

#### Sent via email

June 26, 2023

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

RE: 2022 Consumer Confidence Report PWS #1300643

Dear Mr. Gutierrez:

Please find enclosed the Mesquite Mine 2022 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 Engineer Western Mesquite Mines, Inc.

### **APPENDIX B: eCCR Certification Form (Suggested Format)**

# Consumer Confidence Report Certification Form (To be submitted with a copy of the CCR)

Water System Name:	Mesquite Mine NTNC						
Water System Number:	1300643						
was distributed on notices of availability have contained in the report is	_06-26-2023_ been given). Fu correct and con	ertifies that its Consumer Confidence Report (date) to customers (and appropriate rther, the system certifies that the information sistent with the compliance monitoring data esources Control Board, Division of Drinking					
Certified by:							
Name: Michael Musey		Title: Senior Environmental Engineer					
Signature:		Date: 06-26-2023					
Phone number: (928) 347 3132	I-4653 ext.	blank					
other direct delivery r  CCR was distributed for Electronic Delivery relectronic delivery me "Good faith" efforts wincluded the following control of the con	methods used). using electronic y of the Consume ethods must com vere used to read g methods:	direct delivery methods (attach description of delivery methods described in the Guidance er Confidence Report (water systems utilizing plete the second page).  ch non-bill paying consumers. Those efforts URL: www					
☐ Mailing the CC used)	R to postal patro	ons within the service area (attach zip codes					
<u> </u>	Advertising the availability of the CCR in news media (attach copy of press						
		al newspaper of general circulation (attach a including name of newspaper and date					
	R in public places	s (attach a list of locations)					

	<ul> <li>Delivery of multiple copies of CCR to single-billed addresses serving several persons, such as apartments, businesses, and schools</li> <li>Delivery to community organizations (attach a list of organizations)</li> <li>Publication of the CCR in the electronic city newsletter or electronic community newsletter or listserv (attach a copy of the article or notice)</li> <li>Electronic announcement of CCR availability via social media outlets (attach list of social media outlets utilized)</li> <li>Other (attach a list of other methods used)</li> <li>For systems serving at least 100,000 persons: Posted CCR on a publicly-accessible internet site at the following URL: www</li></ul>
	Consumer Confidence Report Electronic Delivery Certification
	er systems utilizing electronic distribution methods for CCR delivery must complete page by checking all items that apply and fill-in where appropriate.
	Water system mailed a notification that the CCR is available and provides a direct URL to the CCR on a publicly available website where it can be viewed (attach a copy of the mailed CCR notification). URL: www.
	Water system emailed a notification that the CCR is available and provides a direct URL to the CCR on a publicly available site on the Internet where it can be viewed (attach a copy of the emailed CCR notification). URL: www.
	Water system emailed the CCR as an electronic file email attachment.  Water system emailed the CCR text and tables inserted or embedded into the body of an email, not as an attachment (attach a copy of the emailed CCR).
	Requires prior DDW review and approval. Water system utilized other electronic delivery method that meets the direct delivery requirement.
	vide a brief description of the water system's electronic delivery procedures and ude how the water system ensures delivery to customers unable to receive electronic very.
Pos	sted on Western Mesquite Mine SharePoint.

This form is provided as a convenience and may be used to meet the certification requirement of section 64483(c) of the California Code of Regulations.

#### **2022 Consumer Confidence Report**

#### **Water System Information**

Water System Name: [Mesquite Mine NTNC G No.1300643]

Report Date: [06-26-2023]

Type of Water Source(s) in Use: [Groundwater Wells]

Name and General Location of Source(s): [Well #s 2, 3, and 4; located approximately 3 miles south of

the Mesquite Mine on the 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, (928) 341-4653 ext. 3231]

#### **About This Report**

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, 2022 and may include earlier monitoring data.

# Importance of This Report Statement in Five Non-English Languages (Spanish, Mandarin, Tagalog, Vietnamese, and Hmong)

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

Language in Mandarin: 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 Name]以获得中文的帮助: [Enter Water System's Address][Enter Water System's Phone Number].

