BEFORE THE HEARING BOARD OF THE

SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT

In The Matter Of SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT, Petitioner, CHIQUITA CANYON, LLC, a Delaware Corporation, [Facility ID No. 119219] Respondent.	**Case No. 6177-4** **DECLARATION OF SRIVIDHYA VISWANATHAN, P.E.** Health and Safety Code § 41700, and District Rules 402, 431.1, 3002, 203, 1150 Hearing Date: April 24-25, 2024 Time: 9:30 A.M. Place: Hearing Board South Coast Air Quality Management District 21865 Copley Drive Diamond Bar, CA 91765

I, Srividhya Viswanathan, declare as follows:

1. I am of sufficient age and am competent to testify in this proceeding. I make this declaration based upon personal knowledge and am competent to testify to the facts set forth herein.

Background and Experience

2. As discussed in more detail in my prior declarations in this Case No. 6177-4, I serve on the Reaction Committee as the expert on the landfill gas well-field and dewatering. I am a Vice President and Director of Engineering of the Southwest Region of SCS Engineers, Inc. ("SCS"). I have over 17 years of experience in solid waste management services and infrastructure projects. I began working with Chiquita Canyon, LLC ("Chiquita") in November 2022, primarily advising on Chiquita's landfill gas well-field and dewatering system. Since then, I have continued working on these components at the Chiquita Canyon Landfill ("Landfill").

3. This declaration is made for the April 24 and 25, 2024 status and modification hearing on the Modified Stipulated Order for Abatement with the South Coast AQMD issued on March 21, 2024 in Case No. 6177-4 ("Modified Stipulated Order").

Compliance with the March 21, 2024 Modified Stipulated Order

4. On March 21, 2024, Chiquita entered a further modified Stipulated Order with the South Coast AQMD that requires Chiquita to implement new and modified mitigation measures to address dewatering and further increase monitoring.

5. Chiquita has begun implementing these updates and new requirements and reports, many of which are or will be made available on Chiquita's website. Chiquita is implementing and/or working to implement the conditions described below as they relate to Chiquita's landfill gas wells.

Chiquita continues to expand the gas well system through the installation of additional vertical dual extraction wells.

6. Chiquita continues to expand the landfill gas well system to address the landfill reaction. As of April 19, 2024, Chiquita has installed a total of 112 wells since July 2023, when Chiquita first began installing wells in response to the reaction.

7. As required by **Condition No. 13** and **Condition No. 15**, since September 7, 2023, Chiquita continues to expand the gas well system and operate new wells and collectors. Chiquita also continues to operate the two sumps with pumps along the west slope to dewater the Landfill and operates additional landfill gas collection equipment as construction is completed. Chiquita submitted a design and installation schedule for 70 additional dual vertical extraction wells and their associated piping on January 31, 2024. 64 of those 70 wells have been installed as of April 19, 2024. Chiquita continues to notify South Coast AQMD of the number of added wells in monthly reports pursuant to Condition No. 8(m). Chiquita also notifies South Coast AQMD each Friday regarding which wells have been installed the prior week and which are scheduled to be installed the following week.

8. During any well drilling, Chiquita complies with the following procedures as required:

a. **Condition No. 15(e)**: Chiquita uses a landfill gas control box that is vented to an approved emission control system to prevent emissions.

b. **Condition No. 15(f)**: Chiquita continues to complete each well and cap it the same day its construction commences, unless the well hole is completely covered

(using a minimum 8'x8' at least 0.25" thick steel plate, and 12 inches depth of clean dirt), or the subsequently installed pipe is capped.

c. **Condition No. 15(g)**: Chiquita connects each well to an operating landfill gas header or the ends of the well are sealed with blind flanges, glued or fused caps, or other types of seals approved by South Coast AQMD as soon as well is installed.

d. **Condition No. 15(h)**: Chiquita continues to properly cover and seal all openings and connections of the landfill gas collection system to prevent leaks in accordance with the South Coast AQMD Title V Permit and all applicable regulations.

e. **Condition No. 15(i)**: Chiquita installs additional stainless steel, carbon steel, or CPVC wells in the Reaction Area per the recommendation of the Reaction Committee. Stainless steel or carbon steel is installed for any well which has gas temperatures exceeding 170 degrees Fahrenheit.

9. As required by **Condition No. 15(b)(i)**, on April 18, 2024, Chiquita provided to South Coast AQMD an updated design and installation schedule incorporating the dual vertical extraction wells under Condition No. 15(a) and the additional dual vertical extraction wells under Condition No. 15(b) and their associated piping. A true and correct copy of the schedule is attached as **Exhibit A**.

Chiquita has resumed the installation and operation of dewatering pumps and is dewatering to the best of its ability.

10. As discussed at the March hearing, Chiquita had as many as 44 pumps in operation before experiencing a change in the constituents of its leachate. As a result of the changing constituents, Chiquita had to slow down its dewatering. At the time of the March hearing, Chiquita had shut off 42 of the 44 pumps in the vertical extraction wells but was continuing to operate pumps in sumps.

11. Since March, I understand that Chiquita has worked with experts in wastewater treatment to improve its onsite treatment capabilities and has worked to identify additional offsite treatment and

disposal facilities to increase its offsite disposal capacity. Chiquita has also increased the number of tanks on site, freeing up additional capacity for dewatering.

12. Chiquita still faces constraints on its ability to pump due to lack of adequate offsite disposal facilities but is successfully restarting dewatering through vertical extraction wells.

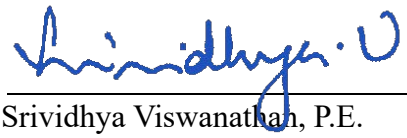
13. Despite facing constraints, as required by **Condition No. 17**, Chiquita is dewatering wells impacted by liquids and taking measures to remove additional liquids in the Reaction Area to limit the reaction severity and spread. Chiquita provides these updates in Condition No. 8 reports. As required by **Condition No. 65**, since March 29, 2024, Chiquita has been providing to South Coast AQMD each Friday a summary of leachate dewatering pumps that have been installed and resumed operation the prior week, and the number and location of dewatering pumps anticipated to be installed and placed into operation in the following week. True and correct copies of the March 29, April 5, April 12, and April 19, 2024 summaries of leachate dewatering pumps submitted to South Coast AQMD are attached as **Exhibit B**. 31 dewatering pumps have been installed in dual vertical extraction wells and are operational as of April 19, 2024.

14. **Condition No. 17** required Chiquita to install dewatering sumps/pumps in at least 60% of the landfill gas vertical extraction wells capable of extracting liquids by March 15, 2024, Chiquita had achieved the 60% target in early 2024 and was on track to maintain this target by March 15, 2024, but due to the changed circumstances in February, Chiquita was forced to slow its dewatering and turn off pumps. As required by Condition No. 17(a), Chiquita will provide detailed rationale and reasoning in the April 22, 2024 Condition No. 8 report.

15. As required by **Condition No. 18**, Chiquita submitted to South Coast AQMD revised dewatering guidelines on April 4, 2024 that implemented South Coast AQMD comments received by e-mail on March 13, 2024. A true and correct copy of the revised dewatering guidelines is attached as **Exhibit C**. Although awaiting approval by South Coast AQMD, Chiquita has already implemented the dewatering guidelines and continues to do so to the maximum extent feasible in light of leachate tank capacity shortages.

I declare under penalty of perjury under the laws of the State of California that the foregoing is true and correct to my personal knowledge.

Executed on this 19th day of April 2024, in San Diego, California.

By: 

Srividhya Viswanathan, P.E.
Vice President
SCS Engineers

BEFORE THE HEARING BOARD OF THE

SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT

In The Matter Of SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT, Petitioner, vs. CHIQUITA CANYON, LLC a Delaware Corporation, [Facility ID No. 119219] Respondent.	**Case No. 6177-4** **EXHIBIT A TO DECLARATION OF SRIVIDHYA VISWANATHAN, P.E.** Health and Safety Code § 41700, and District Rules 402, 431.1, 3002, 203, 1150 Hearing Date: April 24-25, 2024 Time: 9:30 am Place: Hearing Board South Coast Air Quality Management District 21865 Copley Drive Diamond Bar, CA 91765

From: Steve Cassulo <Steven.Cassulo@WasteConnections.com>
Sent: Thursday, April 18, 2024 6:24 PM
To: bchen@aqmd.gov
Cc: ndickel@aqmd.gov; cojeda@aqmd.gov; wchaley@scsengineers.com; sviswanathan@scsengineers.com; bdick@scsengineers.com; Pablo Sanchez-Soria; neal@blueridgeservices.com; rcpleus@intertox.com; psullivan@scsengineers.com
Subject: Case No. 6177-4 – Chiquita Canyon, LLC – Updated Well Design and Installation Schedule
Attachments: 2024.04.18_CCLF AQMD GCCS Updated Design Submittal.pdf

Follow Up Flag: Flag for follow up
Flag Status: Flagged

Dear Mr. Chen,

Attached please find the updated design and installation schedule incorporating Condition 15(a) and 15(b) wells and their associated piping on behalf of Chiquita Canyon, LLC.

Steve Cassulo
District Manager
661-371-9214

April 18, 2024
File No. 01204123.21-13

Baitong Chen, Air Quality Engineer, bchen@aqmd.gov
Nathaniel Dickel, Senior Air Quality Engineer, ndickel@aqmd.gov
Christina Ojeda, Air Quality Inspector, cojeda@aqmd.gov
South Coast Air Quality Management District
21865 Copley Drive
Diamond Bar, California 91765

Subject: Updated Design and Installation Schedule of the Gas Collection and Control System Well-Field Expansion Plan
Chiquita Canyon Landfill – Castaic, California

Dear Mr. Chen:

In accordance with Condition No. 15(b)(i) of the March 21, 2024 Modified Stipulated Order for Abatement (SOFA) pertaining to the Chiquita Canyon Landfill (Landfill) (Case No. 6177-4), Chiquita Canyon, LLC (Chiquita) provides the updated design and installation schedule of the gas collection and control system (GCCS) well-field expansion plan incorporating the wells under SOFA Condition No. 15(a) and the additional wells under Condition No. 15(b) and their associated piping.

Attachment A presents the updated "Proposed Overall GCCS Site Plan" drawing, prepared by SCS Engineers and dated April 16, 2024. This updated drawing illustrates the installation plan design for an average of three (3) wells per acre within the estimated extent of elevated temperature landfill conditions as depicted by the Reaction Committee in their monthly determinations and a minimum of two (2) wells per acre in any individual grid along with associated landfill gas (LFG) collection piping.

The wells will be single casing completions, with design depths ranging between 42 and 297 feet, as depicted in **Attachment B**'s updated table titled "Proposed Well Schedule" also prepared by SCS and dated April 16, 2024. The well casings will be constructed using perforated and blank (solid) 8-inch diameter Chlorinated Poly Vinyl Chloride (CPVC) Schedule 80 and carbon steel pipe. The total length of 8-inch carbon steel well casings and 8-inch CPVC well casings will vary depending on temperatures encountered during drilling. If temperatures of the waste exceed 150 degrees Fahrenheit, then the well will be constructed of carbon steel instead of CPVC. The final number, depth, and design of the vertical LFG extraction wells may be subject to change based on field and/or other conditions.

The Landfill will continue to install new LFG header and lateral piping, associated tees, valves, and road crossings. The proposed LFG piping will continue to include 36-inch (39 feet), 24-inch (7,369 feet), 20-inch (20 feet), 18-inch (3,781 feet), 8-inch (1,875 feet), and 6-inch (14,170 feet) header and lateral piping to connect all vertical extraction wells to the proposed and existing GCCS.

The expected gas collection from the associated proposed LFG wells, header and lateral piping will be approximately 2,100 standard cubic feet per minute (scfm); a reduction in gas collection from the existing horizontal collectors is expected as new vertical wells are installed.

These proposed upgrades of the additional wells and upgrades to the piping system are expected to be completed by August 30, 2024, weather, soil, and safety conditions permitting. Monthly updates on these upgrades will be included in the monthly report submitted to South Coast AQMD pursuant to SOFA Condition No. 8(m).

Please contact either of the undersigned if you have questions or require additional information.

Sincerely,

Bill Haley

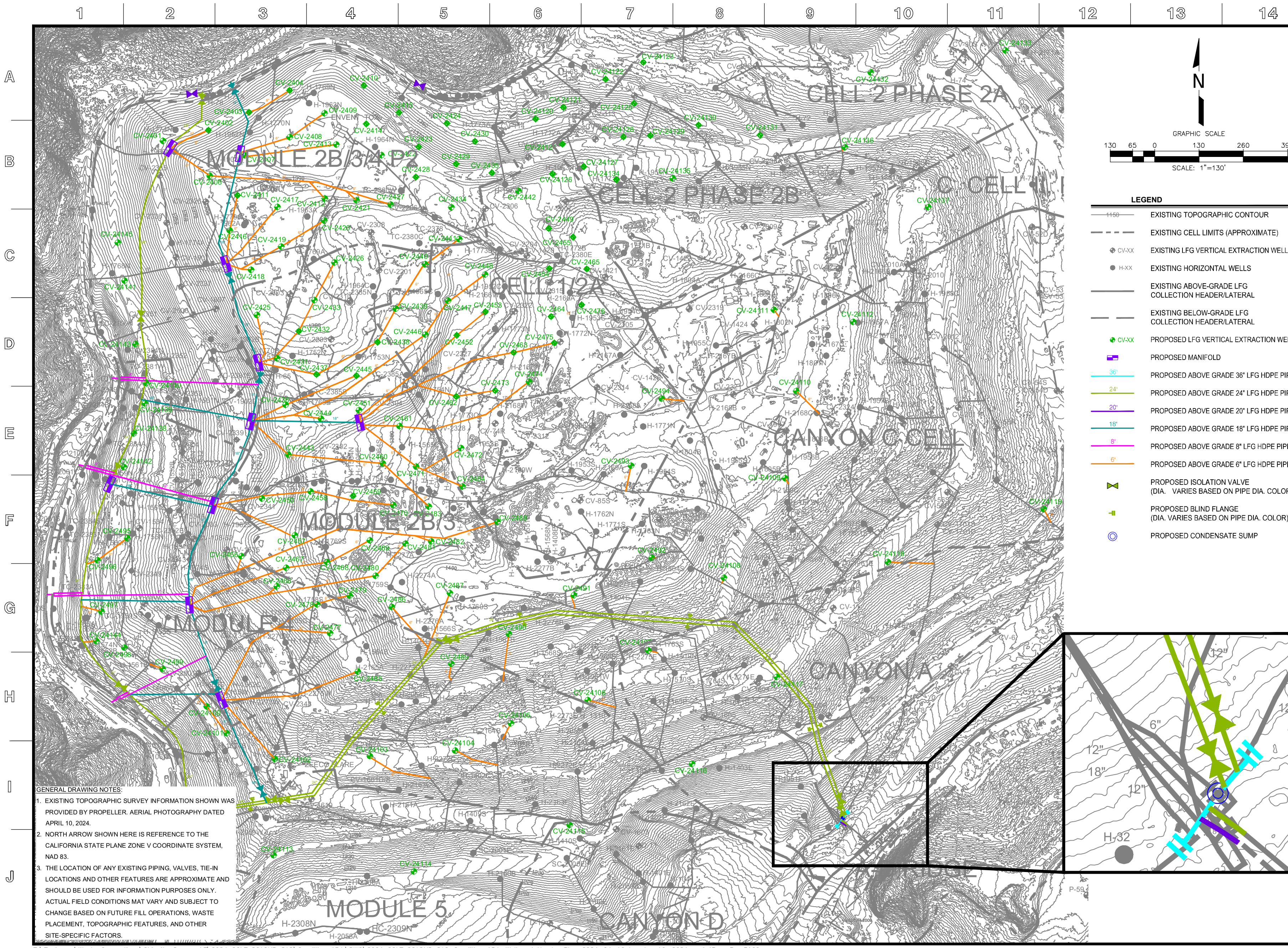
Bill Haley, PE
Project Director
SCS Engineers

Srividhya Viswanathan, PE
Vice President
SCS Engineers

cc: Robert Dick, PE, BCEE, SCS Engineers
Pablo Sanchez Soria, PhD, CIH, CTEH
Neal Bolton, PE, Blue Ridge Services, Inc.
Angie Perez, PhD, CIH, CTEH
Patrick S. Sullivan, BCES, CCP, SCS Engineers

Attachment A

Proposed Overall GCCS Site Plan



N

GRAPHIC SCALE

130 65 0 130 260 390

SCALE: 1"=130'

LEGEND

- 1150 — EXISTING TOPOGRAPHIC CONTOUR
- EXISTING CELL LIMITS (APPROXIMATE)
- CV-XX — EXISTING LFG VERTICAL EXTRACTION WELL
- H-XX — EXISTING HORIZONTAL WELLS
- EXISTING ABOVE-GRADE LFG COLLECTION HEADER/LATERAL
- EXISTING BELOW-GRADE LFG COLLECTION HEADER/LATERAL
- CV-XX — PROPOSED LFG VERTICAL EXTRACTION WELL
- PROPOSED MANIFOLD
- 36" — PROPOSED ABOVE GRADE 36" LFG HDPE PIPING
- 24" — PROPOSED ABOVE GRADE 24" LFG HDPE PIPING
- 20" — PROPOSED ABOVE GRADE 20" LFG HDPE PIPING
- 18" — PROPOSED ABOVE GRADE 18" LFG HDPE PIPING
- 8" — PROPOSED ABOVE GRADE 8" LFG HDPE PIPING
- 6" — PROPOSED ABOVE GRADE 6" LFG HDPE PIPING
- PROPOSED ISOLATION VALVE (DIA. VARIES BASED ON PIPE DIA. COLOR)
- PROPOSED BLIND FLANGE (DIA. VARIES BASED ON PIPE DIA. COLOR)
- PROPOSED CONDENSATE SUMP

GENERAL DRAWING NOTES:

1. EXISTING TOPOGRAPHIC SURVEY INFORMATION SHOWN WAS PROVIDED BY PROPELLER. AERIAL PHOTOGRAPHY DATED APRIL 10, 2024.
2. NORTH ARROW SHOWN HERE IS REFERENCE TO THE CALIFORNIA STATE PLANE ZONE V COORDINATE SYSTEM, NAD 83.
3. THE LOCATION OF ANY EXISTING PIPING, VALVES, TIE-IN LOCATIONS AND OTHER FEATURES ARE APPROXIMATE AND SHOULD BE USED FOR INFORMATION PURPOSES ONLY. ACTUAL FIELD CONDITIONS MAT VARY AND SUBJECT TO CHANGE BASED ON FUTURE FILL OPERATIONS, WASTE PLACEMENT, TOPOGRAPHIC FEATURES, AND OTHER SITE-SPECIFIC FACTORS.

NO.	REVISION	DATE

SHEET TITLE: PROPOSED OVERALL GCCS SITE PLAN

PROJECT TITLE: CHIQUITA CANYON LANDFILL CASTAIC, CALIFORNIA

CLIENT: CHIQUITA CANYON LANDFILL CASTAIC, CALIFORNIA

SCS ENGINEERS
ENVIRONMENTAL CONSULTANTS
8799 BALBOA AVENUE SUITE 290
SAN DIEGO, CA 92123
(858) 571-5500 FAX. (562) 427-0805

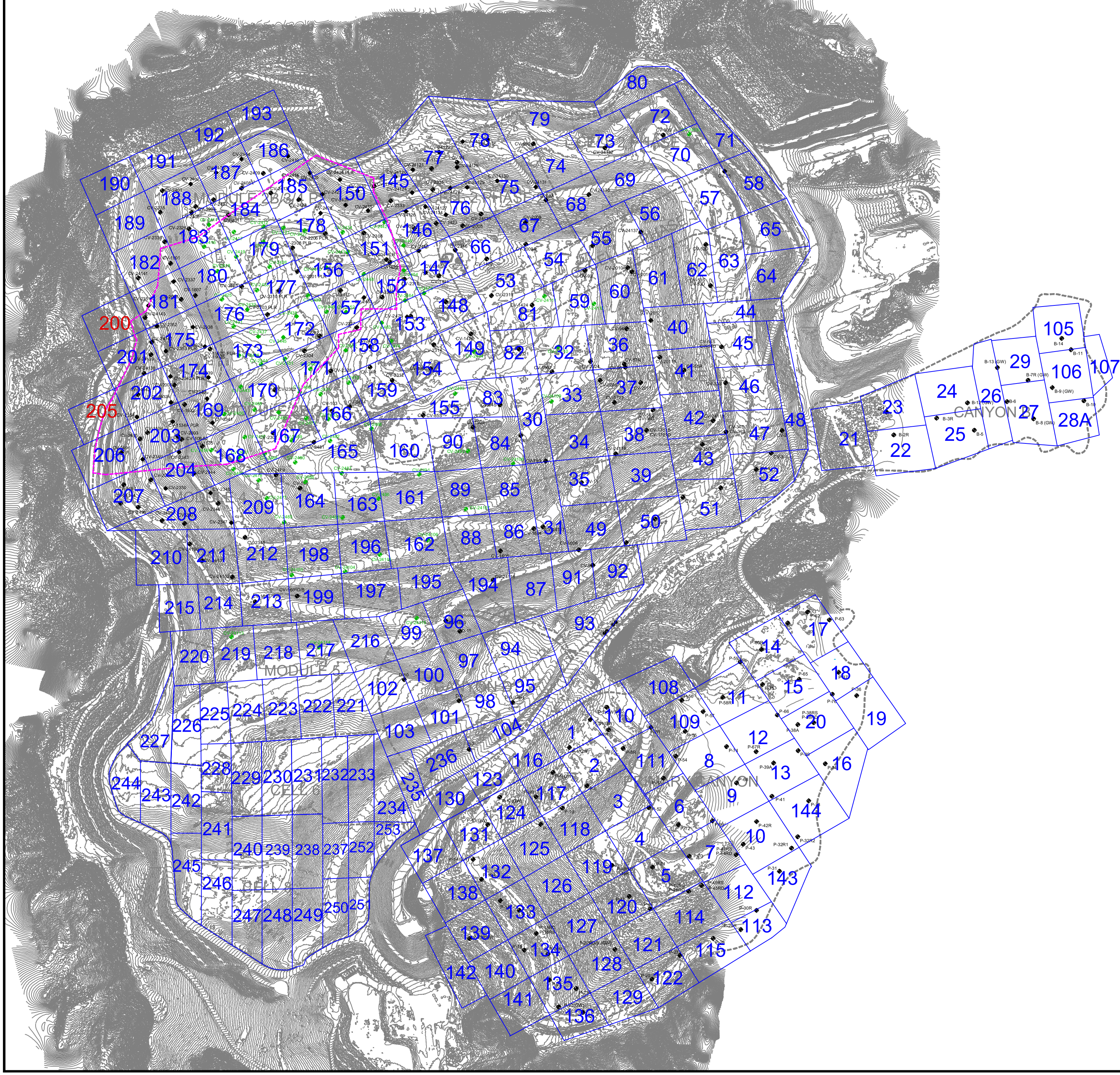
PROJ. NO. 01204123.35	DWN. BY: SRM	ACAD FILE: F:/ENGINEERS
DSN. BY: JH/SRM	CHK. BY: WCH	APP. BY: -

DATE: 04/16/2024

SCALE: AS SHOWN

SHEET: 1

Z:\Engineers\Waste Connections\Chiquita Canyon LF\2024 CCLF SCAQMD SAO\Condition 15.b\DWG\2024 CCLF SCAQMD SAO_Condition 15.b_Well and Header Plan_2024-04-16.dwg Apr 16, 2024 - 1:45pm By: 5160srm



N

GRAPHIC SCALE

150 75 0 150 300 450

SCALE: 1"=150'

LEGEND

- 1150 — EXISTING TOPOGRAPHIC CONTOUR
- EXISTING CELL LIMITS (APPROXIMATE)
- CV-XX — EXISTING LFG VERTICAL EXTRACTION WELL
- CV-XX — PROPOSED LFG VERTICAL EXTRACTION WELL
- 23 — SURFACE EMISSION MONITORING GRID
- 23 — SURFACE EMISSION MONITORING GRID - LESS THAN TWO WELLS WITHIN GRID
- REACTION AREA BOUNDARY (APPROXIMATE) - BASED ON DATA REVIEW

Total Number of LFG Vertical Extraction Wells Within Reaction Area	97
Total Acreage of Reaction Area (Approx.)	28.76
LFG Vertical Extraction Well Density Within Reaction Area	3

GENERAL DRAWING NOTES:

1. EXISTING TOPOGRAPHIC SURVEY INFORMATION SHOWN WAS PROVIDED BY PROPELLOR. AERIAL PHOTOGRAPHY DATED APRIL 10, 2024.
2. NORTH ARROW SHOWN IS REFERENCE TO THE CALIFORNIA STATE PLANE ZONE V COORDINATE SYSTEM, NAD 83.
3. THE LOCATION OF ANY EXISTING PIPING, VALVES, TIE-IN LOCATIONS AND OTHER FEATURES ARE APPROXIMATE AND SHOULD BE USED FOR INFORMATION PURPOSES ONLY. ACTUAL FIELD CONDITIONS MAY VARY AND SUBJECT TO CHANGE BASED ON FUTURE FILL OPERATIONS, WASTE PLACEMENT, TOPOGRAPHIC FEATURES, AND OTHER SITE-SPECIFIC FACTORS.
4. EXISTING GCCS AS-BUILT DATED APRIL 11, 2024.

