

Sent via email

September 29, 2020

Daniel Gutierrez
Imperial County Public Health Department
Division of Environmental Health
797 Main Street, Suite B
El Centro, CA 92243

RE: 2019 Consumer Confidence Report PWS #1300643

Dear Mr. Gutierrez:

Please find enclosed the Mesquite Mine 2020 Consumer Confidence Report and Certification Form. The report has been posted on bulletin boards in all break areas in addition to site wide availability on the intranet.

Should you have any questions, please contact me (928) 341-4653, extension 3231 or michael.musey@equinoxgold.com.

Sincerely,



Michael Musey
Sr. Environmental Coordinator
Western Mesquite Mines, Inc.

APPENDIX F: Certification Form (Suggested Format)

Consumer Confidence Report

Certification Form

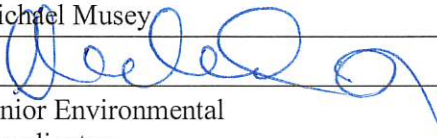
(to be submitted with a copy of the CCR)

(To certify electronic delivery of the CCR, use the certification form on the State Board's website at http://www.swrcb.ca.gov/drinking_water/certific/drinkingwater/CCR.shtml)

Water System Name: Mesquite Mine NTNC

Water System Number: 1300643

The water system named above hereby certifies that its Consumer Confidence Report was distributed on 6/26/2020 (date) to customers (and appropriate notices of availability have been given). Further, the system certifies that the information contained in the report is correct and consistent with the compliance monitoring data previously submitted to the State Water Resources Control Board, Division of Drinking Water.

Certified by: Name: Michael Musey
Signature: 
Title: Senior Environmental Coordinator
Phone Number: (928) 341-4653 ext. 3231 Date: 6-26-2020

To summarize report delivery used and good-faith efforts taken, please complete the below by checking all items that apply and fill-in where appropriate:

☒ CCR was distributed by mail or other direct delivery methods. Specify other direct delivery methods used: Posted on the Mesquite SharePoint

☐ "Good faith" efforts were used to reach non-bill paying consumers. Those efforts included the following methods:

- ☐ Posting the CCR on the Internet at www.
- ☐ Mailing the CCR to postal patrons within the service area (attach zip codes used)
- ☐ Advertising the availability of the CCR in news media (attach copy of press release)
- ☐ Publication of the CCR in a local newspaper of general circulation (attach a copy of the published notice, including name of newspaper and date published)
- ☒ Posted the CCR in public places (attach a list of locations)
- ☐ Delivery of multiple copies of CCR to single-billed addresses serving several persons, such as apartments, businesses, and schools
- ☐ Delivery to community organizations (attach a list of organizations)
- ☐ Other (attach a list of other methods used)

☐ For systems serving at least 100,000 persons: Posted CCR on a publicly-accessible internet site at the following address: www.

☐ For investor-owned utilities: Delivered the CCR to the California Public Utilities Commission

This form is provided as a convenience for use to meet the certification requirement of the California Code of Regulations, section 64483(c).

2019 Consumer Confidence Report

Water System Name: **Mesquite Mine NTNC G No. 1300643**

Report Date: **6-26-2020**

We test the drinking water quality for many constituents as required by state and federal regulations. This report shows the results of our monitoring for the period of January 1 to December 31, 2018 and may include earlier monitoring data.

Este informe contiene información muy importante sobre su agua para beber. Favor de comunicarse [Enter Water System's Name Here] a [Enter Water System's Address or Phone Number Here] para asistirlo en español.

这份报告含有关于您的饮用水的重要讯息。请用以下地址和电话联系 [Enter Water System's Name Here] 以获得中文的帮助:[Enter Water System's Address Here][Enter Water System's Phone Number Here]

Ang pag-uulat na ito ay naglalaman ng mahalagang impormasyon tungkol sa inyong inuming tubig. Mangyaring makipag-ugnayan sa [Enter Water System's Name and Address Here] o tumawag sa [Enter Water System's Phone Number Here] para matulungan sa wikang Tagalog.

