



Sunnyside Operations Associates L.P.

P.O. Box 10, East Carbon, Utah 84520 • (801) 888-4476 • Fax (801) 888-2538

January 6, 2021

Brian Speer
Solid Waste Program Manager
195 North 1950 West
Salt Lake City, Utah 84116

RE: Sunnyside Cogeneration Associates (SCA)
SCA #2 Ash Landfill
CCR Annual Ground Water Report

Dear Mr. Speer:

Please find attached SCA's CCR Annual Ground Water Report. Monitoring wells MW-8, MW-9, MW-10 and MW-11, were sampled on June 24, 2020 and November 5, 2020, in accordance with Federal regulations under 40CFR 257 and State regulations under R315-319.

Water samples were collected at MW-8 only, since MW-9, MW-10 and MW-11 were dry wells. MW-8 sampling results were well within permit protection limits.

Enclosures:

<u>Table 1:</u>	CCR Ground Water Analysis for year 2020
<u>Table 2:</u>	CCR Monitoring Well Parameters for year 2020

SCA #2 Ash Landfill
CCR Annual Ground Water Report
Page 2:

If you have any questions regarding the sampling activities or this report, please contact Rusty Netz or myself at (435) 888-4476.

Thank You,



Gerald Hascall

Agent for

Sunnyside Cogeneration Associates

Cc: Rusty Netz
Scott Carlson
Plant File

CCR Monitoring Wells

Legend
Wells



500 ft

TABLE 1

Sunnyside Cogeneration Associates Facility SCA #2 CCR Ash Landfill Groundwater Compliance Sampling

First half of 2020
Sampling Date: 6/24/20

Sample Location	Field Parameters				Metals (mg/l)						
	Temp. (C)	pH (S.U.)	SC (umhos)	Boron	Calcium	Chloride	Fluoride	pH	Sulfate	TDS	
Permit Background Values	N.A.	N.A.	N.A.	0.35	422	251	0.6	7.2	6743	11013	
Permit Protection Levels	N.A.	N.A.	N.A.	0.46	510.70	394.2	1.42	7.98	7988	12659	
NW-8	16.1	6.15	8361	0.23	252	243	0.5	7.2	5740	9690	
NW-9	NW	NW	NW	NW	NW	NW	NW	NW	NW	NW	
NW-10	NW	NW	NW	NW	NW	NW	NW	NW	NW	NW	
NW-11	NW	NW	NW	NW	NW	NW	NW	NW	NW	NW	

NW= No water present in well
NA= Non-Applicable
ND=Non-Detect

TABLE 1

Sunnyside Cogeneration Associates Facility SCA #2 CCR Ash Landfill Groundwater Compliance Sampling

Second half of 2020
Sampling Date: 11/5/20

Sample Location	Field Parameters				Metals(mg/l)						
	Temp. (C)	pH (S.U.)	SC (umhos)	Boron	Calcium	Chloride	Fluoride	pH	Sulfate	TDS	
Permit Background Values	N.A.	N.A.	N.A.	0.35	422	251	0.6	7.2	6743	11013	
Permit Protection Levels	N.A.	N.A.	N.A.	0.46	510.70	394.2	1.42	7.98	7988	12659	
MW-8	13.3	6.78	8198	0.27	270	254	0.54	7.1	6310	11200	
MW-9	NW	NW	NW	NW	NW	NW	NW	NW	NW	NW	
MW-10	NW	NW	NW	NW	NW	NW	NW	NW	NW	NW	
MW-11	NW	NW	NW	NW	NW	NW	NW	NW	NW	NW	

NW= No water present in well
NA= Non-Applicable
ND=Not-Detect

TABLE 2
Sunnyside Cogeneration Associates Facility
SCA #2 CCR Ash Landfill Groundwater Compliance Sampling
First Half 2020

Date: June 24, 2020

GROUND WATER WELLS: _____

Casing Diameter (inches) 2

Casing Type: PVC

LOCATION	Monitoring Well	Personnel	Weather	Static Water Level (ft.)	Total Well Depth (ft.)	Calculated Purge Volume (gals.)	Purge Method	Purge Volume (gals.)	Field Parameters		
									Temp. (C)	pH (su)	SC (um)
SCA #2 Ash Landfill	MW-8	R. Netz	Clear	18.2	50.0	15.26	PUMP	15.0	16.1	6.15	8,361
SCA #2 Ash Landfill	MW-9	R. Netz	Clear	NW	50.0	NW	NW	NW	NW	NW	NW
SCA #2 Ash Landfill	MW-10	R. Netz	Clear	NW	50.0	NW	NW	NW	NW	NW	NW
SCA #2 Ash Landfill	MW-11	R. Netz	Clear	NW	65.0	NW	NW	NW	NW	NW	NW

Purge volume (gallons) = ((well depth-static water level)/25) x (casing dia.)² x³
 NW- NO Water Present in well
 NS=No Sample Taken

TABLE 2

Sunnyside Cogeneration Associates Facility SCA #2 CCR Ash Landfill Groundwater Compliance Sampling Second Half 2020