NO.	REVISION	DATE

SHEET TITLE: SURFACE EMISSION MONITORING WITH REACTION AREA LIMITS MAP- SOFA SUBMITTAL

PROJECT TITLE: CHIQUITA CANYON LANDFILL CASTAIC, CALIFORNIA

CLIENT: CHIQUITA CANYON LANDFILL CASTAIC, CALIFORNIA

SCS ENGINEERS
ENVIRONMENTAL CONSULTANTS
3900 KILROY AIRPORT WAY, SUITE 100
LONG BEACH, CA 90806
PH. (562) 426-9544

PROJ. NO. | DWN. BY: SRM | ACAD FILE: U:/WCI/CCL/LFG ASB
DSN. BY: - | CHK. BY: - | APP. BY: -

DATE: 04/16/2024

SCALE: AS SHOWN

Attachment B

Proposed Well Schedule

2024 LFG WELL DRILLING SCHEDULE
CHIQUITA CANYON LANDFILL, CASTAIC, CA

#	Well ID	Coordinates[3]		Elevations		Depth to Base (ft)	Clearance Above Base >=15 ft.	Bore Depth[4] (ft)	Bore Diam. (in)	Casing size and Material Type[4]	Perforated pipe (ft)	Solid Pipe[2] (ft)	Gravel Pack (ft)	Depth to Top of Gravel Pack (ft)	Depth to Bottom of shallow Gravel Pack (ft)	Shallow Soil Backfill(ft)	Centralizers
		Northing	Easting	Surface	Base[1]												
1	CV-2401	1981918.267	6365410.820	1352	1283	69	17	52	36	8" CARBON STEEL	20	33	24	28	52	23	0
2	CV-2402	1981949.502	6365544.096	1360	1297	63	16	47	36	8" CARBON STEEL	25	23	29	18	47	13	0
3	CV-2403	1982002.248	6365663.255	1364	1305	59	17	42	36	8" CARBON STEEL	20	23	24	18	42	13	0
4	CV-2404	1982066.566	6365782.382	1369	1310	59	17	42	36	8" CARBON STEEL	20	23	24	18	42	13	0
5	CV-2406	1981815.941	6365548.148	1382	1250	132	30	102	36	8" CARBON STEEL	70	33	74	28	102	23	1
6	CV-2407	1981875.887	6365651.136	1387	1269	118	26	92	36	8" CARBON STEEL	60	33	64	28	92	23	0
7	CV-2408	1981929.433	6365782.798	1378	1265	113	31	82	36	8" CARBON STEEL	50	33	54	28	82	23	0
8	CV-2409	1981999.282	6365884.764	1381	1273	108	31	77	36	8" CARBON STEEL	45	33	49	28	77	23	0
9	CV-2410	1982080.558	6366000.616	1366	1316	50	18	32	36	8" CARBON STEEL	10	23	14	18	32	13	0
10	CV-2411	1981758.730	6365629.668	1385	1225	160	23	137	36	8" CARBON STEEL	105	33	109	28	137	23	2
11	CV-2412	1981749.304	6365885.804	1385	1193	192	25	167	36	8" CARBON STEEL	135	33	139	28	167	23	4
12	CV-2413	1981907.595	6365919.589	1381	1245	136	24	112	36	8" CARBON STEEL	80	33	84	28	112	23	1
13	CV-2414	1981967.930	6366007.370	1385	1275	110	28	82	36	8" CARBON STEEL	50	33	54	28	82	23	0
14	CV-2415	1982001.469	6366103.279	1368	1300	68	26	42	36	8" CARBON STEEL	20	23	24	18	42	13	0
15	CV-2416	1981655.349	6365607.103	1382	1195	187	20	167	36	8" CARBON STEEL	135	33	139	28	167	23	4
16	CV-2417	1981724.493	6365746.684	1387	1203	184	22	162	36	8" CARBON STEEL	130	33	134	28	162	23	4
17	CV-2418	1981540.108	6365669.325	1382	1145	237	25	212	36	8" CARBON STEEL	180	33	184	28	212	23	6
18	CV-2419	1981608.358	6365757.877	1387	1161	226	24	202	36	8" CARBON STEEL	170	33	174	28	202	23	6
19	CV-2420	1981684.455	6365884.354	1383	1168	215	28	187	36	8" CARBON STEEL	155	33	159	28	187	23	5
20	CV-2421	1981743.846	6365978.848	1382	1188	194	22	172	36	8" CARBON STEEL	140	33	144	28	172	23	4
21	CV-2422	1981876.310	6366051.965	1386	1245	141	29	112	36	8" CARBON STEEL	80	33	84	28	112	23	1
22	CV-2423	1981901.144	6366161.460	1380	1275	105	23	82	36	8" CARBON STEEL	50	33	54	28	82	23	0
23	CV-2424	1981969.891	6366244.235	1350	1301	49	17	32	36	8" CARBON STEEL	10	23	14	18	32	13	0
24	CV-2425	1981407.656	6365686.569	1380	1110	270	26	244	36	8" CARBON STEEL	212	33	216	28	244	23	8
25	CV-2426	1981561.583	6365914.109	1385	1126	259	27	232	36	8" CARBON STEEL	200	33	204	28	232	23	7
26	CV-2427	1981731.55	6366078.935	1384	1193	191	29	162	36	8" CARBON STEEL	130	33	134	28	162	23	4
27	CV-2428	1981812.141	6366153.075	1387	1230	157	25	132	36	8" CARBON STEEL	100	33	104	28	132	23	2
28	CV-2429	1981850.686	6366271.016	1378	1251	127	20	107	36	8" CARBON STEEL	75	33	79	28	107	23	1
29	CV-2430	1981916.857	6366326.449	1355	1280	75	23	52	36	8" CARBON STEEL	20	33	24	28	52	23	0
30	CV-2431	1981280.700	6365745.912	1372	1100	272	30	242	36	8" CARBON STEEL	210	33	214	28	242	23	8
31	CV-2432	1981360.401	6365809.530	1382	1078	304	32	272	36	8" CARBON STEEL	240	33	244	28	272	23	9
32	CV-2433	1981450.908	6365855.369	1387	1092	295	33	262	36	8" CARBON STEEL	230	33	234	28	262	23	9
33	CV-2434	1981723.526	6366257.197	1385	1200	185	23	162	36	8" CARBON STEEL	130	33	134	28	162	23	4
34	CV-2435	1981824.446	6366376.142	1377	1230	147	25	122	36	8" CARBON STEEL	90	33	94	28	122	23	2
35	CV-2436	1981144.242	6365770.669	1361	1100	261	24	237	36	8" CARBON STEEL	205	33	209	28	237	23	7

Notes:
1. Base grades titled "CCLF liner limit with floor elevations 20230110" and obtained from Tetra Tech on October 2023.
2. Includes 3 of solid pipe stickup above grade.
3. The Horizontal Coordinates are based on California State Plane Zone 5.
4. If drill cutting temperatures are consistently greater than 150, contractor shall inform Site and Design Engineer for change in well casing materials.

NO.	REVISION	DATE

SHEET TITLE: PROPOSED WELL SCHEDULE
PROJECT TITLE: CHIQUITA CANYON LANDFILL CASTAIC, CALIFORNIA
CLIENT: CHIQUITA CANYON LANDFILL CASTAIC, CALIFORNIA

SCS ENGINEERS
ENVIRONMENTAL CONSULTANTS
8799 BALBOA AVENUE SUITE 290
SAN DIEGO, CA 92123
(858) 571-5500 FAX. (562) 427-0805

PROJ. NO. 01204123.35 | DSN. BY: JH/SRM | DWN. BY: SRM | CHK. BY: WCH | ACAD FILE: F:/ENGINEERS | APP. BY: -
DATE: 04/16/2024
SCALE: AS SHOWN
SHEET: 1

2024 LFG WELL DRILLING SCHEDULE
CHIQUITA CANYON LANDFILL, CASTAIC, CA

#	Well ID	Coordinates[3]		Elevations		Depth to Base (ft)	Clearance Above Base >=15 ft.	Bore Depth[4] (ft)	Bore Diam. (in)	Casing size and Material Type[4]	Perforated pipe (ft)	Solid Pipe[2] (ft)	Gravel Pack (ft)	Depth to Top of Gravel Pack (ft)	Depth to Bottom of shallow Gravel Pack (ft)	Shallow Soil Backfill(ft)	Centralizers
		Northing	Easting	Surface	Base[1]												
36	CV-2437	1981233.265	6365861.478	1371	1068	303	26	277	36	8" CARBON STEEL	245	33	249	28	277	23	9
37	CV-2438	1981328.093	6366040.691	1374	1067	307	30	277	36	8" CARBON STEEL	245	33	249	28	277	23	9
38	CV-2439	1981426.235	6366094.001	1374	1074	300	23	277	36	8" CARBON STEEL	245	33	249	28	277	23	9
39	CV-2440	1981556.729	6366180.008	1376	1125	251	24	227	36	8" CARBON STEEL	195	33	199	28	227	23	7
40	CV-2441	1981630.234	6366280.123	1381	1152	229	22	207	36	8" CARBON STEEL	175	33	179	28	207	23	6
41	CV-2442	1981771.361	6366454.012	1396	1210	186	29	157	36	8" CARBON STEEL	125	33	129	28	157	23	3
42	CV-2443	1980997.934	6365778.807	1358	1091	267	30	237	36	8" CARBON STEEL	205	33	209	28	237	23	7
43	CV-2444	1981103.358	6365874.702	1364	1072	292	25	267	36	8" CARBON STEEL	235	33	239	28	267	23	9
44	CV-2445	1981229.645	6365978.426	1371	1061	310	28	282	36	8" CARBON STEEL	250	33	254	28	282	23	10
45	CV-2446	1981350.110	6366180.731	1374	1070	304	27	277	36	8" CARBON STEEL	245	33	249	28	277	23	9
46	CV-2447	1981449.332	6366247.407	1382	1082	300	28	272	36	8" CARBON STEEL	240	33	244	28	272	23	9
47	CV-2448	1981526.446	6366356.092	1392	1106	286	24	262	36	8" CARBON STEEL	230	33	234	28	262	23	9
48	CV-2449	1981661.234	6366543.058	1399	1145	254	32	222	36	8" CARBON STEEL	190	33	194	28	222	23	7
49	CV-2450	1980869.189	6365701.336	1354	1092	262	30	232	36	8" CARBON STEEL	200	33	204	28	232	23	7
50	CV-2451	1981128.434	6365985.988	1366	1058	308	21	287	36	8" CARBON STEEL	255	33	259	28	287	23	10
51	CV-2452	1981348.223	6366272.978	1394	1070	324	27	297	36	8" CARBON STEEL	265	33	269	28	297	23	10
52	CV-2453	1981417.004	6366357.183	1393	1074	319	27	292	36	8" CARBON STEEL	260	33	264	28	292	23	10
53	CV-2454	1981543.821	6366544.547	1402	1098	304	32	272	36	8" CARBON STEEL	240	33	244	28	272	23	9
54	CV-2455	1981635.910	6366614.251	1404	1130	274	27	247	36	8" CARBON STEEL	215	33	219	28	247	23	8
55	CV-2456	1980700.408	6365641.165	1354	1076	278	31	247	36	8" CARBON STEEL	215	33	219	28	247	23	8
56	CV-2457	1980761.530	6365797.719	1367	1052	315	28	287	36	8" CARBON STEEL	255	33	259	28	287	23	10
57	CV-2458	1980890.277	6365843.893	1370	1060	310	28	282	36	8" CARBON STEEL	250	33	254	28	282	23	10
58	CV-2459	1980876.915	6365968.548	1375	1054	321	29	292	36	8" CARBON STEEL	260	33	264	28	292	23	10
59	CV-2460	1980972.495	6366055.968	1379	1055	324	27	297	36	8" CARBON STEEL	265	33	269	28	297	23	10
60	CV-2461	1981081.709	6366105.102	1383	1057	326	29	297	36	8" CARBON STEEL	265	33	269	28	297	23	0
61	CV-2462	1981168.75	6366271.579	1393	1067	326	29	297	36	8" CARBON STEEL	265	33	269	28	297	23	10
62	CV-2463	1981297.654	6366440.071	1402	1068	334	37	297	36	8" CARBON STEEL	265	33	269	28	297	23	0
63	CV-2464	1981402.951	6366549.744	1410	1072	338	41	297	36	8" CARBON STEEL	265	33	269	28	297	23	10
64	CV-2465	1981543.525	6366654.885	1406	1088	318	21	297	36	8" CARBON STEEL	265	33	269	28	297	23	10
65	CV-2466	1980611.421	6365744.980	1358	1048	310	28	282	36	8" CARBON STEEL	250	33	254	28	282	23	10
66	CV-2467	1980666.205	6365772.512	1362	1050	312	30	282	36	8" CARBON STEEL	250	33	254	28	282	23	10
67	CV-2468	1980683.016	6365891.962	1381	1049	332	35	297	36	8" CARBON STEEL	265	33	269	28	297	23	10
68	CV-2469	1980746.669	6366017.894	1381	1051	330	33	297	36	8" CARBON STEEL	265	33	269	28	297	23	10
69	CV-2470	1980850.233	6366086.908	1384	1053	331	34	297	36	8" CARBON STEEL	265	33	269	28	297	23	10
70	CV-2471	1980963.059	6366153.699	1387	1055	332	40	292	36	8" CARBON STEEL	260	33	264	28	292	23	10

Notes:
1. Base grades titled "CCLF liner limit with floor elevations 20230110" and obtained from Tetra Tech on October 2023.
2. Includes 3 of solid pipe stickup above grade.
3. The Horizontal Coordinates are based on California State Plane Zone 5.
4. If drill cutting temperatures are consistently greater than 150, contractor shall inform Site and Design Engineer for change in well casing materials.

NO. | REVISION | DATE

SHEET TITLE: PROPOSED WELL SCHEDULE
PROJECT TITLE: CHIQUITA CANYON LANDFILL CASTAIC, CALIFORNIA

CLIENT: CHIQUITA CANYON LANDFILL CASTAIC, CALIFORNIA

SCS ENGINEERS
ENVIRONMENTAL CONSULTANTS
8799 BALBOA AVENUE, SUITE 290
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(858) 571-5500 FAX: (562) 427-0805
PROJECT NO. 01024123.35 | DSN. BY: JHS/RM | DWN. BY: SRM | CHK. BY: WCH | ACAD FILE: | APP. BY: -

DATE: 04/16/2024
SCALE: AS SHOWN
SHEET: 2

2024 LFG WELL DRILLING SCHEDULE
CHIQUITA CANYON LANDFILL, CASTAIC, CA

#	Well ID	Coordinates[3]		Elevations		Depth to Base (ft)	Clearance Above Base >=15 ft.	Bore Depth[4] (ft)	Bore Diam. (in)	Casing size and Material Type[4]	Perforated pipe (ft)	Solid Pipe[2] (ft)	Gravel Pack (ft)	Depth to Top of Gravel Pack (ft)	Depth to Bottom of shallow Gravel Pack (ft)	Shallow Soil Backfill(ft)	Centralizers
		Northing	Easting	Surface	Base[1]												
71	CV-2472	1981017.322	6366285.610	1397	1063	334	37	297	36	8" CARBON STEEL	265	33	269	28	297	23	10
72	CV-2473	1981186.022	6366385.567	1404	1067	337	40	297	36	8" CARBON STEEL	265	33	269	28	297	23	10
73	CV-2474	1981212.031	6366485.087	1407	1067	340	43	297	36	8" CARBON STEEL	265	33	269	28	297	23	10
74	CV-2475	1981325.530	6366559.186	1411	1068	343	46	297	36	8" CARBON STEEL	265	33	269	28	297	23	10
75	CV-2476	1981437.382	6366639.241	1414	1073	341	44	297	36	8" CARBON STEEL	265	33	269	28	297	23	10
76	CV-2477	1980474.684	6365901.134	1364	1045	319	32	287	36	8" CARBON STEEL	255	33	259	28	287	23	10
77	CV-2478	1980558.653	6365863.259	1364	1046	318	31	287	36	8" CARBON STEEL	255	33	259	28	287	23	10
78	CV-2479	1980584.519	6365958.936	1375	1048	327	30	297	36	8" CARBON STEEL	265	33	269	28	297	23	10
79	CV-2480	1980642.744	6366034.803	1395	1049	346	49	297	36	8" CARBON STEEL	265	33	269	28	297	23	10
80	CV-2481	1980737.324	6366122.356	1390	1050	340	43	297	36	8" CARBON STEEL	265	33	269	28	297	23	10
81	CV-2482	1980743.683	6366198.125	1390	1051	339	42	297	36	8" CARBON STEEL	265	33	269	28	297	23	10
82	CV-2483	1980845.795	6366190.941	1390	1052	338	41	297	36	8" CARBON STEEL	265	33	269	28	297	23	10
83	CV-2484	1980904.731	6366289.726	1397	1062	335	38	297	36	8" CARBON STEEL	265	33	269	28	297	23	10
84	CV-2485	1980362.094	6365982.434	1362	1043	319	30	289	36	8" CARBON STEEL	257	33	261	28	289	23	10
85	CV-2486	1980551.439	6366082.254	1396	1047	349	52	297	36	8" CARBON STEEL	265	33	269	28	297	23	10
86	CV-2487	1980592.117	6366252.775	1404	1047	357	60	297	36	8" CARBON STEEL	265	33	269	28	297	23	10
87	CV-2488	1980801.068	6366392.510	1395	1060	335	43	292	36	8" CARBON STEEL	260	33	264	28	292	23	10
88	CV-2489	1980384.612	6366256.979	1370	1043	327	30	297	36	8" CARBON STEEL	265	33	269	28	297	23	10
89	CV-2490	1980472.567	6366425.832	1387	1045	342	45	297	36	8" CARBON STEEL	265	33	269	28	297	23	10
90	CV-2491	1980585.785	6366616.580	1406	1047	359	62	297	36	8" CARBON STEEL	265	33	269	28	297	23	10
91	CV-2492	1980695.944	6366844.827	1408	1060	348	51	297	36	8" CARBON STEEL	265	33	269	28	297	23	10
92	CV-2493	1980965.601	6366784.537	1404	1061	343	46	297	36	8" CARBON STEEL	265	33	269	28	297	23	10
93	CV-2494	1981162.449	6366874.044	1408	1065	343	46	297	36	8" CARBON STEEL	265	33	269	28	297	23	10
94	CV-2495	1980753.206	6365306.232	1264	1160	104	22	82	36	8" CARBON STEEL	50	33	54	28	82	23	0
95	CV-2496	1980688.343	6365219.167	1249	1174	75	23	52	36	8" CARBON STEEL	20	33	24	28	52	23	0
96	CV-2497	1980538.00	6365230.116	1248	1165	83	21	62	36	8" CARBON STEEL	30	33	34	28	62	23	0
97	CV-2498	1980432.329	6365297.671	1248	1164	84	27	57	36	8" CARBON STEEL	25	33	29	28	57	23	0
98	CV-2499	1980369.902	6365409.758	1252	1158	94	27	67	36	8" CARBON STEEL	35	33	39	28	67	23	0
99	CV-24100	1980259.703	6365539.488	1260	1155	105	28	77	36	8" CARBON STEEL	45	33	49	28	77	23	0
100	CV-24101	1980181.110	6365597.406	1263	1150	113	26	87	36	8" CARBON STEEL	55	33	59	28	87	23	0
101	CV-24102	1980105.202	6365739.572	1288	1100	188	26	162	36	8" CARBON STEEL	130	33	134	28	162	23	4
102	CV-24103	1980113.980	6366018.102	1296	1038	258	31	227	36	8" CARBON STEEL	195	33	199	28	227	23	7
103	CV-24104	1980130.409	6366268.164	1308	1038	270	28	242	36	8" CARBON STEEL	210	33	214	28	242	23	8
104	CV-24105	1980209.856	6366431.982	1317	1039	278	31	247	36	8" CARBON STEEL	215	33	219	28	247	23	8
105	CV-24106	1980278.285	6366657.500	1330	1042	288	31	257	36	8" CARBON STEEL	225	33	229	28	257	23	8

Notes:
1. Base grades titled "CCLF liner limit with floor elevations 20230110" and obtained from Tetra Tech on October 2023.
2. Includes 3 of solid pipe stickup above grade.
3. The Horizontal Coordinates are based on California State Plane Zone 5.
4. If drill cutting temperatures are consistently greater than 150, contractor shall inform Site and Design Engineer for change in well casing materials.

