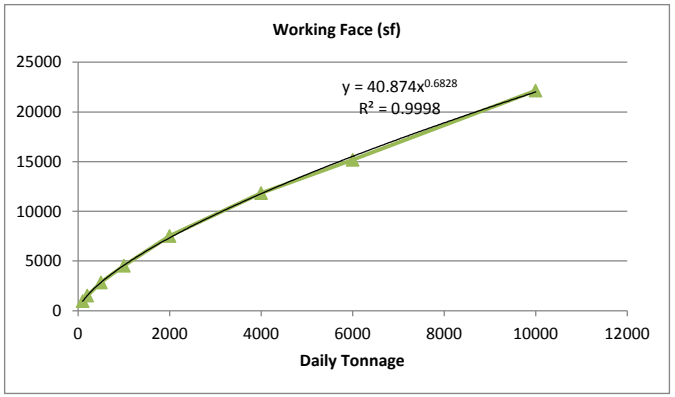
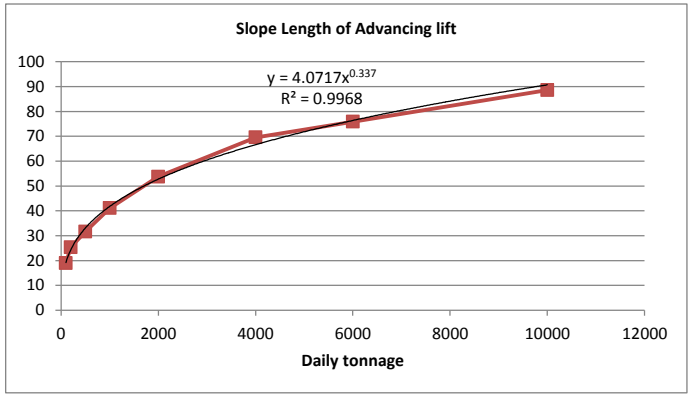
Attachment 1.3. Direct Measurement Flux Applied Over Landfill Footprint										
Facility	Estimated Landfill Waste Footprint at Time of Study (acres)	2010 Waste-In-Place(tons)	2010 Waste-in-Place (tons) per footprint acre	Total Footprint Square Feet	Total Footprint Square Meters	Flux (gram/m2/day)	Flux Applied over Footprint (gram/day)	Total grams per year	Mg/Yr	KG CO2 Equivalent (GWP-21)
CA-1 (21-AA-0001)	210	13,530,524	64,431	9,147,600	849,840	9.1	7,762,437	2,833,289,570	2,833	59,499,081
SD of Flux	210			9,147,600	849,840	5.9	4,991,547	1,821,914,732	1,822	38,260,209
CA-2 (43-AN-0008)	70	6,112,821	87,326	3,049,200	283,280	20.9	5,910,636	2,157,382,194	2,157	45,305,026
SD of Flux	70			3,049,200	283,280	16.0	4,520,978	1,650,156,985	1,650	34,653,297
CA-3 (01-AA-0008)	115	13,500,000	117,391	5,009,400	465,388	8.2	3,803,775	1,388,377,965	1,388	29,155,937
SD of Flux	115			5,009,400	465,388	2.1	991,281	361,817,610	362	7,598,170
CA-4 (01-AA-0009)	235	44,144,295	187,848	10,236,600	951,011	12.8	12,203,852	4,454,405,974	4,454	93,542,525
SD of Flux	235			10,236,600	951,011	2.3	2,201,796	803,655,707	804	16,876,770
CA-5 (19-AA-0050)	85	6,225,912	73,246	3,702,600	343,983	2.4	835,878	305,095,541	305	6,407,006
SD of Flux	85			3,702,600	343,983	2.2	744,292	271,666,454.75	272	5,704,996
Total with Aggregate Average Flux	*715*	*83,513,552*	*116,802*	*31,145,400*	*2,893,502*	*10.5*	*30,517,769*	*11,138,985,758*	*11,139*	*233,918,701*
Check							*30,516,579*	11,138,551,244	11,139	233,909,576
Notes:										
Footprint for CA-2 based on Planimeter measure of Figure B-1, updated RWQCB WDRs Order R2-2007-0021 and check by Google Earth TM historical images.										
Footprint for CA-5 based on Google Earth TM historical images and Figure 1 (January 2009) from the 27 CCR Joint Technical Document.										
Footprint for CA-1 (full build-out) as per 2007 Revised Solid Waste Facility Permit and EIR.										
Footprint for CA-4 includes 27 acre Unit 1 fill area 1 which is closed with compacted clay based final cover system.										

