

Use Trends of Pesticides on DPR's Toxic Air Contaminants List: Pounds Applied

[Text files](#) of data are available. The reported pounds of chemicals used that are toxic air contaminants. Toxic air contaminants (TACs) are defined as air pollutants that may cause or contribute to increases in serious illness or death, that may pose a present or potential hazard to human health, or pesticides identified as hazardous air pollutants per Section 7412 of Title 42 of the United States Code and pesticides determined to be TACs in consultation with the Office of Environmental Health Hazard Assessment. The toxic air contaminants category included all chemicals listed in the California Code of Regulations, Title 3, Division 6, Chapter 4, Subchapter 2, Article 1, Section 6860. Values greater than one are rounded. For more information, see [Pesticide Use Annual Report Data Access, References, and Definitions Guide](#).

Chemical	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
1,3-dichloropropene	13,615,169	15,693,070	14,132,954	12,581,936	12,580,525	11,304,749	11,686,702	11,089,115	9,749,522	7,023,406
2,4-d	6,383	7,371	6,042	4,314	6,079	5,532	6,861	8,789	8,044	9,083
2,4-d, 2-ethylhexyl ester	21,922	27,330	32,264	19,551	21,093	24,025	20,571	18,262	20,023	22,687
2,4-d, alkanolamine salts (ethanol and isopropanol amines)	< 1	201	21	82	204	7	1	< 1	0	0
2,4-d, butoxyethanol ester	2,318	1,791	893	1,325	2,105	1,948	3,344	2,405	3,185	1,872
2,4-d, butyl ester	0	129	0	50	0	33	0	0	0	0
2,4-d, diethanolamine salt	4,081	3,628	3,227	2,977	3,254	3,044	3,383	2,899	2,617	1,857
2,4-d, dimethylamine salt	329,057	362,286	368,391	305,707	328,654	320,242	357,390	331,155	335,940	286,555
2,4-d, dodecylamine salt	0	0	10	0	0	0	0	0	0	0
2,4-d, isooctyl ester	512	680	549	192	417	318	176	461	394	317
2,4-d, isopropyl ester	10,808	11,489	14,954	12,769	13,590	13,904	12,913	12,961	13,059	13,073
2,4-d, tetradecylamine salt	0	0	2	0	0	0	0	0	0	0
2,4-d, triethylamine salt	23	10	137	2	< 1	12	< 1	1	11	0

Chemical	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
2,4-d, triisopropanolamine salt	4,310	3,318	2,814	1,284	1,675	876	610	186	644	93
2,4-d, triisopropylamine salt	0	0	0	0	0	0	0	0	0	0
2,4-dichlorophenoxyac etic acid, choline salt	0	0	0	0	0	0	10,989	27,978	38,271	22,940
Acrolein	84,220	56,830	48,108	56,227	57,971	54,899	54,950	50,253	44,647	57,320
Aggregated adjuvant data	3	0	41	3	< 1	2	< 1	< 1	0	7
Aluminum phosphide	113,910	90,315	160,806	299,645	123,661	90,506	149,498	130,562	156,330	83,696
Arsenic pentoxide	16,719	22,190	10,508	5,105	3,677	0	0	0	0	0
Arsenic trioxide	< 1	< 1	< 1	0	0	0	0	0	0	0
Captan	370,136	511,177	638,313	561,762	414,516	379,101	376,873	333,397	332,165	367,648
Captan, other related	4,717	4,030	4,838	4,159	3,853	3,482	4,227	3,429	3,349	4,433
Carbaryl	131,744	155,525	221,095	107,470	128,935	113,755	110,504	99,403	85,258	84,510
Chlorine	800,013	603,519	726,781	418,713	589,661	676,123	246,961	192,703	558,588	522,963
Chloropicrin	8,994,591	8,520,057	8,658,076	8,788,431	7,486,861	8,062,341	8,384,767	8,506,634	8,775,770	8,515,832
Chlorpyrifos	1,312,209	1,107,435	903,260	948,004	602,946	12,817	14,121	7,507	1,825	1,933
Chromic acid	23,358	31,629	15,709	7,632	5,497	0	0	0	0	0
Dazomet	58,652	83,058	53,928	47,513	25,086	13,317	22,048	41,748	27,788	11,078
Ddvp	4,122	4,132	3,919	3,523	3,581	3,350	4,582	3,542	4,984	4,068
Endosulfan	8,136	6,420	576	55	1	81	231	105	59	< 1
Ethylene oxide	< 1	0	0	0	0	0	0	0	0	0
Formaldehyde	52,989	31,956	23,116	11,825	1,349	3,082	8,696	5,452	5,138	0
Hydrogen chloride	412	553	589	1,573	3,958	1,385	1,059	802	855	277
Lindane	0	6	0	0	0	< 1	20	2	2	0
Magnesium phosphide	7,562	22,316	14,766	9,021	8,344	9,660	8,313	35,652	15,653	18,521
Mancozeb	1,282,112	1,273,730	1,437,311	1,521,405	1,323,816	1,544,627	1,558,376	1,043,969	1,000,448	773,398