NO. | REVISION | DATE

SHEET TITLE: PROPOSED WELL SCHEDULE
PROJECT TITLE: CHIQUITA CANYON LANDFILL CASTAIC, CALIFORNIA

CLIENT: CHIQUITA CANYON LANDFILL CASTAIC, CALIFORNIA

SCS ENGINEERS
ENVIRONMENTAL CONSULTANTS
8799 BALBOA AVENUE, SUITE 290
SAN DIEGO, CA 92123
(858) 571-5500 FAX: (562) 427-0805
PROJECT NO. 01024123.35 | DSN. BY: JHS/RM | DWN. BY: SRM | CHK. BY: WCH | ACAD FILE: | APP. BY: -

DATE: 04/16/2024
SCALE: AS SHOWN
SHEET: 3

2024 LFG WELL DRILLING SCHEDULE
CHIQUITA CANYON LANDFILL, CASTAIC, CA

#	Well ID	Coordinates[3]		Elevations		Depth to Base (ft)	Clearance Above Base >=15 ft.	Bore Depth[4] (ft)	Bore Diam. (in)	Casing size and Material Type[4]	Perforated pipe (ft)	Solid Pipe[2] (ft)	Gravel Pack (ft)	Depth to Top of Gravel Pack (ft)	Depth to Bottom of shallow Gravel Pack (ft)	Shallow Soil Backfill(ft)	Centralizers
		Northing	Easting	Surface	Base[1]												
106	CV-24107	1980423.678	6366835.204	1339	1050	289	32	257	36	8" CARBON STEEL	225	33	229	28	257	23	8
107	CV-24108	1980637.016	6367056.869	1368	1060	308	31	277	36	8" CARBON STEEL	245	33	249	28	277	23	9
108	CV-24109	1980928.855	6367236.733	1389	1077	312	30	282	36	8" CARBON STEEL	250	33	254	28	282	23	10
109	CV-24110	1981184.762	6367269.199	1398	1087	311	29	282	36	8" CARBON STEEL	250	33	254	28	282	23	10
110	CV-24111	1981422.941	6367203.612	1403	1090	313	31	282	36	8" CARBON STEEL	250	33	254	28	282	23	10
111	CV-24112	1981387.327	6367436.266	1391	1097	294	32	262	36	8" CARBON STEEL	230	33	234	28	262	23	9
112	CV-24113	1979823.296	6365735.633	1240	1120	120	23	97	36	8" CARBON STEEL	65	33	69	28	97	23	0
113	CV-24114	1979775.834	6366147.202	1216	1031	185	28	157	36	8" CARBON STEEL	125	33	129	28	157	23	3
114	CV-24115	1979911.902	6366604.241	1240	1036	204	27	177	36	8" CARBON STEEL	145	33	149	28	177	23	4
115	CV-24116	1980091.199	6366963.376	1250	1108	142	25	117	36	8" CARBON STEEL	85	33	89	28	117	23	1
116	CV-24117	1980346.201	6367212.078	1305	1065	240	28	212	36	8" CARBON STEEL	180	33	184	28	212	23	6
117	CV-24118	1980683.144	6367538.235	1305	1073	232	25	207	36	8" CARBON STEEL	175	33	179	28	207	23	6
118	CV-24119	1980838.506	6367995.160	1274	1107	167	25	142	36	8" CARBON STEEL	110	33	114	28	142	23	3
119	CV-24120	1981982.673	6366504.473	1344	1265	79	22	57	36	8" CARBON STEEL	25	33	29	28	57	23	0
120	CV-24121	1982016.466	6366585.870	1342	1255	87	25	62	36	8" CARBON STEEL	30	33	34	28	62	23	0
121	CV-24122	1982099.082	6366709.653	1320	1245	75	28	47	36	8" CARBON STEEL	15	33	19	28	47	23	0
122	CV-24123	1982148.673	6366820.321	1308	1225	83	21	62	36	8" CARBON STEEL	30	33	34	28	62	23	0
123	CV-24124	1981908.818	6366583.285	1369	1220	149	27	122	36	8" CARBON STEEL	90	33	94	28	122	23	2
124	CV-24125	1982028.268	6366793.409	1335	1210	125	28	97	36	8" CARBON STEEL	65	33	69	28	97	23	0
125	CV-24126	1981821.499	6366553.844	1388	1210	178	26	152	36	8" CARBON STEEL	120	33	124	28	152	23	3
126	CV-24127	1981842.920	6366645.709	1382	1200	182	30	152	36	8" CARBON STEEL	120	33	124	28	152	23	3
127	CV-24128	1981929.897	6366762.144	1363	1185	178	26	152	36	8" CARBON STEEL	120	33	124	28	152	23	3
128	CV-24129	1981933.790	6366841.109	1355	1170	185	28	157	36	8" CARBON STEEL	125	33	129	28	157	23	3
129	CV-24130	1981964.561	6366982.409	1336	1130	206	29	177	36	8" CARBON STEEL	145	33	149	28	177	23	4
130	CV-24131	1981935.253	6367162.973	1341	1125	216	29	187	36	8" CARBON STEEL	155	33	159	28	187	23	5
131	CV-24132	1982119.35	6367487.496	1286	1175	111	19	92	36	8" CARBON STEEL	60	33	64	28	92	23	0
132	CV-24133	1982183.268	6367883.189	1284	1153	131	19	112	36	8" CARBON STEEL	80	33	84	28	112	23	1
133	CV-24134	1981804.920	6366741.392	1375	1165	210	28	182	36	8" CARBON STEEL	150	33	154	28	182	23	5
134	CV-24135	1981808.301	6366906.633	1365	1120	245	28	217	36	8" CARBON STEEL	185	33	189	28	217	23	6
135	CV-24136	1981899.385	6367412.014	1333	1120	213	26	187	36	8" CARBON STEEL	155	33	159	28	187	23	5
136	CV-24137	1981724.145	6367656.564	1362	1108	254	27	227	36	8" CARBON STEEL	195	33	199	28	227	23	7
137	CV-24138	1981060.353	6365325.583	1266	1216	50	18	32	36	8" CARBON STEEL	10	23	14	18	32	13	0
138	CV-24139	1981148.191	6365357.844	1274	1223	51	19	32	36	8" CARBON STEEL	10	23	14	18	32	13	0
139	CV-24140	1981207.624	6365361.933	1282	1222	60	18	42	36	8" CARBON STEEL	20	23	24	18	42	13	0
140	CV-24141	1981508.343	6365298.145	1295	1246	49	17	32	36	8" CARBON STEEL	10	23	14	18	32	13	0
141	CV-24142	1980961.653	6365296.588	1264	1203	61	19	42	36	8" CARBON STEEL	20	23	24	18	42	13	0
142	CV-24143	1981322.262	6365330.229	1285	1230	55	18	37	36	8" CARBON STEEL	15	23	19	18	37	13	0
143	CV-24144	1980451.415	6365215.484	1245	1177	68	21	47	36	8" CARBON STEEL	15	33	19	28	47	23	0

Notes:

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2. Includes 3 of solid pipe stickup above grade.
3. The Horizontal Coordinates are based on California State Plane Zone 5.
4. If drill cutting temperatures are consistently greater than 150, contractor shall inform Site and Design Engineer for change in well casing materials.

NO. | REVISION | DATE

SHEET TITLE: PROPOSED WELL SCHEDULE

PROJECT TITLE: CHIQUITA CANYON LANDFILL CASTAIC, CALIFORNIA

CLIENT: CHIQUITA CANYON LANDFILL CASTAIC, CALIFORNIA

SCS ENGINEERS
ENVIRONMENTAL CONSULTANTS
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PROJECT NO. 01024123.35 | DSN. BY: JHS/SM | DWN. BY: SRM | CHK. BY: WCH | APP. BY: - | ACAD FILE: REV ENGINEERS

DATE: 04/16/2024

SCALE: AS SHOWN

SHEET: 4

BEFORE THE HEARING BOARD OF THE

SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT

In The Matter Of SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT, Petitioner, vs. CHIQUITA CANYON, LLC a Delaware Corporation, [Facility ID No. 119219] Respondent.	**Case No. 6177-4** **EXHIBIT B TO DECLARATION OF SRIVIDHYA VISWANATHAN, P.E.** Health and Safety Code § 41700, and District Rules 402, 431.1, 3002, 203, 1150 Hearing Date: April 24-25, 2024 Time: 9:30 am Place: Hearing Board South Coast Air Quality Management District 21865 Copley Drive Diamond Bar, CA 91765

From:	Medina, Steven <SMedina@scsengineers.com>
Sent:	Friday, April 19, 2024 12:11 PM
To:	bchen@aqmd.gov; ndickel@aqmd.gov; Christina Ojeda
Cc:	Steve Cassulo; Haley, William (Bill); amanda.froman; Michael Hearns; Nicole Ward; Christopher.Fear@WasteConnections.com
Subject:	Re: Case No. 6177-4 Stipulated Order for Abatement - Weekly Pump Installation and operation update
Attachments:	2024 CCLF Existing De-Watering Well with Pump Map_2024-04-19.pdf

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Good afternoon All,

In accordance with Condition 65 of the Modified Stipulated Order, below is the summary of the installation and operation of dewatering pumps for the Chiquita Canyon Landfill.
During 04/12/2024 to 04/18/2024, Chiquita completed the installation of, and began operating during the day, five (5) pumps in vertical LFG extraction wells for a total of thirty-one (31) pumps operating in vertical LFG extraction wells. Please refer to the attached, up-to-date LFG wells with operating pumps Map.

During 04/19/2024 to 04/25/2024, Chiquita plans to install and begin operating an additional eight (8) pumps in vertical LFG extraction wells in locations along the west slope and top deck of the reaction area. The pump installation locations for next week are subject to change due to weather and/or safety conditions.

Regards,

Steven Ruben Medina, **E.I.T.**
Associate Professional
SCS Engineers
8799 Balboa Ave, Suite 290
San Diego, CA 92123
858-204-4342 (c)
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2024 Conrad Quality Focus Award Recipient

SCS Quality Focus

De-Watering Well Pumps that are Currently Running		
#	Well I.D	Operational Startup Date
1	CV-2349	2/28/2024
2	CV-2495	2/28/2024
3	CV-114	3/21/2024
4	CV-2333	3/21/2024
5	CV-2334	3/21/2024
6	CV-2424	3/21/2024
7	CV-2009A	3/27/2024
8	CV-2305	3/27/2024
9	CV-2321	3/27/2024
10	CV-2319	3/28/2024
11	CV-2324	3/28/2024
12	CV-2001	4/1/2024
13	CV-2345	4/1/2024
14	CV-2347	4/1/2024
15	CV-2350	4/1/2024
16	CV-2354	4/1/2024
17	CV-2499	4/1/2024
18	CV-2002	4/2/2024
19	CV-2343	4/2/2024
20	CV-2344	4/2/2024
21	CV-2498	4/2/2024
22	CV-24144	4/8/2024
23	CV-2302	4/10/2024
24	CV-2314	4/10/2024
25	CV-2341	4/10/2024
26	CV-2003	4/11/2024
27	CV-2352	4/12/2024
28	CV-24139	4/12/2024
29	CV-24140	4/12/2024
30	CV-24100	4/16/2024
31	CV-24101	4/16/2024

GENERAL DRAWING NOTES:

1. EXISTING TOPOGRAPHIC SURVEY INFORMATION SHOWN WAS PROVIDED BY PROPELLOR. AERIAL PHOTOGRAPHY DATED APRIL 10, 2024.
2. NORTH ARROW SHOWN HERE IS REFERENCE TO THE CALIFORNIA STATE PLANE ZONE V COORDINATE SYSTEM, NAD 83.
3. THE LOCATION OF ANY EXISTING GCCS COMPONENTS AND OTHER FEATURES ARE APPROXIMATE AND SHOULD BE USED FOR INFORMATION PURPOSES ONLY. ACTUAL FIELD CONDITIONS MAY VARY AND SUBJECT TO CHANGE BASED ON FUTURE FILL OPERATIONS, WASTE PLACEMENT, TOPOGRAPHIC FEATURES, AND OTHER SITE-SPECIFIC FACTORS.
4. EXISTING GCCS AS-BUILT DATED APRIL 11, 2024.

NO.	REVISION	DATE

SHEET TITLE: EXISTING DE-WATERING WELL WITH PUMP MAP

PROJECT TITLE: CHIQUITA CANYON LANDFILL CASTAIC, CALIFORNIA

CLIENT: CHIQUITA CANYON LANDFILL CASTAIC, CALIFORNIA

SCS ENGINEERS
ENVIRONMENTAL CONSULTANTS
8799 BALBOA AVENUE, SUITE 290
SAN DIEGO, CA 92123
(858) 571-5500 FAX: (562) 427-0805

PROJECT NO. 01204123.35 | DWN. BY: SRM | ACAD FILE: FIELD SERVICES | DSN. BY: - | CHK. BY: WCH-JH | APP. BY: WCH

DATE: 04/19/2024

SCALE: AS SHOWN

SHEET: 1

From:	Medina, Steven
Sent:	Friday, April 12, 2024 8:49 AM
To:	bchen@aqmd.gov; ndickel@aqmd.gov; Christina Ojeda
Cc:	Steve Cassulo; Haley, William (Bill); Amanda Froman; Michael Hearns; nicole.ward@wasteconnections.com; Christopher.Fear@WasteConnections.com
Subject:	Case No. 6177-4 Stipulated Order for Abatement - Weekly Pump Installation and operation update
Attachments:	2024 CCLF Existing De-Watering Well with Pump Map_2024-04-12.pdf

All,
In accordance with Condition 65 of the Modified Stipulated Order, below is the summary of the installation and operation of dewatering pumps for the Chiquita Canyon Landfill.

During 04/05/2024 to 04/11/2024, Chiquita completed the installation of, and began operating during the day, five (5) pumps in vertical LFG extraction wells for a total of twenty-six (26) pumps operating in vertical LFG extraction wells. Please refer to the attached, up-to-date LFG wells with operating pumps Map.

During 04/12/2024 to 04/18/2024, Chiquita plans to install and begin operating an additional five (5) pumps in vertical LFG extraction wells in locations along the west slope of the reaction area. The pump installation locations for next week are subject to change due to weather and/or safety conditions.

Thank you,

Steven Ruben Medina, **E.I.T.**
Associate Professional
SCS Engineers
8799 Balboa Ave, Suite 290
San Diego, CA 92123
858-204-4342 (c)
5160srm@scsengineers.com

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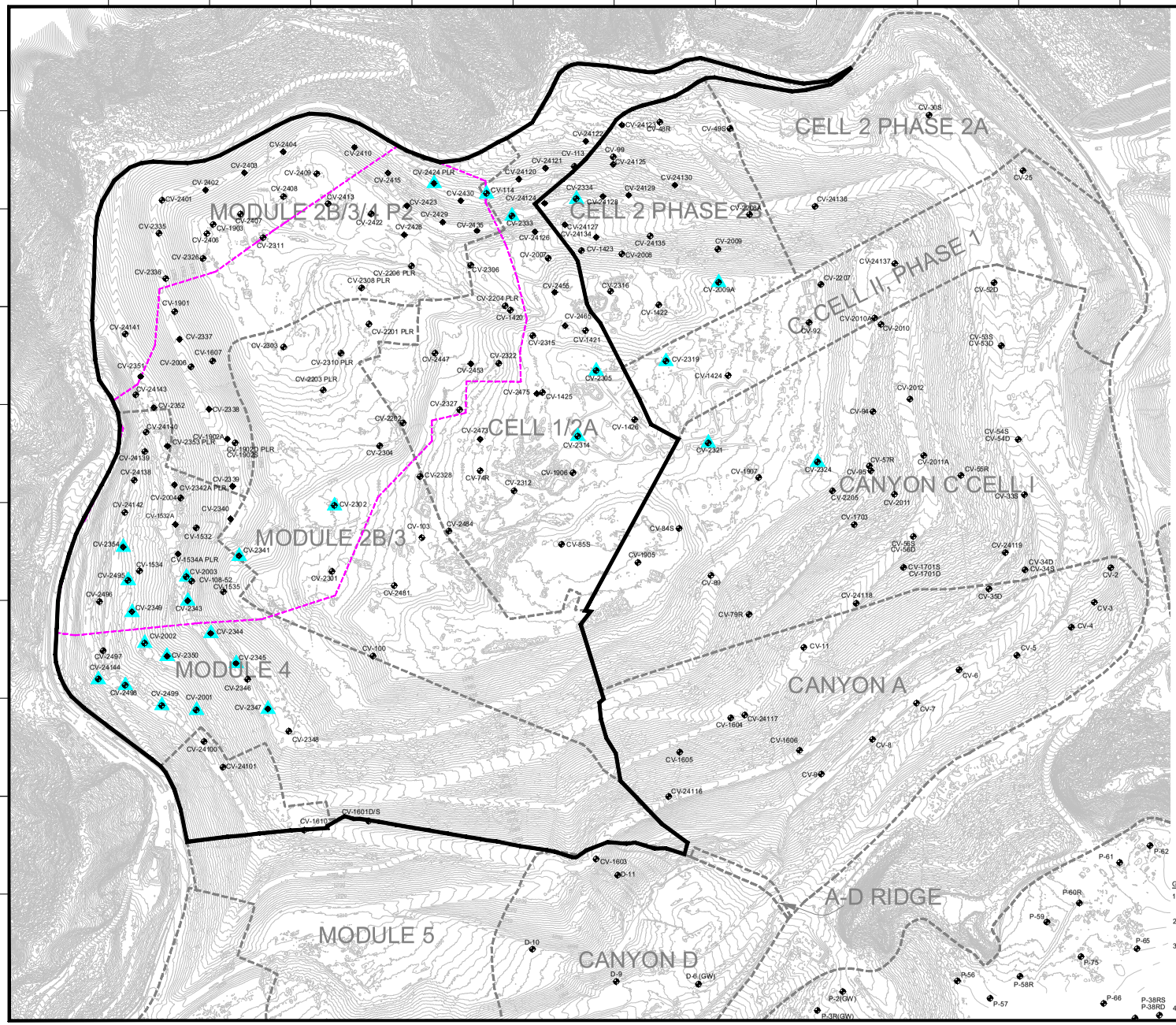
www.scsengineers.com

2024 Conrad Quality Focus Award Recipient

SCS Quality Focus



N

GRAPHIC SCALE

150 75 0 150 300 450

SCALE: 1"=150'

LEGEND

- 1150 TOPOGRAPHIC CONTOUR
- EXISTING CELL LIMITS (APPROXIMATE)
- REACTION AREA BOUNDARY - CONDITION 9A
- REACTION AREA BOUNDARY - DATA ANALYSIS
- CV-XX EXISTING VERTICAL LFG EXTRACTION WELL
- CV-XX PLR EXISTING LFG VERTICAL EXTRACTION WELL - PRESSURIZED LEACHATE RELEASE
- EXISTING DE-WATERING WELL WITH PUMP

De-Watering Well Pumps that are Currently Running		
#	Well ID	Operational Startup Date
1	CV-2349	2/28/2024
2	CV-2495	2/28/2024
3	CV-114	3/21/2024
4	CV-2333	3/21/2024
5	CV-2334	3/21/2024
6	CV-2424	3/21/2024
7	CV-2009A	3/27/2024
8	CV-2305	3/27/2024
9	CV-2321	3/27/2024
10	CV-2319	3/28/2024
11	CV-2324	3/28/2024
12	CV-2001	4/1/2024
13	CV-2345	4/1/2024
14	CV-2347	4/1/2024
15	CV-2350	4/1/2024
16	CV-2354	4/1/2024
17	CV-2499	4/1/2024
18	CV-2002	4/2/2024
19	CV-2343	4/2/2024
20	CV-2344	4/2/2024
21	CV-2498	4/2/2024
22	CV-24144	4/8/2024
23	CV-2302	4/10/2024
24	CV-2314	4/10/2024
25	CV-2341	4/10/2024
26	CV-2003	4/11/2024

GENERAL DRAWING NOTES:

1. EXISTING TOPOGRAPHIC SURVEY INFORMATION SHOWN WAS PROVIDED BY PROPELLOR. AERIAL PHOTOGRAPHY DATED MARCH 27, 2024.
2. NORTH ARROW SHOWN HERE IS REFERENCE TO THE CALIFORNIA STATE PLANE ZONE V COORDINATE SYSTEM, NAD 83.
3. THE LOCATION OF ANY EXISTING GCCS COMPONENTS AND OTHER FEATURES ARE APPROXIMATE AND SHOULD BE USED FOR INFORMATION PURPOSES ONLY. ACTUAL FIELD CONDITIONS MAY VARY AND SUBJECT TO CHANGE BASED ON FUTURE FILL OPERATIONS, WASTE PLACEMENT, TOPOGRAPHIC FEATURES, AND OTHER SITE-SPECIFIC FACTORS.
4. EXISTING GCCS AS-BUILT DATED APRIL 04, 2024.

NO.	REVISION	DATE

SHEET TITLE: EXISTING DE-WATERING WELL WITH PUMP MAP

PROJECT TITLE: CHIQUITA CANYON LANDFILL CASTAIC, CALIFORNIA

CLIENT: CHIQUITA CANYON LANDFILL CASTAIC, CALIFORNIA

SCS ENGINEERS
ENVIRONMENTAL CONSULTANTS
8799 BALBOA AVENUE, SUITE 290
SAN DIEGO, CA 92123
(858) 571-5500 FAX: (562) 427-0805

PROJECT NO. 01204123.35 | DSN. BY: - | DWN. BY: SRM | CHK. BY: WCH/JH | APP. BY: WCH | ACAD FILE: FIELD SERVICES

DATE: 04/12/2024

SCALE: AS SHOWN

SHEET: 1

From: Haley, William (Bill) <WCHaley@scsengineers.com>
Sent: Friday, April 5, 2024 4:03 PM
To: Haley, William (Bill); bchen@aqmd.gov; ndickel@aqmd.gov; Christina Ojeda
Cc: Steve Cassulo; Amanda Froman; Michael Hearns; nicole.ward@wasteconnections.com; christopher.fear@wasteconnections.com
Subject: RE: Case No. 6177-4 Stipulated Order for Abatement - Weekly Pump Installation and operation update
Attachments: 2024 CCLF Existing De-Watering Well with Pump Map_2024-04-05.pdf

[EXTERNAL SENDER: Use caution with links/attachments]

All,

In accordance with Condition 65 of the Modified Stipulated Order, below is the summary of the installation and operation of dewatering pumps for the Chiquita Canyon Landfill.

During 03/29/2024 to 04/04/2024, Chiquita completed the installation of, and began operating during the day, ten (10) pumps in vertical LFG extraction wells for a total of twenty-one (21) pumps operating in vertical LFG extraction wells. Please refer to the attached, up-to-date LFG wells with operating pumps Map.

During 04/05/2024 to 04/11/2024, Chiquita plans to install and begin operating an additional ten (10) pumps in vertical LFG extraction wells in locations along the west slope and top deck of the reaction area. The pump installation locations for next week are subject to change due to weather and/or safety conditions.

Have a good weekend,

William C. Haley, PE.*
Project Director
SCS ENGINEERS
*Licensed in CO and TX

Office: 303-221-1719
Cell #: 303-519-4503
Email: wchaley@scsengineers.com

From: Haley, William (Bill) <WCHaley@scsengineers.com>
Sent: Tuesday, April 2, 2024 10:39 AM
To: bchen@aqmd.gov; ndickel@aqmd.gov; Christina Ojeda <cojeda@aqmd.gov>
Cc: Steve Cassulo <Steven.Cassulo@WasteConnections.com>; Amanda Froman <Amanda.Froman@WasteConnections.com>; Michael Hearns <Michael.Hearns@WasteConnections.com>; nicole.ward@wasteconnections.com; christopher.fear@wasteconnections.com
Subject: Case No. 6177-4 Stipulated Order for Abatement - Weekly Pump Installation and operation update

[EXTERNAL SENDER: Use caution with links/attachments]

Dear Mr. Chen,

In accordance with Condition 65 of the Modified Stipulated Order, below is the summary of the installation and operation of dewatering pumps for the Chiquita Canyon Landfill. This is a re-submittal of the summary of the installation and operation of dewatering pumps for the Chiquita Canyon Landfill sent on 3/29/2024.