Attachment 1.4. Calculation of Optimum Working Face and Daily Cover Areas

Bolton, Neal. (1995). The Handbook of Landfill Operations, Blue Ridge Services, Inc., P.O. Box 2212, Atascadero, CA 93423. 534 pages.
(http://www.blueridgeservices.com/tools/index.html)

Daily Tonnage	Vertical Depth of Cell	Length of Advancinface Area of Active Fq Root Active Face		
100	6	19	949	31
200	8	25	1,518	
500	10	32	2,846	
1,000	13	41	4,522	
2,000	17	54	7,526	
4,000	22	70	11,827	
6,000	24	76	15,179	
10,000	28	89	22,136	





	2010 Daily Tonnage	Bolton Working Face (sf)	Bolton Working Face (acres)	Active Area Footprint (acres)	Active Area Footprint (sf)	Approximate Advancing Slope Width (SQRT Footprint)	Bolton Slope Length of Advancing Lift (ft)	Daily Cover Area (sf)	Daily Cover Area (acres)	Intermediate Cover Area (Acres) (total active-working face-daily cover)	% Active Footprint Intermediate Cover	% Active Footprint Daily Cover Cover	% Active Footprint Working Face
CA-1 (21-AA-0001)	1,127	4,958	0.11	210	9,147,600	3,024	43	131,501	3	207	99%	1.4%	0.1%
CA-2 (43-AN-0008)	635	3,351	0.08	70	3,049,200	1,746	36	62,575	1	68	98%	2.1%	0.1%
CA-3 (01-AA-0008)	518	2,916	0.07	115	5,009,400	2,238	33	74,886	2	113	98%	1.5%	0.1%
CA-4 (01-AA-0009)	4,158	12,090	0.28	235	10,236,600	3,199	68	215,982	5	230	98%	2.1%	0.1%
CA-5 (19-AA-0050)	990	4,538	0.10	85	3,702,600	1,924	42	80,086	2	83	98%	2.2%	0.1%

Daily disposal based on total annual 2010 disposal and 260 operating days.
Calculated working face based on Neal Bolton P.E., Blue Ridge Services, Inc. equation for optimum cell size: =(40.874/43560)*POWER(Daily Disposal tons,0.68281)

SWIS	Annual Precipitation	Latitude	Longitude	2010 Estimated Daily Disposal (tons)	2010 WIP	2010 Active?	Waste Characterization Comments	Disposal Start	Cease Operating (Actual or Anticipated)	Certification of Closure Approved	Final Cover System	Liner System (if combination approximate acreage of unlined in parantheses)	Leachate System Design and Management	Actual Leachate Flow	Leachate Recirculation?
01-AA-0008	14	37.49277	-121.99229	518	13,500,000	Yes		1968	2012		CCL	Unlined	SF Bay mud site with ground water partially in contact with waste and inward-gradient system to maintain hydraulic containment. Discharge of leachate and condensate to sanitary sewer and POTW.	Average 55 gpm leachate and condensate (28,908,000 gallons per year).	No
01-AA-0009	14	37.75389	-121.65165	4,158	44,144,295	Yes	Class II	1980	2025		Water Balance- CCL	Unlined/CCL Canyon Bottom (122)-Composite	Expanded leachate, condensate, and subdrain groundwater recirculation started September 2009. Recirculation includes surface application, horizontal trenches, and vertical wells. Facility has on-site leachate treatment plant as backup- 75,000 gallons/day and can treat up to 201,600 gallons per day during a peak flow event. Surface impoundments provide additional capacity. Treated water used for dust control in the lined. Class II landfill areas.	Average and peak design monthly flows (total 500,000 gallons/850,000 gallongs): Unit 1 leachate subdrain-150,000/300,000; Unit 2 leachate-75,000/125,000; Unit 2 subdrain-75,000/175,000; LFG condensate-200,000/250,000.	Yes
19-AA-0050	7	34.74740	-118.11650	990	6,225,912	Yes		1957	2038		Water-Balance	Composite- Unlined (78)	Dust control, offsite treatment, recirculation, discharge to municipal POTW. Peak design flow is 80 gpd.	2011 JTD states no significant quantities of leachate are currently generated.	No
21-AA-0001	25	38.16564	-122.56835	1,127	13,530,524	Yes		1958	2039		FML	Unlined (195)-Composite (14.5)	Class II evaporation pond and dust control. Note: SF Bay mud site with ground water in contact with waste and inward-gradient system to maintain hydraulic containment (perimeter leachate extraction trench and interior collection of leachate from dual landfill gas/leachate extraction wells).		No
43-AN-0008	20	37.18507	-121.67109	635	6,112,821	Yes		1986	2022		Composite	Composite- Unlined (22 Unit-C1)	Leachate and subdrain groundwater is collected and discharged to infiltration pond where treatment occurs by GAC system. Condensate is injected into the flare and combusted.		Yes

SWIS	LFG System Type	2010 Annual Average Total System Flow (scfm)	2010 Annual Average Total Methane (% by volume)	2010 Flared or Thermally Oxidized (scfm)	2010 ICE/Turbine System Flow (scfm)	2010 Direct Use (med-btu) System Flow (scfm)	2010 Alternative Fuel (high-btu) System Flow (scfm)	2010 Annual Total Recovered (scfm)	2010 Annual Methane Recovered (scfm)	2010 Annual Methane Flared or Thermally Oxidized (scfm)	LFGTE Project?	LFGTE System Type	IC Engine (MW)	Gas or Steam Turbine (MW)	Microturbine (MW)
01-AA-0008	Active-Flare/LFGTE Planned	1,855	47%	1,855						872	Yes	IC Engine			
01-AA-0009	Active-Flare/LFGTE	4,749	51%	1,653	2,858		239	3,097	1,579	843	Yes	Turbine, IC Engine and Alternative Fuel (LNG)	2.0	6.6	
19-AA-0050	Active-Flare	444	44%	444						194	No	No LFGTE System			
21-AA-0001	Active-Flare/LFGTE Planned	2,774	50%	2,774						1,387	Yes	IC Engine			
43-AN-0008	Active-Flare/LFGTE Planned	1,589	48%	1,589						769	Yes	IC Engine			

