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LOS ANGELES, CALIFORNIA 90024-6302

VIA EMAIL

February 22, 2013

Lois Henry  
Bakersfield Californian  
lhenry@bakersfield.com

**Re: Public Records Request - PRR # 2013-294**

Dear Ms. Henry:

This is a response to your request for public records under the California Public Records Act (CPRA), dated February 20, 2013, in which you requested (1) A copy of the "second public records request submitted by a law firm on behalf of Arysta" (2) All correspondence regarding that "second public records request" between UCLA and the firm representing Arysta (3) All records provided to Arysta in response to its July 21, 2010 public records request . UCLA departments completed the search for the responsive documents and, pursuant to California Government Code section 6253, we are making the requested records/data available to you. Please find enclosed all such records that were found to be responsive to your request.

Although the CPRA authorizes UCLA to charge for reproduction costs and/or programming services,<sup>[1]</sup> as a courtesy these fees have been waived. Any subsequent requests may be subject to copying and/or programming fees.

UCLA strives to honor the spirit and legislative intent of the California Public Records Act. We believe the attached responsive records successfully fulfill the purpose of this law and your request.

This completes the response to your request. Should you have any questions, please contact me at (310) 794-8741 or via email at [UCLAPublicRecords@finance.ucla.edu](mailto:UCLAPublicRecords@finance.ucla.edu) and reference the PRR number found above in the subject line.

Sincerely,

A handwritten signature in black ink, appearing to read 'Erin Daugherty'.

**Erin Daugherty**

Program Administrator/Office Coordinator  
Records Management & Information Practices  
(310) 794-8741 | (310) 794-8961 (fax) | [uclapublicrecords@finance.ucla.edu](mailto:uclapublicrecords@finance.ucla.edu)

<sup>[1]</sup> California Government Code §6253(b)



In addition to the thyroid tumors observed in the study, large and significant changes were observed in thyroid hormone levels, which are intimately tied to metabolic disorders, immune function, and developmental disorders of the fetus leading to miscarriages in laboratory animals. Other animal studies demonstrate that exposure to methyl iodide causes respiratory tract lesions and neurological effects.

### **Methyl iodide is a threat to state groundwater supplies**

In California, thousands of drinking water wells are already contaminated with the banned, extremely toxic fumigants DBCP and EDB. We can not afford to place our scarce water resources at risk of further contamination. Since methyl iodide is very soluble in water, there is a real danger of leaching to ground water, especially if it rains soon after fumigation tarps are removed. In a recently published study, scientists from USDA and UC Riverside concluded that methyl iodide may pose a risk of groundwater contamination in vulnerable areas.

### **Growers do not need methyl iodide**

The rush to register methyl iodide has been rationalized by the upcoming withdrawal of methyl bromide from the agricultural market, as mandated by the Montreal Protocol, an international treaty to phase out production and use of ozone-depleting substances. Yet prior to the introduction of methyl iodide, growers were exploring a variety of non-fumigant methods for controlling soil pests.

**From:** [Susan Kegley](#)  
**To:** [REDACTED]; [Froines, John](#)  
**Cc:** [Elinor Fanning](#); [Robert Bergman](#)  
**Subject:** Methyl Iodide  
**Date:** Tuesday, April 07, 2009 3:13:45 PM  
**Attachments:** [Methyl Iodide Response, April 6, 2009.pdf](#)  
[Bergman Hoffman to LJackson2-3-09.doc](#)

---

Hi John and [REDACTED],

Bob Bergman just received this response from EPA to his and Roald Hoffman's email they sent a few months ago (appended below, FYI). Although EPA doesn't agree to pull it right away or make any comment on the conditionality of the registration, it looks somewhat positive to me in that they indicate that they may initiate reevaluation earlier than normal. Bob and I would appreciate your read on the tone and content of this letter to see if you see anything else in there. Also note the importance of the CA peer review that EPA highlights. It seems that will play a role in their decision-making process.

Best,

Susan

\*\*\*\*\*

February 3, 2009

Administrator Lisa Jackson  
United States Environmental Protection Agency  
Ariel Rios Building  
1200 Pennsylvania Avenue, N. W.  
Mail Code: 1101A  
Washington, DC 20460

Dear Administrator Jackson,

As chemists and citizens, we are pleased to see the staff changes at EPA with the new administration and wish you the best in your new position.

We are writing to request your attention to the fumigant pesticide methyl iodide (iodomethane). In September of 2007, we and 52 other members of the National Academy of Sciences—six of them Nobel Prize laureates—wrote to Mr. Stephen Johnson with our concerns about the impending registration of the highly toxic chemical methyl iodide, especially with regard to its carcinogenicity, developmental toxicity, and propensity for off-site drift (see attached letter).

Assistant Administrator Jim Gulliford replied to our letter (also attached), but dismissed our concerns. Mr. Johnson organized a telephone conference, putatively for us to talk to him about our concerns. When the conference took place, he was not there. Lower level staff talked to us, in our perception not with great enthusiasm. Methyl iodide was given a one-year conditional registration less than a week later, and this registration was revised to be a time-unlimited conditional registration in the fall of 2008. The stated intent of the extension of the conditional registration was that staff is waiting for the new mitigations for the other fumigants

to be finalized before finalizing the registration of methyl iodide. We attach an October 2008 article from Chemical and Engineering News that nicely summarizes the history of the process, for your review. In light of the fact that this registration is still conditional, we are hoping you can reopen the matter in the near future.

The push for alternatives to the ozone-depleting methyl bromide has led to substitution of a chemical that is more toxic than methyl bromide in every way except for its effect on the ozone layer. We believe EPA can do better. With a citizen's and professional's concern, we urge you to take action in this matter.

Robert G. Bergman  
Member, National Academy of Sciences  
Gerald E. K. Branch Distinguished Professor  
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Roald Hoffmann  
Member, National Academy of Sciences  
Nobel Laureate, Chemistry 1981  
Frank H. T. Rhodes Professor of Humane Letters  
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UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

WASHINGTON, D.C. 20460

APR 06 2009

Dr. Robert Bergman  
Member, National Academy of Sciences  
Department of Chemistry  
University of California, Berkeley  
Berkeley, California 94720

OFFICE OF  
PREVENTION, PESTICIDES AND  
TOXIC SUBSTANCES

Dr. Roald Hoffmann  
Member, National Academy of Sciences  
Department of Chemistry  
Cornell University  
Ithaca, New York 14853

Dear Drs. Bergman and Hoffmann:

I am responding to your February 3, 2009 correspondence to Administrator Lisa Jackson asking the Agency revisit its registration of the soil fumigant, methyl iodide. Administrator Jackson asked me to respond on behalf of the Agency since my office is responsible for the regulation of pesticides.

As you are aware, the Agency registered methyl iodide in September 2007 with significant controls on its use (use restricted to "certified"/trained applicators; buffer zones around treated fields; prohibition of use within a quarter mile of any occupied sensitive site such as a school, day care facility, nursing home, hospital, prison, or playground; etc.). The Agency is currently working toward implementation of similar restrictions in use for all soil fumigants.

In recent studies, conducted in Georgia, Florida, and Michigan, significant reductions in emissions of methyl iodide have been shown when metalized and virtually impermeable films (VIF) were used along with reduced application rates and a programmable application control system. This is an example of how new technologies to reduce soil fumigant emissions are emerging in response to the new restrictions.

EPA currently plans to initiate reevaluation of the registrations for all the soil fumigants ("registration review"), including methyl iodide, in 2013. Registration review is EPA's legally mandated program for reevaluating pesticides on a continuing 15-year cycle. EPA uses a public process for registration review that was developed with input from the Pesticide Program Dialogue Committee, a Federal Advisory Committee Act (FACA) committee with broad and diverse stakeholder representatives. The process for registration review includes the opening of public dockets, public comment opportunities, case development, and decision making. The Agency moved the registration review forward several years for methyl iodide and the other soil fumigants to allow early reassessment of how well the new restrictions for soil fumigants are

working in practice, to consider new technologies, and to review new scientific data, including studies that are expected to improve the understanding of the factors that affect fumigant emissions.

The Agency is also in close contact with the California Department of Pesticide Regulation's (CDPR) as they continue their review of the application for registration of methyl iodide in California. CDPR's risk assessment was recently provided to EPA scientists for review and comment. Also, CDPR has chosen to take the additional step of conducting an external peer review of their assessment of methyl iodide risks before making a final registration decision. We look forward to seeing the outcome of the California peer review, which is currently planned to conclude prior to initiation of the registration review process in 2013, as described above. However, depending on the outcome of California's external peer review and final risk assessment, EPA may choose to initiate reevaluation of the methyl iodide registration even sooner.