Báo cáo này chứa thông tin quan trọng về nước uống của bạn. Xin vui lòng liên hệ [Enter Water System's Name Here] tại [Enter Water System's Address or Phone Number Here] để được hỗ trợ giúp bằng tiếng Việt.

Tsab ntawv no muaj cov ntsiab lus tseem ceeb txog koj cov dej haus. Thov hu rau [Enter Water System's Name Here] ntawm [Enter Water System's Address or Phone Number Here] rau kev pab hauv lus Askiv.

Type of water source(s) in use: Groundwater Wells

Name & general location of source(s): Wells #2 and #3 located approximately 3 miles south of the Mesquite Mine, near Vista Mine Road.

Drinking Water Source Assessment information: N/A

Time and place of regularly scheduled board meetings for public participation: N/A

For more information, contact: Michael Musey Phone: (928) 341-4653 ext. 3231

TERMS USED IN THIS REPORT

Maximum Contaminant Level (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.

Maximum Contaminant Level Goal (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 (U.S. EPA).

Public Health Goal (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.

Maximum Residual Disinfectant Level (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.

Maximum Residual Disinfectant Level Goal (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.

Primary Drinking Water Standards (PDWS): MCLs and MRDLs for contaminants that affect health along with their

Secondary Drinking Water Standards (SDWS): MCLs for contaminants that affect taste, odor, or appearance of the drinking water. Contaminants with SDWSs do not affect the health at the MCL levels.

Treatment Technique (TT): A required process intended to reduce the level of a contaminant in drinking water.

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

Variances and Exemptions: Permissions from the State Water Resources Control Board (State Board) to exceed an MCL or not comply with a treatment technique under certain conditions.

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.

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.

ND: not detectable at testing limit

ppm: parts per million or milligrams per liter (mg/L)

ppb: parts per billion or micrograms per liter (µg/L)

ppt: parts per trillion or nanograms per liter (ng/L)

ppq: parts per quadrillion or picogram per liter (pg/L)

pCi/L: picocuries per liter (a measure of radiation)

monitoring and reporting requirements, and water treatment requirements.

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.

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 byproducts 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.

In order to ensure that tap water is safe to drink, the U.S. EPA and the State Board prescribe regulations that limit the amount of certain contaminants in water provided by public water systems. The 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.

Tables 1, 2, 3, 4, 5, and 6 list all of the drinking water contaminants that were detected during the most recent sampling for the constituent. The presence of these contaminants in the water does not necessarily indicate that the water poses a health risk. The State Board allows us to monitor for certain contaminants less than once per year because the concentrations of these contaminants do not change frequently. Some of the data, though representative of the water quality, are more than one year old. Any violation of an AL, MCL, MRDL, or TT is asterisked. Additional information regarding the violation is provided later in this report.

TABLE 1 – SAMPLING RESULTS SHOWING THE DETECTION OF COLIFORM BACTERIA

| Microbiological Contaminants (complete if bacteria detected) | Highest No. of Detections | No. of Months in Violation | MCL | MCLG | Typical Source of Bacteria |
|--|------------------------------|-------------------------------|---|------|---|
| Total Coliform Bacteria (state Total Coliform Rule) | (In a month) 1 | 0 | 1 positive monthly sample | 0 | Naturally present in the environment |
| Fecal Coliform or <i>E. coli</i> (state Total Coliform Rule) | (In the year) 0 | 0 | A routine sample and a repeat sample are total coliform positive, and one of these is also fecal coliform or <i>E. coli</i> positive | 0 | Human and animal fecal waste |
| <i>E. coli</i> (federal Revised Total Coliform Rule) | (In the year) 0 | 0 | (a) | 0 | Human and animal fecal waste |
| (a) Routine and repeat samples are total coliform-positive and either is <i>E. coli</i> -positive or system fails to take repeat samples following <i>E. coli</i> -positive routine sample or system fails to analyze total coliform-positive repeat sample for <i>E. coli</i> . | | | | | |