SWIS	Planned LFGTE Electricity (MW)	Direct Use (mmscfd)	Alternative Fuel (LNG)-(mmscfd)	Planned Alternative Fuel (LNG)-(mmscfd)	LFG System Flow and Control Comments	LFGTE Comments	Permitted Disposal Footprint (acres)	Permitted Disposal Footprint Not Developed (acres)	2010 Final Cover Footprint (acres)	2010 Intermediate/ Daily Cover Footprint (acres)	2010 Developed Footprint (acres)	Total Unlined Footprint (acres)	2010 Working Face (Bolton Equation in sf)	Working Face (Bolton Equation in acres)	
01-AA-0008	1.5						115	-00	-00	115	115	115	2,915	0.07	
01-AA-0009			3.5			Initial ops in 2009, full-scale mid-2010 (2600 scfm; 13,000 gpd; 3.5 mmscfd). Note- survey data is for 2009.	472	237	27	208	235	122	12,091	0.28	
19-AA-0050							209	109	-00	85	100	78	4,537	0.10	
21-AA-0001	4.5						210	-00	-00	210	210	195	4,957	0.11	
43-AN-0008	1.3						311	251	-00	60	60	22	3,351	0.08	

SWIS	2012 Waste-In-Place (WIP) tons (includes GW and Sludge ADC)	2012 Disposal	2012 ADC Green Waste	2012 ADC Sludge	2011 Disposal	2011 ADC Green Waste	2011 ADC Sludge	Revised 2010 WIP (includes GW and Sludge ADC)	2010 Disposal	2010 ADC Green Waste	2010 ADC Sludge	2009 Disposal	2009 ADC Green Waste	2009 ADC Sludge	2008 Disposal
01-AA-0008	89,278	31,426	0	0	57,852	0	0	0	134,586	0	0	204,617	5,333	0	221,871
01-AA-0009	2,338,630	1,167,064	0	20,972	1,128,684	0	21,910	0	1,081,206	0	11,861	1,069,711	10,080	16,514	1,220,426
19-AA-0050	507,970	212,667	21,388	0	252,365	21,550	0	0	257,314	23,449	0	253,089	18,366	0	356,075
21-AA-0001	399,208	170,298	3,416	10,109	199,235	4,695	11,454	0	292,949	4,972	8,845	331,124	8,823	9,888	336,305
43-AN-0008	331,340	179,536	0	0	151,804	0	0	0	165,117	0	0	180,107	15,293	0	217,536

SWIS	2008 ADC Green Waste	2008 ADC Sludge	2007 Disposal	2007 ADC Green Waste	2007 ADC Sludge	2006 Disposal	2006 ADC Green Waste	2006 ADC Sludge	2005 Disposal	2005 ADC Green Waste	2005 ADC Sludge	2004 Disposal	2004 ADC Green Waste	2004 ADC Sludge	2003 Disposal
01-AA-0008	44,451	0	251,072	50,061	0	266,893	36,854	0	275,144	43,965	0	276,669	61,655	0	297,709
01-AA-0009	7,613	8,371	1,286,716	2,799	23,323	1,413,742	19,442	16,969	1,305,977	38,847	20,486	1,300,993	111,628	27,497	1,275,358
19-AA-0050	16,901	0	417,076	22,207	0	388,142	20,724	0	468,951	43,690	0	425,726	34,155	0	374,558
21-AA-0001	3,506	16,169	352,659	29,028	17,105	364,564	44,241	15,351	338,533	71,650	14,323	349,814	82,290	16,221	358,978
43-AN-0008	0	0	208,331	0	0	251,339	145,232	0	290,320	0	0	277,511	0	0	272,086
SWIS	**2003 ADC Green Waste**	**2003 ADC Sludge**	**2002 Disposal**	**2002 ADC Green Waste**	**2002 ADC Sludge**	**2001 Disposal**	**2001 ADC Green Waste**	**2001 ADC Sludge**	**2000 Disposal**	**2000 ADC Green Waste**	**2000 ADC Sludge**	**1999 Disposal**	**1999 ADC Green Waste**	**1999 ADC Sludge**	**1998 Disposal**
01-AA-0008	57,967	0	281,491	36,396	0	281,337	33,023	0	292,908	33,797	0	313,375	32,096	0	280,226
01-AA-0009	122,378	28,135	1,346,360	77,150	20,558	1,443,648	133,722	16,916	1,491,958	33,855	66,210	1,465,261	27,871	98,937	1,547,217
19-AA-0050	18,837	0	271,858	15,909	0	181,884	10,659	0	154,766	6,797	0	116,246	0	0	175,600
21-AA-0001	68,716	26,067	370,591	54,142	19,739	377,537	46,632	27,677	380,993	40,682	23,579	378,033	43,044	29,130	311,148
43-AN-0008	376	0	281,463	4,271	0	348,987	3,634	0	391,838	4,180	0	387,038	2,471	0	414,164
SWIS	**1998 ADC Green Waste**	**1998 ADC Sludge**	**1997 Disposal**	**1997 ADC Green Waste (estimated)**	**1997 ADC Sludge (estimated)**	**1996 Disposal**	**1996 ADC Green Waste (estimated)**	**1996 ADC Sludge (estimated)**	**1995 Disposal**	**1995 ADC Green Waste (estimated)**	**1995 ADC Sludge (estimated)**	**1994 Disposal**	**1993 Disposal**	**1992 Disposal**	**1991 Disposal**
01-AA-0008	20,283	0	278,709	25,197	0	273,663	58,248	0	283,236	25,197	0	283,547	295,035	329,445	331,757
01-AA-0009	2,165	38,019	1,516,481	2,165	38,019	1,481,016	2,165	38,019	1,569,496	2,200	0	1,508,100	1,537,907	1,513,647	1,810,422
19-AA-0050	0	0	162,419	0	0	127,526	0	0	184,921	0	0	135,826	108,087	130,838	109,444
21-AA-0001	52,004	60,851	263,712	61,515	61,515	257,766	72,827	72,827	263,232	18,202	18,202	299,636	230,329	333,704	358,270
43-AN-0008	6,668	0	405,266	6,500	0	410,463	0	0	396,591	203	0	300,538	126,636	102,379	88,190
SWIS	**1990 Disposal**	**Pre-1990 Disposal**	**Comment**												
01-AA-0008	492,254	6,989,933	Revised WIP Based on BAAQMD Title V Permit maximum and 4/10 permit application (19,271,000 cy; AUF- 0.7).												
01-AA-0009	1,980,767	12,913,973													
19-AA-0050	122,077	1,737,714													
21-AA-0001	425,324	5,415,563	Revised Pre-90 Based on Title V Permit monitoring report states 12.59 million tons waste in place as of 10/31/12 (not including ADC). This analysis estimates 2012 WIP including GW and Sludge ADC is 13,929,731 tons.												
43-AN-0008	91,410	316,683	Revised Pre-1990 based on Title V Monitoring Report (7/12).												

