conductanceSubstances
that form ions when in water; seawater influence ChlorideRunoff/leaching from natural
deposits; seawater influence SulfateRunoff/leaching from natural deposits; industrial
wastes