TABLE 2 – SAMPLING RESULTS SHOWING THE DETECTION OF LEAD AND COPPER

| Lead and Copper (complete if lead or copper detected in the last sample set) | Sample Date | No. of Samples Collected | 90 th Percentile Level Detected | No. Sites Exceeding AL | AL | PHG | No. of Schools Requesting Lead Sampling | Typical Source of Contaminant |
|--|----------------|--------------------------------|---|------------------------------|-----|-----|---|---|
| Lead (ppb) | 6/19/2018 | 5 | 11.5 | 1 | 15 | 0.2 | Not applicable | Internal corrosion of household water plumbing systems; discharges from industrial manufacturers; erosion of natural deposits |
| Copper (ppm) | 6/19/2018 | 5 | 0.175 | 0 | 1.3 | 0.3 | Not applicable | Internal corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives |

TABLE 3 – SAMPLING RESULTS FOR SODIUM AND HARDNESS

| Chemical or Constituent (and reporting units) | Sample Date | Level Detected | Range of Detections | MCL | PHG (MCLG) | Typical Source of Contaminant |
|--|----------------|-------------------|------------------------|------|---------------|--|
| Sodium (ppm) | 1/15/2018 | 365 | 350-380 | None | None | Salt present in the water and is generally naturally occurring |
| Hardness (ppm) | 1/15/2018 | 120 | 120 | None | None | Sum of polyvalent cations present in the water, generally magnesium and calcium, and are usually naturally occurring |

TABLE 4 – DETECTION OF CONTAMINANTS WITH A PRIMARY DRINKING WATER STANDARD

| Chemical or Constituent (and reporting units) | Sample Date | Level Detected | Range of Detections | MCL [MRDL] | PHG (MCLG) [MRDLG] | Typical Source of Contaminant |
|--|-----------------|-------------------|------------------------|---------------|--------------------------|---|
| Arsenic(ppb) | 1/15/2018 | 3.6 | N/A | 10 | 0.004 | Erosion of natural deposits; runoff from orchards; glass and electronics production wastes |
| Barium(ppb) | 1/15/2018 | 33 | 31-35 | 1000 | 2000 | Discharge of oil drilling wastes and from metal refineries; erosion of natural deposits |
| Chromium [Total](ppb) | 1/15/2018 | 15 | 11-19 | 50 | (100) | Discharge from steel and pulp mills and chrome plating; erosion of natural deposits |
| Fluoride (ppm) | 9/9/2019 | 2.8* | 2.8-2.9 | 2.0 | 1.0 | Erosion of natural deposits; water additive which promotes strong teeth; discharge from fertilizer and aluminum factories |
| Gross Alpha Particle Activity (pCi/L) | 12/19/16 | 1.51 | 1.26-1.76 | 15 | (0) | Erosion of natural deposits |
| Copper (ppm) | 1/15/2018 | 0.011 | N/A | AL=1.3 | 0.3 | Internal corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives |
| Lead (ppb) | 1/15/2018 | 5 | 3.1-6.9 | AL=15 | 0.2 | Internal corrosion of household water plumbing systems; discharges from industrial manufacturers; erosion of natural deposits |
| Nitrate (ppm) | 1/15/2018 | 0.79 | 0.65-0.93 | 10 | 10 | Runoff and leaching from fertilizer use; leaching from septic tanks and sewage; erosion natural deposits |
| Radium-226 (pCi/L) | 1/16/17 | 0 | N/A | 5 | 0.05 | Erosion of natural deposits |
| Radium-228 (pCi/L) | 1/16/17 | 0.340 | 0.303-0.376 | 5 | 0.019 | Erosion of natural deposits |
| Selenium (ppb) | 1/15/2018 | 8.4 | 7.5-9.3 | 50 | 30 | Discharge from petroleum, glass, and metal refineries; erosion of natural deposits; discharge from mines and chemical manufacturers; runoff from livestock lots (feed additive) |