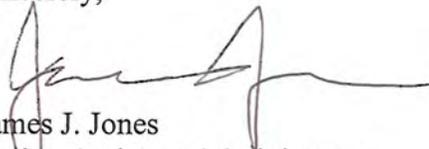
Before closing, I would like to address a point raised in the Chemical and Engineering News (C&E News) article which you cite. At one point, the article includes assertions that EPA has "...bound themselves off..." from the conversation about alternatives to highly hazardous chemicals and that pheromone technology is "orphan pest control." In fact, the Agency shares the concern expressed that all alternatives for pest control should be considered. Regarding the re-registration eligibility decisions for the existing soil fumigants, EPA assessed the availability of non-chemical and non-fumigant alternatives to soil fumigation. It is the Agency's expectation that with the new restrictions being placed on soil fumigant products, some growers may be more willing to incorporate non-fumigant alternatives into their future production practices.

In order to be more effective in its efforts to support alternatives to conventional agricultural chemicals, over 10 years ago the Office of Pesticide Programs reorganized and created the Biopesticides and Pollution Prevention Division (BPPD) which now includes approximately 55 scientist and other staff. A major function of BPPD is to promote and register a category of pesticides, known as biopesticides, which tend to be more pest/target specific and less toxic than conventional chemical control agents. A second purpose of the Division is to encourage the use of safer pest management techniques such as the use of biopesticides. As part of this effort, BPPD manages a voluntary educational cooperative effort to encourage the use of pest control techniques such as Integrated Pest Management (IPM) that minimize the use of more toxic pesticides.

The Agency supports the use of pheromones as a technology that can reduce the risk from pesticide use. EPA regulates pheromones as biopesticides and about 15 years ago completed efforts to streamline the registration of certain types of straight chain lepidopteron pheromones. The Agency's approach has been accepted by Health Canada's Pest Management Regulatory Agency and by the Organization for Economic Cooperation and Development (OECD). EPA also registers other pheromone products and has encouraged the adoption of pheromones through demonstration grants and other means. There are several successful pheromone registrants in the United States and also in other countries. We believe pheromones are an important tool for integrated pest management practices that can be used by both conventional and organic farmers.

Again, thank you for your correspondence. I hope this letter has helped to clarify the current status of EPA's review of methyl iodide.

Sincerely,

A handwritten signature in black ink, appearing to read 'James J. Jones', with a long horizontal flourish extending to the right.

James J. Jones  
Acting Assistant Administrator

cc: Britt E. Erickson  
Chemical and Engineering News

February 3, 2009

Administrator Lisa Jackson  
United States Environmental Protection Agency  
Ariel Rios Building  
1200 Pennsylvania Avenue, N. W.  
Mail Code: 1101A  
Washington, DC 20460

Dear Administrator Jackson,

As chemists and citizens, we are pleased to see the staff changes at EPA with the new administration and wish you the best in your new position.

We are writing to request your attention to the fumigant pesticide methyl iodide (iodomethane). In September of 2007, we and 52 other members of the National Academy of Sciences—six of them Nobel Prize laureates—wrote to Mr. Stephen Johnson with our concerns about the impending registration of the highly toxic chemical methyl iodide, especially with regard to its carcinogenicity, developmental toxicity, and propensity for off-site drift (see attached letter).

Assistant Administrator Jim Gulliford replied to our letter (also attached), but dismissed our concerns. Mr. Johnson organized a telephone conference, putatively for us to talk to him about our concerns. When the conference took place, he was not there. Lower level staff talked to us, in our perception not with great enthusiasm. Methyl iodide was given a one-year conditional registration less than a week later, and this registration was revised to be a time-unlimited conditional registration in the fall of 2008. The stated intent of the extension of the conditional registration was that staff is waiting for the new mitigations for the other fumigants to be finalized before finalizing the registration of methyl iodide. We attach an October 2008 article from Chemical and Engineering News that nicely summarizes the history of the process, for your review. In light of the fact that this registration is still conditional, we are hoping you can reopen the matter in the near future.

The push for alternatives to the ozone-depleting methyl bromide has led to substitution of a chemical that is more toxic than methyl bromide in every way except for its effect on the ozone layer. We believe EPA can do better. With a citizen's and professional's concern, we urge you to take action in this matter.

Robert G. Bergman  
Member, National Academy of Sciences  
Gerald E. K. Branch Distinguished Professor  
Department of Chemistry  
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Berkeley, CA 94720

Roald Hoffmann  
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Nobel Laureate, Chemistry 1981  
Frank H. T. Rhodes Professor of Humane Letters  
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cc:

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**From:** [Susan Kegley](#)  
**To:** [REDACTED]; [Froines, John](#); [Robert Bergman](#); [Roald Hoffmann](#)  
**Cc:** [REDACTED]  
**Subject:** Draft DPR MeI Risk assessment  
**Date:** Wednesday, April 29, 2009 4:18:59 PM  
**Attachments:** [MeI RCD for Inhalation Exposure Vol III Env. Fate March 2009.pdf](#)  
[MeI RCD for Inhalation Exposure Vol I Health Risk Assessment March 2009.pdf](#)  
[MeI RCD for Inhalation Exposure Vol II Exposure Assessment March 2009.pdf](#)

---

Hi All,

Here is a quick summary of DPR's MeI risk assessment by [REDACTED] at PANNA. It's only a first take--neither of us have had time to read it thoroughly--but it looks bad for MeI registration in California. The DPR documents are attached.

For those of you perhaps not used to the jargon, the MOE is the Margin of Exposure. The "safe" level of exposure will have an MOE with a value that is at least as great as the product of all uncertainty factors (in this case 300). If the MOE is less than the product of all of the uncertainty factors, then exposures are above a level of concern. MeI exposures exceed levels of concern for many different scenarios, particularly for bystanders--Karl outlines several of them below.

Susan

I've only had a moment to flip thru these documents but check this out:

When compared to the benchmark MOE of 300, there are health concerns for MeI

inhalation exposure scenarios by workers, bystanders, and residents under the proposed uses (Tables 68 and 69). Most of the acute and seasonal MOEs for workers are below this benchmark. Chronic exposure MOEs for this group are close to 300 (shallow shank applicator at 273) or higher (range from 410 to 13667). For worker bystanders, the acute MOEs are all <300, but the seasonal MOEs are at 342. For other bystanders and residents living in the application region, the acute and seasonal MOEs are all <300. The chronic MOEs for residents living in the region are also <300 for the infants and children groups, while the MOE is 333 for adults.

I don't see how DPR can approve MeI most or all of the acute and seasonal MOEs for workers and bystanders less than their target MOE.

[REDACTED]

--

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**Methyl Iodide (Iodomethane)**

**RISK CHARACTERIZATION DOCUMENT  
FOR INHALATION EXPOSURE**

**Volume I**

**Health Risk Assessment**

**CH<sub>3</sub>I**

**DPR and External Review Draft**

**Medical Toxicology Branch  
Department of Pesticide Regulation  
California Environmental Protection Agency**

**March 2009**

**CONTRIBUTORS AND ACKNOWLEDGEMENT**

**Volume I: Health Risk Assessment**

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**Volume II: Bystander and Occupational Exposure Assessment**

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**Volume III: Environmental Fate**

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**Acknowledgement**

A draft of this document has been reviewed by the Office of Environmental Health Hazard  
Assessment, California Environmental Protection Agency and the U.S. Environmental Protection  
Agency.

**Methyl Iodide (Iodomethane)**  
**RISK CHARACTERIZATION DOCUMENT**  
**FOR INHALATION EXPOSURE**

**Volume II**  
**Exposure Assessment**

**CH<sub>3</sub>I**

**DPR and External Review Draft**

**Worker Health and Safety Branch**  
**Department of Pesticide Regulation**  
**California Environmental Protection Agency**

**March 2009**

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*EXPOSURE ASSESSMENT DOCUMENT FOR PESTICIDE PRODUCTS CONTAINING  
METHYL IODIDE*

By

Roger Cochran, Staff Toxicologist (Specialist)

California Environmental Protection Agency  
Department of Pesticide Regulation  
Worker Health and Safety Branch  
Human Health Assessment Program  
1001 I Street, Box 4015  
Sacramento, California 95812

HS-1866  
March 2009

**DRAFT**

**ABSTRACT**

1  
2  
3 Methyl iodide is a new active ingredient that is being proposed as a pre-plant fumigant to  
4 control pests in soil. With the phase-out of methyl bromide use (USEPA, 1993), methyl  
5 iodide is actively being developed as an alternative in pre-plant soil fumigation. USEPA  
6 has approved the use of methyl iodide, but the chemical is not currently registered for use  
7 in California.