Attachment 1.6. Input to ARB Landfill Emissions Tool Version 1.3:							
http://www.arb.ca.gov/cc/landfills/landfills.htm							
	CARB default k:	**21-AA-0001**	**21-AA-0001**	**43-AN-0008**	**01-AA-0008**	**01-AA-0009**	**19-AA-0050**
		CA-1	**CA-1**	**CA-2**	**CA-3**	**CA-4**	**CA-5**
		Site-Specific					
		ANDOC%					
	M (delay in months):	**6**	**6**	**6**	**6**	**6**	**6**
	Average Annual ppt.	**25**	**20**	**14**	**14**	**14**	**7**
Notes:							

Projection of annual disposal beyond 2012 for CA-1, CA-2, CA-4, and CA-5 is based on a scenario of 2012 disposal to the most recent available anticipated closure date. Actual disposal and anticipated closure date will be different. CA-3 closed in 2013.

Based on County drainage manual (Figure A-2) CA2 precipitation is >20 inches. Precipitation rises with elevation and site area is steep with disposal area at upper elevations. RWQCB notes annual precipitation of site at 19.5 inches. Leachate recirculation expanded after 2002 and is reported as 1-5 million gallons per year.

CA1 has relatively high % sludge disposal/ADC (total 13% of disposal + ADC; pre-1990 anticipated higher). CA1 is a San Francisco Bay mud site with ground water in contact with waste and inward-gradient system to maintain hydraulic containment (perimeter leachate extraction trench and interior collection of leachate from dual landfill gas/leachate extraction wells). Collected liquids managed in Class II evaporation pond.

CA4 expanded leachate, condensate, and subdrain groundwater recirculation into lined units in September 2009. Recirculation includes surface application, horizontal trenches, and vertical wells. Average and peak design monthly flows (total 500,000 gallons/850,000 gallongs): Unit 1 leachate subdrain- 150,000/300,000; Unit 2 leachate- 75,000/125,000; Unit 2 subdrain- 75,000/175,000; LFG condensate- 200,000/250,000.

CA3 is a San Francisco Bay mud site with ground water partially in contact with waste and inward-gradient system to maintain hydraulic containment. Collected leachate and condensate is discharged to sanitary sewer and POTW. Average 55 gpm leachate and condensate (28,908,000 gallons per year).

