

May 30, 2023

Ms. Courtney Scott
HHW Program Manager
Zero Waste Sonoma
2300 County Center Drive, Suite B-100
Santa Rosa, CA 95403

**Subject: Sonoma County Household Hazardous Waste Collection Facility
Conceptual Cost Estimate**

Dear Ms. Scott:

SCS is pleased to provide Zero Waste Sonoma with a conceptual cost estimate for a proposed Sonoma County Household Hazardous Waste (HHW) Collection Facility.

SCS Engineers utilized actual costs from a similar HHW Collection Facility constructed in 2011 in Elk Grove, CA. The Elk Grove HHW facility costs were provided to SCS by a consultant to Zero Waste Sonoma.

Elk Grove HHW Facility Summary

The completed Elk Grove HHW Facility included the following facility components:

- 120' x 70' (8,400 sq ft) building including concrete footings, slab-on-grade concrete floor, concrete beams, and a concrete topping slab. The standing seam metal roof panels are installed over plywood sheathing, while the walls are constructed of both CMU and wood framing materials.
- The building includes a waste storage room, mixing room, materials storage, utility room, electric room, employee break room, data room, men's and women's locker rooms, restrooms, janitor closet, reuse store, and offices. Additionally, there are two canopies: one that is 3,162 sq ft and the other is 1,470 sq ft.

Cost Estimate Procedure

SCS utilized the 2011 Elk Grove Development cost of \$2,806,622 as the basis for developing our cost estimate. After incorporating the price difference percentage between Sonoma County and Sacramento County, the adjusted project budget for the Sonoma County HHW Collection Facility is approximately \$2,973,449. For more information, please see the attached Summary of HHW Adjusted Cost in Sonoma County.

SCS used data from the U.S. Department of Commerce website at <https://apps.bea.gov/iTable/?reqid=19&step=3&isuri=1&1921=survey&1903=13> to estimate the



inflation factor between 2011 and 2022. We used an annual inflation factor of 5% for 2023 to 2027 when the facility construction is expected.

The following is a summary of cost estimate procedure:

1. 2011 Elk Grove costs	\$2,806,622
2. Increased cost between Sacramento and Sonoma County ¹	\$2,973,449
3. Actual Inflation rates from 2011 to 2022 ²	\$4,551,034
4. Estimated Inflation rates between 2022 and 2027 ³	\$5,808,401

1. RSMeans data (2020 34th annual edition)
2. US Department of Commerce
3. SCS estimate - 5% Per Year

SCS's recommends that Zero Waste Sonoma budget approximately \$6.0 million to construct the proposed HHW facility in Sonoma County. This cost does not include land costs. We recommend that once a site is chosen for the proposed facility, a more detailed cost estimate be performed to include land and demolition costs.

Please see the attached Summary of HHW Cost for additional information.

If you should have any questions please do not hesitate to contact me at tparker@scsengineers.com or 505 991 4987.

Sincerely,



Thomas D. Parker, P.E., BCEE
Project Director
SCS Engineers

TP/ML

Sonoma County HHW Conceptual Cost Estimate

2011 Elk Grove HHW Facility - Actual Costs

Fund Name	Fund Description	Cost
	Demolition	
Household Haz. Waste EECBG Energy Block Grant Solid Waste Solid Waste Comm Haulers	Professional Services	\$ 399,752
Solid Waste Solid Waste Comm Haulers EGFA HHW Facility Bonds	Land	\$ -
EGFA HHW Facility Bonds	Construction Engineering	\$ 262,474
EGFA HHW Facility Bonds	Construction Contract	\$ 1,579,742
EECBG Energy Block Grant Solid Waste EGFA HHW Facility Bonds	Miscellaneous	\$ 564,654
		\$ 2,806,622

1. 2011 Project costs for the Elk Grove HHW project provided by consultant to Sonoma County .
2. Miscellaneous includes (Administration, Material and Supplies, Insurance charge, Software, Bond cost, and Environmental).