Language in Tagalog: 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] o tumawag sa [Enter Water System's Phone Number] para matulungan sa wikang Tagalog.

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

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

### **Terms Used in This Report**

Term	Definition
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 <i>E. coli</i> MCL violation has occurred and/or why total coliform bacteria have been found in our water system on multiple occasions.
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).
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 monitoring and reporting requirements, and water treatment requirements.
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.
Regulatory Action Level (AL)	The concentration of a contaminant which, if exceeded, triggers treatment or other requirements that a water system must follow.
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.
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.
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)

## Sources of Drinking Water and Contaminants that May Be Present in Source Water

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.

#### **Regulation of Drinking Water and Bottled Water Quality**

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.

#### **About Your Drinking Water Quality**

#### **Drinking Water Contaminants Detected**

Tables 1, 2, 3, 4, 5, 6, and 8 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

Complete if bacteria are detected.

Microbiological Contaminants	Highest No. of Detections	No. of Months in Violation	MCL	MCLG	Typical Source of Bacteria
E. coli	(In the year) 0	0	(a)	0	Human and animal fecal waste

<sup>(</sup>a) Routine and repeat samples are total coliform-positive and either is *E. coli*-positive or system fails to take repeat samples following *E. coli*-positive routine sample or system fails to analyze total coliform-positive repeat sample for *E. coli*.

Table 2. Sampling Results Showing the Detection of Lead and Copper

Complete if lead or copper is detected in the last sample set.

Lead and Copper	Sample Date	No. of Samples Collected	90 <sup>th</sup> Percentile Level Detected	No. Sites Exceeding AL	AL	PHG	Typical Source of Contaminant
Lead (ppb)	05/31/2021	5	13	0	15	0.2	Internal corrosion of household water plumbing systems; discharges from industrial manufacturers; erosion of natural deposits
Copper (ppm)	05/31/2021	5	0.195	0	1.3	0.3	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)	1/11/2021	4.5	N/A	10	0.004	Erosion of natural deposits
Barium (ppb)	1/11/2021	31.5	31-32	1000	2000	Erosion of natural deposits
Chromium Total (ppb)	11/03/2022	24.7	11 - 50	50	(100)	Erosion of natural deposits
Fluoride (ppm)*	11/03/2022	2.7	2.6 – 2.8	2.0	1.0	Erosion of natural deposits
Gross Alpha Particle Activity (pCi/L)	11/03/2022	3.71	3.32 – 4.10	15	(0)	Erosion of natural deposits
Lead (ppb)	1/11/2021	5.2	1.50 - 8.8	AL=15	0.2	Erosion of natural deposits
Nitrate (ppm)	11/3/2022	1.17	0.87 – 1.7	10	10	Erosion of natural deposits
Radium-226 (pCi/L)	11/03/2022	0.413	0.638 - 0.188	5	0.05	Erosion of natural deposits
Radium-228 (pCi/L)	11/03/2022	1.182	0.803 – 1.56	5	0.019	Erosion of natural deposits
Selenium (ppb)	1/11/2021	12	N/A	50	30	Erosion of natural deposits
Uranium (pCi/L)	11/3/2022	5.6	1.9 – 9.2	20	0.43	Erosion of natural deposits

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)	2/15/2021	450	N/A	500	N/A	Runoff/ leaching from natural deposits
Color (units)	2/15/2021	1.5	1.0 – 2.0	15	N/A	Naturally occurring organic materials

Copper (ppm)	2/15/2021	3.8	N/A	1.0	N/A	Erosion from natural deposits; Internal corrosion of building plumbing systems
Iron (ppm)	11/03/2022	255.7	35 - 660	0.3	N/A	Leaching from natural deposits
Sulfate (ppm)	2/15/2021	240	N/A	500	N/A	Runoff/leaching from natural deposits
Turbidity (NTU)	2/15/2021	0.50	0.44 - 0.55	5	N/A	Soil runoff
Total Dissolved Solids (ppm)*	11/03/2022	1143	960 -1200	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
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. [Enter Water System's Name] 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 <a href="http://www.epa.gov/lead">http://www.epa.gov/lead</a>.

