

UNITED STATES DISTRICT COURT  
NORTHERN DISTRICT OF CALIFORNIA  
SAN JOSE DIVISION

**CERTIFIED COPY**

JAYNE PALMISANO, et al., )  
 )  
 Plaintiffs, )  
 )  
 -vs- )  
 )  
 OLIN CORPORATION, et al., )  
 )  
 Defendants. )  
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CASE NO. C 03-01607 RMW

DEPOSITION OF ROBERT D. MORRISON, Ph.D.

DATE: March 3, 2005

TIME: 1:05 p.m.

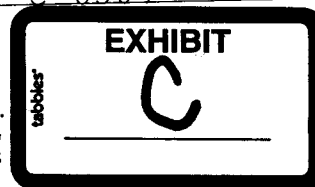
LOCATION: DUANE MORRIS, LLP  
One Market, Spear Tower  
Suite 2000  
San Francisco, California

**DISK  
ENCLOSED**

REPORTED BY: Joanmarie Torrealano, CSR, CRR, CRP  
Certified Shorthand Reporter  
License Number C-6504



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3:21 1 Q. Okay. You had also mentioned that in  
3:22 2 connection with the presentations you recently gave in  
3:22 3 2005 to the Bar Associations of San Francisco and Orange  
3:22 4 County some discussion of the historical activities  
3:22 5 associated with the perchlorate ion.

3:22 6 Can you describe generally what the nature of  
3:22 7 that aspect of the presentation contained?

3:22 8 A. Yes. My recollection is that I shared  
3:22 9 information regarding historical sources of perchlorate  
3:22 10 contamination to subsurface, such as solid rocket fuel.

3:22 11 Q. Any other sources that you discussed?

3:22 12 A. I may have. I certainly recall the use and  
3:22 13 incorporation of perchlorate in solid rocket fuel  
3:23 14 formulations.

3:23 15 Q. Did you discuss pyrotechnics?

3:23 16 A. I don't recall.

3:23 17 Q. Do pyrotechnics, such as fire works, have the  
3:23 18 potential of emitting perchlorate into the environment?

3:23 19 MR. FRANCO: Objection. Vague.

3:23 20 THE WITNESS: I haven't looked into that issue.

3:23 21 BY MR. MILLER:

3:23 22 Q. Have you looked into the issue associated with  
3:23 23 the use of Chilean fertilizers as a source of  
3:23 24 perchlorate into the environment?

3:23 25 A. I'm familiar with some of the literature

13:23 1 relative to the presence of perchlorate at low  
13 2 concentrations in some Chilean fertilizers.

13:23 3 Q. Have you ever had occasion to assess a site or  
13:23 4 area for the presence of perchlorate associated with the  
13:24 5 use of -- the historical use of Chilean fertilizers?

13:24 6 A. No.

13:24 7 Q. Did you discuss in your presentations the  
13:24 8 recent publication of data suggesting the presence of  
13:24 9 perchlorate in groundwater in the vicinity of areas  
13:24 10 absent any historical industrial use of perchlorate?

13:24 11 MR. FRANCO: Objection. Lacks foundation,  
13:24 12 vague.

13 13 THE WITNESS: No.

13:24 14 BY MR. MILLER:

13:24 15 Q. Okay. Are you familiar with recent  
13:24 16 publications that have reported the presence of  
13:24 17 perchlorate in groundwater in areas in which there is no  
13:24 18 historically known industrial discharge of perchlorate?

13:24 19 A. You would need to be more specific relative to  
13:24 20 the literature that you're referring to.

13:24 21 Q. Okay. There have been reports from West Texas  
13:24 22 in which perchlorate has been detected in groundwater  
13:25 23 but for which there is no attributable industrial  
13:25 24 source. Are you familiar with that literature?

13:25 25 A. I'm generally familiar with that literature

14:32 1 Q. Do you know why this request was made?

14:32 2 A. Not specifically.

14:32 3 Q. In general do you know why Paul Garcia  
14:32 4 requested this particular change order?

14:32 5 A. Not in general, although I would comment that  
14:32 6 it's not uncommon when DPRA is retained to do this type  
14:32 7 of sampling work that we request that J-flags be  
14:32 8 reported.

14:32 9 Q. What's your understanding, Dr. Morrison, of  
14:33 10 what a J-flag qualifier may mean for the validity of the  
14:33 11 results obtained with that qualification?

14:33 12 MR. FRANCO: Object to the form. It's vague  
14:33 13 and ambiguous and it assumes facts.

14:33 14 Go ahead.

14:33 15 THE WITNESS: That would be an area outside of  
14:33 16 my expertise.

14:33 17 BY MR. MILLER:

14:33 18 Q. Okay. If that area is outside of your  
14:33 19 expertise I take it that you are not rendering an  
14:33 20 opinion with respect to the validity of the perchlorate  
14:33 21 sampling results reported by Calscience with  
14:33 22 J-qualifiers; is that correct?

14:33 23 MR. FRANCO: Object to the form, vague and  
14:33 24 ambiguous.

14:33 25 THE WITNESS: I'm not offering an opinion

14:33 1 regarding that subject.

14:33 2 BY MR. MILLER:

14:33 3 Q. Are you offering the opinion in this case  
14:33 4 regarding the validity of any of the results that are  
14:34 5 reported in Exhibit 2, your expert report, with respect  
14:34 6 to the presence of perchlorate at specific  
14:34 7 quantifications or quantities?

14:34 8 MR. FRANCO: Objection to form.

14:34 9 Go ahead.

14:34 10 THE WITNESS: I don't understand your question.

14:34 11 BY MR. MILLER:

14:34 12 Q. Okay. Are you offering an opinion,  
14 13 Dr. Morrison, with respect to the validity of any of the  
14:34 14 results reflected in Exhibit Number 2 regarding the  
14:34 15 quantity of perchlorate detected in these four  
14:34 16 plaintiffs' wells?

14:34 17 MR. FRANCO: Objection. Vague. Go ahead.

14:34 18 THE WITNESS: Relative to the analytical  
14:34 19 validity of the values contained in Exhibit 2, that  
14:34 20 would be an issue for Calscience and is outside of my  
14:34 21 area of expertise.

14:34 22 BY MR. MILLER:

14:34 23 Q. Thank you very much.

14:34 24 Dr. Morrison, do you know whether EPA Method  
14:34 25 314 permits the reporting of perchlorate levels using

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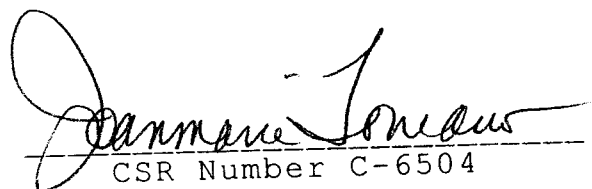
STATE OF CALIFORNIA        )  
                                  )        ss.  
COUNTY OF SANTA CLARA    )

I, JOANMARIE TORREANO, a Certified Shorthand Reporter in and for the State of California, certify that the witness in the foregoing deposition,

ROBERT D. MORRISION, Ph.D.,

was by me duly sworn to tell the truth, the whole truth and nothing but the truth in the within-entitled cause, and that the foregoing is a full, true and correct transcript of the proceedings had at the taking of said deposition, reported to the best of my ability and transcribed under my direction.

March 14, 2005  
Date

  
CSR Number C-6504