8  
9 The expected primary route of exposure to methyl iodide for humans is through inhalation  
10 due to the chemical's high vapor pressure. Acute (8-hour) and long-term exposures of  
11 workers and bystanders to methyl iodide were estimated using air concentrations detected  
12 in chemical-specific studies performed at super- and sub-maximal application rates.  
13 Measured air concentrations of methyl iodide were adjusted to reflect the maximal label-  
14 approved application rates. Label-required buffer zones and respiratory personal  
15 protective equipment or engineering controls for applicators were also factored in before  
16 worker and bystander exposures were calculated.

17  
18 Acute exposures from tasks performed by fumigation workers, expressed as absorbed  
19 daily dosage, ranged from 2.7 µg/kg-day for planters to 213.2 µg/kg-day for tarp  
20 monitors. Seasonal absorbed daily dosages ranged from 0.6 µg/kg-day for planters to 26.2  
21 µg/kg-day for applicators. Theoretical long-term or annual absorbed daily dosages ranged  
22 from 0.1 µg/kg-day for planters to 6.6 µg/kg-day for applicators.

23  
24 Each bystander exposure scenario is for a 40-acre field and an individual that is 152m  
25 (400 ft) from the edge of the field. Acute (8-hour) exposures arising from tasks performed  
26 by non-fumigation workers or other adult bystanders in fields at the 152 m (400 ft) label-  
27 required buffer zone near previously fumigated tarped fields, ranged from 325 µg/kg-day  
28 to 882 µg/kg-day. Potential acute (24-hr) exposures of resident bystanders to application  
29 site concentrations of methyl iodide at the 152 m (400 ft) buffer zone near 40-acre fields  
30 fumigated by different methods ranged from 278 µg/kg-day (adults) to 969 µg/kg-day  
31 (infants). Seasonal exposures of resident bystanders immediately outside the buffer zone  
32 ranged from 19 µg/kg-day (adults) to 40 µg/kg-day (infants). Theoretical, amortized  
33 annual exposure of bystanders to the potential ambient air concentrations of methyl iodide  
34 near fumigated fields ranged from 5 to 10 µg/kg-day for adults and infants, respectively.

35  
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1 **Table of Contents**  
2  
3 Contributors ..... ii  
4 List of tables ..... iii  
5 List of figures ..... v  
6  
7 I INTRODUCTION ..... 1  
8 A. Physical and Chemical Properties.....4  
9 B. Federal Regulatory History.....4  
10 C. California Regulatory History.....5  
11 D. Formulations .....5  
12 E. Labeled Uses.....6  
13 F. Label Precautions/Personal Protective Equipment .....9  
14 G. Illness Reports.....10  
15 H. Dermal Toxicity/Sensitization .....10  
16 I. Pharmacokinetics .....10  
17 J. Inhalation Uptake/Dermal Absorption.....11  
18 K. Environmental Fate.....12  
19  
20 II EXPOSURE ASSESSMENT ..... 12  
21 A. Occupational Exposure Studies .....13  
22 B. Bystander Exposures (Application Site Air Monitoring Studies).....32  
23 C. Community Exposures (Surrogate Ambient Air Concentrations).....38  
24 D. Estimation of absorbed dose .....38  
25  
26 III EXPOSURE APPRAISAL ..... 43  
27 A. Physiological Assumptions.....43  
28 B. Analytical Assumptions.....44  
29 C. Estimation of Application Site Air Concentrations .....44  
30 D. Occupational Exposures.....46  
31 E. Bystander Exposures.....47  
32  
33 IV REFERENCES .....50  
34  
35 APPENDIX I (Label Language).....57  
36 APPENDIX II (Calculation of Occupational and Bystander Exposures).....67  
37 APPENDIX III (Comparison of DPR’s Exposure Estimates with the Exposure  
38 Estimates in U.S. EPA’s Registration Eligibility documents).....71  
39

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7 California Environmental Protection Agency

8

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10 Environmental Monitoring Branch

11 Department of Pesticide Regulation

12 California Environmental Protection Agency

13

14

15

**Methyl Iodide (Iodomethane)**  
**RISK CHARACTERIZATION DOCUMENT**  
**FOR INHALATION EXPOSURE**

**Volume III**  
**Environmental Fate**

**CH<sub>3</sub>I**

**DPR and External Review Draft**

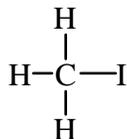
**Environmental Monitoring Branch**  
**Department of Pesticide Regulation**  
**California Environmental Protection Agency**

**March 2009**

# ENVIRONMENTAL FATE OF IODOMETHANE

Terrell Barry, Ph.D.  
Wynetta S. Kollman, Ph.D.  
Department of Pesticide Regulation  
Environmental Monitoring Branch  
P.O. Box 4015 Sacramento, California 95812-4015

## I. Chemical Description



Chemical Name (CAS)	Iodomethane
Common Name	Methyl Iodide
CAS Registry Number	74-88-4
Molecular Formula	CH <sub>3</sub> I
Molecular Weight	141.95

Iodomethane, an alkyl halide, is a colorless to pale yellow liquid with an acrid odor. It is stable at room temperature in sealed containers, non-corrosive to metals, and incompatible with strong oxidizing and reducing agents. On exposure to light, discoloration occurs due to decomposition and the liberation of free iodine. When heated to decomposition in air at 270 °C, toxic iodine vapors are emitted. Iodomethane is soluble in water, and is miscible with alcohol and ether (DPR, 2002a; DPR, 2002f; Lewis, 1991; Meister, 2004; O'Neil, 2001). Additional physical and chemical properties are summarized in Table 1. Wildlife toxicity data are summarized in Table 2.

Table 1. Physical and chemical properties of iodomethane (DPR, 2002a; DPR, 2002f; DPR, 2002h, DPR, 2002i).

Physical/Chemical Property	Value
Melting Point	-66.1 °C
Boiling Point	42 °C
Vapor Pressure	398 mmHg (25 °C)
Water Solubility	1.42 x 10 <sup>4</sup> ppm (25 °C)
Henry's Law Constant (K <sub>h</sub> )	0.0054 atm-m <sup>3</sup> /mol (25 °C)
Ozone Depletion Potential	0.0015
Atmospheric Lifetimes (τ)	5.2 days (uniform emission at all latitudes)

**From:** [Susan Kegley](#)  
**To:** [Froines, John](#); [Elinor Fanning](#); [REDACTED]  
**Subject:** [Fwd: methyl iodide]  
**Date:** Friday, July 03, 2009 5:26:52 AM  
**Attachments:** [MeI\\_pressInfoDRAFT.doc](#)  
[Attached Message Part.txt](#)

---

PROBLEMS!!! We are working on this here, but wanted to give you a heads up. Whatever you can do from that end would be welcome.

----- Original Message -----

**Subject:** methyl iodide

**Date:** Thu, 2 Jul 2009 22:41:20 -0700

**From:** Anne <[akatten@cal.net](mailto:akatten@cal.net)>

**To:** Tracey Brieger <[tracey@igc.org](mailto:tracey@igc.org)>, [skegley@pesticideresearch.com](mailto:skegley@pesticideresearch.com), Alegria De La Cruz <[Alegria@crpe-ej.org](mailto:Alegria@crpe-ej.org)>, Martha Guzman Aceves <[mguzmanaceves@crlaf.org](mailto:mguzmanaceves@crlaf.org)>, Kathryn Gilje <[kathryn@panna.org](mailto:kathryn@panna.org)>

To follow-up on today's conversations and messages, today a DPR scientist and another state scientist called to alert me that the Gov's office is now bowing to industry pressure and di [REDACTED] o register methyl iodide soon. Reportedly MAW and [REDACTED] were raked over the coals about this and got a memo [REDACTED] to register it but really don't want to register it. Industry is also up in arms that Froines will be reviewing the chloropicrin TAC report and the methyl iodide risk assessment and the Gov may try to pull something with the budget to stop these reviews. A guy in the Gov office named [REDACTED] o also was very [REDACTED] n LBAM is very involved but [REDACTED], J Moffatt and [REDACTED] are all in agreement. [REDACTED] ces said he thou [REDACTED] gistration could be completed in as little as several weeks.

I spoke briefly with [REDACTED] and he said he sent an email to J Moffatt several days [REDACTED] him know that Dr. Bergman? would be calling to set up an appt [REDACTED] th the Gov office. I just wanted to be sure you understood that [REDACTED] himself isn't working on setting up such an appt.

We need to get press but I don't know the best reporters to approach. I tried to extract some key pts from the draft letter in the attached and add a few points from DPR's draft risk assessment.