Date: November 5, 2020

GROUND WATER WELLS:

Casing Diameter (inches) 2

Casing Type: PVC

LOCATION	Monitoring Well	Personnel	Weather	Static Water Level (ft.)	Total Well Depth (ft.)	Calculated Purge Volume (gals.)	Purge Method	Purge Volume (gals.)	Field Parameters		
									Temp. (C)	pH (su)	SC (um)
SCA #2 Ash Landfill	MMW-8	R. Netz	Clear	19.5	50.0	14.65	PUMP	14.5	13.3	6.78	8,198
SCA #2 Ash Landfill	MMW-9	R. Netz	Clear	NW	50.0	NW	NW	NW	NW	NW	NW
SCA #2 Ash Landfill	MMW-10	R. Netz	Clear	NW	50.0	NW	NW	NW	NW	NW	NW
SCA #2 Ash Landfill	MMW-11	R. Netz	Clear	NW	65.0	NW	NW	NW	NW	NW	NW

Purge volume (gallons) = ((well depth-static water level)/25) x (casing dia.)² x 3
 NW- NO Water Present in well
 NS=No Sample Taken



Certificate of Analysis

**Sunnyside Cogeneration
Rusty Netz
P.O. Box 10
East Carbon, UT 84520**

PO#: _____
Receipt: **6/25/20 11:20 @ 24.3 °C**
Date Reported: 7/6/2020
Project Name: **CCR Water Sampling**

Sample ID: **MW-8**

Matrix: **Water**

Lab ID: **20F1602-01**

Date Sampled: **6/24/20 9:00**

Sampled By: _____

	<u>Result</u>	<u>Units</u>	<u>Minimum Reporting Limit</u>	<u>Method</u>	<u>Preparation Date/Time</u>	<u>Analysis Date/Time</u>	<u>Flag(s)</u>
Inorganic							
Chloride	243	mg/L	5	EPA 300.0	6/29/20	6/29/20	
Fluoride	0.5	mg/L	0.5	EPA 300.0	6/29/20	6/29/20	
pH	7.2	pH Units	0.1	SM 4500 H-B	6/25/20 14:58	6/25/20 15:20	SPH
Sulfate	5740	mg/L	100	EPA 300.0	6/29/20	6/29/20	
Total Dissolved Solids (TDS)	9690	mg/L	20	SM 2540 C	6/30/20	6/30/20	
Metals							
Boron, Total	0.23	mg/L	0.05	EPA 200.7	6/29/20	6/29/20	
Calcium, Total	252	mg/L	0.2	EPA 200.7	6/29/20	6/29/20	



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Certificate of Analysis

**Sunnyside Cogeneration
Rusty Netz
P.O. Box 10
East Carbon, UT 84520**

PO#:
Receipt: **6/25/20 11:20 @ 24.3 °C**
Date Reported: 7/6/2020
Project Name: **CCR Water Sampling**

Report Footnotes

Abbreviations

ND = Not detected at the corresponding Minimum Reporting Limit (MRL)
1 mg/L = one milligram per liter or 1 mg/kg = one milligram per kilogram = 1 part per million
1 ug/L = one microgram per liter or 1 ug/kg = one microgram per kilogram = 1 part per billion
1 ng/L = one nanogram per liter or 1 ng/kg = one nanogram per kilogram = 1 part per trillion.

Flag Descriptions

SPH = Sample submitted past method specified holding time.

DRINKING WATER SAMPLES ONLY

CHEMTECH - FORD ANALYTICAL LABORATORY

CHAIN OF CUSTODY

COMPANY: SCA (Sunny side 0 generation)
 ADDRESS: _____
 CITY/STATE/ZIP: _____
 PHONE #: _____ FAX: _____
 CONTACT: Rusty Netz PROJECT: CCR water sampling
 EMAIL: _____

BILLING ADDRESS: _____
 BILLING CITY/STATE/ZIP: _____
 PURCHASE ORDER: _____



TURNAROUND TIME REQUIRED: _____
 * Expedited turnaround subject to additional charge

State System Number	Send to State
	Yes No

No tests are listed.
 Assuming the same list as the other samples
 -M- 6-25-20

TESTS REQUESTED										Bacteria			
										Total Coliform - E coli (Present/Absent)	Total Coliform - E coli (Enumerated)	HPC (Plate Count)	R = Routine I = Investigative TR = Trigger Source RP = Repeat
1	2	3	4	5	6	7	8	9	10				REPEAT OR = Original Location UP = Upstream DN = Downstream
11	12	13	14	15	16	17	18	19	20				
21	22	23	24	25	26	27	28	29	30				
31	32	33	34	35	36	37	38	39	40				
41	42	43	44	45	46	47	48	49	50				
51	52	53	54	55	56	57	58	59	60				
61	62	63	64	65	66	67	68	69	70				
71	72	73	74	75	76	77	78	79	80				
81	82	83	84	85	86	87	88	89	90				
91	92	93	94	95	96	97	98	99	100				