Chemical	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
Maneb	1,307	286	1,275	2,224	59	3,221	866	653	166	95
Meta-cresol	< 1	< 1	< 1	4	< 1	< 1	1	1	< 1	< 1
Metam-sodium	4,297,719	3,606,650	3,297,827	3,144,344	3,765,658	4,307,477	4,326,370	3,593,891	3,636,234	2,800,317
Methanol	0	0	2	0	0	0	0	0	0	0
Methidathion	3,614	245	146	11	140	2	< 1	3	0	0
Methoxychlor	0	< 1	< 1	3	0	10	0	< 1	< 1	45
Methoxychlor, other related	0	0	< 1	0	0	0	0	0	0	6
Methyl bromide	2,969,523	2,655,364	2,604,013	1,798,430	1,683,024	1,641,579	1,687,149	1,604,892	1,624,932	1,676,651
Methyl iodide	0	0	0	0	0	9	0	0	0	0
Methyl isothiocyanate	92	63	77	153	511	0	79	246	0	0
Methyl parathion	481	182	24	5	10	4	74	54	22	< 1
Methyl parathion, other related	< 1	5	< 1	0	0	< 1	< 1	0	0	0
Naphthalene	0	0	0	< 1	< 1	< 1	0	< 1	0	0
Para-dichlorobenzene	0	0	0	< 1	< 1	1	0	2	< 1	0
Parathion	1	836	41	3	3	49	11	< 1	149	68
Pcnb	23,431	20,626	53,374	76,601	83,944	69,718	45,784	25,405	9,159	8,680
Pcp, other related	2	< 1	0	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Pentachlorophenol	11	2	0	< 1	< 1	< 1	< 1	< 1	1	< 1
Phenol	0	1	0	0	0	0	0	0	0	0
Phosphine	11,399	28,397	19,234	21,700	19,561	48,814	83,260	88,346	15,934	15,380
Phosphorus	0	0	0	0	0	0	< 1	0	< 1	< 1
Potassium n-methyldit hiocarbamate	7,798,703	10,256,414	9,346,591	8,940,720	8,527,736	6,629,298	9,000,088	8,513,080	8,005,694	8,633,739
Potassium permanganate	0	0	113	0	0	0	12	0	52	0
Propoxur	251	100	49	43	29	15	5	3	3	2
Propylene oxide	400,719	396,191	368,260	255,702	216,833	229,979	271,228	163,231	138,059	168,176

Chemical	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
S,s-s-tributyl phosphorotrithioate	11,683	6,472	6,882	8,151	8,911	8,104	6,546	6,804	3,974	3,504
Sodium cyanide	2,611	3,108	2,869	3,057	2,986	2,618	2,698	2,389	2,350	1,727
Sodium dichromate	2	0	0	0	0	0	0	0	0	0
Sodium pentachlorophenate	< 1	0	0	0	0	0	0	< 1	0	0
Sodium tetrathiocarbonate	120	0	0	0	0	0	0	0	0	0
Sulfuryl fluoride	2,801,523	3,042,482	3,301,117	3,146,765	3,013,619	3,013,702	2,831,687	3,091,624	3,149,943	3,071,223
Trifluralin	513,766	471,559	387,921	346,848	352,470	323,618	300,868	305,680	326,808	284,002
Xylene	204	649	143	30	151	277	281	236	109	49
Zinc phosphide	3,598	4,001	3,722	4,202	4,334	2,278	3,718	2,889	4,608	4,565
Total	46,100,951	49,129,815	46,877,678	43,471,249	41,421,292	38,923,992	41,608,893	39,348,804	38,102,766	34,495,798