Anyhow we should really move on this Monday. I guess the legislators letter should go forward but I don't think it will help that much and a lot of times that last signature phase takes a while.

Anne

--  
Susan E. Kegley, Ph.D., Principal and CEO  
Pesticide Research Institute  
2768 Shasta Rd.  
Berkeley, CA 94708

Phone: (510) 759-9397  
Fax: (510) 848-5271  
E-mail: [skegley@pesticideresearch.com](mailto:skegley@pesticideresearch.com)  
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## **Why the California Department of Pesticide Regulation must refuse to register Methyl Iodide as a soil fumigant**

### **The Bush EPA registered this chemical for soil fumigation despite strong objections from eminent scientists**

Last year, US EPA fast-tracked registration of methyl iodide (a Proposition 65 carcinogen) for use as a soil fumigant despite serious concerns raised by a group of over 50 eminent scientists, including two Nobel Laureates. These scientists sent a letter to USEPA stating "As chemists and physicians familiar with the effects of this chemical, we are concerned that pregnant women and the fetus, children, the elderly, farm workers and other people living near application sites would be at serious risk if methyl iodide is permitted for use in agriculture." The letter goes on to explain " Because of methyl iodide's high volatility and water solubility, broad use of this chemical in agriculture will guarantee substantial releases to air, surface waters and groundwater, and will result in exposures for many people. In addition to the potential for increased cancer incidence, US EPA's own evaluation of the chemical also indicates that methyl iodide causes thyroid toxicity, permanent neurological damage, and fetal losses in experimental animals." The letter concludes, "It is astonishing that the Office of Pesticide Programs (of USEPA) is working to legalize broadcast releases of one of the more toxic chemicals used in manufacturing into the environment."

**To it's credit, California's Department of Pesticide Regulation has held off registration and has completed a draft risk assessment that reviews methyl iodide's toxicity and environmental hazards and scheduled an outside peer review of this work.** The draft risk assessment prepared by CDPR details serious health risks of methyl iodide exposure. DPR toxicologists explain that iodide is concentrated in the mammary gland so nursing infants would receive excess iodide exposure through breast milk if their mothers were exposed to methyl iodide (vol 1 pg 151). The toxicologists conclude that methyl iodide is an endocrine disrupter that can upset maternal and fetal thyroid function. The chemical causes thyroid tumors in rats and humans are assumed more sensitive to this oncogenicity. Methyl iodide air concentration estimated for human exposure under proposed use conditions will result in significant risks for workers and the general population with reduction of exposure up to 3,000 fold needed for some proposed soil fumigation use scenarios. (vol 1 Conclusion pg 155)

Controlling exposure to this degree is simply not feasible or realistic – Need to look up more info from exposure part of risk assessment..

**According to unnamed sources, representatives from the pesticide manufacturers and agricultural industry have been meeting with the Governor's office to demand faster registration of Midas, a methyl iodide and chloropicrin fumigation product, by the end of the summer. The same sources indicate that the Governor's office has by memo directed the Department of Pesticide Regulation to register methyl iodide by a certain date, apparently regardless of findings of the draft risk assessment or peer review.**

Methyl iodide is so toxic that scientists working with it take precautions to use methyl iodide in a ventilation hood in very small quantities. In contrast, if registered as a soil fumigant, methyl iodide would be applied in agricultural fields at rates up to 275 pounds per acre, and as a gas it would drift away from the application site, and expose neighboring residents and farmworkers in nearby fields. Methyl iodide is a threat to air and water supplies and has been linked to very serious illnesses including cancer, developmental toxicity, immune system and neurological problems.

### **Methyl iodide can cause cancer and other very serious illnesses**

The state of California lists methyl iodide as a carcinogen under Proposition 65. Methyl iodide reacts rapidly with DNA to cause mutations, and the presence of iodine in methyl iodide results in particularly damaging



In addition to the thyroid tumors observed in the study, large and significant changes were observed in thyroid hormone levels, which are intimately tied to metabolic disorders, immune function, and developmental disorders of the fetus leading to miscarriages in laboratory animals. Other animal studies demonstrate that exposure to methyl iodide causes respiratory tract lesions and neurological effects.

### **Methyl iodide is a threat to state groundwater supplies**

In California, thousands of drinking water wells are already contaminated with the banned, extremely toxic fumigants DBCP and EDB. We can not afford to place our scarce water resources at risk of further contamination. Since methyl iodide is very soluble in water, there is a real danger of leaching to ground water, especially if it rains soon after fumigation tarps are removed. In a recently published study, scientists from USDA and UC Riverside concluded that methyl iodide may pose a risk of groundwater contamination in vulnerable areas.

### **Growers do not need methyl iodide**

The rush to register methyl iodide has been rationalized by the upcoming withdrawal of methyl bromide from the agricultural market, as mandated by the Montreal Protocol, an international treaty to phase out production and use of ozone-depleting substances. Yet prior to the introduction of methyl iodide, growers were exploring a variety of non-fumigant methods for controlling soil pests.

03.02- Attached Message Part.txt

**From:** [Susan Kegley](#)  
**To:** [Robert Bergman](#); [Froines, John](#); [Elinor Fanning](#); [REDACTED]  
**Subject:** [Fwd: Re: methyl iodide]  
**Date:** Friday, July 03, 2009 10:06:01 AM

---

FYI, it looks like the governor thinks he CAN cancel the SRP review on the basis of the fact that all CA contracts are frozen because of budget issues. Arrgggghhh.

----- Original Message -----

**Subject:** Re: methyl iodide  
**Date:** Fri, 3 Jul 2009 16:08:21 +0000  
**From:** [mguzmanaceves@crlaf.org](mailto:mguzmanaceves@crlaf.org)  
**Reply-To:** [mguzmanaceves@crlaf.org](mailto:mguzmanaceves@crlaf.org)  
**To:** Anne Katten [akatten@cal.net](mailto:akatten@cal.net); [REDACTED]  
[skegley@pesticideresearch.com](mailto:skegley@pesticideresearch.com), Alegria De La Cruz [Alegria@crpe-ej.org](mailto:Alegria@crpe-ej.org), Kathryn Gilje [kathryn@panna.org](mailto:kathryn@panna.org)  
**References:** [33A623D8-3123-4F98-9423-8423F41B5CC2@cal.net](mailto:33A623D8-3123-4F98-9423-8423F41B5CC2@cal.net)

I spoke to maryann warmerdam and she said that they the governor is hearing from industry and that we should be getting into the governor's office on this. She also said that they had laid out a process with a scientific review and that bc that is a "contractual" process they are not allowed to do so right now bc the Governor has a freeze on state contracts. I also emailed John Moffatt and told him what I was hearing and that it was a huge mistake bc of the risks -which I laid out. W do need to meet with them and we need to get Dr. Bergman in there asap. Didnt someone volunteer to do this on the call earlier this week? Sent via BlackBerry by AT&T

-----Original Message-----

**From:** Anne [akatten@cal.net](mailto:akatten@cal.net)  
**Date:** [REDACTED]  
**To:** [REDACTED]; [skegley@pesticideresearch.com](mailto:skegley@pesticideresearch.com); Alegria De La Cruz [Alegria@crpe-ej.org](mailto:Alegria@crpe-ej.org); artha Guzman Aceves [mguzmanaceves@crlaf.org](mailto:mguzmanaceves@crlaf.org); Kathryn Gilje [kathryn@panna.org](mailto:kathryn@panna.org)  
**Subject:** methyl iodide

To follow-up on today's conversations and messages, today a DPR scientist and another state scientist called to alert me that the Govs office is now bowing to industry pressure and di [REDACTED] o register methyl iodide soon. Reportedly MAW and [REDACTED] were raked over the coals about this and got a memo [REDACTED] to register it but really don't want to register it. Industry is also up in arms that Froines will be reviewing the chloropicrin TAC report and the methyl iodide risk assessment and the Gov may try to pull something with the budget to stop these reviews. A guy in the Gov office named [REDACTED] also was very [REDACTED] n LBAM is very involved but [REDACTED] J Moffatt and [REDACTED] are all in agreement. [REDACTED] es said he thou [REDACTED] gistration could be completed in as little as several weeks.

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We need to get press but I don't know the best reporters to approach. I tried to extract some key pts from the draft letter in the attached and add a few points from DPR's draft risk assessment.

Anyhow we should really move on this Monday. I guess the legislators

letter should go forward but I don't think it will help that much and a lot of times that last signature phase takes a while.