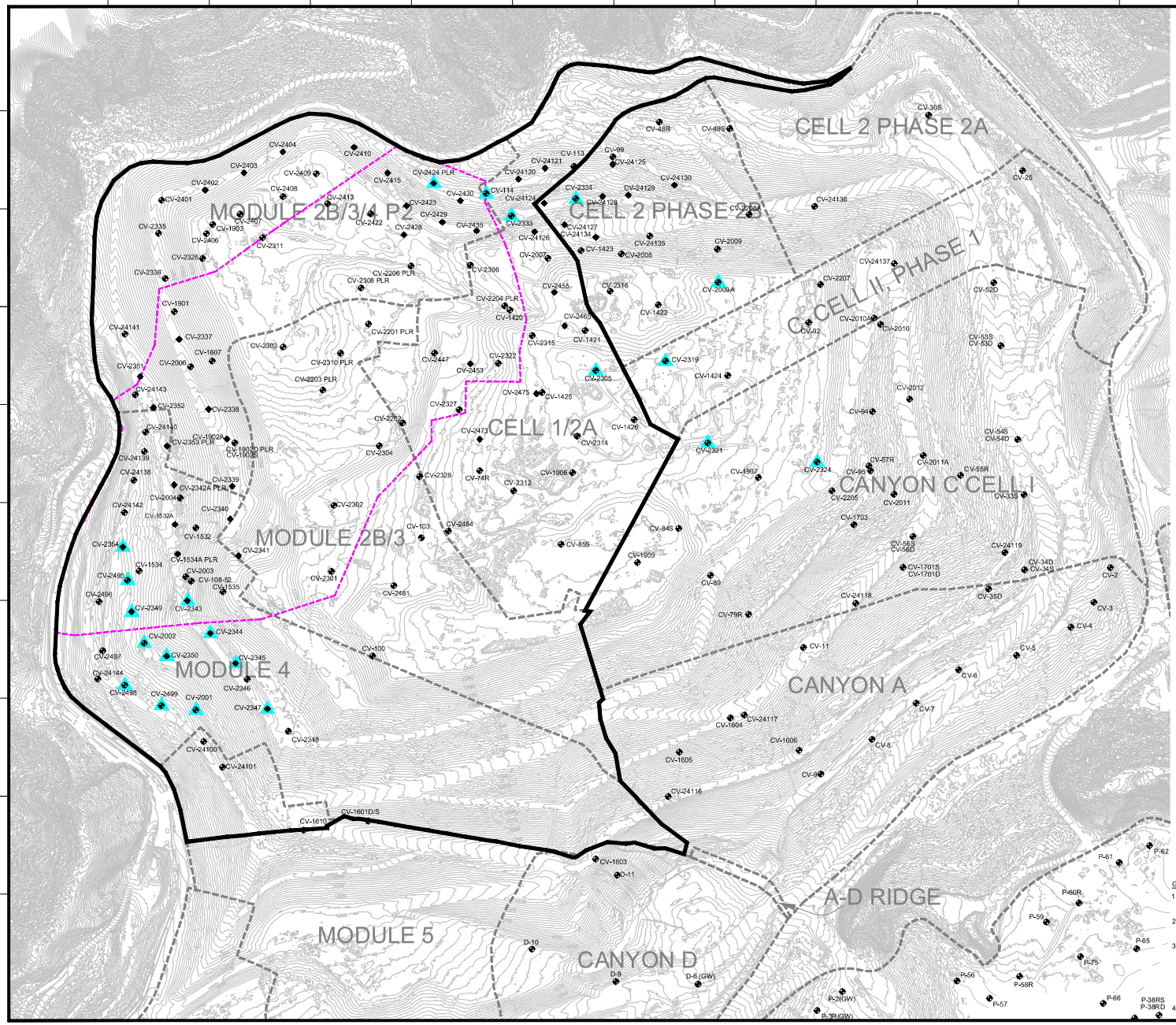
During 03/22/2024 to 03/28/2024, Chiquita completed the installation of, and began operating during the day, nine (9) pumps in vertical LFG extraction wells for a total of eleven (11) pumps operating in vertical LFG extraction wells.

During 03/29/2024 to 04/04/2024, Chiquita plans to install and begin operating an additional ten (10) pumps in vertical LFG extraction wells in locations along the west slope of the reaction area. The pump installation locations for next week are subject to change due to weather and/or safety conditions.

Best,
Bill

William C. Haley, PE.*
Project Director
SCS ENGINEERS
*Licensed in CO and TX

Office: 303-221-1719
Cell #: 303-519-4503
Email: wchaley@scsengineers.com



N

GRAPHIC SCALE

150 75 0 150 300 450

SCALE: 1"=150'

LEGEND

- TOPOGRAPHIC CONTOUR
- EXISTING CELL LIMITS (APPROXIMATE)
- REACTION AREA BOUNDARY - CONDITION 9A
- REACTION AREA BOUNDARY - DATA ANALYSIS
- CV-XX EXISTING VERTICAL LFG EXTRACTION WELL
- CV-XX PLR EXISTING LFG VERTICAL EXTRACTION WELL - PRESSURIZED LEACHATE RELEASE
- EXISTING DE-WATERING WELL WITH PUMP

De-Watering Well Pumps that are Currently Running		
#	Well I.D.	Operational Startup Date
1	CV-2349	2/28/2024
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3	CV-114	3/21/2024
4	CV-2333	3/21/2024
5	CV-2334	3/21/2024
6	CV-2424	3/21/2024
7	CV-2009A	3/27/2024
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10	CV-2319	3/28/2024
11	CV-2324	3/28/2024
12	CV-2001	4/1/2024
13	CV-2350	4/1/2024
14	CV-2354	4/1/2024
15	CV-2499	4/1/2024
16	CV-2345	4/1/2024
17	CV-2347	4/1/2024
18	CV-2343	4/2/2024
19	CV-2498	4/2/2024
20	CV-2344	4/2/2024
21	CV-2002	4/2/2024

GENERAL DRAWING NOTES:

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4. EXISTING GCCS AS-BUILT DATED APRIL 04, 2024.

NO.	REVISION	DATE

SHEET TITLE: EXISTING DE-WATERING WELL WITH PUMP MAP

PROJECT TITLE: CHIQUITA CANYON LANDFILL CASTAIC, CALIFORNIA

CLIENT: CHIQUITA CANYON LANDFILL CASTAIC, CALIFORNIA

SCS ENGINEERS
ENVIRONMENTAL CONSULTANTS
8799 BALBOA AVENUE, SUITE 290
SAN DIEGO, CA 92123
(858) 571-5500 FAX: (562) 427-0805

PROJ. NO. 01204123.35 | DWG. BY: SRM | ACAD FILE: FIELD SERVICES
DSN. BY: - | CHK. BY: WCH/JH | APP. BY: WCH

DATE: 04/05/2024

SCALE: AS SHOWN

SHEET: 1

From: Haley, William (Bill) <WCHaley@scsengineers.com>
Sent: Tuesday, April 2, 2024 9:39 AM
To: bchen@aqmd.gov; ndickel@aqmd.gov; Christina Ojeda
Cc: Steve Cassulo; Amanda Froman; Michael Hearns; nicole.ward@wasteconnections.com; christopher.fear@wasteconnections.com
Subject: Case No. 6177-4 Stipulated Order for Abatement - Weekly Pump Installation and operation update

Follow Up Flag: Follow up
Flag Status: Completed

[EXTERNAL SENDER: Use caution with links/attachments]

Dear Mr. Chen,

In accordance with Condition 65 of the Modified Stipulated Order, below is the summary of the installation and operation of dewatering pumps for the Chiquita Canyon Landfill. This is a re-submittal of the summary of the installation and operation of dewatering pumps for the Chiquita Canyon Landfill sent on 3/29/2024.

During 03/22/2024 to 03/28/2024, Chiquita completed the installation of, and began operating during the day, nine (9) pumps in vertical LFG extraction wells for a total of eleven (11) pumps operating in vertical LFG extraction wells.

During 03/29/2024 to 04/04/2024, Chiquita plans to install and begin operating an additional ten (10) pumps in vertical LFG extraction wells in locations along the west slope of the reaction area. The pump installation locations for next week are subject to change due to weather and/or safety conditions.

Best,
Bill

William C. Haley, PE.*
Project Director
SCS ENGINEERS
*Licensed in CO and TX

Office: 303-221-1719
Cell #: 303-519-4503
Email: wchaley@scsengineers.com

BEFORE THE HEARING BOARD OF THE

SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT

In The Matter Of SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT, Petitioner, vs. CHIQUITA CANYON, LLC a Delaware Corporation, [Facility ID No. 119219] Respondent.	**Case No. 6177-4** **EXHIBIT C TO DECLARATION OF SRIVIDHYA VISWANATHAN, P.E.** Health and Safety Code § 41700, and District Rules 402, 431.1, 3002, 203, 1150 Hearing Date: April 24-25, 2024 Time: 9:30 am Place: Hearing Board South Coast Air Quality Management District 21865 Copley Drive Diamond Bar, CA 91765

April 4, 2024

Baitong Chen, Air Quality Engineer, bchen@aqmd.gov
Nathaniel Dickel, Senior Air Quality Engineer, ndickel@aqmd.gov
Christina Ojeda, Air Quality Inspector, cojeda@aqmd.gov
South Coast Air Quality Management District
21865 East Copley Drive
Diamond Bar, CA 91765-4182

Subject: Revised Landfill Gas Collection System Dewatering Guidelines for Stipulated Order for Abatement (Case No. 6177-4), Chiquita Canyon Landfill (Facility ID 119219), Castaic, California

To Whom It May Concern:

SCS Engineers (SCS), on behalf of Chiquita Canyon, LLC (Chiquita), hereby provides the South Coast Air Quality Management District (SCAQMD) with Chiquita's revised landfill gas (LFG) collection and control system Reaction Area dewatering guidelines and implementation procedures per Condition No. 18 of the Stipulated Order for Abatement (SOFA) (Case No. 6177-4), as modified on March 21, 2024 (Modified SOFA), for the Chiquita Canyon Landfill (CCL or Landfill).

BACKGROUND

The Landfill is a landfill/solid waste disposal facility located at 29201 Henry Mayo Dr., Castaic, California, 91384 (SCAQMD Facility No. 119219). In connection with the Landfill, Chiquita operates an LFG collection and control system (GCCS). The GCCS includes vertical LFG extraction wells and dedicated dewatering pumps (which have historically been either pneumatic or electric) that can be inserted downhole, into select vertical LFG extraction wells for purposes of extracting liquids that may accumulate in the well. Lowering the liquid levels within individual wells reduces the length of perforated well pipe that is blocked by liquids and has shown to expand the zone-of-influence exerted by each well, resulting in improved LFG recovery (increased LFG flowrates).

In 2023, the conditions at CCL indicated that the Landfill was undergoing an elevated temperature landfill (ETLF) event. On September 6, 2023, a hearing was held before the SCAQMD Hearing Board to approve the SOFA, which includes numerous measures to mitigate emissions resulting from the Landfill's ETLF conditions. The approved SOFA was modified on January 15, 2024, and again on March 21, 2024.

Condition No. 18 of the Modified SOFA requires Chiquita to submit revised Reaction Area dewatering guidelines and implementation procedures to SCAQMD in response to SCAQMD comments on the Reaction Area dewatering guidelines and implementation procedures. Condition No. 18 of the Modified SOFA provides:

Respondent shall, in addition to the installation of dewatering sumps/pumps specified in Condition No. 17 above, within ninety (90) days of the issuance of the Initial Order, provide proposed Reaction Area dewatering guidelines and implementation procedures for the landfill to South Coast AQMD (Baitong Chen, Air Quality Engineer, (bchen@aqmd.gov); Nathaniel Dickel, Senior Air Quality Engineer, (ndickel@aqmd.gov)) that include but are not limited to the following:

A. *Proposed methodologies and monitoring procedures that determine the level of dewatering within the Reaction Area (as defined in Condition 9(a)) wells impacted by liquid. Methods may include the measurement of the gas flow at each landfill gas collection well impacted by liquids;*
B. *Use of dewatering pumps or other methods to remove liquids from Reaction Area (as defined in Condition 9(a)) wells impacted by liquids;*
C. *An implementation plan for the use of dewatering pumps or other methods to remove liquids from the Reaction Area wells impacted by liquids. The plan shall include a list of wells in the Reaction Area and depth where liquids are expected to impact landfill gas collection efficacy or be a concern, the proposed action to remove the liquids, and the schedule for liquid removal. The implementation plan shall also include pro-active measures, such as additional dewatering pumps, to be installed at landfill gas collection wells where liquid impaction issues have not yet occurred, but may be expected to occur.*
D. *Upgrades to the site leachate collection system as needed, including through the addition of increased air compressor and/or drain line infrastructure;*
E. *Protocols for the pumping and monitoring of dewatering pumps and other such methods to remove water from Reaction Area (as defined in Condition 9(a)) wells impacted by liquids;*
F. *Well field liquid sounding in the Reaction Area (as defined in Condition 9(a)), and a proposed schedule for conducting liquid sounding on a consistent basis;*
G. *A timeline for appropriate reporting on impacted wells;*
H. *The feasibility of integrity testing of all vertical gas wells in the Reaction Area (as defined in Condition 9(a)) and a timeline and protocol for addressing any wells that the integrity testing demonstrates are damaged or are exhibiting temperatures of at least 170 degrees Fahrenheit; and*
I. *A timeline for implementation of appropriate dewatering procedures upon discovery of wells impacted by liquids.*

Respondent shall, within 14 calendar days of approval of this Order, revise the dewatering guidelines according to the comments received by email on March 13, 2024, and re-submit the revised dewatering guidelines to South Coast AQMD for final approval. The proposed Reaction Area dewatering guidelines and implementation procedures shall be implemented within seven (7) days of South Coast AQMD approval, and shall be implemented to the maximum extent feasible if Respondent's facility is encountering leachate tank capacity shortages.

DEWATERING GUIDELINES

Section A – Proposed methodologies and monitoring procedures that determine the level of dewatering within the Reaction Area (as defined in Condition 9(a)) wells impacted by liquid. Methods may include the measurement of the gas flow at each landfill gas collection well impacted by liquids;

The LFG industry generally considers the ideal condition for maximizing LFG collection and extraction to be well conditions unencumbered by accumulated liquids (i.e., when the full length of perforated well pipe is open). However, this idealized condition is rarely achievable. The "level of dewatering" means the degree to which the static liquid level in each well is lowered by dewatering pump operations, which extract liquids at a rate equivalent to the well's liquid recharge rate, or "yield." Methodologies and monitoring procedures that can assess the appropriate level of dewatering include measurement of LFG composition (quality), measurement of LFG recovery quantities (flowrate),

measurement of applied vacuum, and measurement of liquid level elevations (depth-to-liquid) within the well casing pipe.

Chiquita utilizes gas quality and flow measurements at individual vertical LFG extraction wells within the Reaction Area and liquid level monitoring to assess the level of dewatering that is being achieved by the pumps installed within select vertical LFG extraction wells positioned within the Reaction Area. These same parameters (composition and flow) are evaluated to decide if the dewatering being achieved is adequate to accomplish the objective of removal of heat through fluid extraction (both gas and liquids).

Extraction wells with low LFG flow of less than 5 cubic feet per minute (cfm) or decreasing gas quality (British thermal unit [BTU] content less than 100 BTU per cubic foot), or equilibration with system vacuum within one minute of opening the wellhead may need additional investigation (root cause analysis) to determine the cause of the decrease. During routine LFG monitoring as prescribed by the Landfill's Title V permit, if a well exhibits one or more of these conditions (low LFG flow of less than 5 cfm, decreasing gas quality (British thermal unit [BTU] content less than 100 BTU per cubic foot), or equilibration with system vacuum within one minute of opening the wellhead), Chiquita will conduct liquid level monitoring of that well within three weeks as prescribed in Section F.

Chiquita conducts routine liquid level monitoring utilizing crews experienced in conducting liquid level monitoring and operating and maintaining dewatering pumps at all vertical LFG extraction wells within the Reaction Area, at a minimum, on a quarterly basis. It is standard industry practice to monitor liquid levels quarterly for landfills with liquid concerns. More frequent liquid level monitoring is impractical for the continued operation of the pumps and would be detrimental to the removal of liquids from the Landfill. Pumps must be shut off to perform the liquid level monitoring, thus halting gas collection. Performing liquid level monitoring at a greater frequency would reduce the amount of gas and liquids extracted from the Landfill. Additionally, more frequent monitoring would not be helpful as the liquid levels within landfills do not appreciably change in a month much less a week. During liquid level monitoring (often referred to as a "sounding" event), a liquid level measurement device that consists of a probe and cable is lowered into the well casing and produces an audible sound when the probe encounters liquids. Section F provides additional details on this liquid level monitoring method. Alternative instrumentation, such as a tape measure with floatation device or downhole video camera, may be utilized in order to reduce potential interference due to foam formation. The measurements on the cable or tape measure indicate the depth to liquids, as measured from the top of the casing, within the Landfill Reaction Area, and are used to calculate the depth of liquids and the liquid levels within each well casing.

Section B – Use of dewatering pumps or other methods to remove liquids from Reaction Area (as defined in Condition 9(a)) wells impacted by liquids;

Chiquita is installing a dedicated dewatering pump in any vertical LFG well in the Reaction Area where the well exhibits low LFG flow (less than 5 cfm), decreasing gas quality (BTU content less than 100 BTU per cubic foot), or equilibration with system vacuum within one minute of opening the wellhead, as well as in wells where liquids block more than 10% of well casing perforations, provided that the well casing pipe has structural integrity as noted in Section H and a pump can be installed safely. The type of pump, depth of installation, and ancillary features to be installed will vary depending on liquid temperature, composition of the liquids (primarily solids content, etc.), presence of fouling substances (sludge, precipitants, crust, black goo, flubber, taffy, etc.), historical pump performance, and maintenance cycles to maximize liquid extraction for each individual well in the Reaction Area.

It is well-documented within the landfill industry that the use of dedicated dewatering pumps to extract liquids from vertical LFG extraction wells is a challenging endeavor that requires continuous maintenance because the physical properties of the leachate lend itself to clogging the dewatering pumps. This continuous maintenance includes cleaning of the pumps, due to the accumulation of solids in the vertical discharge tubing and pump which occurs during normal operation. These solids will also accumulate in the leachate discharge piping (forcemain) which requires routine cleaning and jetting to remove the solids to prevent blockages. Work performed to safely maintain pumps in the reaction area will be conducted in accordance with the Health and Safety Plan for the reaction area. Pump downtime and servicing needs impose significant demand on resources. To help mitigate these resource demands and minimize delays in servicing, Chiquita will maintain a maintenance stockpile of spare pumps and all related infrastructure. When any portion of the dewatering system needs to be replaced or maintained, it can be swapped with the backup unit until the original can be brought back to operating condition. The subsurface conditions within an ETLF are a particularly harsh environment, and expectations of liquid quantities removed should be correlated to field conditions that the dewatering system (pumps, pneumatic supply piping, liquid forcemain piping, valves, compressors, electric power equipment, etc.) is being exposed to. Chiquita continues to partner with pump manufacturers to develop new equipment to help withstand the challenging liquid conditions present as well as utilize the best materials for the pumps and related infrastructure, which are the best known practices for dealing with ETLF liquids in the industry.

Section C – An implementation plan for the use of dewatering pumps or other methods to remove liquids from the Reaction Area wells impacted by liquids. The plan shall include a list of wells in the Reaction Area and depth where liquids are expected to impact landfill gas collection efficacy or be a concern, the proposed action to remove the liquids, and the schedule for liquid removal. The implementation plan shall also include pro-active measures, such as additional dewatering pumps, to be installed at landfill gas collection wells where liquid impaction issues have not yet occurred, but may be expected to occur.

Chiquita will install pumps in wells in the Reaction Area that are impacted by liquids, which expands on its prior procedure of installing pumps only after liquids impact LFG collection. Currently, there are 117 vertical LFG extraction wells positioned within the Condition 9A Reaction Area (listed below) of which 35 currently have dewatering pumps installed to remove liquids from the Reaction Area. A specific depth in the Landfill cannot be used to expect impact to LFG collection efficacy, because the depth of liquids impacts can vary by the elevation of the Landfill at that location, the depth of the specific well, the depth of perforations of that well, or the time when that well is drilled. Instead, each well is evaluated for possible depth of impaction individually. Currently, 32 of the 117 wells within the Reaction Area show no open perforations due to liquid levels within the well.

Table 1. Vertical Extraction Wells within Reaction Area

CV-74R	CV-1532B	CV-2001	CV-2302	CV-2326	CV-2343
CV-85S	CV-1534	CV-2002	CV-2303	CV-2327	CV-2344
CV-100	CV-1534A	CV-2003	CV-2304	CV-2328	CV-2345
CV-103	CV-1535	CV-2004	CV-2305	CV-2333	CV-2346
CV-108-52	CV-1601D/S	CV-2006	CV-2306	CV-2335	CV-2347
CV-113	CV-1607	CV-2007	CV-2308	CV-2336	CV-2348
CV-114	CV-1610	CV-2201	CV-2310	CV-2337	CV-2349

CV-1420	CV-1901	CV-2202	CV-2311	CV-2338	CV-2350
CV-1421	CV-1902A	CV-2203	CV-2312	CV-2339	CV-2351
CV-1425	CV-1902D/S	CV-2204	CV-2314	CV-2340	CV-2352
CV-1426	CV-1903	CV-2206	CV-2315	CV-2341	CV-2353
CV-1532	CV-1906	CV-2301	CV-2322	CV-2342A	CV-2354
CV-2401	CV-2402	CV-2403	CV-2404	CV-2406	CV-2407
CV-2408	CV-2409	CV-2410	CV-2413	CV-2435	CV-2447
CV-2465	CV-2473	CV-2475	CV-2481	CV-2484	CV-24100
CV-24101	CV-24120	CV-24121	CV-24138	CV-24139	CV-24140
CV-14141	CV-24142	CV-24143	CV-24144	CV-2415	CV-2422
CV-2423	CV-2424	CV-2428	CV-2429	CV-2430	CV-2453
CV-2495	CV-2496	CV-2497	CV-2498	CV-2499	CV-24126
CV-24122	CV-24127	CV-2455			

To proactively plan for future dewatering pump installation, Chiquita is installing dewatering infrastructure (pneumatic supply piping and liquid forcemain piping) to all existing wells. All newly drilled wells will be evaluated to determine if the well needs the dewatering pump to maintain proper performance.. Additionally, Chiquita is continually ordering new pumps both to install in existing LFG extraction wells and to stock on-site, if an existing well begins to have liquid impacts or an existing pump needs to be removed from the LFG extraction well for servicing and maintenance. Pumps in wells are being pulled for cleaning and maintenance when they are no longer producing liquids. This maintenance interval has been as short as 3 days for wells within the Reaction Area, with replacement occurring within 24 hours of determining the pump is no longer functioning. Chiquita continues to order new pumps; delivery timelines have been between 3 days and 3 months depending on the pump type and specification. Due to the constant maintenance and delivery timelines, Chiquita maintains an inventory of spare pumps on site (up to 20 spare pumps) so that any pump that needs to be pulled for maintenance is immediately replaced with a functional pump.

The schedule for dewatering infrastructure installation is highly dependent on manufacturing, vendors, and contractors, each of which may have unexpected circumstances arise. Chiquita is focusing on expeditiously installing the dewatering pumps into the most impacted and newly installed wells while concurrently working on installing dewatering infrastructure to all wells on-site. Chiquita will strive to have this full installation completed by August 30, 2024. The pumps (both pneumatic and/or electric) are configured to actuate and commence liquid removal when liquids are present, so the pumping activities are ongoing and continuous when liquids are present, and the pump is operational.

Section D – Upgrades to the site leachate collection system as needed, including through the addition of increased air compressor and/or drain line infrastructure;

The leachate management system at the Landfill is comprised of various liquids handling infrastructure and subsystems, including the bottom liner drainage layer, the leachate sump pumps, leachate pump stations and forcemain piping, the leachate storage tanks, tanker truck loadout stations, etc. The dewatering infrastructure that is the focus of these dewatering guidelines also serves the LFG collection system and contributes to the liquids handling efforts at the Landfill.