TABLE 5 – DETECTION OF CONTAMINANTS WITH A SECONDARY DRINKING WATER STANDARD

| Chemical or Constituent (and reporting units) | Sample Date | Level Detected | Range of Detections | SMCL | PHG (MCLG) | Typical Source of Contaminant |
|--|----------------|----------------|------------------------|------|---------------|---|
| Chloride (ppm) | 1/15/2018 | 440 | N/A | 500 | N/A | Runoff/leaching from natural deposits; seawater influence |
| Color (units) | 1/15/2018 | 1.0 | N/A | 15 | N/A | Naturally-occurring organic materials |
| Copper (ppm) | 1/15/2018 | 0.011 | N/A | 1.0 | N/A | Internal corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives |
| Iron (ppm) | 1/15/2018 | 0.056 | N/A | 0.3 | N/A | Leaching from natural deposits; industrial wastes |

| | | | | | | |
|--|-----------------|--------------|------------|-------------|------------|--|
| Sulfate (ppm) | 1/15/2018 | 245 | 240-250 | 500 | N/A | Runoff/leaching from natural deposits; industrial wastes |
| Turbidity | 1/15/2018 | 0.53 | 0.24-0.82 | 5 | N/A | Soil runoff |
| Total Dissolve Solids (TDS) (ppm) | 9/9/2019 | 1300* | N/A | 1000 | N/A | Runoff/leaching from natural deposits |

TABLE 6 – DETECTION OF UNREGULATED CONTAMINANTS

| Chemical or Constituent (and reporting units) | Sample Date | Level Detected | Range of Detections | Notification Level | Health Effects Language |
|--|-------------|----------------|------------------------|--------------------|-------------------------|
| N/A | | | | | |

Additional General Information on Drinking Water

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 the water poses a health risk. More information about contaminants and potential health effects can be obtained by calling the U.S. EPA's Safe Drinking Water Hotline (1-800-426-4791).

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. U.S. EPA/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).

Lead-Specific Language: If present, elevated levels of lead can cause serious health problems, especially for pregnant women and young children. Lead in drinking water is primarily from materials and components associated with service lines and home plumbing. [Mesquite Mine NTNC G No. 1300643] is responsible for providing high quality drinking water, but cannot control the variety of materials used in plumbing components. When your water has been sitting for several hours, you can minimize the potential for lead exposure by flushing your tap for 30 seconds to 2 minutes before using water for drinking or cooking. [OPTIONAL: If you do so, you may wish to collect the flushed water and reuse it for another beneficial purpose, such as watering plants.] If you are concerned about lead in your water, you may wish to have your water tested. Information on lead in drinking water, testing methods, and steps you can take to minimize exposure is available from the Safe Drinking Water Hotline (1-800-426-4791) or at <http://www.epa.gov/lead>.

Summary Information for Violation of a MCL, MRDL, AL, TT, or Monitoring and Reporting Requirement

| VIOLATION OF A MCL, MRDL, AL, TT, OR MONITORING AND REPORTING REQUIREMENT | | | | |
|---|--|----------|---|--|
| Violation | Explanation | Duration | Actions Taken to Correct the Violation | Health Effects Language |
| Fluoride | Naturally occurring in source water, treated through Reverse Osmosis | On-going | Source wells are sampled quarterly and treated water from Reverse Osmosis (RO) sampled monthly. The RO is effective in removing the naturally occurring fluoride. The average fluoride concentration of samples from the RO | Some people who drink water containing fluoride in excess of the Federal MCL of 4 mg/L over many years may get bone disease, including pain and tenderness of the bones. Children who drink water continuing fluoride in excess of |

| | | | | |
|-------------|--|----------|---|---|
| | | | effluent for 2018 is 0.08mg/L | the state MCL of 2mg/L may get mottled teeth. |
| TDS | Naturally occurring in source water, treated through Reverse Osmosis | On-going | Source wells are sampled quarterly and treated water from Reverse Osmosis (RO) sampled monthly. The RO is effective in removing the naturally occurring fluoride. The average fluoride concentration of samples from the RO effluent for 2018 is 73mg/L | N/A |
| Lead | Elevated levels in Men's restroom in Administration Building only | On-going | Have Posted information on effects of lead in drinking water | Infants and children who drink water containing lead in excess of the action level may experience delays in their physical or mental development. Children may show slight deficits in attention span and learning abilities. Adults who drink this water over many years may develop kidney problems or high blood pressure. |