		Rx tons (includes GW and Sludge ADC)					
		21-AA-0001	**21-AA-0001**	**43-AN-0008**	**01-AA-0008**	**01-AA-0009**	**19-AA-0050**
Year	**CARB Default ANDOC %**	(ANDOC% high sludge):					
1954	10.45%						10,000
1955	10.45%						10,000
1956	10.45%						10,000
1957	10.45%						10,000
1958	10.45%	10.95%	10,000				10,000
1959	10.45%	10.95%	10,000				10,000

		Rx tons (includes GW and Sludge ADC)					
		21-AA-0001	21-AA-0001	43-AN-0008	01-AA-0008	01-AA-0009	19-AA-0050
Year	CARB Default ANDOC %	(ANDOC% high sludge):					
1960	10.45%	10.95%	10,000				10,000
1961	10.45%	10.95%	10,000				10,000
1962	10.45%	10.95%	25,000				10,000
1963	10.45%	10.95%	25,000				10,000
1964	10.45%	10.95%	25,000				10,000
1965	10.44%	10.94%	25,000				25,000
1966	10.44%	10.94%	25,000				25,000
1967	10.44%	10.94%	25,000				25,000
1968	10.44%	10.94%	25,000		100,000		25,000
1969	10.44%	10.94%	50,000		100,000		25,000
1970	10.44%	10.94%	50,000		100,000		25,000
1971	10.44%	10.94%	50,000		200,000		25,000
1972	10.44%	10.94%	50,000		200,000		25,000
1973	10.44%	10.94%	100,000		300,000		25,000
1974	10.44%	10.94%	100,000		300,000		50,000
1975	10.34%	10.84%	100,000		300,000		50,000
1976	10.34%	10.84%	200,000		300,000		50,000
1977	10.34%	10.84%	200,000		350,000		50,000
1978	10.34%	10.84%	300,000		350,000		50,000
1979	10.34%	10.84%	300,000		350,000		50,000
1980	10.34%	10.84%	300,000		400,000	1,291,397	50,000
1981	10.34%	10.84%	300,000		400,000	1,291,397	100,000
1982	10.34%	10.84%	300,000		400,000	1,291,397	100,000
1983	10.34%	10.84%	300,000		450,000	1,291,397	100,000
1984	10.34%	10.84%	400,000		450,000	1,291,397	125,000
1985	11.02%	11.52%	400,000		500,000	1,291,397	125,000
1986	11.02%	11.52%	400,000	25,000	500,000	1,291,397	125,000
1987	11.02%	11.52%	400,000	100,000	500,000	1,291,397	125,000
1988	11.02%	11.52%	425,000	100,000	500,000	1,291,397	125,000
1989	11.02%	11.52%	425,000	100,000	500,000	1,291,397	125,000
1990	11.02%	11.35%	425,324	91,410	492,254	1,980,767	135,826

		Rx tons (includes GW and Sludge ADC)					
		21-AA-0001	21-AA-0001	43-AN-0008	01-AA-0008	01-AA-0009	19-AA-0050
Year	CARB Default ANDOC %	(ANDOC% high sludge):					
1991	11.02%	11.35%	358,270	88,190	331,757	1,810,422	108,087
1992	11.02%	11.35%	333,704	102,379	329,445	1,513,647	130,838
1993	11.62%	11.95%	230,329	126,636	295,035	1,537,907	109,444
1994	11.62%	11.95%	316,315	300,538	283,547	1,508,100	122,077
1995	11.62%	11.95%	319,377	396,591	283,236	1,569,496	184,921
1996	8.42%	8.74%	404,237	410,463	273,663	1,481,016	127,526
1997	8.42%	8.74%	394,501	405,266	278,709	1,516,481	162,419
1998	8.42%	8.74%	425,595	414,164	280,226	1,547,217	175,600
1999	8.42%	8.74%	450,150	387,038	313,375	1,465,261	116,246
2000	8.42%	8.74%	445,605	391,838	292,908	1,491,958	154,766
2001	8.42%	8.74%	451,837	348,987	281,337	1,443,648	181,884
2002	7.45%	7.77%	444,520	281,463	281,491	1,346,360	271,858
2003	7.45%	7.77%	454,300	272,086	297,709	1,275,358	374,558
2004	7.45%	7.77%	448,325	277,511	276,669	1,300,993	425,726
2005	7.45%	7.77%	424,507	290,320	275,144	1,305,977	468,951
2006	7.45%	7.77%	424,156	251,339	266,893	1,413,742	388,142
2007	7.52%	7.85%	398,792	208,331	251,072	1,286,716	417,076
2008	7.52%	7.85%	355,972	217,536	221,871	1,220,426	356,075
2009	7.52%	7.85%	349,894	180,107	204,617	1,069,711	253,089
2010	7.52%	7.85%	306,766	165,117	134,586	1,081,206	257,314
2011	7.52%	7.85%	215,385	151,804	57,852	1,128,684	252,365
2012	7.52%	7.85%	183,823	179,536	31,426	1,188,036	212,667
2013	7.52%	7.85%	183,823	179,536		1,188,036	212,667
2014	7.52%	7.85%	183,823	179,536		1,188,036	212,667
2015	7.52%	7.85%	183,823	179,536		1,188,036	212,667
2016	7.52%	7.85%	183,823	179,536		1,188,036	212,667
2017	7.52%	7.85%	183,823	179,536		1,188,036	212,667
2018	7.52%	7.85%	183,823	179,536		1,188,036	212,667
2019	7.52%	7.85%	183,823	179,536		1,188,036	212,667
2020	7.52%	7.85%	183,823	179,536		1,188,036	212,667
2021	7.52%	7.85%	183,823	179,536		1,188,036	212,667
2022	7.52%	7.85%	183,823	179,536		1,188,036	212,667