Chiquita has expanded the leachate management system with additional storage tanks and the LFG wellfield dewatering system with liquid conveyance lines and compressed air lines to collect and convey leachate extracted from LFG wells impacted by liquids to the leachate storage tanks. Additionally, as described in Section C, Chiquita will continue to expand the LFG wellfield dewatering system so that every vertical LFG extraction well within the Reaction Area is capable of receiving a pump. The leachate forcemain lines will have the ability to convey 500,000 gallons a day, and the leachate storage tanks will have the ability to store 1,000,000 gallons.

Section E – Protocols for the pumping and monitoring of dewatering pumps and other such methods to remove water from Reaction Area (as defined in Condition 9(a)) wells impacted by liquids;

Pumps installed in vertical LFG extraction wells at CCL are monitored daily to check that the pumps are properly functioning. If a pump is found to be non-functional, it is diagnosed and, if it cannot be fixed-in-place, it is swapped for a functional pump while the original pump is cleaned/maintained. This diagnosis, fix in-place, or replacement is done within one day. If a pump is found to be operational at the time of the daily monitoring event, it is noted as a currently operational pump until checked on the following calendar day. Each pump is not monitored at a specific time of day, because the Landfill's conditions and access to certain areas are constantly changing, resulting in changes to the order pumps are checked. Pumps are checked one by one in the morning of each day to catch any issues early in the day. Pumps are operated as frequently as possible to maximize the dewatering at CCL. It is worth noting that the dewatering pumps installed in LFG wells are subject to occasional stalling because of the conditions in the well (primarily solids content of the liquids and other fouling mechanisms), and field technicians verify proper operation daily and utilize various techniques to restart (referred to as "bump") the pump. This daily monitoring, pump restarts, and maintenance performance is logged using mobile forms. For pneumatic pumps, this often involves temporarily connecting the air supply line to the exhaust hose in an attempt to dislodge any debris and re-seat the float check valve.

Section F – Well field liquid sounding in the Reaction Area (as defined in Condition 9(a)), and a proposed schedule for conducting liquid sounding on a consistent basis;

Chiquita proposes to conduct quarterly liquid level sounding on all vertical LFG extraction wells in the Reaction Area, as explained in Section A, as well as conduct liquid level sounding at any vertical LFG extraction well in the Reaction Area found to have declining gas quality or flow, or immediate equilibration with system vacuum, as detailed in Section A. Wells unsafe for wellhead removal—in accordance with the site's Health and Safety Plan and Containment Feasibility Study—may not be monitored for liquid levels during the routine monitoring until the work can be performed safely. Some of these unsafe conditions may include high wellhead pressure (in excess of 0.1 inch of WC) with no applied vacuum, free flowing liquids on the leachate discharge line without pump operation, or liquids temperature exceeding 180 degrees at the wellhead. Approximately 10% of wells within the Reaction Area currently exhibit these systems and no additional mitigation is required beyond the other best management practices being implemented in accordance with the Modified SOFA to slow the reaction, like expansion of the gas well system. Wells not monitored for liquids levels will be re-checked for high pressures, free flowing liquids, or high temperatures on a monthly basis until safe to conduct liquid level monitoring. Based on the experiences of other ETLF landfills, wells exhibiting these unsafe conditions may take months or years to abate to the point of being safe to monitor liquids levels.

Section G – A timeline for appropriate reporting on impacted wells;

Liquid sounding data will be reported quarterly in conjunction with the regular quarterly monitoring of depths to liquids of all vertical LFG extraction wells in the Reaction Area. It is standard industry practice to monitor liquid levels quarterly for landfills with liquid concerns. More frequent liquid level monitoring is impractical for the continued operation of the pumps and would be detrimental to the removal of liquids from the Landfill. Pumps must be shut off to perform the liquid level monitoring, thus halting gas collection. Performing liquid level monitoring at a greater frequency would reduce the amount of gas and liquids extracted from the Landfill. Additionally, more frequent monitoring would not be helpful as the liquid levels within landfills do not appreciably change in a month much less a week. Liquid impaction on LFG flow or quality is identified through routine LFG monitoring and is reported in the monthly report submissions required under SOFA Condition No. 8(i).

Section H – The feasibility of integrity testing of all vertical gas wells in the Reaction Area (as defined in Condition 9(a)) and a timeline and protocol for addressing any wells that the integrity testing demonstrates are damaged or are exhibiting temperatures of at least 170 degrees Fahrenheit;

All vertical LFG extraction wells within the Reaction Area will be checked for well casing integrity on a quarterly basis, or more frequently as dictated by analysis of LFG monitoring data or at a minimum in conjunction with the proposed quarterly liquid level sounding, provided it is safe to remove the wellhead on the LFG extraction well for the manually performed integrity testing. For purposes of this effort, the structural integrity of the well will be evaluated to assess the extent to which pinching, crimping, shearing or other deformation or deflection of the well riser pipe has occurred to such degree that the well is no longer capable of insertion of a dewatering pump or measurement device, and the well is no longer productive for recovering. LFG Vertical LFG extraction wells discovered to be damaged during the integrity testing will be re-drilled or repaired in accordance with the GCCS design plan.

Section I – A timeline for implementation of appropriate dewatering procedures upon discovery of wells impacted by liquids;

Based on the evaluation of the installation and monitoring data, Chiquita proposes to install dewatering infrastructure and pumps in any impacted vertical LFG extraction well by August 30, 2024, when all vertical wells locations on-site will have the infrastructure to power pumps and convey leachate from the pumps. Specially, if the LFG extraction well has 25% or less available perforations, dewatering infrastructure activities such as pump installation will be initiated. This implementation will commence in conjunction with the reporting of liquid impactions discussed in Section G. As described in Section C, Chiquita is acquiring additional pumps to have on site and expanding piping proactively. If there is no pump on site or available piping, the additional equipment will be ordered within a week. Chiquita will commit to install the pump within one week of receipt.

CLOSING

If you have any questions or need any additional information, please contact the undersigned at (303) 519-4503.

Sincerely,

Arthur E Jones Jr
Vice President
SCS Engineers

Bill Haley, P.E.
Project Director
SCS Engineers

Enclosures

cc: Steve Cassulo, Chiquita Canyon Landfill, LLC
Pat Sullivan, SCS Engineers
Bob Dick, SCS Engineers
Srividhya Viswanathan, SCS Engineers
Gabrielle Stephens, SCS Engineers

From: Steve Cassulo <Steven.Cassulo@WasteConnections.com>
Sent: Thursday, April 18, 2024 6:24 PM
To: bchen@aqmd.gov
Cc: ndickel@aqmd.gov; cojeda@aqmd.gov; wchaley@scsengineers.com; sviswanathan@scsengineers.com; bdick@scsengineers.com; Pablo Sanchez-Soria; neal@blueridgeservices.com; rcpleus@intertox.com; psullivan@scsengineers.com
Subject: Case No. 6177-4 – Chiquita Canyon, LLC – Updated Well Design and Installation Schedule
Attachments: 2024.04.18_CCLF AQMD GCCS Updated Design Submittal.pdf

Follow Up Flag: Flag for follow up
Flag Status: Flagged

Dear Mr. Chen,

Attached please find the updated design and installation schedule incorporating Condition 15(a) and 15(b) wells and their associated piping on behalf of Chiquita Canyon, LLC.

Steve Cassulo
District Manager
661-371-9214

April 18, 2024
File No. 01204123.21-13

Baitong Chen, Air Quality Engineer, bchen@aqmd.gov
Nathaniel Dickel, Senior Air Quality Engineer, ndickel@aqmd.gov
Christina Ojeda, Air Quality Inspector, cojeda@aqmd.gov
South Coast Air Quality Management District
21865 Copley Drive
Diamond Bar, California 91765

Subject: Updated Design and Installation Schedule of the Gas Collection and Control System Well-Field Expansion Plan
Chiquita Canyon Landfill – Castaic, California

Dear Mr. Chen:

In accordance with Condition No. 15(b)(i) of the March 21, 2024 Modified Stipulated Order for Abatement (SOFA) pertaining to the Chiquita Canyon Landfill (Landfill) (Case No. 6177-4), Chiquita Canyon, LLC (Chiquita) provides the updated design and installation schedule of the gas collection and control system (GCCS) well-field expansion plan incorporating the wells under SOFA Condition No. 15(a) and the additional wells under Condition No. 15(b) and their associated piping.

Attachment A presents the updated "Proposed Overall GCCS Site Plan" drawing, prepared by SCS Engineers and dated April 16, 2024. This updated drawing illustrates the installation plan design for an average of three (3) wells per acre within the estimated extent of elevated temperature landfill conditions as depicted by the Reaction Committee in their monthly determinations and a minimum of two (2) wells per acre in any individual grid along with associated landfill gas (LFG) collection piping.

The wells will be single casing completions, with design depths ranging between 42 and 297 feet, as depicted in **Attachment B**'s updated table titled "Proposed Well Schedule" also prepared by SCS and dated April 16, 2024. The well casings will be constructed using perforated and blank (solid) 8-inch diameter Chlorinated Poly Vinyl Chloride (CPVC) Schedule 80 and carbon steel pipe. The total length of 8-inch carbon steel well casings and 8-inch CPVC well casings will vary depending on temperatures encountered during drilling. If temperatures of the waste exceed 150 degrees Fahrenheit, then the well will be constructed of carbon steel instead of CPVC. The final number, depth, and design of the vertical LFG extraction wells may be subject to change based on field and/or other conditions.

The Landfill will continue to install new LFG header and lateral piping, associated tees, valves, and road crossings. The proposed LFG piping will continue to include 36-inch (39 feet), 24-inch (7,369 feet), 20-inch (20 feet), 18-inch (3,781 feet), 8-inch (1,875 feet), and 6-inch (14,170 feet) header and lateral piping to connect all vertical extraction wells to the proposed and existing GCCS.

The expected gas collection from the associated proposed LFG wells, header and lateral piping will be approximately 2,100 standard cubic feet per minute (scfm); a reduction in gas collection from the existing horizontal collectors is expected as new vertical wells are installed.

These proposed upgrades of the additional wells and upgrades to the piping system are expected to be completed by August 30, 2024, weather, soil, and safety conditions permitting. Monthly updates on these upgrades will be included in the monthly report submitted to South Coast AQMD pursuant to SOFA Condition No. 8(m).

Please contact either of the undersigned if you have questions or require additional information.

Sincerely,

Bill Haley

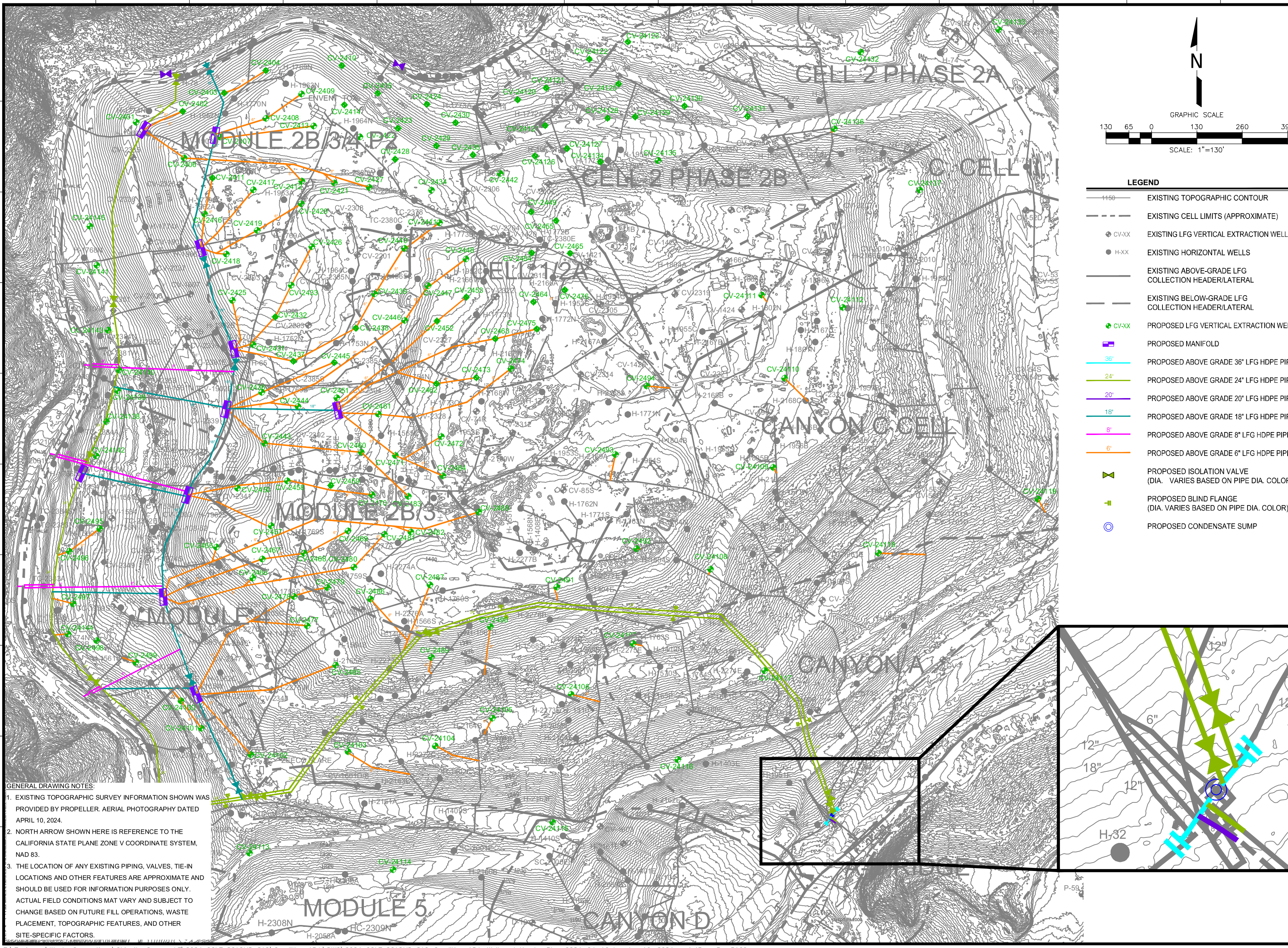
Bill Haley, PE
Project Director
SCS Engineers

Srividhya Viswanathan, PE
Vice President
SCS Engineers

cc: Robert Dick, PE, BCEE, SCS Engineers
Pablo Sanchez Soria, PhD, CIH, CTEH
Neal Bolton, PE, Blue Ridge Services, Inc.
Angie Perez, PhD, CIH, CTEH
Patrick S. Sullivan, BCES, CCP, SCS Engineers

Attachment A

Proposed Overall GCCS Site Plan



N

GRAPHIC SCALE

130 65 0 130 260 390

SCALE: 1"=130'

LEGEND

1150	EXISTING TOPOGRAPHIC CONTOUR
	EXISTING CELL LIMITS (APPROXIMATE)
CV-XX	EXISTING LFG VERTICAL EXTRACTION WELL
H-XX	EXISTING HORIZONTAL WELLS
	EXISTING ABOVE-GRADE LFG COLLECTION HEADER/LATERAL
	EXISTING BELOW-GRADE LFG COLLECTION HEADER/LATERAL
CV-XX	PROPOSED LFG VERTICAL EXTRACTION WELL
	PROPOSED MANIFOLD
36"	PROPOSED ABOVE GRADE 36" LFG HDPE PIPING
24"	PROPOSED ABOVE GRADE 24" LFG HDPE PIPING
20"	PROPOSED ABOVE GRADE 20" LFG HDPE PIPING
18"	PROPOSED ABOVE GRADE 18" LFG HDPE PIPING
8"	PROPOSED ABOVE GRADE 8" LFG HDPE PIPING
6"	PROPOSED ABOVE GRADE 6" LFG HDPE PIPING
	PROPOSED ISOLATION VALVE (DIA. VARIES BASED ON PIPE DIA. COLOR)
	PROPOSED BLIND FLANGE (DIA. VARIES BASED ON PIPE DIA. COLOR)
	PROPOSED CONDENSATE SUMP

GENERAL DRAWING NOTES:

1. EXISTING TOPOGRAPHIC SURVEY INFORMATION SHOWN WAS PROVIDED BY PROPELLER. AERIAL PHOTOGRAPHY DATED APRIL 10, 2024.
2. NORTH ARROW SHOWN HERE IS REFERENCE TO THE CALIFORNIA STATE PLANE ZONE V COORDINATE SYSTEM, NAD 83.
3. THE LOCATION OF ANY EXISTING PIPING, VALVES, TIE-IN LOCATIONS AND OTHER FEATURES ARE APPROXIMATE AND SHOULD BE USED FOR INFORMATION PURPOSES ONLY. ACTUAL FIELD CONDITIONS MAT VARY AND SUBJECT TO CHANGE BASED ON FUTURE FILL OPERATIONS, WASTE PLACEMENT, TOPOGRAPHIC FEATURES, AND OTHER SITE-SPECIFIC FACTORS.

Z:\Engineers\Waste Connections\Chiquita Canyon LF\2024 CCLF SCAQMD SAO\Condition 15.b\DWG\2024 CCLF SCAQMD SAO_Condition 15.b_Well and Header Plan_2024-04-16.dwg Apr 16, 2024 - 1:45pm By: 5160srm

NO.	REVISION	DATE

SHEET TITLE: PROPOSED OVERALL GCCS SITE PLAN

PROJECT TITLE: CHIQUITA CANYON LANDFILL CASTAIC, CALIFORNIA

CLIENT: CHIQUITA CANYON LANDFILL CASTAIC, CALIFORNIA

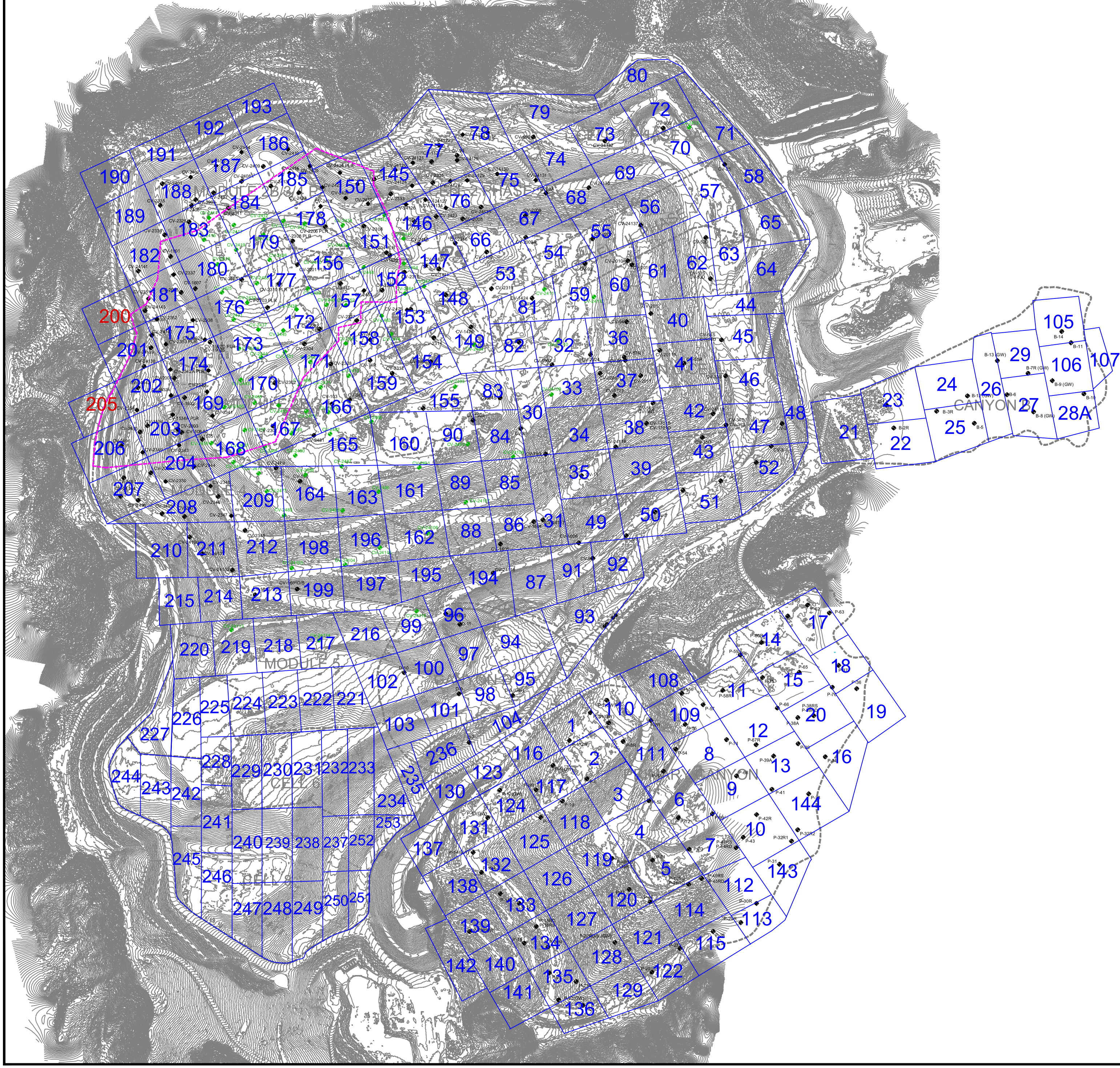
SCS ENGINEERS
ENVIRONMENTAL CONSULTANTS
8799 BALBOA AVENUE SUITE 290
SAN DIEGO, CA 92123
(858) 571-5500 FAX. (562) 427-0805

PROJ. NO.: 01204123.35 | DSN. BY: JH/SRM | CHK. BY: SRM | DWN. BY: WCH | ACAD FILE: F:/ENGINEERS | APP. BY: -

DATE: 04/16/2024

SCALE: AS SHOWN

SHEET: 1



GRAPHIC SCALE

150 75 0 150 300 450

SCALE: 1"=150'

N

LEGEND

Symbol	Description
1150 (contour line)	EXISTING TOPOGRAPHIC CONTOUR
(dashed line)	EXISTING CELL LIMITS (APPROXIMATE)
CV-XX	EXISTING LFG VERTICAL EXTRACTION WELL
CV-XX	PROPOSED LFG VERTICAL EXTRACTION WELL
23	SURFACE EMISSION MONITORING GRID
23	SURFACE EMISSION MONITORING GRID - LESS THAN TWO WELLS WITHIN GRID
(magenta dashed line)	REACTION AREA BOUNDARY (APPROXIMATE) - BASED ON DATA REVIEW

Total Number of LFG Vertical Extraction Wells Within Reaction Area	97
Total Acreage of Reaction Area (Approx.)	28.76
LFG Vertical Extraction Well Density Within Reaction Area	3

GENERAL DRAWING NOTES:

1. EXISTING TOPOGRAPHIC SURVEY INFORMATION SHOWN WAS PROVIDED BY PROPELLOR. AERIAL PHOTOGRAPHY DATED APRIL 10, 2024.
2. NORTH ARROW SHOWN IS REFERENCE TO THE CALIFORNIA STATE PLANE ZONE V COORDINATE SYSTEM, NAD 83.
3. THE LOCATION OF ANY EXISTING PIPING, VALVES, TIE-IN LOCATIONS AND OTHER FEATURES ARE APPROXIMATE AND SHOULD BE USED FOR INFORMATION PURPOSES ONLY. ACTUAL FIELD CONDITIONS MAY VARY AND SUBJECT TO CHANGE BASED ON FUTURE FILL OPERATIONS, WASTE PLACEMENT, TOPOGRAPHIC FEATURES, AND OTHER SITE-SPECIFIC FACTORS.
4. EXISTING GCCS AS-BUILT DATED APRIL 11, 2024.