Summary of HHW Adjusted Cost in Sonoma County

Year	City Cost Index for Sacramento ¹	City Cost Index for Santa Rosa ¹	Price Difference Percentage
2022	114.4	121.2	1.059
Adjusted Project Budget in Sonoma County = \$			2,973,449

1. Data from the Heavy Construction Costs with RSMeans data (2020 34th annual edition)

DIVISION	SACRAMENTO			SANTA ROSA					
	942, 956 - 958			954					
	MAT.	INST.	TOTAL	MAT.	INST.	TOTAL			
015433	CONTRACTOR EQUIPMENT				99.0	99.0		97.6	97.6
0241, 31 - 34	SITE & INFRASTRUCTURE, DEMOLITION			95.6	111.3	106.4	101.4	102.6	102.2
0310	Concrete Forming & Accessories			100.5	156.0	147.8	100.7	167.1	157.3
0320	Concrete Reinforcing			86.0	134.4	109.4	104.6	135.1	119.3
0330	Cast-in-Place Concrete			88.6	130.2	104.1	103.3	130.8	113.5
03	CONCRETE			97.9	141.1	116.9	107.1	146.9	124.6
04	MASONRY			106.1	145.9	130.6	101.8	153.5	133.6
05	METALS			100.8	109.8	103.4	108.1	117.7	110.9
06	WOOD, PLASTICS & COMPOSITES			87.1	160.2	127.3	93.6	173.0	137.3
07	THERMAL & MOISTURE PROTECTION			122.2	142.5	131.0	108.9	154.1	128.6
08	OPENINGS			103.9	149.0	114.4	100.8	161.4	114.9
0920	Plaster & Gypsum Board			103.4	161.5	142.5	109.2	175.0	153.5
0950, 0980	Ceilings & Acoustic Treatment			102.0	161.5	142.1	109.3	175.0	153.6
0960	Flooring			115.8	128.6	119.4	102.1	136.5	111.7
0970, 0990	Wall Finishes & Painting/Coating			107.9	134.1	123.4	91.1	165.5	135.2
09	FINISHES			105.3	150.7	129.9	100.0	163.0	134.1
COVERS	DIVS. 10 - 14, 25, 28, 41, 43, 44, 46			100.0	131.7	107.1	100.0	132.4	107.2
21, 22, 23	FIRE SUPPRESSION, PLUMBING & HVAC			100.1	131.4	112.4	96.4	182.2	130.1
26, 27, 3370	ELECTRICAL, COMMUNICATIONS & UTIL.			94.8	120.8	107.6	94.9	124.9	109.7
MF2018	WEIGHTED AVERAGE			100.8	133.0	114.4	101.2	148.4	121.2

Summary of HHW Adjusted Cost

Year	Implicit Price Deflator for Nonresidential Structure ¹	Annual Inflation Factor ⁽²⁾	Projected Budget
2011	95.362	-	\$ 2,973,449
2012	100.000	1.049	\$ 3,118,065
2013	101.455	1.015	\$ 3,163,433
2014	107.198	1.057	\$ 3,342,503
2015	109.403	1.021	\$ 3,411,257
2016	109.670	1.002	\$ 3,419,582
2017	112.411	1.025	\$ 3,505,048
2018	114.116	1.015	\$ 3,558,211
2019	118.805	1.041	\$ 3,704,417
2020	120.380	1.013	\$ 3,753,527
2021	125.276	1.041	\$ 3,906,187
2022	145.957	1.165	\$ 4,551,034
2023	-	1.050	\$ 4,778,586
2024	-	1.050	\$ 5,017,515
2025	-	1.050	\$ 5,268,391
2026	-	1.050	\$ 5,531,810
2027	-	1.050	\$ 5,808,401

1. Data from the U.S. Department of Commerce website at <https://apps.bea.gov/iTable/?reqid=19&step=3&isuri=1&1921=survey&1903=13>

2. Estimated future inflation factor for (2023-2027).