Anne

--

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**From:** [Susan Kegley](#)  
**To:** [Froines, John](#); [Elinor Fanning](#); [REDACTED]  
**Subject:** letter from Bergman requesting a meeting  
**Date:** Friday, July 03, 2009 1:06:05 PM  
**Attachments:** [MeI\\_9\\_21\\_07c-Johnson.doc](#)

---

Hi John, Elinor and [REDACTED],

Here is what Bergman sent to the Governor's staff. They have all opened the email (and presumably read it). We're just waiting now to hear. The media machine at PAN and CPR is going into high gear on Monday morning.

I'd like to do a call, but am only available until about 2:45 your time. I'm on the east coast visiting my family (of COURSE, this is when all hell breaks loose!) and cell reception and internet access is spotty, but we can try.

Susan

----- Original Message -----

**Subject:** methyl iodide fumigant registration  
**Date:** Fri, 03 Jul 2009 12:37:10 -0700  
**From:** Robert G. Bergman <[rbergman@berkeley.edu](mailto:rbergman@berkeley.edu)>  
**To:** [susan.kennedy@gov.ca.gov](mailto:susan.kennedy@gov.ca.gov), [michael.prosio@gov.ca.gov](mailto:michael.prosio@gov.ca.gov)  
**CC:** [john.moffatt@gov.ca.gov](mailto:john.moffatt@gov.ca.gov)

Dear Ms. Kennedy and Mr. Prosio:

I am deeply concerned about the possibility that methyl iodide (iodomethane) may be registered as a new fumigant pesticide in California. I and 53 other chemists who are members of the National Academy of Sciences wrote to EPA expressing our concerns about this chemical prior to its registration and asking for a much more thorough scientific evaluation of its toxicity. This letter is attached for your information.

As chemists, my coworkers and I work with this substance in the laboratory. Alkylating agents like methyl iodide are extraordinarily well-known cancer hazards in the chemical community because of their ability to modify the chemist's own DNA, as well as the target molecule in the flask, leading to mutations that are potentially very harmful. Because of this potential toxicity, chemists who work with this material use the smallest amounts possible and take great precautions to avoid exposure. Because of methyl iodide's high volatility and water solubility, broad use of this chemical in agriculture will guarantee substantial releases to air, surface waters and groundwater, and will result in exposures for many people. In addition to the potential for increased cancer incidence, CA DPR's own evaluation of the chemical also indicates that methyl iodide causes thyroid toxicity, permanent neurological damage, and fetal losses in experimental animals.

I and several others representing the scientific community and the communities of people who would be exposed to this chemical would like to urgently request a meeting with you both to discuss the likely impacts of a decision to allow registration of methyl iodide. I am available for a meeting the following days next week:

Tuesday, July 7 (any time)  
Wednesday, July 8 (any time)  
Thursday, July 9 (any time)  
Friday, July 10 (any time)

If these times are not good for you, there are also times during the

week of July 13 that we could be available.

Please let me know if you would be able to meet soon about this very important issue.

Sincerely,

Professor Robert G. Bergman  
Gerald E. K. Branch Distinguished Professor of Chemistry  
University of California, Berkeley

--

Susan E. Kegley, Ph.D., Principal and CEO  
Pesticide Research Institute  
2768 Shasta Rd.  
Berkeley, CA 94708

Phone: (510) 759-9397  
Fax: (510) 848-5271  
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September 25, 2007

Mr. Stephen Johnson, Administrator  
United States Environmental Protection  
112 Hart Senate Office Bldg.  
Washington, DC 20510

Dear Mr. Johnson,

We are writing to urgently request your assistance in preventing the registration of methyl iodide for use as a soil fumigant. As chemists, toxicologists and physicians familiar with the effects of this chemical, we are concerned that pregnant women and the unborn fetus, children, the elderly, farm workers, and other people living near application sites would be at serious risk if methyl iodide is permitted for use in agriculture (80-275 pounds per acre).

We have several concerns about a decision that would allow indiscriminate release of methyl iodide into the environment, summarized below.

Methyl iodide is a highly reactive chemical used in some industrial processes and in research laboratories for the synthesis of new molecules. Alkylating agents like methyl iodide are extraordinarily well-known cancer hazards in the chemical community because of their ability to modify the chemist's own DNA, as well as the target molecule in the flask, leading to mutations that are potentially very harmful. Because of this potential toxicity, chemists who work with this material use the smallest amounts possible and take great precautions to avoid exposure. Because of methyl iodide's high volatility and water solubility, broad use of this chemical in agriculture will guarantee substantial releases to air, surface waters and groundwater, and will result in exposures for many people. In addition to the potential for increased cancer incidence, U.S. EPA's own evaluation of the chemical also indicates that methyl iodide causes thyroid toxicity, permanent neurological damage, and fetal losses in experimental animals. EPA's exposure assessment suggests that the Agency is willing to accept exposures at levels that may cause these effects in humans up to five percent of the time near the application site.

We are skeptical of U.S. EPA's conclusion that the high levels of exposure to methyl iodide that are likely to result from broadcast applications are "acceptable" risks. U.S. EPA has made many assumptions about toxicology and exposure in the risk assessment that have not been examined by independent scientific peer reviewers for adequacy or accuracy. Additionally, none of U.S. EPA's calculations account for the extra vulnerability of the unborn fetus and children to toxic insults. We know that developing organisms are generally more sensitive than adults, yet no additional safety factors were applied to account for this sensitivity, as is usual for most pesticides. In fact, based on results from a questionable model of how the pesticide is detoxified by the body, U.S. EPA has actually decreased the size of the safety factors that typically add some level of protection from exposures to pesticides.

Finally, we are perplexed that U.S. EPA would even consider the introduction of a chemical like methyl iodide into agricultural use. The Agency has spent a great deal of effort to reduce industrial toxic emissions from chemical manufacturing plants. It is astonishing then that the Office of Pesticide Programs is working to legalize broadcast releases of one of the more toxic chemicals used in manufacturing into the environment.

As members of the scientific community, we urge you to do whatever is possible to prevent this chemical from ever becoming a registered pesticide.

Thank you for your consideration. Please note that titles and affiliations of the signatories below are for identification only. Opinions are personal and not institutional.

Sincerely yours,



Robert G. Bergman  
Gerald E. K. Branch Distinguished Professor  
University of California, Berkeley  
Member, National Academy of Sciences



Roald Hoffmann  
Nobel Laureate, Chemistry 1981  
Frank H. T. Rhodes Professor of Humane Letters  
Cornell University  
Member, National Academy of Sciences

John B. Fenn  
Virginia Commonwealth University  
Nobel Laureate, Chemistry 2002  
Member, National Academy of Sciences

Williams S. Knowles  
Nobel Laureate, Chemistry 2001  
Member, National Academy of Sciences

Richard R. Ernst  
Professor Emeritus  
ETH Zürich  
Nobel Laureate, Chemistry 1991  
Foreign Associate, National Academy of Sciences

Stephen R. Leone  
Professor of Chemistry and Physics  
Director, Chemical Dynamics Beamline  
Lawrence Berkeley National Laboratory  
Member, National Academy of Sciences

C. Bradley Moore  
Vice President for Research  
Northwestern University  
Member, National Academy of Sciences

Jerome A. Berson  
Sterling Professor Emeritus of Chemistry  
Yale University  
Member, National Academy of Sciences

Peter Guy Wolynes  
Professor of Chemistry and Biochemistry  
University of California San Diego  
Member, National Academy of Sciences

Brian M. Hoffman  
Professor of Chemistry  
Northwestern University  
Member, National Academy of Sciences

Prof. Charles H. DePuy, Emeritus  
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Richard J. Saykally  
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University of California Berkeley  
Member, National Academy of Sciences

Clayton Heathcock  
Chief Scientist, QB3 Berkeley  
California Institute for Quantitative Biosciences  
University of California Berkeley  
Member, National Academy of Sciences

John E. Bercaw  
Centennial Professor of Chemistry  
California Institute of Technology  
Member, National Academy of Sciences

Robert J. Silbey  
Professor of Chemistry  
Massachusetts Institute of Technology  
Member, National Academy of Sciences

Peter J. Stang  
Distinguished Professor of Chemistry  
University of Utah  
Member, National Academy of Sciences

Royce W. Murray  
Kenan Professor of Chemistry  
University of North Carolina  
Member, National Academy of Sciences

Thomas C. Bruice, Research Professor in  
Chemistry & Biochemistry  
University Of California at Santa Barbara  
Member, National Academy of Sciences

Charles S. Parmenter  
Distinguished Professor of Chemistry  
Indiana University  
Member, National Academy of Sciences

Stephen J. Lippard  
Arthur Amos Noyes Professor of Chemistry  
Massachusetts Institute of Technology  
Member, National Academy of Sciences