		Rx tons (includes GW and Sludge ADC)					
		21-AA-0001	21-AA-0001	43-AN-0008	01-AA-0008	01-AA-0009	19-AA-0050
Year	CARB Default ANDOC %	(ANDOC% high sludge):					
2023	7.52%	7.85%	183,823			1,188,036	212,667
2024	7.52%	7.85%	183,823			1,188,036	212,667
2025	7.52%	7.85%	183,823			1,188,036	212,667
2026	7.52%	7.85%	183,823				212,667
2027	7.52%	7.85%	183,823				212,667
2028	7.52%	7.85%	183,823				212,667
2029	7.52%	7.85%	183,823				212,667
2030	7.52%	7.85%	183,823				212,667
2031	7.52%	7.85%	183,823				212,667
2032	7.52%	7.85%	183,823				212,667
2033	7.52%	7.85%	183,823				212,667
2034	7.52%	7.85%	183,823				212,667
2035	7.52%	7.85%	183,823				212,667
2036	7.52%	7.85%	183,823				212,667
2037	7.52%	7.85%	183,823				212,667
2038	7.52%	7.85%	183,823				212,667
2039	7.52%	7.85%	183,823				
2040	7.52%						

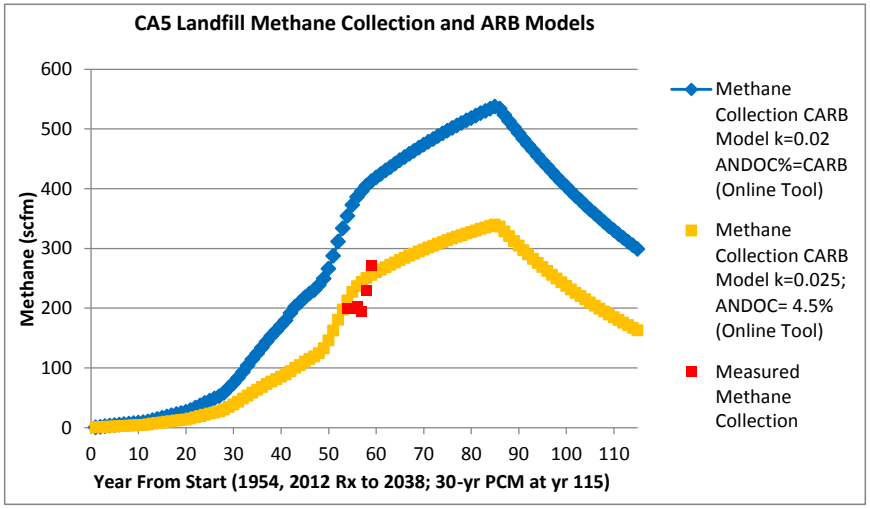
Attachment 1.7. Output from ARB Landfill Emissions Tool Version 1.3:

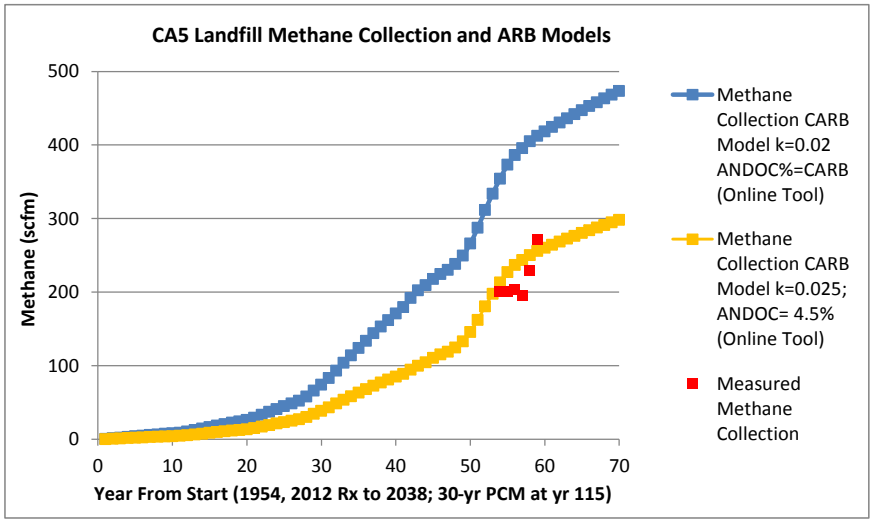
http://www.arb.ca.gov/cc/landfills/landfills.htm

