

ABENGOA NORTH AMERICA

**Mojave Solar LLC**

42134 Harper Lake Road
Hinkley, California 92347

Phone: 760-308-0400

Subject:	09-AFC-5C
Condition Number:	SWAT 10
Description:	Annual Consumer Confidence Report (CCR)
Submittal Number:	SWAT10-14-00

June 12, 2018

Dale Rundquist, CPM
California Energy Commission
1516 Ninth Street
Sacramento, CA 95814
Dale.Rundquist@energy.ca.gov

Dear Mr. Rundquist,

State regulations require community water systems and nontransient-noncommunity water systems to provide consumers with an annual Consumer Confidence Report (CCR). The CCR includes information about the water system, water sources, definitions, levels of detected contaminants, water quality compliance/violations, and some educational information. The deadline for distributing the CCR to the consumers is July 1st of each year.

Enclosed for your records is the County approved annual Consumer Confidence Report (CCR). We will proceed to distribute the report to the consumers.

For your convenience we are including here the compliance language:

Verification: The project owner shall obtain a permit to operate a nontransient, non-community water system with the County of San Bernardino at least sixty (60) days prior to commencement of construction at the site. The project owner shall supply updates annually for all monitoring requirements and submittals to County of San Bernardino related to the permit, and proof of annual renewal of the operating permit.

As always, please contact me with any question.

Sincerely,

Jose Manuel Bravo Romero
Manager
Permitting, Compliance, Quality and Environment Department

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ASI Operations LLC

42134 Harper Lake Rd
Hinkley, CA 92347

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Mojave Solar LLC

42134 Harper Lake Road
Hinkley, California 92347

Phone: 760-308-0400

Cell: (303) 378-7302

jmanuel.bravo@abengoa.com

Attachments:

2017 Mojave Solar LLC approved Annual Consumer Confidence Report (CCR).
County CCR approval notice.

2017 Consumer Confidence Report

Water System Name: **Mojave Solar plant Alpha (3601184)**
Beta (3601185)

Report Date: 5/30/2018

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 - December 31, 2017 and may include earlier monitoring data.

Este informe contiene información muy importante sobre su agua potable. Tradúzcalo ó hable con alguien que lo entienda bien.

Type of water source(s) in use: Ground Water

Name & general location of source(s): Wells: Alpha 1, Alpha 2 located at Alpha Plant
Beta 3, Beta 4 located at Beta Plant

Drinking Water Source Assessment information: N/A

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

For more information, contact: José Manuel Bravo

Phone: (760) 308-2601 / (303) 378-7302

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

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: State Board permission 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)

with their monitoring and reporting requirements, and **pCi/L**: picocuries per liter (a measure of radiation) 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 Water Resources Control Board (State Board) prescribe regulations that limit the amount of certain contaminants in water provided by public water systems. State Board regulations 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 mo.) 1	1*	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	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		Human and animal fecal waste
<i>E. coli</i> (federal Revised Total Coliform Rule)	(In the year)	0	(a)	0	Human and animal fecal waste

(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

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
Copper (ppm)-Alpha plant	07.04.2015	6	0.360*	0	1.3	0.3	0	Internal corrosion of household water plumbing systems; discharges from industrial manufacturers; erosion of natural deposits

Copper (ppm)-Beta Plant	07.04.2015	6	0.720*	0	1.3	0.3	0	Internal corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives
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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)	04.04.2017 10.05.2017 02.11.2017 07.12.2017	Alpha : 424 Beta: 415	360-520 390-520	none	none	Salt present in the water and is generally naturally occurring
Hardness (ppm)	04.04.2017 10.05.2017 02.11.2017 07.12.2017	Alpha: 320 Beta: 312	230-480 320-400	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)	08.21.2017	Alpha: 9.75 Beta: 10.75*	7.5-12 8.5-13	10	0.004	Erosion of natural deposits; runoff from orchards; glass and electronics production wastes
Gross Alpha (pCi/L)	02.24.2017	Alpha: 7.9 Beta: 4.83	5.96-9.84 4.1-5.56	15	0.0	Erosion of natural deposits
Uranium (pCi/L)	02.24.2017	Alpha: 4.66 Beta: 3.73	4.06-5.26 2.30-5.16	20	0.43	Erosion of natural deposits
Total Alpha Radium -226 (pCi/L)	02.24.2017	Alpha: 0.0 Beta: 0.023	0.0-0.0 0.046-0.0	5	0.05	Erosion of natural deposits
Radium -228 (pCi/L)	02.24.2017	Alpha: 0.0 Beta: 0.0	0.0-0.0 0.0-0.0	5	0.019	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	MCL	PHG (MCLG)	Typical Source of Contaminant
TDS (ppm)	10.05.2017 11.02.2017 12.07.2017	A: 1779* B:2016* A: 2345* B:2246* A:2126* B:2367*	A: 1590-2505 B:2016-2465	1000	N/A	Runoff/leaching from natural deposits
Chloride (ppm)	10.05.2017 11.02.2017 12.07.2017	A: 470 B:300 A: 725* B:660* A: 490 B:535*	A: 390- 810 B:300-760	500	N/A	Runoff/leaching from natural deposits; seawater influence
Sulfate (ppm)	10.05.2017 11.02.2017 12.07.2017	A: 375 B:300 A: 395 B:430 A: 380 B:385	A: 300-460 B: 370-410	500	N/A	Runoff/leaching from natural deposits; industrial wastes