Lab Use Only	CLIENT SAMPLE INFORMATION					
	LOCATION	DATE	TIME	PARTICLE NUMBER (code)	POINT CODE (DBP)	Field Record Number
201602 21	MIW-8	6/24/20	0900			
1						
2						
3						
4						
5						
6						
7						
8						
9						
10						

Sampled by (print): _____ Sampled on (date/time): _____
 Special instructions: _____
 Submitted by (signature): _____ Date/time: 6/24/20 1200
 Received by (signature): _____ Date/time: 6/25/20 1120
 Requested by (signature): _____ Date/time: _____
 Received by (signature): _____ Date/time: _____

ON ICE NOT ON ICE Temp (C°): 24.3
 Samples received outside the EPA recommended temperature range of 0-6 C° may be rejected.

CHEMTECH FORD
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 Sandy, UT 84070

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 866.792.0093 FAX
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Payment Terms are net 30 days OAC + 1.5% interest charge per month (18% per annum)
 Client agrees to pay collection costs and attorney's fees

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Certificate of Analysis

Sunnyside Cogeneration
Rusty Netz
P.O. Box 10
East Carbon, UT 84520

PO#:
Receipt: 11/6/20 9:50 @ 10.7 °C
Date Reported: 11/12/2020
Project Name: CCR Ash Pile Sampling

Sample ID: MW-8

Matrix: Wastewater

Date Sampled: 11/5/20 9:30

Sampled By: Client

Lab ID: 20K0442-01

	Result	Units	Minimum Reporting Limit	Method	Preparation Date/Time	Analysis Date/Time	Flag(s)
Inorganic							
Chloride	254	mg/L	5.0	EPA 300.0	11/6/20	11/6/20	
Fluoride	0.54	mg/L	0.50	EPA 300.0	11/6/20	11/6/20	
pH	7.1	pH Units	0.1	SM 4500 H-B	11/6/20 15:27	11/6/20 16:46	SPH
Sulfate	6310	mg/L	100	EPA 300.0	11/6/20	11/6/20	
Total Dissolved Solids (TDS)	11200	mg/L	50	SM 2540 C	11/9/20	11/9/20	
Metals							
Boron, Total	0.27	mg/L	0.10	EPA 200.7	11/11/20	11/11/20	
Calcium, Total	270	mg/L	2.0	EPA 200.7	11/11/20	11/11/20	



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Certificate of Analysis

Sunnyside Cogeneration
Rusty Netz
P.O. Box 10
East Carbon, UT 84520

PO#:
Receipt: 11/6/20 9:50 @ 10.7 °C
Date Reported: 11/12/2020
Project Name: CCR Ash Pile Sampling

Report Footnotes

Abbreviations

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1 ug/L = one microgram per liter or 1 ug/kg = one microgram per kilogram = 1 part per billion.
1 ng/L = one nanogram per liter or 1 ng/kg = one nanogram per kilogram = 1 part per trillion.

Flag Descriptions

SPH = Sample submitted past method specified holding time.

DRINKING WATER SAMPLES ONLY

CHEMTECH - FORD ANALYTICAL LABORATORY

CHAIN OF CUSTODY

COMPANY: SCA
 ADDRESS: _____
 CITY/STATE/ZIP: _____
 PHONE #: _____
 CONTACT: Rusty Artz FAX: _____
 PROJECT: CCR Ash pile sampling
 EMAIL: _____

BILLING ADDRESS: _____
 BILLING CITY/STATE/ZIP: _____
 PURCHASE ORDER: _____



TURNAROUND TIME REQUIRED: _____
 * Expedited turnaround subject to additional charge

State System Number: _____

Send to State
 Yes No

TESTS REQUESTED	Total Coliform - E. coli (Presumptive)	Total Coliform - E. coli (Enumerated)	HPC (Peanut Count)	Bacteria	
				R = Routine	I = Investigative
PAT History project Amc 11/16/20				TR	RP

Lab Use Only	CLIENT SAMPLE INFORMATION					Field Residual Chlorine
204042 -01	LOCATION <u>MW-8</u>	DATE <u>11/5/20</u>	TIME <u>9:30</u>	FACILITY ID (source code) <u>SCA</u>	POINT CODE (DOP)	

Sampled by: [print] _____ Signature: _____
 ON ICE NOT ON ICE Temp (C): 10.7

Special Instructions: _____
 Samples received outside the EPA recommended temperature range of 0-6 C° may be rejected.

Requested by: (signature) <u>Rusty Artz</u>	Date/Time <u>11/5/20 12:00</u>	Received by: (signature) <u>Janet Miles</u>	Date/Time <u>11/6/20 9:50</u>
Requested by: (signature)	Date/Time	Received by: (signature)	Date/Time
Requested by: (signature)	Date/Time	Received by: (signature)	Date/Time

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Payment Terms are net 30 days OAC. 1.5% interest charge per month (18% per annum)
 Client agrees to pay collection costs and attorney's fees.

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