CA1				CA2			CA3				CA4			CA5			
x (Year of Input)	Methane Collection CARB Model k=0.038 ANDOC%=CARB (Online Tool)	Measured Methane Collection	Calendar Year	Methane Collection CARB FOD Model k=0.038 ANDOC%=CARB (Online Tool)	Measured Methane Collection	Calendar Year	Methane CARB FOD Model k=0.02 ANDOC%=CARB (Online Tool)	Methane Collection CARB Model k=0.08 ANDOC%=7.0 (Online Tool)	Measured Methane Collection	Calendar Year	Methane Collection CARB Model k=0.02 ANDOC%=CARB (Online Tool)	Measured Methane Collection	Calendar Year	Methane Collection CARB Model k=0.02 ANDOC%=CARB (Online Tool)	Methane Collection CARB Model k=0.025; ANDOC= 4.5% (Online Tool)	Measured Methane Collection	Calendar Year
1	2		1958	2		1986	5	12		1968	60		1980	0	0		1954
2	7			14			14	36			178			1	1		
3	11			32			23	57			294			2	1		
4	15			49			36	89			407			3	2		
5	19			65		1990	54	131			518			4	2		
6	23			79			77	182			631			5	3		
7	27			94			103	241			746			6	3		1960
8	31			112			129	295			858			7	3		
9	34			150			154	345			968			7	4		
10	40			213			181	397			1,076			8	4		
11	47			272			210	452			1,216		1990	9	5		
12	55			320			238	502			1,378			10	5		
13	62		1970	366			268	554		1980	1,514			13	7		
14	69			409			299	609			1,638			15	8		
15	80			449		2000	330	659			1,764			17	9		
16	96			485			363	712			1,889			19	10		
17	110			511		2002+ Leachate recirculation 1-5 million gallons per year.	397	766			1,988			21	11		1970
18	134			529			435	823			2,062			23	12		
19	165			544			476	881			2,136			24	13		
20	205			559			515	934			2,207			26	14		
21	252			572			554	984			2,274		2000	29	15		
22	297			580			593	1,029			2,340			33	17		
23	341		1980	585			630	1,071		1990	2,392			37	19		
24	383			**588**	**685**		658	1,088			2,432			41	21		
25	423			**588**	**769**	2010	677	1,085			2,470			45	23		
26	462			586	**883**		695	1,077			2,507			49	25		
27	499			585	**937**		711	1,064			2,548			52	27		1980
28	547			586			727	1,051			2,588			58	30		
29	604			587			737	1,038			2,621			66	35		
30	659			588			744	1,025			**2,646**	**2,422**	2009	74	39		
31	714			589			750	1,014			**2,666**	**2,575**	*Corrected from prior 4036 error*	83	43		
32	770			589			757	1,008			2,687	**2,728**		93	49		
33	823		1990	590			765	1,004		2000	**2,712**	**2,999**		104	54		
34	867			591			771	997			2,738			114	59		
35	901			591			776	988			2,763			124	63		
36	922			592			780	983			2,788			134	68		
37	943			593		2022 Closure	784	977			2,813			144	73		1990
38	971			582			787	969			2,837			153	77		
39	997			560			789	960			2,860			162	81		
40	1,018			539			791	949			2,884			171	85		
41	1,041			519			791	933	**989**		2,906			179	89		
42	1,066			500			**790**	**913**	**889**		2,928			192	95		
43	1,092		2000	481			**785**	**884**	**872**	2010	2,950			202	100		
44	1,117			463			776	839	**914**		2,971			209	105		
45	1,138			446			**764**	**786**	**832**		2,992			218	111		
46	1,154			429			750	729		2013 Cease Disposal	3,013		2025 Closure	225	115		
47	1,170			413			735	673			2,993			230	119		2000
48	1,183			398			720	621			2,934			238	125		
49	1,195			383			706	573			2,876			251	133		
50	1,204			369			692	529			2,819			268	146		
51	1,209			355			678	489			2,763			290	162		
52	**1,211**	**1,225**		342			665	451			2,708			314	181		
53	**1,209**	**1,387**	2010	329			652	416			2,655			336	198		
54	**1,198**	**1,363**		317			639	384			2,602			**356**	**213**	**200**	
55	**1,180**	**1,333**		305			626	355			2,550			**375**	**227**	**200**	
56	1,160			294			614	328			2,500			**388**	**237**	**203**	
57	1,141			283			602	302			2,450			398	244	**195**	2010
58	1,123			272			590	279			2,402			407	250	**230**	
59	1,105			262			578	258			2,354			414	256	**272**	
60	1,088			252			567	238			2,308			421	260		
61	1,072			243			555	220			2,262			426	264		
62	1,056			234			544	203			2,217			432	269		
63	1,041			225			534	187			2,173			438	273		
64	1,026			217			523	173			2,130			444	277		
65	1,012			209			513	159			2,088			449	280		
66	999			201			503	147			2,047			454	284		
67	986			193		2052 (30-yr PCM)	493	136			2,006			460	288		2020
68	973			186			483	125			1,967			465	291		
69	961			179			473	116			1,928			470	295		
70	950			172			464	107			1,889			475	298		
71	939			166			455	99			1,852			480	301		
72	928			160			446	91			1,815			485	305		
73	918			154			437	84			1,779			489	308		
74	908			148			428	78			1,744			494	311		
75	898			143		Alternative <3 MMTBtU	420	72			1,710			498	314		
76	889			137			411	66			**1,676**		30-year PCM	503	317		
77	880			132			403	61		30-yr PCM	1,643			507	320		2030
78	871			127			395	56			1,610			511	322		