Marvin H. Caruthers  
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Member, National Academy of Sciences

Martin Saunders  
Professor of Chemistry  
Yale University  
Member, National Academy of Sciences

James L. Dye

Bruce J. Berne  
Higgins Professor of Chemistry  
Columbia University  
Member, National Academy of Sciences

John S. Waugh  
Professor of Chemistry and Institute Professor  
Emeritus  
Massachusetts Institute of Technology  
Member, National Academy of Sciences

John D. Corbett  
Professor of Chemistry  
Distinguished Professor of  
Liberal Arts and Sciences  
Iowa State University  
Member, National Academy of Sciences

John D. Roberts  
Institute Professor of Chemistry, Emeritus  
California Institute of Tecnology  
Member, National Academy of Sciences

K.C. Nicolaou  
Aline W. and L.S. Skaggs Professor  
of Chemical Biology, and  
Darlene Shiley Chair in Chemistry and  
Distinguished Professor of Chemistry  
University of California, San Diego  
Member, National Academy of Sciences

Laura Kiessling  
Hilldale Professor of Chemistry and Laurens  
Anderson Professor of Biochemistry  
University of Wisconsin  
Member, National Academy of Sciences

R. Stephen Berry  
James Franck Distinguished Service Professor  
Emeritus  
Department of Chemistry  
The University of Chicago  
Member, National Academy of Sciences

Maurice S. Brookhart  
W. R. Kenan, Jr. Professor of Chemistry  
University of North Carolina, Chapel Hill  
Member, National Academy of Sciences

Duilio Arigoni, Professor Emeritus

University Distinguished Professor Emeritus  
Department of Chemistry  
Michigan State University  
Member, National Academy of Sciences

Jean-Michel Saveant  
Professor of Chemistry  
University of Paris  
Foreign associate, National Academy of Sciences

Jacob Bigeleisen  
Distinguished Professor Emeritus  
State University of New York, Stony Brook  
Member, National Academy of Sciences

Charles P. Casey  
Homer B. Adkins Emeritus Professor of Chemistry  
University of Wisconsin-Madison  
Member, National Academy of Sciences

Dietmar Seyferth  
Robert T. Haslam and Bradley Dewey Professor  
Emeritus  
Department of Chemistry  
Massachusetts Institute of Technology  
Member, National Academy of Sciences

Swiss Federal Institute of Technology  
Foreign Associate, National Academy of Sciences

Malcolm H. Chisholm  
Distinguished University Professor,  
Ohio State University  
Member, National Academy of Sciences

Richard N. Zare  
Marguerite Blake Wilbur Professor in Natural  
Science  
Stanford University  
Member, National Academy of Sciences

Allen J. Bard  
Norman Hackerman/Welch Regents' Chair in  
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The University of Texas at Austin  
Member, National Academy of Sciences

Harry B. Gray  
Arnold O. Beckman Professor of Chemistry  
California Institute of Technology  
Member, National Academy of Sciences

Fred W. McLafferty  
Peter J. W. Debye Professor of Chemistry,  
Emeritus  
Cornell University  
Member, National Academy of Sciences

Duilio Arigoni, Professor Emeritus  
Swiss Federal Institute of Technology  
Foreign Associate, National Academy of Sciences

Robert L. Letsinger  
Hall Professor of Chemistry Emeritus  
Northwestern University  
Member, National Academy of Sciences

Adrian Bax  
NIH Senior Scientist  
National Institute of Diabetes and Digestive and  
Kidney Diseases  
National Institutes of Health  
Member, National Academy of Sciences

Kenneth B. Wiberg  
Professor of Chemistry, Emeritus  
Yale University  
Member, National Academy of Sciences

Jerrold Meinwald  
Goldwin Smith Professor of Chemistry, Emeritus  
Cornell University  
Member, National Academy of Sciences

**From:** [Susan Kegley](#)  
**To:** [Robert Bergman](#); [Froines, John](#)  
**Subject:** Legislator opposition to MeI  
**Date:** Thursday, July 09, 2009 10:55:06 AM

---

Hi Bob and John,

Looks like this is in the works, from the Central Coast groups working on this issue.

I did a radio interview on KPFK (Los Angeles public radio) this a.m.. The Santa Cruz paper is running an article too. Still working on AP.

Susan

----- Original Message -----

**Subject:** RE: Press release

**Date:** Thu, 9 Jul 2009 10:48:47 -0700

**From:** Paul S. Towers <[paul@pesticidewatch.org](mailto:paul@pesticidewatch.org)>

**To:** [REDACTED], [REDACTED], 'susan kegley'  
<[skegley@pesticideresearch.com](mailto:skegley@pesticideresearch.com)>, [REDACTED]  
[REDACTED]

[REDACTED]

I'll respond for [REDACTED] because she is in [REDACTED] today and tomorrow and mostly out of touch. [REDACTED] talked to the reporter—which is why we got the blurb. She struggled to print anything in more depth because we didn't have a source to give her in the Governor's office. I believe [REDACTED] will pitch a longer story with new developments. Asm Monning is helping to circulate the legislator opposition letter today—so maybe that will give us something additionally newsworthy in the Monterey Bay Area.

Paul

---

**From:** Marilyn Lynds [mailto:[marilynlynds@yahoo.com](mailto:marilynlynds@yahoo.com)]

**Sent:** Thursday, July 09, 2009 10:32 AM

**To:** Paul Schramski; [REDACTED] susan kegley; [REDACTED]

**Subject:** Press release

There is a paragraph in the update section(pg 10) of the Monterey County Weekly, about our press release.

Since they had less than a day before they went to press, I am happy that they included anything.

[REDACTED] perhaps you can get a hold of your contact there so we could have a larger article in next week's paper, or the week after that.\

could someone pass this along to other people in the group that may be interested.?

Marilyn

--

Susan E. Kegley, Ph.D., Principal and CEO

Pesticide Research Institute  
2768 Shasta Rd.  
Berkeley, CA 94708

Phone: (510) 759-9397  
Fax: (510) 848-5271  
E-mail: [skegley@pesticideresearch.com](mailto:skegley@pesticideresearch.com)  
Web: <http://www.pesticideresearch.com>

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**From:** [Susan Kegley](#)  
**To:** [Robert Bergman](#); [Froines, John](#); [Elinor Fanning](#); [REDACTED]  
**Subject:** Radio interview on MeI  
**Date:** Thursday, July 09, 2009 10:56:12 AM

---

[New Dangerous Pesticide Proposed for California Strawberries - uprisingradio.org](#)

--

Susan E. Kegley, Ph.D., Principal and CEO  
Pesticide Research Institute  
2768 Shasta Rd.  
Berkeley, CA 94708

Phone: (510) 759-9397  
Fax: (510) 848-5271  
E-mail: [skegley@pesticideresearch.com](mailto:skegley@pesticideresearch.com)  
Web: <http://www.pesticideresearch.com>

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**From:** [Susan Kegley](#)  
**To:** [Robert Bergman](#); [Froines, John](#)  
**Subject:** [Fwd: RE: Monning's office]  
**Date:** Thursday, July 09, 2009 3:54:34 PM  
**Attachments:** [methyl iodide sign on letter.doc](#)

---

Hi Bob and John,

Here is the letter that Monning's office is going to be circulating for sign-ons to other legislators. Monning is meeting with the head of DPR on Monday morning--doing his due diligence.

Susan

<!--[if !supportLineBreakNewLine]-->

<!--[endif]-->

--

Susan E. Kegley, Ph.D., Principal and CEO  
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\*\*\*\*\* DRAFT LETTER\*\*\*\*\*

July 12, 2009

The Honorable Arnold Schwarzenegger  
Governor  
State Capitol  
Sacramento, CA 95814

Mary-Ann Warmerdam, Director  
California Department of Pesticide Regulation  
1001 I Street, PO Box 4015  
Sacramento, CA 95812-4015

Dear Governor Schwarzenegger and Director Warmerdam:

We are writing to express our serious concern over the possible registration of methyl iodide as a soil fumigant in California. There is overwhelming scientific evidence of potential harm from exposure to this pesticide—a chemical so toxic that scientists handling very small quantities in a laboratory typically utilize a ventilation hood. In contrast, if registered by the Department of Pesticide Regulation (DPR) as a soil fumigant, methyl iodide would be applied in agricultural fields at rates up to 175 pounds per acre. Since this volatile compound spreads as a gas, it will undoubtedly drift from any application site, contaminating neighboring residents and farm workers in nearby fields.