Additional Special Language for Nitrate, Arsenic, Lead, Radon, and *Cryptosporidium*: [Enter Additional Information Described in Instructions for SWS CCR Document]

State Revised Total Coliform Rule (RTCR): [Enter Additional Information Described in Instructions for SWS CCR Document]

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

Table 7. Violation of a MCL, MRDL, AL, TT or Monitoring Reporting Requirement

Violation	Explanation	Duration	Actions Taken to Correct Violation	Health Effects Language
Fluoride	Naturally occurring in the 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 2022 is 0.06 mg/L	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 the state MCL of 2mg/L may get mottled teeth.
TDS	Naturally occurring in the 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 2022 is 48 mg/L	N/A
Iron	Naturally occurring in the source water.	On-going	Source well #4 is sampled quarterly.	N/A

Treated through	The source water
Sand Filter	goes through the
	Sand Filter and
	then the RO. The
	Sand Filter is
	effective in
	removing Iron and
	Manganese.

#### For Water Systems Providing Groundwater as a Source of Drinking Water

Table 8. 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
E. coli	(In the year) 0	N/A	0	(0)	Human and animal fecal waste
Enterococci	(In the year) 0	N/A	TT	N/A	Human and animal fecal waste
Coliphage	(In the year)	N/A	TT	N/A	Human and animal fecal waste

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

Special Notice of Fecal Indicator-Positive Groundwater Source Sample: [Enter Special Notice of Fecal Indicator-Positive Groundwater Source Sample]

**Special Notice for Uncorrected Significant Deficiencies:** [Enter Special Notice for Uncorrected Significant Deficiencies]

Table 9. Violation of Groundwater TT

Violation	Explanation	Duration	Actions Taken to Correct Violation	Health Effects Language
N/A				

#### For Systems Providing Surface Water as a Source of Drinking Water

Table 10. Sampling Results Showing Treatment of Surface Water Sources

Treatment Technique (a) (Type of approved filtration technology used)	N/A
Turbidity Performance Standards (b)	Turbidity of the filtered water must:
(that must be met through the water treatment process)	1 – Be less than or equal to [Enter Turbidity Performance Standard to Be Less Than or Equal to 95% of Measurements in a Month] NTU in 95% of measurements in a month.
	2 – Not exceed [Enter Turbidity Performance Standard Not to Be Exceeded for More Than Eight Consecutive Hours] NTU for more than eight consecutive hours.
	3 – Not exceed [Enter Turbidity Performance Standard Not to Be Exceeded at Any Time] NTU at any time.
Lowest monthly percentage of samples that met Turbidity Performance Standard No. 1.	N/A
Highest single turbidity measurement during the year	N/A
Number of violations of any surface water treatment requirements	N/A

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

#### Summary Information for Violation of a Surface Water TT

**Table 11. Violation of Surface Water TT** 

Violation	Explanation	Duration	Actions Taken to Correct Violation	Health Effects Language
N/A				

#### **Summary Information for Operating Under a Variance or Exemption**

[Enter Additional Information Described in Instructions for SWS CCR Document]

<sup>(</sup>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 Revised Total Coliform Rule Level 1 and Level 2 Assessment Requirements**

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, include the following information below [22 CCR section 64481(n)(1)].

#### 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.

The water system shall include the following statements, as appropriate:

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

During the past year [Insert Number of Level 2 Assessment] 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 we failed to correct all identified defects that were found during the assessment.

[For Violation of the Total Coliform Bacteria TT Requirement, Enter Additional Information Described in Instructions for SWS CCR Document]

If a water system is required to comply with a Level 2 assessment requirement that is due to an *E. coli* MCL violation, include the information below [22 CCR section 64481(n)(2)].

#### 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.

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: N/A

We failed to conduct the required assessment.

We failed to correct all sanitary defects that were identified during the assessment.

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: N/A

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

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

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

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

[If a water system detects *E. coli* and has not violated the *E. coli* MCL, the water system may include a statement that explains that although they have detected *E. coli*, they are not in violation of the *E. coli* MCL.] N/A



#### **Posted Lead and Copper 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**