CA1				CA2			CA3				CA4			CA5			
x (Year of Input)	Methane Collection CARB Model k=0.038 ANDOC%=CARB (Online Tool)	Measured Methane Collection	Calendar Year	Methane Collection CARB FOD Model k=0.038 ANDOC%=CARB (Online Tool)	Measured Methane Collection	Calendar Year	Methane CARB FOD Model k=0.02 ANDOC%=CARB (Online Tool)	Methane Collection CARB Model k=0.08 ANDOC%=7.0 (Online Tool)	Measured Methane Collection	Calendar Year	Methane Collection CARB Model k=0.02 ANDOC%=CARB (Online Tool)	Measured Methane Collection	Calendar Year	Methane Collection CARB Model k=0.02 ANDOC%=CARB (Online Tool)	Methane Collection CARB Model k=0.025; ANDOC= 4.5% (Online Tool)	Measured Methane Collection	Calendar Year
79	863			123			387	52			1,578			516	325		
80	855			118			380	48		Alt.- <3 MMTBtU	1,547			520	328		
81	848			114			372	44			1,516			524	330		
82	840		2039 Closure	109			365	41			1,486			527	333		
83	821			105			358	38			1,457			531	335		
84	790			101			351	35			1,428			535	338		
85	761			98			344	32			1,400			539	340		Closure
86	733			94			337	30			1,372			535	337		
87	705			90			330	27			1,345			525	328		
88	679						324	25			1,318			514	320		
89	654						317	23			1,292			504	312		
90	629						311	22			1,267			494	305		
91	606						305	20			1,241			484	297		
92	583						299	18			1,217			475	290		
93	561						293	17			1,193			**465**	283		
94	541						287	16			1,169			456	276		
95	520						281	14			1,146			447	269		
96	501						276	13			1,123			438	262		
97	482						270	12			1,101			430	256		
98	464						265	11			1,079			421	249		
99	447						260	11			1,058			413	243		
100	430						255	10			1,037			404	237		
101	414										1,016			396	231		
102	399										996			389	226		
103	384										977			381	220		
104	370										957			373	215		
105	356										938			366	209		
106	343										920			359	204		
107	330										901			352	199		
108	318										884			345	194		
109	306										866			338	189		
110	294										849			331	185		
111	283										832			325	180		
112	273		30-year PCM								816			318	176		
111	263										800			312	171		
112	253										784			306	167		
113	243										768			300	163		30-yr PCM
114	234										753			294	159		
115	226										738			288	155		
114	217										723			282	151		
115	209										709			277	148		
116	201										695			271	144		
117	194										681			266	140		
118																	
119																	
120																	

x (Year of Input)	Methane Collection ARB Model k=0.02 ANDOC%=CARB (Online Tool)	Methane Collection ARB Model k=0.025; ANDOC= 4.5% (Online Tool)	Measured Methane Collection	
1	0	0		1954
2	1	1		
3	2	1		
4	3	2		
5	4	2		
6	5	3		
7	6	3		1960
8	7	3		
9	7	4		
10	8	4		
11	9	5		
12	10	5		
13	13	7		
14	15	8		
15	17	9		
16	19	10		
17	21	11		1970
18	23	12		
19	24	13		
20	26	14		
21	29	15		
22	33	17		
23	37	19		
24	41	21		
25	45	23		
26	49	25		
27	52	27		1980
28	58	30		
29	66	35		
30	74	39		
31	83	43		
32	93	49		
33	104	54		
34	114	59		
35	124	63		
36	134	68		
37	144	73		1990
38	153	77		
39	162	81		
40	171	85		





x (Year of Input)	Methane Collection ARB Model k=0.02 ANDOC%=CARB (Online Tool)	Methane Collection ARB Model k=0.025; ANDOC= 4.5% (Online Tool)	Measured Methane Collection	
41	180	89		
42	192	95		
43	202	100		
44	209	105		
45	218	111		
46	225	115		
47	230	119		2000
48	238	125		
49	250	133		
50	266	146		
51	287	162		
52	312	181		
53	334	198		
54	**354**	**213**	**200**	
55	**373**	**227**	**200**	
56	**386**	**237**	**203**	
57	396	244	**195**	2010
58	405	250	**230**	
59	413	256	**272**	
60	419	260		
61	425	264		
62	430	269		
63	436	273		
64	442	277		
65	447	280		
66	453	284		
67	458	288		2020
68	463	291		
69	468	295		
70	473	298		
71	478	301		
72	483	305		
73	488	308		
74	492	311		
75	497	314		
76	501	317		
77	506	320		2030
78	510	322		
79	514	325		
80	518	328		

x (Year of Input)	Methane Collection ARB Model k=0.02 ANDOC%=CARB (Online Tool)	Methane Collection ARB Model k=0.025; ANDOC= 4.5% (Online Tool)	Measured Methane Collection	
81	522	330		
82	526	333		
83	530	335		
84	534	338		
85	538	340		Closure
86	534	337		
87	524	328		
88	513	320		
89	503	312		
90	493	305		
91	483	297		
92	474	290		
93	**464**	283		
94	455	276		
95	446	269		
96	437	262		
97	429	256		
98	420	249		
99	412	243		
100	404	237		
101	396	231		
102	388	226		
103	380	220		
104	373	215		
105	365	209		
106	358	204		
107	351	199		
108	344	194		
109	337	189		
110	330	185		
111	324	180		
112	318	176		
113	311	171		
114	305	167		
115	299	163		30-yr PCM