For Water Systems Providing Groundwater as a Source of Drinking Water

**TABLE 7 – SAMPLING RESULTS SHOWING
FECAL INDICATOR-POSITIVE GROUNDWATER SOURCE SAMPLES**

| Microbiological Contaminants (complete if fecal-indicator detected) | Total No. of Detections | Sample Dates | MCL [MRDL] | PHG (MCLG) [MRDLG] | Typical Source of Contaminant |
|--|----------------------------|--------------|---------------|--------------------------|-------------------------------|
| <i>E. coli</i> | (0) | N/A | 0 | (0) | Human and animal fecal waste |
| Enterococci | (0) | N/A | TT | N/A | Human and animal fecal waste |
| Coliphage | (0) | N/A | TT | N/A | Human and animal fecal waste |

Summary Information for Fecal Indicator-Positive Groundwater Source Samples, Uncorrected Significant Deficiencies, or Groundwater TT

| SPECIAL NOTICE OF FECAL INDICATOR-POSITIVE GROUNDWATER SOURCE SAMPLE | | | | |
|---|-------------|----------|--|-------------------------|
| N/A | | | | |
| | | | | |
| | | | | |
| | | | | |
| SPECIAL NOTICE FOR UNCORRECTED SIGNIFICANT DEFICIENCIES | | | | |
| N/A | | | | |
| | | | | |
| | | | | |
| | | | | |
| VIOLATION OF GROUNDWATER TT | | | | |
| TT Violation | Explanation | Duration | Actions Taken to Correct the Violation | Health Effects Language |
| N/A | | | | |
| | | | | |

For Systems Providing Surface Water as a Source of Drinking Water

| TABLE 8 - SAMPLING RESULTS SHOWING TREATMENT OF SURFACE WATER SOURCES | |
|--|---|
| Treatment Technique ^(a) (Type of approved filtration technology used) | |
| Turbidity Performance Standards ^(b) (that must be met through the water treatment process) | Turbidity of the filtered water must: 1 – Be less than or equal to ____ NTU in 95% of measurements in a month. 2 – Not exceed ____ NTU for more than eight consecutive hours. 3 – Not exceed ____ NTU at any time. |
| Lowest monthly percentage of samples that met Turbidity Performance Standard No. 1. | |
| Highest single turbidity measurement during the year | |
| Number of violations of any surface water treatment requirements | |

(a) A required process intended to reduce the level of a contaminant in drinking water.

(b) Turbidity (measured in NTU) is a measurement of the cloudiness of water and is a good indicator of water quality and filtration performance. Turbidity results which meet performance standards are considered to be in compliance with filtration requirements.

Summary Information for Violation of a Surface Water TT

| VIOLATION OF A SURFACE WATER TT | | | | |
|--|-------------|----------|--|-------------------------|
| TT Violation | Explanation | Duration | Actions Taken to Correct the Violation | Health Effects Language |
| N/A | | | | |
| | | | | |

| | | | | |
|--|--|--|--|--|
| | | | | |
|--|--|--|--|--|

Summary Information for Operating Under a Variance or Exemption

N/A

Summary Information for Federal Revised Total Coliform Rule Level 1 and Level 2 Assessment Requirements

Level 1 or Level 2 Assessment Requirement not Due to an *E. coli* MCL Violation

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.

During the past year we were required to conduct [1] Level 1 assessment(s). [1] Level 1 assessment(s) were completed. In addition, we were required to take [1] corrective actions and we completed [1] of these actions.

During the past year [N/A] Level 2 assessments were required to be completed for our water system. [N/A] Level 2 assessments were completed. In addition, we were required to take [N/A] corrective actions and we completed [N/A] of these actions.

Level 2 Assessment Requirement Due to an *E. coli* MCL Violation

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) 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.

N/A

Posted Consumer Confidence Report Public Locations:

Safety/Training Building main bulletin board

Administration Building break room bulletin board

Process Building break room

Lab Building break room

Engineering Building Bullpen bulletin board

Mine Operations Muster/Line out building

Mine Maintenance break room

Environmental building