Article

Groundwater Contamination and Risk Assessment in Greater Palm Springs

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Table S1. Characterization of groundwater samples.

Sample	Sample date (2021)	Sample time (hours)	LSD altitude (ft)	Depth to top perforated or open interval (ft below LSD)	Depth to bottom perforated or open interval (ft below LSD)	Well depth (ft below LSD)
Indio-GW-01	March 20	09:00	312	280	400	400
Indio-GW-02	March 21	11:00	422.37	400	500	500
Indio-GW-03	March 22	12:00	-64	340	475	495
Indio-GW-04	March 29	17:00	780	431	551	494
Indio-GW-05	March 30	11:00	892.53	1100	1140	1129
Indio-GW-06	March 30	16:00	892.53	600	640	617
Indio-GW-07	April 07	13:00	515	500	700	700
Indio-GW-08	April 28	08:30	-57	310	590	600
Indio-GW-09	April 29	11:00	97	220	570	590
Indio-GW-10	April 30	10:30	-160	400	500	500
Indio-GW-11	May 01	09:30	143	200	450	450
Indio-GW-12	May 01	13:00	-97	380	700	700
Indio-GW-13	May 14	15:00	-203	350	390	395
Indio-GW-14	May 14	13:00	-203	730	770	775
Indio-GW-15	May 14	17:30	-203	1220	1260	1265
Indio-GW-16	May 14	08:00	-203	1430	1470	1475
Indio-GW-17	May 12	17:00	379	140	215	215

Note: LSD: land surface datum; ft: feet.

Table S2. Parameters used for estimation of groundwater health risk.

Symbol (units)	Description	Children	Adults
C (mg L^{-1} for As and Cd, μg L^{-1} for Cr and Pb)	Concentration		
IR (L day^{-1})	Ingestion rate	0.5	2
ED (years)	Exposure duration	12	30
EF (days $year^{-1}$)	Exposure duration	365	
BW (kg)	Body weight	20	67
RfD (mg^{-1} kg^{-1} day^{-1})	Reference dose	0.0003 (As); 0.0005 (Cd); 1.50 (Cr); 0.036 (Pb)	
CSF (L cm^{-3})	Cancer slope factor	1.5 (As); 0.001 (Cd); 0.5 (Cr); 0.01 (Pb)	

Table S3. Saturation index values of various mineral phases in the study area.

Minerals	Min.	Max.	Average	Standard deviation
Calcite	-0.6789	1.5569	0.164818	0.72695
Dolomite	-4.2125	1.9074	-0.73864	1.512944
Gypsum	-1.0129	5.1	0.702271	1.512293
Halite	-5.3968	4.7631	-3.57322	2.360996