The United States Environmental Protection Agency (EPA) registered methyl iodide last year despite serious concerns from environmentalists, farm workers, rural residents and a group of over 50 eminent scientists, including six Nobel Laureates. These scientists sent a letter to the EPA stating, "As chemists and physicians familiar with the effects of this chemical, we are concerned that pregnant women and the fetus, children, the elderly, farm workers and other people living near application sites would be at serious risk if methyl iodide is permitted for use in agriculture." The letter goes on to explain, "Because of methyl iodide's high volatility and water solubility, broad use of this chemical in agriculture will guarantee substantial releases to air, surface waters and groundwater, and will result in exposures for many people. In addition to the potential for increased cancer incidence, EPA's own evaluation of the chemical also indicates that methyl iodide causes thyroid toxicity, permanent neurological damage, and fetal losses in experimental animals." The letter concludes, "It is astonishing that the Office of Pesticide Programs is working to legalize broadcast releases of one of the more toxic chemicals used in manufacturing into the environment."

We were pleased by The California Department of Pesticide Registration's decision to consider the possible registration of methyl iodide through an open and public process that promised to include an independent scientific review of DPR's risk assessment and ample opportunity for public input. Therefore, we were surprised to learn that your staff has quietly begun to explore the possibility of "fast tracking" the approval of methyl iodide through an abbreviated process that could to make it available for use as early as this fall. Considering the well-documented

health and environmental risks methyl iodide poses, the prospect that your staff would jettison a careful, public and scientifically-driven approach is, at best, alarming.

The draft risk assessment prepared by DPR's own staff details the serious health risks of methyl iodide exposure. DPR toxicologists point out that methyl iodide can disrupt maternal and fetal thyroid function, explaining that because iodide is concentrated in the mammary gland, California's nursing infants would receive excess iodide through breast milk if their mothers were exposed. In conclusion, the risk assessment finds that "air concentrations estimated for human exposure to [methyl iodide] under the proposed use conditions will result in significant risks for workers and the general population, with anticipated exposures up to 3,000 times the acceptable dose for some proposed soil fumigation use scenarios." (Emphasis added.)

The workers and residents in California's rural agricultural communities have too often been unnecessarily exposed to highly toxic fumigant pesticides in the name of agricultural efficiency and economic gain. We urge you to place the health and well being of our state's residents ahead of calls for expediency from the pesticide and agriculture industry. You have the opportunity to move California forward toward much safer methods of pest control. Methyl iodide has no role to play in building a secure, viable and healthy agricultural economy in the 21st Century. If you allow science and the will of the people to guide you in your decision, we trust you will arrive at the conclusion that we must prohibit the use of this dangerous chemical as a soil fumigant in our state.

Sincerely,

Mark Leno  
Senator, 3<sup>rd</sup> District

Bill Monning  
Assemblymember, 27<sup>th</sup> District

**From:** [Susan Kegley](#)  
**To:** [Froines, John](#); [Elinor Fanning](#)  
**Subject:** [Fwd: methyl iodide--possible lawsuit]  
**Date:** Monday, July 13, 2009 2:47:08 PM

---

FYI---this is what we are thinking about now. It might be the only chance of stopping this.

----- Original Message -----

**Subject:** methyl iodide--possible lawsuit  
**Date:** Mon, 13 Jul 2009 14:43:22 -0700  
**From:** Susan Kegley <[skegley@pesticideresearch.com](mailto:skegley@pesticideresearch.com)>  
**Reply-To:** [skegley@pesticideresearch.com](mailto:skegley@pesticideresearch.com)  
**Organization:** Pesticide Research Institute  
**To:** Greg Loarie <[gloarie@earthjustice.org](mailto:gloarie@earthjustice.org)>, Joshua Osborne-Klein <[josborne-klein@earthjustice.org](mailto:josborne-klein@earthjustice.org)>, Brian Hill <[bhill@panna.org](mailto:bhill@panna.org)>, Kathryn Gilje <[kathryn@panna.org](mailto:kathryn@panna.org)>, steve Scholl-Buckwald <[steveatpan@panna.org](mailto:steveatpan@panna.org)>

Hi [REDACTED],

PAN and EJ had spoken earlier about the possibility of a lawsuit against

[REDACTED]

[REDACTED]

[REDACTED]

Susan

[REDACTED]

--  
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**From:** [Susan Kegley](#)  
**To:** [Froines, John](#); [Elinor Fanning](#); [REDACTED]  
**Subject:** [Fwd: Re: Today's MeI call notes (next mtg 7/22, 9am)]  
**Date:** Thursday, July 16, 2009 11:28:25 AM

---

FYI, news from Sacramento.

----- Original Message -----

**Date:** Wed, 15 Jul 2009 14:01:38 -0700

Hi Everyone,

Sorry I missed the call. xxx and I met with Linda Adams yesterday and Chris Riordan from DPR was also there. Essentially, Chris said that they had suspended the contract with Dr. Froines/UCLA to conduct the peer review and they did not know if they would be able to continue with that contract. Assuming they did not, Chris said that they would continue with their internal review, which includes OEHHA's review and make a final determination by the end of next month. Linda was not aware that they had suspended the contract and seemed a bit peeved about it. Which is good. Linda also said when we started our statement that 'we are hearing that the Governor wants to register MeI'- she quickly interrupted and said- the governor does not want to register MeI. So although that was good to hear, she seems very out of the loop. Incidentally, [REDACTED] is still around bc I saw him leaving the governor's office as I was walking in to see if Moffatt would give me some time.

--  
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**From:** [Susan Kegley](mailto:Susan.Kegley@pesticideresearch.com)  
**To:** [efanning@ucla.edu](mailto:efanning@ucla.edu)  
**Cc:** [Froines, John](mailto:Froines,John)  
**Subject:** Re: [Fwd: methyl iodide--possible lawsuit]  
**Date:** Thursday, July 16, 2009 11:34:13 AM

---

Here's an update on the Monning/DPR meeting:

Quick update: Asm. Monning and staff just got back from a meeting with DPR. DPR (Chris Reardon) is saying that the Governor is hoping to have a summary decision about methyl iodide within the next 2 weeks (a memo or something, maybe?). They plan to make a decision by year's end to actually approve it for use, though with industry pressure, they acknowledge it will likely be Fall (sounds like the Guv's target). Monning's office stressed the need for transparency on the issue. And Asm. Monning will join Sen. Leno in circulating the legislator sign-on letter more seriously by weeks end.

Elinor Fanning wrote:

Susan, do you have any update on the situation in the gov's office?

What happened with Monning et al's letter, and his meeting with MAW?

John talked with Bergman last week, and we want Bergman to know that we would support him in any way possible going to the governor, etc. but that we have to remain behind the scenes at the moment. John has to protect his position as chair of the review committee for the time being.

of course, if a backdoor registration happens, we'll step up in protest.

-----Original Message-----

**From:** Susan Kegley [<mailto:skegley@pesticideresearch.com>]  
**Sent:** Monday, July 13, 2009 2:47 PM  
**To:** John Froines; Elinor Fanning  
**Subject:** [Fwd: methyl iodide--possible lawsuit]

FYI---this is what we are thinking about now. It might be the only chance of stopping this.

----- Original Message -----

**Subject:** methyl iodide--possible lawsuit  
**Date:** Mon, 13 Jul 2009 14:43:22 -0700  
**From:** Susan Kegley <[skegley@pesticideresearch.com](mailto:skegley@pesticideresearch.com)>  
**Reply-To:** [skegley@pesticideresearch.com](mailto:skegley@pesticideresearch.com)  
**Organization:** Pesticide Research Institute  
**To:** Greg Loarie <[gloarie@earthjustice.org](mailto:gloarie@earthjustice.org)>, Joshua Osborne-Klein <[josborne-klein@earthjustice.org](mailto:josborne-klein@earthjustice.org)>, Brian Hill <[bhill@panna.org](mailto:bhill@panna.org)>, Kathryn Gilje <[kathryn@panna.org](mailto:kathryn@panna.org)>, Steve Scholl-Buckwald <[steveatpan@panna.org](mailto:steveatpan@panna.org)>

Hi [REDACTED]  
[REDACTED]  
[REDACTED]

[REDACTED]

[REDACTED]

Susan

[REDACTED]

--  
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**From:** [Susan Kegley](#)  
**To:** [Elinor Fanning](#); [Froines, John](#)  
**Subject:** DPR response to petition  
**Date:** Thursday, July 16, 2009 11:37:10 AM

---

FYI, This is DPR's automated response to a petition the United Farm Workers circulated about MeI. They SAY

"DPR upholds its position that a full, valid and transparent scientific review be conducted before making a decision on the registration of methyl iodide."

Kind of encouraging, but it doesn't match the other things we're hearing. Note that she doesn't say "peer-review", just "scientific review". That could be an internal review that DPR does.