NO.	REVISION	DATE

SHEET TITLE: SURFACE EMISSION MONITORING WITH REACTION AREA LIMITS MAP- SOFA SUBMITTAL

PROJECT TITLE: CHIQUITA CANYON LANDFILL CASTAIC, CALIFORNIA

CLIENT: CHIQUITA CANYON LANDFILL CASTAIC, CALIFORNIA

SCS ENGINEERS
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3900 KILROY AIRPORT WAY, SUITE 100
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PROJ. NO. | DSN. BY: - | DWN. BY: SRM | CHK. BY: - | ACAD FILE: U:/WCI/CCL/LFG ASB | APP. BY: -

DATE: 04/16/2024

SCALE: AS SHOWN

1 of 1

Attachment B

Proposed Well Schedule

2024 LFG WELL DRILLING SCHEDULE

CHIQUITA CANYON LANDFILL, CASTAIC, CA

#	Well ID	Coordinates[3] Northing	Coordinates[3] Easting	Elevations Surface	Elevations Base[1]	Depth to Base (ft)	Clearance Above Base >=15 ft.	Bore Depth[4] (ft)	Bore Diam. (in)	Casing size and Material Type[4]	Perforated pipe (ft)	Solid Pipe[2] (ft)	Gravel Pack (ft)	Depth to Top of Gravel Pack (ft)	Depth to Bottom of shallow Gravel Pack (ft)	Shallow Soil Backfill(ft)	Centralizers
1	CV-2401	1981918.267	6365410.820	1352	1283	69	17	52	36	8" CARBON STEEL	20	33	24	28	52	23	0
2	CV-2402	1981949.502	6365544.096	1360	1297	63	16	47	36	8" CARBON STEEL	25	23	29	18	47	13	0
3	CV-2403	1982002.248	6365663.255	1364	1305	59	17	42	36	8" CARBON STEEL	20	23	24	18	42	13	0
4	CV-2404	1982066.566	6365782.382	1369	1310	59	17	42	36	8" CARBON STEEL	20	23	24	18	42	13	0
5	CV-2406	1981815.941	6365548.148	1382	1250	132	30	102	36	8" CARBON STEEL	70	33	74	28	102	23	1
6	CV-2407	1981875.887	6365651.136	1387	1269	118	26	92	36	8" CARBON STEEL	60	33	64	28	92	23	0
7	CV-2408	1981929.433	6365782.798	1378	1265	113	31	82	36	8" CARBON STEEL	50	33	54	28	82	23	0
8	CV-2409	1981999.282	6365884.764	1381	1273	108	31	77	36	8" CARBON STEEL	45	33	49	28	77	23	0
9	CV-2410	1982080.558	6366000.616	1366	1316	50	18	32	36	8" CARBON STEEL	10	23	14	18	32	13	0
10	CV-2411	1981758.730	6365629.668	1385	1225	160	23	137	36	8" CARBON STEEL	105	33	109	28	137	23	2
11	CV-2412	1981749.304	6365885.804	1385	1193	192	25	167	36	8" CARBON STEEL	135	33	139	28	167	23	4
12	CV-2413	1981907.595	6365919.589	1381	1245	136	24	112	36	8" CARBON STEEL	80	33	84	28	112	23	1
13	CV-2414	1981967.930	6366007.370	1385	1275	110	28	82	36	8" CARBON STEEL	50	33	54	28	82	23	0
14	CV-2415	1982001.469	6366103.279	1368	1300	68	26	42	36	8" CARBON STEEL	20	23	24	18	42	13	0
15	CV-2416	1981655.349	6365607.103	1382	1195	187	20	167	36	8" CARBON STEEL	135	33	139	28	167	23	4
16	CV-2417	1981724.493	6365746.684	1387	1203	184	22	162	36	8" CARBON STEEL	130	33	134	28	162	23	4
17	CV-2418	1981540.108	6365669.325	1382	1145	237	25	212	36	8" CARBON STEEL	180	33	184	28	212	23	6
18	CV-2419	1981608.358	6365757.877	1387	1161	226	24	202	36	8" CARBON STEEL	170	33	174	28	202	23	6
19	CV-2420	1981684.455	6365884.354	1383	1168	215	28	187	36	8" CARBON STEEL	155	33	159	28	187	23	5
20	CV-2421	1981743.846	6365978.848	1382	1188	194	22	172	36	8" CARBON STEEL	140	33	144	28	172	23	4
21	CV-2422	1981876.310	6366051.965	1386	1245	141	29	112	36	8" CARBON STEEL	80	33	84	28	112	23	1
22	CV-2423	1981901.144	6366161.460	1380	1275	105	23	82	36	8" CARBON STEEL	50	33	54	28	82	23	0
23	CV-2424	1981969.891	6366244.235	1350	1301	49	17	32	36	8" CARBON STEEL	10	23	14	18	32	13	0
24	CV-2425	1981407.656	6365686.569	1380	1110	270	26	244	36	8" CARBON STEEL	212	33	216	28	244	23	8
25	CV-2426	1981561.583	6365914.109	1385	1126	259	27	232	36	8" CARBON STEEL	200	33	204	28	232	23	7
26	CV-2427	1981731.55	6366078.935	1384	1193	191	29	162	36	8" CARBON STEEL	130	33	134	28	162	23	4
27	CV-2428	1981812.141	6366153.075	1387	1230	157	25	132	36	8" CARBON STEEL	100	33	104	28	132	23	2
28	CV-2429	1981850.686	6366271.016	1378	1251	127	20	107	36	8" CARBON STEEL	75	33	79	28	107	23	1
29	CV-2430	1981916.857	6366326.449	1355	1280	75	23	52	36	8" CARBON STEEL	20	33	24	28	52	23	0
30	CV-2431	1981280.700	6365745.912	1372	1100	272	30	242	36	8" CARBON STEEL	210	33	214	28	242	23	8
31	CV-2432	1981360.401	6365809.530	1382	1078	304	32	272	36	8" CARBON STEEL	240	33	244	28	272	23	9
32	CV-2433	1981450.908	6365855.369	1387	1092	295	33	262	36	8" CARBON STEEL	230	33	234	28	262	23	9
33	CV-2434	1981723.526	6366257.197	1385	1200	185	23	162	36	8" CARBON STEEL	130	33	134	28	162	23	4
34	CV-2435	1981824.446	6366376.142	1377	1230	147	25	122	36	8" CARBON STEEL	90	33	94	28	122	23	2
35	CV-2436	1981144.242	6365770.669	1361	1100	261	24	237	36	8" CARBON STEEL	205	33	209	28	237	23	7

Notes:
1. Base grades titled "CCLF liner limit with floor elevations 20230110" and obtained from Tetra Tech on October 2023.
2. Includes 3 of solid pipe stickup above grade.
3. The Horizontal Coordinates are based on California State Plane Zone 5.
4. If drill cutting temperatures are consistently greater than 150, contractor shall inform Site and Design Engineer for change in well casing materials.

NO. | REVISION | DATE

SHEET TITLE: PROPOSED WELL SCHEDULE

PROJECT TITLE: CHIQUITA CANYON LANDFILL CASTAIC, CALIFORNIA

CLIENT: CHIQUITA CANYON LANDFILL CASTAIC, CALIFORNIA

SCS ENGINEERS
ENVIRONMENTAL CONSULTANTS
8799 BALBOA AVENUE SUITE 290
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(858) 571-5500 FAX. (562) 427-0805

PROJ. NO. 01204123.35 | DSN. BY: JH/SRM | DWN. BY: SRM | CHK. BY: WCH | ACAD FILE: F/ENGINEERS | APP. BY: -

DATE: 04/16/2024
SCALE: AS SHOWN
SHEET: 1

Z:\Engineers\Waste Connections\Chiquita Canyon LF\2024 CCLF SCAQMD SAO\Condition 15.b\DWG\2024 CCLF SCAQMD SAO_Condition 15.b_Well and Header Plan_2024-04-16.dwg Apr 16, 2024 - 1:37pm By: 5160srm

2024 LFG WELL DRILLING SCHEDULE
CHIQUITA CANYON LANDFILL, CASTAIC, CA

#	Well ID	Coordinates[3]		Elevations		Depth to Base (ft)	Clearance Above Base >=15 ft.	Bore Depth[4] (ft)	Bore Diam. (in)	Casing size and Material Type[4]	Perforated pipe (ft)	Solid Pipe[2] (ft)	Gravel Pack (ft)	Depth to Top of Gravel Pack (ft)	Depth to Bottom of shallow Gravel Pack (ft)	Shallow Soil Backfill(ft)	Centralizers
		Northing	Easting	Surface	Base[1]												
36	CV-2437	1981233.265	6365861.478	1371	1068	303	26	277	36	8" CARBON STEEL	245	33	249	28	277	23	9
37	CV-2438	1981328.093	6366040.691	1374	1067	307	30	277	36	8" CARBON STEEL	245	33	249	28	277	23	9
38	CV-2439	1981426.235	6366094.001	1374	1074	300	23	277	36	8" CARBON STEEL	245	33	249	28	277	23	9
39	CV-2440	1981556.729	6366180.008	1376	1125	251	24	227	36	8" CARBON STEEL	195	33	199	28	227	23	7
40	CV-2441	1981630.234	6366280.123	1381	1152	229	22	207	36	8" CARBON STEEL	175	33	179	28	207	23	6
41	CV-2442	1981771.361	6366454.012	1396	1210	186	29	157	36	8" CARBON STEEL	125	33	129	28	157	23	3
42	CV-2443	1980997.934	6365778.807	1358	1091	267	30	237	36	8" CARBON STEEL	205	33	209	28	237	23	7
43	CV-2444	1981103.358	6365874.702	1364	1072	292	25	267	36	8" CARBON STEEL	235	33	239	28	267	23	9
44	CV-2445	1981229.645	6365978.426	1371	1061	310	28	282	36	8" CARBON STEEL	250	33	254	28	282	23	10
45	CV-2446	1981350.110	6366180.731	1374	1070	304	27	277	36	8" CARBON STEEL	245	33	249	28	277	23	9
46	CV-2447	1981449.332	6366247.407	1382	1082	300	28	272	36	8" CARBON STEEL	240	33	244	28	272	23	9
47	CV-2448	1981526.446	6366356.092	1392	1106	286	24	262	36	8" CARBON STEEL	230	33	234	28	262	23	9
48	CV-2449	1981661.234	6366543.058	1399	1145	254	32	222	36	8" CARBON STEEL	190	33	194	28	222	23	7
49	CV-2450	1980869.189	6365701.336	1354	1092	262	30	232	36	8" CARBON STEEL	200	33	204	28	232	23	7
50	CV-2451	1981128.434	6365985.988	1366	1058	308	21	287	36	8" CARBON STEEL	255	33	259	28	287	23	10
51	CV-2452	1981348.223	6366272.978	1394	1070	324	27	297	36	8" CARBON STEEL	265	33	269	28	297	23	10
52	CV-2453	1981417.004	6366357.183	1393	1074	319	27	292	36	8" CARBON STEEL	260	33	264	28	292	23	10
53	CV-2454	1981543.821	6366544.547	1402	1098	304	32	272	36	8" CARBON STEEL	240	33	244	28	272	23	9
54	CV-2455	1981635.910	6366614.251	1404	1130	274	27	247	36	8" CARBON STEEL	215	33	219	28	247	23	8
55	CV-2456	1980700.408	6365641.165	1354	1076	278	31	247	36	8" CARBON STEEL	215	33	219	28	247	23	8
56	CV-2457	1980761.530	6365797.719	1367	1052	315	28	287	36	8" CARBON STEEL	255	33	259	28	287	23	10
57	CV-2458	1980890.277	6365843.893	1370	1060	310	28	282	36	8" CARBON STEEL	250	33	254	28	282	23	10
58	CV-2459	1980876.915	6365968.548	1375	1054	321	29	292	36	8" CARBON STEEL	260	33	264	28	292	23	10
59	CV-2460	1980972.495	6366055.968	1379	1055	324	27	297	36	8" CARBON STEEL	265	33	269	28	297	23	10
60	CV-2461	1981081.709	6366105.102	1383	1057	326	29	297	36	8" CARBON STEEL	265	33	269	28	297	23	0
61	CV-2462	1981168.75	6366271.579	1393	1067	326	29	297	36	8" CARBON STEEL	265	33	269	28	297	23	10
62	CV-2463	1981297.654	6366440.071	1402	1068	334	37	297	36	8" CARBON STEEL	265	33	269	28	297	23	0
63	CV-2464	1981402.951	6366549.744	1410	1072	338	41	297	36	8" CARBON STEEL	265	33	269	28	297	23	10
64	CV-2465	1981543.525	6366654.885	1406	1088	318	21	297	36	8" CARBON STEEL	265	33	269	28	297	23	10
65	CV-2466	1980611.421	6365744.980	1358	1048	310	28	282	36	8" CARBON STEEL	250	33	254	28	282	23	10
66	CV-2467	1980666.205	6365772.512	1362	1050	312	30	282	36	8" CARBON STEEL	250	33	254	28	282	23	10
67	CV-2468	1980683.016	6365891.962	1381	1049	332	35	297	36	8" CARBON STEEL	265	33	269	28	297	23	10
68	CV-2469	1980746.669	6366017.894	1381	1051	330	33	297	36	8" CARBON STEEL	265	33	269	28	297	23	10
69	CV-2470	1980850.233	6366086.908	1384	1053	331	34	297	36	8" CARBON STEEL	265	33	269	28	297	23	10
70	CV-2471	1980963.059	6366153.699	1387	1055	332	40	292	36	8" CARBON STEEL	260	33	264	28	292	23	10

Notes:
1. Base grades titled "CCLF liner limit with floor elevations 20230110" and obtained from Tetra Tech on October 2023.
2. Includes 3 of solid pipe stickup above grade.
3. The Horizontal Coordinates are based on California State Plane Zone 5.
4. If drill cutting temperatures are consistently greater than 150, contractor shall inform Site and Design Engineer for change in well casing materials.

NO. | REVISION | DATE

SHEET TITLE: PROPOSED WELL SCHEDULE
PROJECT TITLE: CHIQUITA CANYON LANDFILL CASTAIC, CALIFORNIA

CLIENT: CHIQUITA CANYON LANDFILL CASTAIC, CALIFORNIA

SCS ENGINEERS
ENVIRONMENTAL CONSULTANTS
8799 BALBOA AVENUE, SUITE 290
SAN DIEGO, CA 92123
(858) 571-5500 FAX: (562) 427-0805
PROJECT NO. 01024123.35 | DSN. BY: JHS/RM | DWN. BY: SRM | CHK. BY: WCH | ACAD FILE: | APP. BY: -

DATE: 04/16/2024
SCALE: AS SHOWN
SHEET: 2

2024 LFG WELL DRILLING SCHEDULE
CHIQUITA CANYON LANDFILL, CASTAIC, CA

#	Well ID	Coordinates[3]		Elevations		Depth to Base (ft)	Clearance Above Base >=15 ft.	Bore Depth[4] (ft)	Bore Diam. (in)	Casing size and Material Type[4]	Perforated pipe (ft)	Solid Pipe[2] (ft)	Gravel Pack (ft)	Depth to Top of Gravel Pack (ft)	Depth to Bottom of shallow Gravel Pack (ft)	Shallow Soil Backfill(ft)	Centralizers
		Northing	Easting	Surface	Base[1]												
71	CV-2472	1981017.322	6366285.610	1397	1063	334	37	297	36	8" CARBON STEEL	265	33	269	28	297	23	10
72	CV-2473	1981186.022	6366385.567	1404	1067	337	40	297	36	8" CARBON STEEL	265	33	269	28	297	23	10
73	CV-2474	1981212.031	6366485.087	1407	1067	340	43	297	36	8" CARBON STEEL	265	33	269	28	297	23	10
74	CV-2475	1981325.530	6366559.186	1411	1068	343	46	297	36	8" CARBON STEEL	265	33	269	28	297	23	10
75	CV-2476	1981437.382	6366639.241	1414	1073	341	44	297	36	8" CARBON STEEL	265	33	269	28	297	23	10
76	CV-2477	1980474.684	6365901.134	1364	1045	319	32	287	36	8" CARBON STEEL	255	33	259	28	287	23	10
77	CV-2478	1980558.653	6365863.259	1364	1046	318	31	287	36	8" CARBON STEEL	255	33	259	28	287	23	10
78	CV-2479	1980584.519	6365958.936	1375	1048	327	30	297	36	8" CARBON STEEL	265	33	269	28	297	23	10
79	CV-2480	1980642.744	6366034.803	1395	1049	346	49	297	36	8" CARBON STEEL	265	33	269	28	297	23	10
80	CV-2481	1980737.324	6366122.356	1390	1050	340	43	297	36	8" CARBON STEEL	265	33	269	28	297	23	10
81	CV-2482	1980743.683	6366198.125	1390	1051	339	42	297	36	8" CARBON STEEL	265	33	269	28	297	23	10
82	CV-2483	1980845.795	6366190.941	1390	1052	338	41	297	36	8" CARBON STEEL	265	33	269	28	297	23	10
83	CV-2484	1980904.731	6366289.726	1397	1062	335	38	297	36	8" CARBON STEEL	265	33	269	28	297	23	10
84	CV-2485	1980362.094	6365982.434	1362	1043	319	30	289	36	8" CARBON STEEL	257	33	261	28	289	23	10
85	CV-2486	1980551.439	6366082.254	1396	1047	349	52	297	36	8" CARBON STEEL	265	33	269	28	297	23	10
86	CV-2487	1980592.117	6366252.775	1404	1047	357	60	297	36	8" CARBON STEEL	265	33	269	28	297	23	10
87	CV-2488	1980801.068	6366392.510	1395	1060	335	43	292	36	8" CARBON STEEL	260	33	264	28	292	23	10
88	CV-2489	1980384.612	6366256.979	1370	1043	327	30	297	36	8" CARBON STEEL	265	33	269	28	297	23	10
89	CV-2490	1980472.567	6366425.832	1387	1045	342	45	297	36	8" CARBON STEEL	265	33	269	28	297	23	10
90	CV-2491	1980585.785	6366616.580	1406	1047	359	62	297	36	8" CARBON STEEL	265	33	269	28	297	23	10
91	CV-2492	1980695.944	6366844.827	1408	1060	348	51	297	36	8" CARBON STEEL	265	33	269	28	297	23	10
92	CV-2493	1980965.601	6366784.537	1404	1061	343	46	297	36	8" CARBON STEEL	265	33	269	28	297	23	10
93	CV-2494	1981162.449	6366874.044	1408	1065	343	46	297	36	8" CARBON STEEL	265	33	269	28	297	23	10
94	CV-2495	1980753.206	6365306.232	1264	1160	104	22	82	36	8" CARBON STEEL	50	33	54	28	82	23	0
95	CV-2496	1980688.343	6365219.167	1249	1174	75	23	52	36	8" CARBON STEEL	20	33	24	28	52	23	0
96	CV-2497	1980538.00	6365230.116	1248	1165	83	21	62	36	8" CARBON STEEL	30	33	34	28	62	23	0
97	CV-2498	1980432.329	6365297.671	1248	1164	84	27	57	36	8" CARBON STEEL	25	33	29	28	57	23	0
98	CV-2499	1980369.902	6365409.758	1252	1158	94	27	67	36	8" CARBON STEEL	35	33	39	28	67	23	0
99	CV-24100	1980259.703	6365539.488	1260	1155	105	28	77	36	8" CARBON STEEL	45	33	49	28	77	23	0
100	CV-24101	1980181.110	6365597.406	1263	1150	113	26	87	36	8" CARBON STEEL	55	33	59	28	87	23	0
101	CV-24102	1980105.202	6365739.572	1288	1100	188	26	162	36	8" CARBON STEEL	130	33	134	28	162	23	4
102	CV-24103	1980113.980	6366018.102	1296	1038	258	31	227	36	8" CARBON STEEL	195	33	199	28	227	23	7
103	CV-24104	1980130.409	6366268.164	1308	1038	270	28	242	36	8" CARBON STEEL	210	33	214	28	242	23	8
104	CV-24105	1980209.856	6366431.982	1317	1039	278	31	247	36	8" CARBON STEEL	215	33	219	28	247	23	8
105	CV-24106	1980278.285	6366657.500	1330	1042	288	31	257	36	8" CARBON STEEL	225	33	229	28	257	23	8

Notes:
1. Base grades titled "CCLF liner limit with floor elevations 20230110" and obtained from Tetra Tech on October 2023.
2. Includes 3 of solid pipe stickup above grade.
3. The Horizontal Coordinates are based on California State Plane Zone 5.
4. If drill cutting temperatures are consistently greater than 150, contractor shall inform Site and Design Engineer for change in well casing materials.