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 for Community Water Systems: 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. [INSERT NAME OF UTILITY] 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 (1-800-426-4701) 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
Total Coliform Bacteria	Perform the Bacteriological Sample Siting plan, the results was negative	Less than 24Hr	Perform the Bacteriological Sample Siting plan, the results was negative	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.
Copper	The next scheduled analysis will be on Jul-2018	2 years	Treat with RO units	Copper is an essential nutrient, but some people who drink water containing copper in excess of the action level over a relatively short amount of time may experience gastrointestinal distress. Some people who drink water containing copper in excess of the action level over many years may suffer liver or kidney damage. People with Wilson's Disease should consult their personal doctor.
Arsenic	The potable RO effluent Arsenic in Non-detectable.	1 year	Treat with RO units	Some people who drink water containing arsenic in excess of the MCL over many years may experience skin damage

				or circulatory system problems, and may have an increased risk of getting cancer
Chloride	The potable RO Chloride is within the limit.	1 year	Treat with RO units	None
TDS	The potable RO TDS is within the limit.	1 year	Treat with RO units	None

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>	(In the year)		0	(0)	Human and animal fecal waste
Enterococci	(In the year)		TT	n/a	Human and animal fecal waste
Coliphage	(In the year)		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				
SPECIAL NOTICE FOR UNCORRECTED SIGNIFICANT DEFICIENCIES				
VIOLATION OF GROUNDWATER TT				
TT Violation	Explanation	Duration	Actions Taken to Correct the Violation	Health Effects Language

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

Summary Information for Operating Under a Variance or Exemption

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 [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.

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.

José Manuel Bravo Romero

From: Saguan, Ivy <Ivy.Saguan@dph.sbcounty.gov>
Sent: Monday, June 11, 2018 3:43 PM
To: José Manuel Bravo Romero
Subject: RE: Mojave Solar CCR draft
Attachments: 6CCR_SWSAtt7_CertForm_20180111.docx

Hello Jose Manuel,

Good afternoon.

I have reviewed the CCR draft for Mojave Solar Project for Alpha & Beta.

Your CCR is approved to be distributed already.

Attached is the CCR certification form that needs to be submitted to our department on or before the 1st of October 2018.

Please let me know if you have any questions.

Have a great day.

Sincerely,

Ivy F. Saguan

Registered Environmental Health Specialist
Department of Public Health
Division of Environmental Health Services
Land Use Protection Program
385 N. Arrowhead Ave., 2nd floor
San Bernardino, CA 92415
Phone: 800.442.2283 Fax: 909.387.4323
Mobile: 909.677.0895



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From: José Manuel Bravo Romero [mailto:jmanuel.bravo@abengoa.com]
Sent: Monday, June 11, 2018 9:21 AM
To: Saguan, Ivy <Ivy.Saguan@dph.sbcounty.gov>
Subject: RE: Mojave Solar CCR draft

Good morning Ivy,

Was you able to check on the CCR?

Thank you.

Best regards / Saludos.

José Manuel Bravo Romero.
Manager. Permitting, Compliance, Quality & Environmental Department.

ABENGOA NORTH AMERICA

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jmanuel.bravo@abengoa.com
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Eco-Tip: Printing e-mails is usually a waste

From: Saguan, Ivy <Ivy.Saguan@dph.sbcounty.gov>
Sent: Wednesday, June 6, 2018 7:54 AM
To: José Manuel Bravo Romero <jmanuel.bravo@abengoa.com>
Subject: RE: Mojave Solar CCR draft

Hi Jose Manuel,

Good morning!

Yes, I received the CCR's drafts for your water system.

I will be heading out to the field. I will be reviewing the drafts late this week.

Thank you so much for taking care of this in a timely manner.

You will be hearing from me before the end of this week.

Thank you and have a great day.

Sincerely,

Ivy F. Saguan
Registered Environmental Health Specialist
Department of Public Health
Division of Environmental Health Services
Land Use Protection Program
385 N. Arrowhead Ave., 2nd floor
San Bernardino, CA 92415
Phone: 800.442.2283 Fax: 909.387.4323



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From: José Manuel Bravo Romero [<mailto:jmanuel.bravo@abengoa.com>]
Sent: Wednesday, June 6, 2018 7:50 AM
To: Saguan, Ivy <Ivy.Saguan@dph.sbcounty.gov>
Subject: RE: Mojave Solar CCR draft

Good morning Mrs. Saguan.

Just checking to make sure you received the CCR draft from our facility.

Thank you.

Best regards / Saludos.

José Manuel Bravo Romero.
Manager. Permitting, Compliance, Quality & Environmental Department.

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Eco-Tip: Printing e-mails is usually a waste

From: José Manuel Bravo Romero
Sent: Friday, June 1, 2018 7:35 AM
To: Saguan, Ivy <Ivy.Saguan@dph.sbcounty.gov>
Subject: Mojave Solar CCR draft

Good morning Mrs. Saguan,

Find attached the Mojave Solar's CCR draft for your review and approval.

As soon as we receive your approval we will distribute it to the consumer.

Thank you in advance.

Best regards / Saludos.

José Manuel Bravo Romero.
Manager. Permitting, Compliance, Quality & Environmental Department.

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