Appendix J: HED Data for SF Bay Species ESAs

	Set	PC Code	Chemical	Mutagen (y/n)	Mutagen Study Date	Mutagen Database	Carcinogen (y/n)	Carcinogen Study Date	Carcinogen Database	Date of Risk Assessment Document
1	4	035506	Linuron	no	11/20/01	Cancer Classification (final)	yes	11/20/01	Cancer Classification (final)	04/16/02
2	4	029001	1,3-dichlorpropene (telone)	yes	03/19/02	Cancer Classification (final)	yes	03/19/02	Cancer Classification (final)	01/24/08
3	4	059201	Phosmet	yes	10/27/099	Cancer Assessment Summary (final)	yes	10/27/99	Cancer Assessment Summary (final)	02/09/00
4	4	032501	Disulfoton	yes	04/20/01	Cancer Classification (final)	no	04/21/97	Cancer Assessment Summary (final)	02/07/00
5	4	104201	Oryzalin	yes	07/22/03	Cancer Classification (final)	yes	06/25/03	Cancer Assessment Summary (final)	05/18/04
6	4	097601	Propargite	no	06/22/99	Cancer Classification (final)	yes	06/22/99	Cancer Classification (final)	09/13/01
7	4	041401	EPTC	yes	08/31/99	Cancer Classification (final)	no	08/31/99	Cancer Classification (final)	04/07/99
8	5	111601	Oxyfluorfen	yes	09/29/89	Cancer Assessment Summary (final)	yes	09/29/89	Cancer Assessment Summary (final)	04/29/02
9	5	057201	Phorate	no	02/18/99	Risk Assessment Document	no	12/30/93	Cancer Assessment Summary (final)	02/18/99
10	5	417300	Glyphosate	no	01/22/02	Cancer Classification (final)	no	10/31/91	Cancer Assessment Summary (final)	09/29/06
11	5	074801	DEF (tribufos)	no	05/22/97	Cancer Assessment Summary (final)	Likely/Not likely (dose or route dependent)*	05/22/97	Cancer Assessment Summary (final)	06/26/00
12	5	071003	Rotenone	not yet determined**	10/05/88	Cancer Assessment Summary (final)	no	10/05/88	Cancer Assessment Summary (final)	06/28/06
13	5	109701	Permethrin	no	10/23/02	Cancer Assessment Summary (final)	yes	10/23/02	Cancer Assessment Summary (final)	04/04/06
14	5	034805	Ziram	no	02/06/03	Cancer Assessment Summary (final)	yes	02/06/03	Cancer Assessment Summary (final)	02/10/03
15	6	030001	2,4-D	no	01/29/97	Cancer Assessment Summary (final)	not yet determined	01/29/97	Cancer Assessment Summary (final)	05/12/05
16	6	035505	Diuron	no	06/20/01	Cancer Classification (final)	yes	05/08/97	Cancer Assessment Summary (final)	05/15/07
17	6	078701	Chlorthal-dimethyl (DCPA)	no	02/10/95	Cancer Assessment Summary (final)	yes	02/10/95	Cancer Assessment Summary (final)	07/08/02
18	6	100301	Methidathion	no	02/19/88	Cancer Assessment Summary (final)	yes	02/19/88	Cancer Assessment Summary (final)	07/28/99
19	6	080803	Atrazine	no	04/05/02	Cancer Classification (final)	no	04/05/02	Cancer Classification (final)	04/16/02
20	6	103801	Oxamyl	no	08/03/00	Cancer Classification (final)	no	11/05/96	Cancer Assessment Summary (final)	09/18/00
21	6	100601	Fenamiphos	no	03/29/99	Risk Assessment Document	no	11/23/93	Cancer Assessment Summary (final)	03/29/99
22	6	105801	Norflurazon	no	08/10/00	Cancer Classification (final)	yes	08/10/00	Cancer Classification (final)	12/20/01
23	7	028201	Propanil	no	06/19/01	Cancer Assessment Summary (final)	yes	06/19/01	Cancer Assessment Summary (final)	02/28/02
24	7	061601	Paraquat dichloride	no	04/19/00	Cancer Classification (final)	no	04/19/00	Cancer Classification (final)	07/31/06
25	7	108501	Pendimethalin	no	04/18/00	Cancer Classification (final)	yes	06/25/03	Cancer Assessment Summary (final)	08/22/07
26	7	128857	Myclobutanil	no	11/03/97	Cancer Classification (final)	no	06/16/94	Cancer Assessment Summary (final)	11/01/07
27	7	080805	Prometryn	no	01/20/98	Risk Assessment Document	no	07/26/94	Cancer Assessment Summary (final)	01/20/98
28	7	010501	Dicofol	no	06/24/92	ISTEP Cancer Database	yes	06/24/92	ISTEP Cancer Database	07/02/98
29	7	090501	Alachlor	yes	06/27/97	Cancer Assessment Summary (final)	yes	06/27/97	Cancer Assessment Summary (final)	01/08/07
30	7	079401	Endosulfan	no	02/28/02	Cancer Classification (final)	no	02/28/02	Cancer Classification (final)	11/13/07
31	8	108201	Diflubenzuron	no	03/06/02	Cancer Classification (final)	no	04/27/95	Cancer Assessment Summary (final)	04/16/07
32	8	036101	Trifluralin	no	04/11/86	Cancer Assessment Summary (final)	yes	04/11/86	Cancer Assessment Summary (final)	only one study available and that study did not appear to be helpful
33	8	116001	Triclopyr	no	03/21/02	Cancer Classification (final)	not yet determined	05/09/96	Cancer Assessment Summary (final)	07/24/02
34	8	041402	Molinate	yes	12/14/00	Cancer Assessment Summary (final)	yes	12/14/00	Cancer Assessment Summary (final)	01/09/01
35	8	108401	Thiobencarb	***	06/06/97	Risk Assessment Document	not yet determined	06/10/96	Cancer Assessment Summary (final)	06/06/97
36	8	076901	Strychnine	???	???	???	not yet determined	01/22/96	Risk Assessment Document	01/22/96
37	8	059101	Chlorpyrifos	not yet determined****	04/06/00	Cancer Classification (final)	no	11/23/93	Cancer Assessment Summary (final)	06/08/00
38	8	113201	Vinclozolin	not determined	12/08/99	Cancer Classification (final)	yes	12/08/99	Cancer Classification (final)	05/12/00
39	8	109801	Iprodione	no	02/26/98	Cancer Assessment Summary (final)	yes	02/26/98	Cancer Assessment Summary (final)	07/31/98

*likely to be carcinogenic to humans (high doses); not likely to be carcinogenic to humans (low doses) (from ISTEP - Cancer Database).
This classification is "based on increases in multiple tumor types in both sexes of the CD-1 mouse only at the highest dose, which were accompanied by severe toxicity caused by cholinesterase inhibition at all doses" (from ISTEP - Cancer Database
**Page 15 of 71 of the risk assessment states that Rotenone was "negative in several in vitro mutagenicity assays." Page 65 of 71 of the risk assessment states that there was a "concentration-related positive response of induced mutant colonies over background in both experiments." Finally, page 69 or 71 states that "all four studies support the conclusion that rotenone was not genotoxic under the limited conditions of the experiments." However, "inconsistent results in the yeast studies using known mutagens that require activation (e.g., dimethyl nitrosamine) cast doubt on the reliability of the findings."
***Thiobencarb had a negative Ames test and showed no mutagenicity in three out of four tests; however it was positive for micronucleus in mice (page 6 and 7 of 27).
****Page 9 of 138 in the risk assessment states that there are slight genetic alterations in yeast and DNA damage to bacteria.