NO. | REVISION | DATE

SHEET TITLE: PROPOSED WELL SCHEDULE
PROJECT TITLE: CHIQUITA CANYON LANDFILL CASTAIC, CALIFORNIA

CLIENT: CHIQUITA CANYON LANDFILL CASTAIC, CALIFORNIA

SCS ENGINEERS
ENVIRONMENTAL CONSULTANTS
8799 BALBOA AVENUE, SUITE 290
SAN DIEGO, CA 92123
(858) 571-5500 FAX: (562) 427-0805
PROJECT NO. 01024123.35 | DSN. BY: JHS/RM | DWN. BY: SRM | CHK. BY: WCH | ACAD FILE: | APP. BY: -

DATE: 04/16/2024
SCALE: AS SHOWN
SHEET: 3

2024 LFG WELL DRILLING SCHEDULE
CHIQUITA CANYON LANDFILL, CASTAIC, CA

#	Well ID	Coordinates[3]		Elevations		Depth to Base (ft)	Clearance Above Base >=15 ft.	Bore Depth[4] (ft)	Bore Diam. (in)	Casing size and Material Type[4]	Perforated pipe (ft)	Solid Pipe[2] (ft)	Gravel Pack (ft)	Depth to Top of Gravel Pack (ft)	Depth to Bottom of shallow Gravel Pack (ft)	Shallow Soil Backfill(ft)	Centralizers
		Northing	Easting	Surface	Base[1]												
106	CV-24107	1980423.678	6366835.204	1339	1050	289	32	257	36	8" CARBON STEEL	225	33	229	28	257	23	8
107	CV-24108	1980637.016	6367056.869	1368	1060	308	31	277	36	8" CARBON STEEL	245	33	249	28	277	23	9
108	CV-24109	1980928.855	6367236.733	1389	1077	312	30	282	36	8" CARBON STEEL	250	33	254	28	282	23	10
109	CV-24110	1981184.762	6367269.199	1398	1087	311	29	282	36	8" CARBON STEEL	250	33	254	28	282	23	10
110	CV-24111	1981422.941	6367203.612	1403	1090	313	31	282	36	8" CARBON STEEL	250	33	254	28	282	23	10
111	CV-24112	1981387.327	6367436.266	1391	1097	294	32	262	36	8" CARBON STEEL	230	33	234	28	262	23	9
112	CV-24113	1979823.296	6365735.633	1240	1120	120	23	97	36	8" CARBON STEEL	65	33	69	28	97	23	0
113	CV-24114	1979775.834	6366147.202	1216	1031	185	28	157	36	8" CARBON STEEL	125	33	129	28	157	23	3
114	CV-24115	1979911.902	6366604.241	1240	1036	204	27	177	36	8" CARBON STEEL	145	33	149	28	177	23	4
115	CV-24116	1980091.199	6366963.376	1250	1108	142	25	117	36	8" CARBON STEEL	85	33	89	28	117	23	1
116	CV-24117	1980346.201	6367212.078	1305	1065	240	28	212	36	8" CARBON STEEL	180	33	184	28	212	23	6
117	CV-24118	1980683.144	6367538.235	1305	1073	232	25	207	36	8" CARBON STEEL	175	33	179	28	207	23	6
118	CV-24119	1980838.506	6367995.160	1274	1107	167	25	142	36	8" CARBON STEEL	110	33	114	28	142	23	3
119	CV-24120	1981982.673	6366504.473	1344	1265	79	22	57	36	8" CARBON STEEL	25	33	29	28	57	23	0
120	CV-24121	1982016.466	6366585.870	1342	1255	87	25	62	36	8" CARBON STEEL	30	33	34	28	62	23	0
121	CV-24122	1982099.082	6366709.653	1320	1245	75	28	47	36	8" CARBON STEEL	15	33	19	28	47	23	0
122	CV-24123	1982148.673	6366820.321	1308	1225	83	21	62	36	8" CARBON STEEL	30	33	34	28	62	23	0
123	CV-24124	1981908.818	6366583.285	1369	1220	149	27	122	36	8" CARBON STEEL	90	33	94	28	122	23	2
124	CV-24125	1982028.268	6366793.409	1335	1210	125	28	97	36	8" CARBON STEEL	65	33	69	28	97	23	0
125	CV-24126	1981821.499	6366553.844	1388	1210	178	26	152	36	8" CARBON STEEL	120	33	124	28	152	23	3
126	CV-24127	1981842.920	6366645.709	1382	1200	182	30	152	36	8" CARBON STEEL	120	33	124	28	152	23	3
127	CV-24128	1981929.897	6366762.144	1363	1185	178	26	152	36	8" CARBON STEEL	120	33	124	28	152	23	3
128	CV-24129	1981933.790	6366841.109	1355	1170	185	28	157	36	8" CARBON STEEL	125	33	129	28	157	23	3
129	CV-24130	1981964.561	6366982.409	1336	1130	206	29	177	36	8" CARBON STEEL	145	33	149	28	177	23	4
130	CV-24131	1981935.253	6367162.973	1341	1125	216	29	187	36	8" CARBON STEEL	155	33	159	28	187	23	5
131	CV-24132	1982119.35	6367487.496	1286	1175	111	19	92	36	8" CARBON STEEL	60	33	64	28	92	23	0
132	CV-24133	1982183.268	6367883.189	1284	1153	131	19	112	36	8" CARBON STEEL	80	33	84	28	112	23	1
133	CV-24134	1981804.920	6366741.392	1375	1165	210	28	182	36	8" CARBON STEEL	150	33	154	28	182	23	5
134	CV-24135	1981808.301	6366906.633	1365	1120	245	28	217	36	8" CARBON STEEL	185	33	189	28	217	23	6
135	CV-24136	1981899.385	6367412.014	1333	1120	213	26	187	36	8" CARBON STEEL	155	33	159	28	187	23	5
136	CV-24137	1981724.145	6367656.564	1362	1108	254	27	227	36	8" CARBON STEEL	195	33	199	28	227	23	7
137	CV-24138	1981060.353	6365325.583	1266	1216	50	18	32	36	8" CARBON STEEL	10	23	14	18	32	13	0
138	CV-24139	1981148.191	6365357.844	1274	1223	51	19	32	36	8" CARBON STEEL	10	23	14	18	32	13	0
139	CV-24140	1981207.624	6365361.933	1282	1222	60	18	42	36	8" CARBON STEEL	20	23	24	18	42	13	0
140	CV-24141	1981508.343	6365298.145	1295	1246	49	17	32	36	8" CARBON STEEL	10	23	14	18	32	13	0
141	CV-24142	1980961.653	6365296.588	1264	1203	61	19	42	36	8" CARBON STEEL	20	23	24	18	42	13	0
142	CV-24143	1981322.262	6365330.229	1285	1230	55	18	37	36	8" CARBON STEEL	15	23	19	18	37	13	0
143	CV-24144	1980451.415	6365215.484	1245	1177	68	21	47	36	8" CARBON STEEL	15	33	19	28	47	23	0

Notes:

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4. If drill cutting temperatures are consistently greater than 150, contractor shall inform Site and Design Engineer for change in well casing materials.

NO. | REVISION | DATE

SHEET TITLE: PROPOSED WELL SCHEDULE

PROJECT TITLE: CHIQUITA CANYON LANDFILL CASTAIC, CALIFORNIA

CLIENT: CHIQUITA CANYON LANDFILL CASTAIC, CALIFORNIA

SCS ENGINEERS
ENVIRONMENTAL CONSULTANTS
2 CIVIC PLAZA DRIVE, SUITE 200
SAN DIEGO, CA 92123
(858) 571-5500 FAX: (562) 427-0805

PROJECT NO. 01024123.35 | DSN. BY: JHS/SM | DWN. BY: SRM | CHK. BY: WCH | APP. BY: - | ACAD FILE: REV ENGINEERS

DATE: 04/16/2024

SCALE: AS SHOWN

SHEET: 4

EXHIBIT B

From:	Medina, Steven
Sent:	Friday, April 12, 2024 8:49 AM
To:	bchen@aqmd.gov; ndickel@aqmd.gov; Christina Ojeda
Cc:	Steve Cassulo; Haley, William (Bill); Amanda Froman; Michael Hearns; nicole.ward@wasteconnections.com; Christopher.Fear@WasteConnections.com
Subject:	Case No. 6177-4 Stipulated Order for Abatement - Weekly Pump Installation and operation update
Attachments:	2024 CCLF Existing De-Watering Well with Pump Map_2024-04-12.pdf

All,
In accordance with Condition 65 of the Modified Stipulated Order, below is the summary of the installation and operation of dewatering pumps for the Chiquita Canyon Landfill.

During 04/05/2024 to 04/11/2024, Chiquita completed the installation of, and began operating during the day, five (5) pumps in vertical LFG extraction wells for a total of twenty-six (26) pumps operating in vertical LFG extraction wells. Please refer to the attached, up-to-date LFG wells with operating pumps Map.

During 04/12/2024 to 04/18/2024, Chiquita plans to install and begin operating an additional five (5) pumps in vertical LFG extraction wells in locations along the west slope of the reaction area. The pump installation locations for next week are subject to change due to weather and/or safety conditions.

Thank you,

Steven Ruben Medina, **E.I.T.**
Associate Professional
SCS Engineers
8799 Balboa Ave, Suite 290
San Diego, CA 92123
858-204-4342 (c)
5160srm@scsengineers.com

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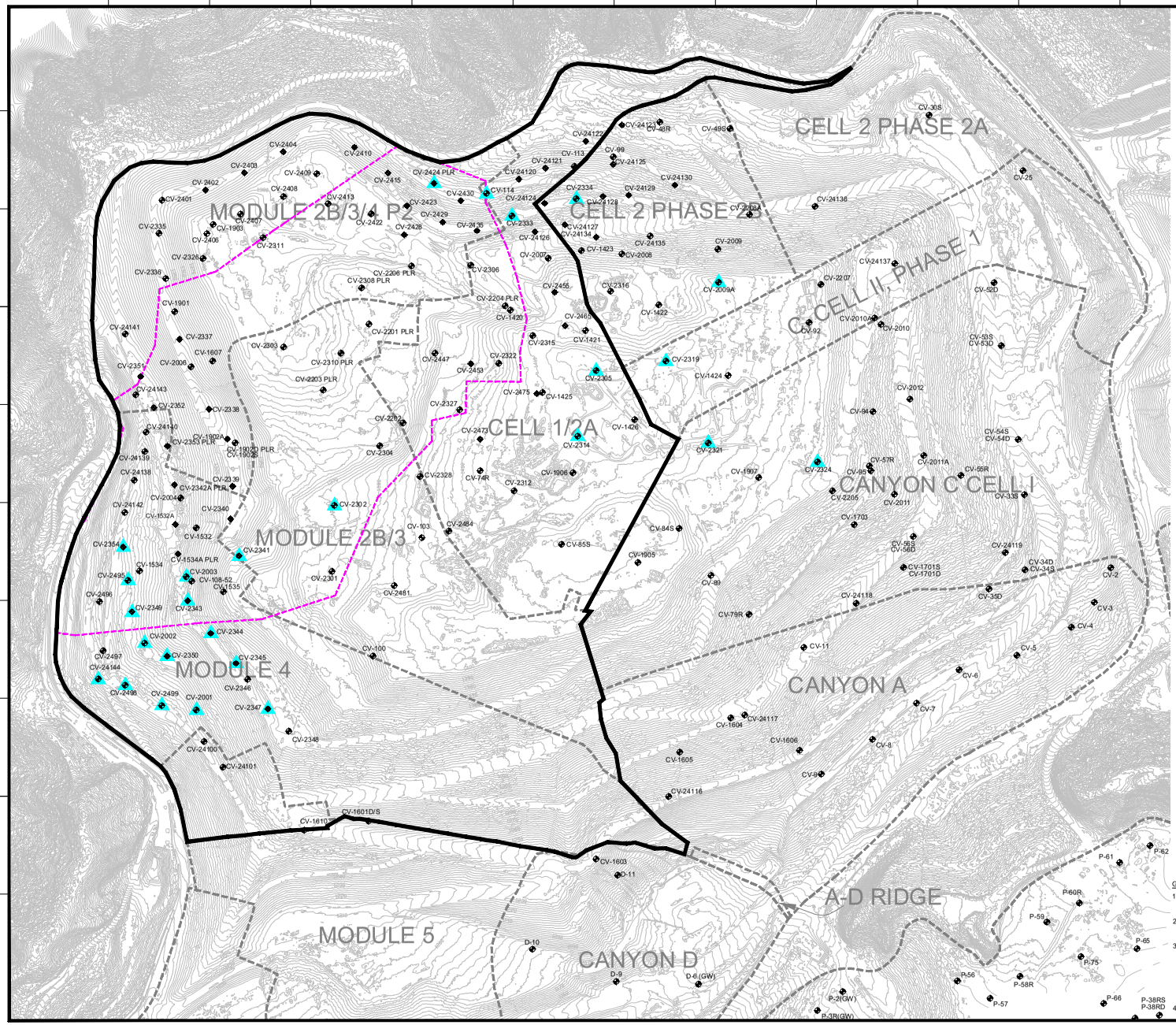
www.scsengineers.com

2024 Conrad Quality Focus Award Recipient

SCS Quality Focus



N

GRAPHIC SCALE

150 75 0 150 300 450

SCALE: 1"=150'

LEGEND

- 1150 TOPOGRAPHIC CONTOUR
- EXISTING CELL LIMITS (APPROXIMATE)
- REACTION AREA BOUNDARY - CONDITION 9A
- REACTION AREA BOUNDARY - DATA ANALYSIS
- CV-XX EXISTING VERTICAL LFG EXTRACTION WELL
- CV-XX PLR EXISTING LFG VERTICAL EXTRACTION WELL - PRESSURIZED LEACHATE RELEASE
- EXISTING DE-WATERING WELL WITH PUMP

De-Watering Well Pumps that are Currently Running		
#	Well ID	Operational Startup Date
1	CV-2349	2/28/2024
2	CV-2495	2/28/2024
3	CV-114	3/21/2024
4	CV-2333	3/21/2024
5	CV-2334	3/21/2024
6	CV-2424	3/21/2024
7	CV-2009A	3/27/2024
8	CV-2305	3/27/2024
9	CV-2321	3/27/2024
10	CV-2319	3/28/2024
11	CV-2324	3/28/2024
12	CV-2001	4/1/2024
13	CV-2345	4/1/2024
14	CV-2347	4/1/2024
15	CV-2350	4/1/2024
16	CV-2354	4/1/2024
17	CV-2499	4/1/2024
18	CV-2002	4/2/2024
19	CV-2343	4/2/2024
20	CV-2344	4/2/2024
21	CV-2498	4/2/2024
22	CV-24144	4/8/2024
23	CV-2302	4/10/2024
24	CV-2314	4/10/2024
25	CV-2341	4/10/2024
26	CV-2003	4/11/2024

GENERAL DRAWING NOTES:

1. EXISTING TOPOGRAPHIC SURVEY INFORMATION SHOWN WAS PROVIDED BY PROPELLOR. AERIAL PHOTOGRAPHY DATED MARCH 27, 2024.
2. NORTH ARROW SHOWN HERE IS REFERENCE TO THE CALIFORNIA STATE PLANE ZONE V COORDINATE SYSTEM, NAD 83.
3. THE LOCATION OF ANY EXISTING GCCS COMPONENTS AND OTHER FEATURES ARE APPROXIMATE AND SHOULD BE USED FOR INFORMATION PURPOSES ONLY. ACTUAL FIELD CONDITIONS MAY VARY AND SUBJECT TO CHANGE BASED ON FUTURE FILL OPERATIONS, WASTE PLACEMENT, TOPOGRAPHIC FEATURES, AND OTHER SITE-SPECIFIC FACTORS.
4. EXISTING GCCS AS-BUILT DATED APRIL 04, 2024.

NO.	REVISION	DATE

SHEET TITLE: EXISTING DE-WATERING WELL WITH PUMP MAP

PROJECT TITLE: CHIQUITA CANYON LANDFILL CASTAIC, CALIFORNIA

CLIENT: CHIQUITA CANYON LANDFILL CASTAIC, CALIFORNIA

SCS ENGINEERS
ENVIRONMENTAL CONSULTANTS
8799 BALBOA AVENUE, SUITE 290
SAN DIEGO, CA 92123
(858) 571-5500 FAX: (562) 427-0805

PROJECT NO. 01204123.35 | DSN. BY: - | DWN. BY: SRM | CHK. BY: WCH/JH | APP. BY: WCH | ACAD FILE: FIELD SERVICES

DATE: 04/12/2024

SCALE: AS SHOWN

SHEET: 1

From: Haley, William (Bill) <WCHaley@scsengineers.com>
Sent: Friday, April 5, 2024 4:03 PM
To: Haley, William (Bill); bchen@aqmd.gov; ndickel@aqmd.gov; Christina Ojeda
Cc: Steve Cassulo; Amanda Froman; Michael Hearns; nicole.ward@wasteconnections.com; christopher.fear@wasteconnections.com
Subject: RE: Case No. 6177-4 Stipulated Order for Abatement - Weekly Pump Installation and operation update
Attachments: 2024 CCLF Existing De-Watering Well with Pump Map_2024-04-05.pdf

[EXTERNAL SENDER: Use caution with links/attachments]

All,

In accordance with Condition 65 of the Modified Stipulated Order, below is the summary of the installation and operation of dewatering pumps for the Chiquita Canyon Landfill.

During 03/29/2024 to 04/04/2024, Chiquita completed the installation of, and began operating during the day, ten (10) pumps in vertical LFG extraction wells for a total of twenty-one (21) pumps operating in vertical LFG extraction wells. Please refer to the attached, up-to-date LFG wells with operating pumps Map.

During 04/05/2024 to 04/11/2024, Chiquita plans to install and begin operating an additional ten (10) pumps in vertical LFG extraction wells in locations along the west slope and top deck of the reaction area. The pump installation locations for next week are subject to change due to weather and/or safety conditions.

Have a good weekend,

William C. Haley, PE.*
Project Director
SCS ENGINEERS
*Licensed in CO and TX

Office: 303-221-1719
Cell #: 303-519-4503
Email: wchaley@scsengineers.com

From: Haley, William (Bill) <WCHaley@scsengineers.com>
Sent: Tuesday, April 2, 2024 10:39 AM
To: bchen@aqmd.gov; ndickel@aqmd.gov; Christina Ojeda <cojeda@aqmd.gov>
Cc: Steve Cassulo <Steven.Cassulo@WasteConnections.com>; Amanda Froman <Amanda.Froman@WasteConnections.com>; Michael Hearns <Michael.Hearns@WasteConnections.com>; nicole.ward@wasteconnections.com; christopher.fear@wasteconnections.com
Subject: Case No. 6177-4 Stipulated Order for Abatement - Weekly Pump Installation and operation update

[EXTERNAL SENDER: Use caution with links/attachments]

Dear Mr. Chen,

In accordance with Condition 65 of the Modified Stipulated Order, below is the summary of the installation and operation of dewatering pumps for the Chiquita Canyon Landfill. This is a re-submittal of the summary of the installation and operation of dewatering pumps for the Chiquita Canyon Landfill sent on 3/29/2024.

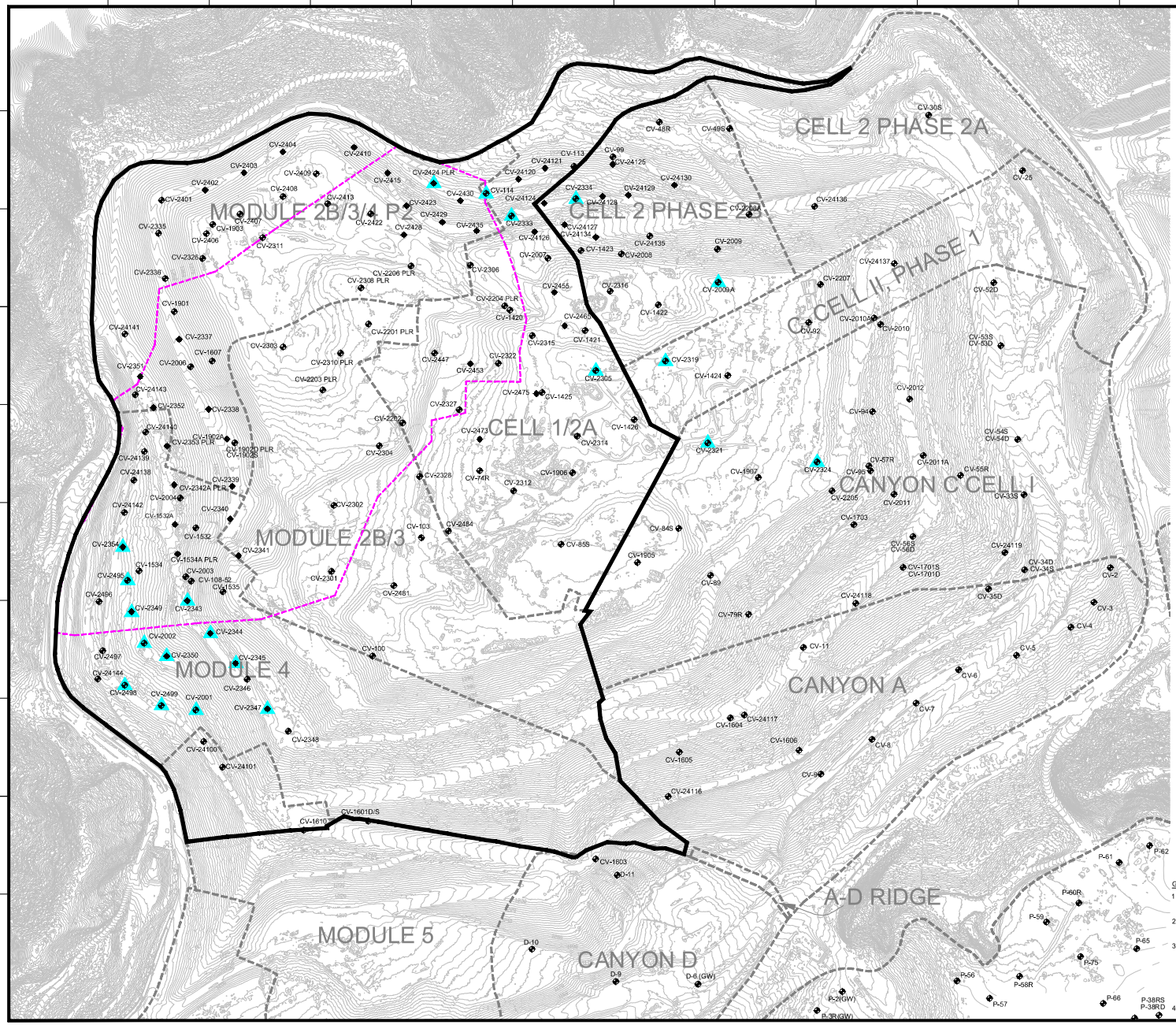
During 03/22/2024 to 03/28/2024, Chiquita completed the installation of, and began operating during the day, nine (9) pumps in vertical LFG extraction wells for a total of eleven (11) pumps operating in vertical LFG extraction wells.

During 03/29/2024 to 04/04/2024, Chiquita plans to install and begin operating an additional ten (10) pumps in vertical LFG extraction wells in locations along the west slope of the reaction area. The pump installation locations for next week are subject to change due to weather and/or safety conditions.

Best,
Bill

William C. Haley, PE.*
Project Director
SCS ENGINEERS
*Licensed in CO and TX

Office: 303-221-1719
Cell #: 303-519-4503
Email: wchaley@scsengineers.com



N

GRAPHIC SCALE

150 75 0 150 300 450

SCALE: 1"=150'

LEGEND

- TOPOGRAPHIC CONTOUR
- EXISTING CELL LIMITS (APPROXIMATE)
- REACTION AREA BOUNDARY - CONDITION 9A
- REACTION AREA BOUNDARY - DATA ANALYSIS
- CV-XX EXISTING VERTICAL LFG EXTRACTION WELL
- CV-XX PLR EXISTING LFG VERTICAL EXTRACTION WELL - PRESSURIZED LEACHATE RELEASE
- EXISTING DE-WATERING WELL WITH PUMP

De-Watering Well Pumps that are Currently Running		
#	Well I.D.	Operational Startup Date
1	CV-2349	2/28/2024
2	CV-2495	2/28/2024
3	CV-114	3/21/2024
4	CV-2333	3/21/2024
5	CV-2334	3/21/2024
6	CV-2424	3/21/2024
7	CV-2009A	3/27/2024
8	CV-2305	3/27/2024
9	CV-2321	3/27/2024
10	CV-2319	3/28/2024
11	CV-2324	3/28/2024
12	CV-2001	4/1/2024
13	CV-2350	4/1/2024
14	CV-2354	4/1/2024
15	CV-2499	4/1/2024
16	CV-2345	4/1/2024
17	CV-2347	4/1/2024
18	CV-2343	4/2/2024
19	CV-2498	4/2/2024
20	CV-2344	4/2/2024
21	CV-2002	4/2/2024

GENERAL DRAWING NOTES:

1. EXISTING TOPOGRAPHIC SURVEY INFORMATION SHOWN WAS PROVIDED BY PROPELLOR, AERIAL PHOTOGRAPHY DATED MARCH 27, 2024.
2. NORTH ARROW SHOWN HERE IS REFERENCE TO THE CALIFORNIA STATE PLANE ZONE V COORDINATE SYSTEM, NAD 83.
3. THE LOCATION OF ANY EXISTING GCCS COMPONENTS AND OTHER FEATURES ARE APPROXIMATE AND SHOULD BE USED FOR INFORMATION PURPOSES ONLY. ACTUAL FIELD CONDITIONS MAY VARY AND SUBJECT TO CHANGE BASED ON FUTURE FILL OPERATIONS, WASTE PLACEMENT, TOPOGRAPHIC FEATURES, AND OTHER SITE-SPECIFIC FACTORS.
4. EXISTING GCCS AS-BUILT DATED APRIL 04, 2024.

NO.	REVISION	DATE

SHEET TITLE: EXISTING DE-WATERING WELL WITH PUMP MAP

PROJECT TITLE: CHIQUITA CANYON LANDFILL CASTAIC, CALIFORNIA

CLIENT: CHIQUITA CANYON LANDFILL CASTAIC, CALIFORNIA

SCS ENGINEERS
ENVIRONMENTAL CONSULTANTS
8799 BALBOA AVENUE, SUITE 290
SAN DIEGO, CA 92123
(858) 571-5500 FAX: (562) 427-0805

PROJ. NO. 01204123.35 | DWG. BY: SRM | ACAD FILE: FIELD SERVICES
DSN. BY: - | CHK. BY: WCH/JH | APP. BY: WCH

DATE: 04/05/2024

SCALE: AS SHOWN

SHEET: 1

From: Haley, William (Bill) <WCHaley@scsengineers.com>
Sent: Tuesday, April 2, 2024 9:39 AM
To: bchen@aqmd.gov; ndickel@aqmd.gov; Christina Ojeda
Cc: Steve Cassulo; Amanda Froman; Michael Hearns; nicole.ward@wasteconnections.com; christopher.fear@wasteconnections.com
Subject: Case No. 6177-4 Stipulated Order for Abatement - Weekly Pump Installation and operation update

Follow Up Flag: Follow up
Flag Status: Completed

[EXTERNAL SENDER: Use caution with links/attachments]

Dear Mr. Chen,

In accordance with Condition 65 of the Modified Stipulated Order, below is the summary of the installation and operation of dewatering pumps for the Chiquita Canyon Landfill. This is a re-submittal of the summary of the installation and operation of dewatering pumps for the Chiquita Canyon Landfill sent on 3/29/2024.

During 03/22/2024 to 03/28/2024, Chiquita completed the installation of, and began operating during the day, nine (9) pumps in vertical LFG extraction wells for a total of eleven (11) pumps operating in vertical LFG extraction wells.

During 03/29/2024 to 04/04/2024, Chiquita plans to install and begin operating an additional ten (10) pumps in vertical LFG extraction wells in locations along the west slope of the reaction area. The pump installation locations for next week are subject to change due to weather and/or safety conditions.

Best,
Bill

William C. Haley, PE.*
Project Director
SCS ENGINEERS
*Licensed in CO and TX

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Cell #: 303-519-4503
Email: wchaley@scsengineers.com

EXHIBIT C

April 4, 2024

Baitong Chen, Air Quality Engineer, bchen@aqmd.gov
Nathaniel Dickel, Senior Air Quality Engineer, ndickel@aqmd.gov
Christina Ojeda, Air Quality Inspector, cojeda@aqmd.gov
South Coast Air Quality Management District
21865 East Copley Drive
Diamond Bar, CA 91765-4182

Subject: Revised Landfill Gas Collection System Dewatering Guidelines for Stipulated Order for Abatement (Case No. 6177-4), Chiquita Canyon Landfill (Facility ID 119219), Castaic, California

To Whom It May Concern:

SCS Engineers (SCS), on behalf of Chiquita Canyon, LLC (Chiquita), hereby provides the South Coast Air Quality Management District (SCAQMD) with Chiquita's revised landfill gas (LFG) collection and control system Reaction Area dewatering guidelines and implementation procedures per Condition No. 18 of the Stipulated Order for Abatement (SOFA) (Case No. 6177-4), as modified on March 21, 2024 (Modified SOFA), for the Chiquita Canyon Landfill (CCL or Landfill).

BACKGROUND

The Landfill is a landfill/solid waste disposal facility located at 29201 Henry Mayo Dr., Castaic, California, 91384 (SCAQMD Facility No. 119219). In connection with the Landfill, Chiquita operates an LFG collection and control system (GCCS). The GCCS includes vertical LFG extraction wells and dedicated dewatering pumps (which have historically been either pneumatic or electric) that can be inserted downhole, into select vertical LFG extraction wells for purposes of extracting liquids that may accumulate in the well. Lowering the liquid levels within individual wells reduces the length of perforated well pipe that is blocked by liquids and has shown to expand the zone-of-influence exerted by each well, resulting in improved LFG recovery (increased LFG flowrates).

In 2023, the conditions at CCL indicated that the Landfill was undergoing an elevated temperature landfill (ETLF) event. On September 6, 2023, a hearing was held before the SCAQMD Hearing Board to approve the SOFA, which includes numerous measures to mitigate emissions resulting from the Landfill's ETLF conditions. The approved SOFA was modified on January 15, 2024, and again on March 21, 2024.

Condition No. 18 of the Modified SOFA requires Chiquita to submit revised Reaction Area dewatering guidelines and implementation procedures to SCAQMD in response to SCAQMD comments on the Reaction Area dewatering guidelines and implementation procedures. Condition No. 18 of the Modified SOFA provides:

Respondent shall, in addition to the installation of dewatering sumps/pumps specified in Condition No. 17 above, within ninety (90) days of the issuance of the Initial Order, provide proposed Reaction Area dewatering guidelines and implementation procedures for the landfill to South Coast AQMD (Baitong Chen, Air Quality Engineer, (bchen@aqmd.gov); Nathaniel Dickel, Senior Air Quality Engineer, (ndickel@aqmd.gov)) that include but are not limited to the following:

A. *Proposed methodologies and monitoring procedures that determine the level of dewatering within the Reaction Area (as defined in Condition 9(a)) wells impacted by liquid. Methods may include the measurement of the gas flow at each landfill gas collection well impacted by liquids;*
B. *Use of dewatering pumps or other methods to remove liquids from Reaction Area (as defined in Condition 9(a)) wells impacted by liquids;*
C. *An implementation plan for the use of dewatering pumps or other methods to remove liquids from the Reaction Area wells impacted by liquids. The plan shall include a list of wells in the Reaction Area and depth where liquids are expected to impact landfill gas collection efficacy or be a concern, the proposed action to remove the liquids, and the schedule for liquid removal. The implementation plan shall also include pro-active measures, such as additional dewatering pumps, to be installed at landfill gas collection wells where liquid impaction issues have not yet occurred, but may be expected to occur.*
D. *Upgrades to the site leachate collection system as needed, including through the addition of increased air compressor and/or drain line infrastructure;*
E. *Protocols for the pumping and monitoring of dewatering pumps and other such methods to remove water from Reaction Area (as defined in Condition 9(a)) wells impacted by liquids;*
F. *Well field liquid sounding in the Reaction Area (as defined in Condition 9(a)), and a proposed schedule for conducting liquid sounding on a consistent basis;*
G. *A timeline for appropriate reporting on impacted wells;*
H. *The feasibility of integrity testing of all vertical gas wells in the Reaction Area (as defined in Condition 9(a)) and a timeline and protocol for addressing any wells that the integrity testing demonstrates are damaged or are exhibiting temperatures of at least 170 degrees Fahrenheit; and*
I. *A timeline for implementation of appropriate dewatering procedures upon discovery of wells impacted by liquids.*

Respondent shall, within 14 calendar days of approval of this Order, revise the dewatering guidelines according to the comments received by email on March 13, 2024, and re-submit the revised dewatering guidelines to South Coast AQMD for final approval. The proposed Reaction Area dewatering guidelines and implementation procedures shall be implemented within seven (7) days of South Coast AQMD approval, and shall be implemented to the maximum extent feasible if Respondent's facility is encountering leachate tank capacity shortages.

DEWATERING GUIDELINES

Section A – Proposed methodologies and monitoring procedures that determine the level of dewatering within the Reaction Area (as defined in Condition 9(a)) wells impacted by liquid. Methods may include the measurement of the gas flow at each landfill gas collection well impacted by liquids;

The LFG industry generally considers the ideal condition for maximizing LFG collection and extraction to be well conditions unencumbered by accumulated liquids (i.e., when the full length of perforated well pipe is open). However, this idealized condition is rarely achievable. The "level of dewatering" means the degree to which the static liquid level in each well is lowered by dewatering pump operations, which extract liquids at a rate equivalent to the well's liquid recharge rate, or "yield." Methodologies and monitoring procedures that can assess the appropriate level of dewatering include measurement of LFG composition (quality), measurement of LFG recovery quantities (flowrate),

measurement of applied vacuum, and measurement of liquid level elevations (depth-to-liquid) within the well casing pipe.

Chiquita utilizes gas quality and flow measurements at individual vertical LFG extraction wells within the Reaction Area and liquid level monitoring to assess the level of dewatering that is being achieved by the pumps installed within select vertical LFG extraction wells positioned within the Reaction Area. These same parameters (composition and flow) are evaluated to decide if the dewatering being achieved is adequate to accomplish the objective of removal of heat through fluid extraction (both gas and liquids).

Extraction wells with low LFG flow of less than 5 cubic feet per minute (cfm) or decreasing gas quality (British thermal unit [BTU] content less than 100 BTU per cubic foot), or equilibration with system vacuum within one minute of opening the wellhead may need additional investigation (root cause analysis) to determine the cause of the decrease. During routine LFG monitoring as prescribed by the Landfill's Title V permit, if a well exhibits one or more of these conditions (low LFG flow of less than 5 cfm, decreasing gas quality (British thermal unit [BTU] content less than 100 BTU per cubic foot), or equilibration with system vacuum within one minute of opening the wellhead), Chiquita will conduct liquid level monitoring of that well within three weeks as prescribed in Section F.

Chiquita conducts routine liquid level monitoring utilizing crews experienced in conducting liquid level monitoring and operating and maintaining dewatering pumps at all vertical LFG extraction wells within the Reaction Area, at a minimum, on a quarterly basis. It is standard industry practice to monitor liquid levels quarterly for landfills with liquid concerns. More frequent liquid level monitoring is impractical for the continued operation of the pumps and would be detrimental to the removal of liquids from the Landfill. Pumps must be shut off to perform the liquid level monitoring, thus halting gas collection. Performing liquid level monitoring at a greater frequency would reduce the amount of gas and liquids extracted from the Landfill. Additionally, more frequent monitoring would not be helpful as the liquid levels within landfills do not appreciably change in a month much less a week. During liquid level monitoring (often referred to as a "sounding" event), a liquid level measurement device that consists of a probe and cable is lowered into the well casing and produces an audible sound when the probe encounters liquids. Section F provides additional details on this liquid level monitoring method. Alternative instrumentation, such as a tape measure with floatation device or downhole video camera, may be utilized in order to reduce potential interference due to foam formation. The measurements on the cable or tape measure indicate the depth to liquids, as measured from the top of the casing, within the Landfill Reaction Area, and are used to calculate the depth of liquids and the liquid levels within each well casing.

Section B – Use of dewatering pumps or other methods to remove liquids from Reaction Area (as defined in Condition 9(a)) wells impacted by liquids;

Chiquita is installing a dedicated dewatering pump in any vertical LFG well in the Reaction Area where the well exhibits low LFG flow (less than 5 cfm), decreasing gas quality (BTU content less than 100 BTU per cubic foot), or equilibration with system vacuum within one minute of opening the wellhead, as well as in wells where liquids block more than 10% of well casing perforations, provided that the well casing pipe has structural integrity as noted in Section H and a pump can be installed safely. The type of pump, depth of installation, and ancillary features to be installed will vary depending on liquid temperature, composition of the liquids (primarily solids content, etc.), presence of fouling substances (sludge, precipitants, crust, black goo, flubber, taffy, etc.), historical pump performance, and maintenance cycles to maximize liquid extraction for each individual well in the Reaction Area.

It is well-documented within the landfill industry that the use of dedicated dewatering pumps to extract liquids from vertical LFG extraction wells is a challenging endeavor that requires continuous maintenance because the physical properties of the leachate lend itself to clogging the dewatering pumps. This continuous maintenance includes cleaning of the pumps, due to the accumulation of solids in the vertical discharge tubing and pump which occurs during normal operation. These solids will also accumulate in the leachate discharge piping (forcemain) which requires routine cleaning and jetting to remove the solids to prevent blockages. Work performed to safely maintain pumps in the reaction area will be conducted in accordance with the Health and Safety Plan for the reaction area. Pump downtime and servicing needs impose significant demand on resources. To help mitigate these resource demands and minimize delays in servicing, Chiquita will maintain a maintenance stockpile of spare pumps and all related infrastructure. When any portion of the dewatering system needs to be replaced or maintained, it can be swapped with the backup unit until the original can be brought back to operating condition. The subsurface conditions within an ETLF are a particularly harsh environment, and expectations of liquid quantities removed should be correlated to field conditions that the dewatering system (pumps, pneumatic supply piping, liquid forcemain piping, valves, compressors, electric power equipment, etc.) is being exposed to. Chiquita continues to partner with pump manufacturers to develop new equipment to help withstand the challenging liquid conditions present as well as utilize the best materials for the pumps and related infrastructure, which are the best known practices for dealing with ETLF liquids in the industry.

Section C – An implementation plan for the use of dewatering pumps or other methods to remove liquids from the Reaction Area wells impacted by liquids. The plan shall include a list of wells in the Reaction Area and depth where liquids are expected to impact landfill gas collection efficacy or be a concern, the proposed action to remove the liquids, and the schedule for liquid removal. The implementation plan shall also include pro-active measures, such as additional dewatering pumps, to be installed at landfill gas collection wells where liquid impaction issues have not yet occurred, but may be expected to occur.

Chiquita will install pumps in wells in the Reaction Area that are impacted by liquids, which expands on its prior procedure of installing pumps only after liquids impact LFG collection. Currently, there are 117 vertical LFG extraction wells positioned within the Condition 9A Reaction Area (listed below) of which 35 currently have dewatering pumps installed to remove liquids from the Reaction Area. A specific depth in the Landfill cannot be used to expect impact to LFG collection efficacy, because the depth of liquids impacts can vary by the elevation of the Landfill at that location, the depth of the specific well, the depth of perforations of that well, or the time when that well is drilled. Instead, each well is evaluated for possible depth of impaction individually. Currently, 32 of the 117 wells within the Reaction Area show no open perforations due to liquid levels within the well.

Table 1. Vertical Extraction Wells within Reaction Area

CV-74R	CV-1532B	CV-2001	CV-2302	CV-2326	CV-2343
CV-85S	CV-1534	CV-2002	CV-2303	CV-2327	CV-2344
CV-100	CV-1534A	CV-2003	CV-2304	CV-2328	CV-2345
CV-103	CV-1535	CV-2004	CV-2305	CV-2333	CV-2346
CV-108-52	CV-1601D/S	CV-2006	CV-2306	CV-2335	CV-2347
CV-113	CV-1607	CV-2007	CV-2308	CV-2336	CV-2348
CV-114	CV-1610	CV-2201	CV-2310	CV-2337	CV-2349

CV-1420	CV-1901	CV-2202	CV-2311	CV-2338	CV-2350
CV-1421	CV-1902A	CV-2203	CV-2312	CV-2339	CV-2351
CV-1425	CV-1902D/S	CV-2204	CV-2314	CV-2340	CV-2352
CV-1426	CV-1903	CV-2206	CV-2315	CV-2341	CV-2353
CV-1532	CV-1906	CV-2301	CV-2322	CV-2342A	CV-2354
CV-2401	CV-2402	CV-2403	CV-2404	CV-2406	CV-2407
CV-2408	CV-2409	CV-2410	CV-2413	CV-2435	CV-2447
CV-2465	CV-2473	CV-2475	CV-2481	CV-2484	CV-24100
CV-24101	CV-24120	CV-24121	CV-24138	CV-24139	CV-24140
CV-14141	CV-24142	CV-24143	CV-24144	CV-2415	CV-2422
CV-2423	CV-2424	CV-2428	CV-2429	CV-2430	CV-2453
CV-2495	CV-2496	CV-2497	CV-2498	CV-2499	CV-24126
CV-24122	CV-24127	CV-2455			

To proactively plan for future dewatering pump installation, Chiquita is installing dewatering infrastructure (pneumatic supply piping and liquid forcemain piping) to all existing wells. All newly drilled wells will be evaluated to determine if the well needs the dewatering pump to maintain proper performance.. Additionally, Chiquita is continually ordering new pumps both to install in existing LFG extraction wells and to stock on-site, if an existing well begins to have liquid impacts or an existing pump needs to be removed from the LFG extraction well for servicing and maintenance. Pumps in wells are being pulled for cleaning and maintenance when they are no longer producing liquids. This maintenance interval has been as short as 3 days for wells within the Reaction Area, with replacement occurring within 24 hours of determining the pump is no longer functioning. Chiquita continues to order new pumps; delivery timelines have been between 3 days and 3 months depending on the pump type and specification. Due to the constant maintenance and delivery timelines, Chiquita maintains an inventory of spare pumps on site (up to 20 spare pumps) so that any pump that needs to be pulled for maintenance is immediately replaced with a functional pump.

The schedule for dewatering infrastructure installation is highly dependent on manufacturing, vendors, and contractors, each of which may have unexpected circumstances arise. Chiquita is focusing on expeditiously installing the dewatering pumps into the most impacted and newly installed wells while concurrently working on installing dewatering infrastructure to all wells on-site. Chiquita will strive to have this full installation completed by August 30, 2024. The pumps (both pneumatic and/or electric) are configured to actuate and commence liquid removal when liquids are present, so the pumping activities are ongoing and continuous when liquids are present, and the pump is operational.

Section D – Upgrades to the site leachate collection system as needed, including through the addition of increased air compressor and/or drain line infrastructure;

The leachate management system at the Landfill is comprised of various liquids handling infrastructure and subsystems, including the bottom liner drainage layer, the leachate sump pumps, leachate pump stations and forcemain piping, the leachate storage tanks, tanker truck loadout stations, etc. The dewatering infrastructure that is the focus of these dewatering guidelines also serves the LFG collection system and contributes to the liquids handling efforts at the Landfill.

Chiquita has expanded the leachate management system with additional storage tanks and the LFG wellfield dewatering system with liquid conveyance lines and compressed air lines to collect and convey leachate extracted from LFG wells impacted by liquids to the leachate storage tanks. Additionally, as described in Section C, Chiquita will continue to expand the LFG wellfield dewatering system so that every vertical LFG extraction well within the Reaction Area is capable of receiving a pump. The leachate forcemain lines will have the ability to convey 500,000 gallons a day, and the leachate storage tanks will have the ability to store 1,000,000 gallons.

Section E – Protocols for the pumping and monitoring of dewatering pumps and other such methods to remove water from Reaction Area (as defined in Condition 9(a)) wells impacted by liquids;

Pumps installed in vertical LFG extraction wells at CCL are monitored daily to check that the pumps are properly functioning. If a pump is found to be non-functional, it is diagnosed and, if it cannot be fixed-in-place, it is swapped for a functional pump while the original pump is cleaned/maintained. This diagnosis, fix in-place, or replacement is done within one day. If a pump is found to be operational at the time of the daily monitoring event, it is noted as a currently operational pump until checked on the following calendar day. Each pump is not monitored at a specific time of day, because the Landfill's conditions and access to certain areas are constantly changing, resulting in changes to the order pumps are checked. Pumps are checked one by one in the morning of each day to catch any issues early in the day. Pumps are operated as frequently as possible to maximize the dewatering at CCL. It is worth noting that the dewatering pumps installed in LFG wells are subject to occasional stalling because of the conditions in the well (primarily solids content of the liquids and other fouling mechanisms), and field technicians verify proper operation daily and utilize various techniques to restart (referred to as "bump") the pump. This daily monitoring, pump restarts, and maintenance performance is logged using mobile forms. For pneumatic pumps, this often involves temporarily connecting the air supply line to the exhaust hose in an attempt to dislodge any debris and re-seat the float check valve.

Section F – Well field liquid sounding in the Reaction Area (as defined in Condition 9(a)), and a proposed schedule for conducting liquid sounding on a consistent basis;

Chiquita proposes to conduct quarterly liquid level sounding on all vertical LFG extraction wells in the Reaction Area, as explained in Section A, as well as conduct liquid level sounding at any vertical LFG extraction well in the Reaction Area found to have declining gas quality or flow, or immediate equilibration with system vacuum, as detailed in Section A. Wells unsafe for wellhead removal—in accordance with the site's Health and Safety Plan and Containment Feasibility Study—may not be monitored for liquid levels during the routine monitoring until the work can be performed safely. Some of these unsafe conditions may include high wellhead pressure (in excess of 0.1 inch of WC) with no applied vacuum, free flowing liquids on the leachate discharge line without pump operation, or liquids temperature exceeding 180 degrees at the wellhead. Approximately 10% of wells within the Reaction Area currently exhibit these systems and no additional mitigation is required beyond the other best management practices being implemented in accordance with the Modified SOFA to slow the reaction, like expansion of the gas well system. Wells not monitored for liquids levels will be re-checked for high pressures, free flowing liquids, or high temperatures on a monthly basis until safe to conduct liquid level monitoring. Based on the experiences of other ETLF landfills, wells exhibiting these unsafe conditions may take months or years to abate to the point of being safe to monitor liquids levels.

Section G – A timeline for appropriate reporting on impacted wells;

Liquid sounding data will be reported quarterly in conjunction with the regular quarterly monitoring of depths to liquids of all vertical LFG extraction wells in the Reaction Area. It is standard industry practice to monitor liquid levels quarterly for landfills with liquid concerns. More frequent liquid level monitoring is impractical for the continued operation of the pumps and would be detrimental to the removal of liquids from the Landfill. Pumps must be shut off to perform the liquid level monitoring, thus halting gas collection. Performing liquid level monitoring at a greater frequency would reduce the amount of gas and liquids extracted from the Landfill. Additionally, more frequent monitoring would not be helpful as the liquid levels within landfills do not appreciably change in a month much less a week. Liquid impaction on LFG flow or quality is identified through routine LFG monitoring and is reported in the monthly report submissions required under SOFA Condition No. 8(i).

Section H – The feasibility of integrity testing of all vertical gas wells in the Reaction Area (as defined in Condition 9(a)) and a timeline and protocol for addressing any wells that the integrity testing demonstrates are damaged or are exhibiting temperatures of at least 170 degrees Fahrenheit;

All vertical LFG extraction wells within the Reaction Area will be checked for well casing integrity on a quarterly basis, or more frequently as dictated by analysis of LFG monitoring data or at a minimum in conjunction with the proposed quarterly liquid level sounding, provided it is safe to remove the wellhead on the LFG extraction well for the manually performed integrity testing. For purposes of this effort, the structural integrity of the well will be evaluated to assess the extent to which pinching, crimping, shearing or other deformation or deflection of the well riser pipe has occurred to such degree that the well is no longer capable of insertion of a dewatering pump or measurement device, and the well is no longer productive for recovering. LFG Vertical LFG extraction wells discovered to be damaged during the integrity testing will be re-drilled or repaired in accordance with the GCCS design plan.

Section I – A timeline for implementation of appropriate dewatering procedures upon discovery of wells impacted by liquids;

Based on the evaluation of the installation and monitoring data, Chiquita proposes to install dewatering infrastructure and pumps in any impacted vertical LFG extraction well by August 30, 2024, when all vertical wells locations on-site will have the infrastructure to power pumps and convey leachate from the pumps. Specially, if the LFG extraction well has 25% or less available perforations, dewatering infrastructure activities such as pump installation will be initiated. This implementation will commence in conjunction with the reporting of liquid impactions discussed in Section G. As described in Section C, Chiquita is acquiring additional pumps to have on site and expanding piping proactively. If there is no pump on site or available piping, the additional equipment will be ordered within a week. Chiquita will commit to install the pump within one week of receipt.

CLOSING

If you have any questions or need any additional information, please contact the undersigned at (303) 519-4503.

Sincerely,

Arthur E Jones Jr
Vice President
SCS Engineers

Bill Haley, P.E.
Project Director
SCS Engineers

Enclosures

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