Susan

----- Original Message -----

**Subject:**Re: Don't fast track methyl iodide (Methyl Iodide)  
**Date:**Thu, 16 Jul 2009 08:56:36 -0700  
**From:**Mary-Ann Warmerdam <[mwarmerdam@cdpr.ca.gov](mailto:mwarmerdam@cdpr.ca.gov)>  
**Reply-To:**[mwarmerdam@cdpr.ca.gov](mailto:mwarmerdam@cdpr.ca.gov)  
**To:**<[skegley@pesticideresearch.com](mailto:skegley@pesticideresearch.com)>

Pesticides must be registered by the California Department of Pesticide Regulation (DPR) before they can be sold or used in California. This process includes scientific evaluation of the hazards of pesticides to ensure they can be used safely without harming people and the environment. On occasion, DPR chooses to conduct a full risk assessment of a new active ingredient before registration--this was the case with methyl iodide.

DPR has completed its draft methyl iodide risk assessment which, in what is standard procedure, has undergone peer review by the Office of Environmental Health Hazard Assessment (another office at the California Environmental Protection Agency) and the U.S. Environmental Protection Agency. DPR is currently revising the document based on peer review comments received.

Although not required by law, our plans then call for the risk assessment to go through an external peer review, including a provision for public comment. Based on comments from these reviews, DPR will make changes as appropriate.

Because of the California budget crisis, the external peer review is on hold. DPR upholds its position that a full, valid and transparent scientific review be conducted before making a decision on the registration of methyl iodide.

Thank you for writing.

Mary-Ann Warmerdam, Director  
Department of Pesticide Regulation

>>> skegley 07/15/09 13:07 >>>

Governor Arnold Schwarzenegger  
State Capitol Building  
1303 10th Street  
Sacramento, CA 95814-4905

Dear Governor Schwarzenegger,

I am writing to urge you to allow science and public process to take their due course in the review of methyl iodide, a dangerous new fumigant pesticide.

California's Department of Pesticide Regulation (DPR) is currently weighing the public health risks associated with registering methyl iodide as a soil fumigant in California. DPR's plans include convening an independent Scientific Review Panel -- a critical step to ensure scientific integrity of the decision.

Methyl iodide is a known carcinogen and prone to drift. It has no appropriate place as a new chemical in California agriculture?one of the largest agricultural states in the U.S.

Bush's USEPA registered this chemical last year despite serious concerns from environmentalists, farm workers, rural residents and a group of over 50 eminent scientists, including five Nobel Laureates. These scientists expressed profound concern for the health of people living near methyl iodide application sites--especially pregnant women, farm workers, children and the elderly.

However, this is no excuse for California to bow to the pressure of agribusiness and introduce a new pesticide to our environment. There is overwhelming evidence of potential harm from exposure to this pesticide--a chemical so toxic that scientists take precautions to use methyl iodide in a ventilation hood in very small quantities. In contrast, if registered as a soil fumigant, methyl iodide would be applied in agricultural fields at rates up to 175 pounds per acre. Since fumigants spread as a gas, they drift from the application site, poisoning neighboring residents and farm workers in nearby fields.

California needs to follow the example of New York where Methyl iodide's manufacturer, Arysta, withdrew its application for registration after state officials raised concerns about groundwater contamination and potential exposure for workers, bystanders and nearby residents--especially children, pregnant women and the elderly.

Methyl iodide is a clear threat to public health, could contaminate groundwater, and is not needed to build a secure, viable and healthy agricultural economy in California. We strongly urge you to not fast-track the registration of methyl iodide. Instead allow DPR's process that incorporates independent scientific review and public input to proceed as planned.

Thank you.

Sincerely,  
Susan Kegley  
2768 Shasta Rd  
Berkeley,, CA 94708

cc:  
Director, CA Department of Pesticide Regulations MaryAnn Warmerdam

--  
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**From:** [Susan Kegley](#)  
**To:** [Froines, John](#); [Elinor Fanning](#); [Robert Bergman](#)  
**Subject:** [Fwd: leg letter]  
**Date:** Wednesday, July 29, 2009 2:02:14 PM  
**Attachments:** [Monning&LenoAsmLetter.pdf](#)

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FYI, re the legislator letter. This is about one-third of the total members of the Assembly. Mark Leno's office is still working on the senate side to get signatures. It looks like the hearing sponsored by Assemblymember Bill Monning is shaping up for August 19, although there is some talk of putting it off until September---we'll know more by tomorrow. Monning's office has asked us for a list of people we would like to see invited to the hearing. [REDACTED], you are on the list, as well as [REDACTED]. [REDACTED]. If you have any other suggestions of people to invite, let me know ASAP.

Susan

All,

Please find the final attached letter to Mary-Ann Warmerdam and the Governor regarding methyl iodide, authored by Assemblymember Monning and Senator Leno.

The final count is 25 Assembly signatories, including: Ammiano, Blumenfield, Brownley, Carter, Chesbro, De LaTorre, De Leon, Fong, Feuer, Furutani, Jones, Hill, Lieu, Huffman, J. Perez, W.M. Perez, Portantino, Ma, Nava, Ruskin, Skinner, Swanson, Torlakson, Torres, and Yamada.

Paul

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TRANSPORTATION  
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MATERIALS  
JOINT LEGISLATIVE AUDIT COMMITTEE  
JUDICIARY

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# Assembly California Legislature



**WILLIAM W. MONNING**  
ASSEMBLYMEMBER, TWENTY-SEVENTH DISTRICT

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FAX (831) 425-2570

99 PACIFIC STREET, SUITE 555-D  
MONTEREY, CA 93940  
(831) 649-2832  
(831) 649-2935

SANTA CLARA COUNTY DIRECT LINE  
(408) 782-0647

July 27, 2009

The Honorable Arnold Schwarzenegger  
Governor  
State Capitol  
Sacramento, CA 95814

Mary-Ann Warmerdam, Director  
California Department of Pesticide Regulation  
1001 I Street, PO Box 4015  
Sacramento, CA 95812-4015

Dear Governor Schwarzenegger and Director Warmerdam:

We are writing to express our serious concern over the possible registration of methyl iodide as a soil fumigant in California.

While we recognize the challenges faced by members of the agricultural community who have relied on methyl bromide as a soil fumigant, we believe it is critical to find both efficacious and safe alternatives. In past years, the United States government has authorized exemptions from the requirements of the Montreal Protocols to limit and eventually eliminate the use of ozone-depleting chemicals including methyl bromide. While we believe it is important to honor and enforce the objectives of the Montreal Protocols, the identification and selection of alternatives must be based on a balancing test that measures potential health and environmental risks. While recognizing the economic and production interests of growers of certain crops, we strongly encourage the continued exploration of safe alternatives.

With respect to the proposed registration of methyl iodide, there is overwhelming scientific evidence of potential harm from exposure to this chemical—a chemical so toxic that scientists handling very small quantities in a laboratory typically utilize a ventilation hood. In contrast, if registered by the Department of Pesticide Regulation (DPR) as a soil fumigant, methyl iodide would be applied in agricultural fields at rates up to 175 pounds per acre. Since this volatile compound spreads as a gas, there is a high probability that it will drift from application sites, contaminating neighboring residents and farm workers in nearby fields.

The United States Environmental Protection Agency (EPA) permitted the use of methyl iodide last year despite the serious concerns of environmentalists, farm workers, rural residents and a group of over 50 eminent scientists, including five Nobel Laureates. These scientists sent a letter to the EPA stating, "As chemists and physicians familiar with the effects of this chemical, we are concerned that pregnant women and the fetus, children, the elderly, farm workers and other

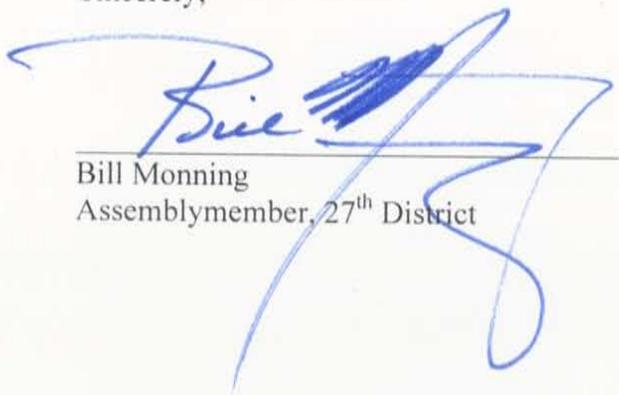
people living near application sites would be at serious risk if methyl iodide is permitted for use in agriculture." The letter goes on to explain, "Because of methyl iodide's high volatility and water solubility, broad use of this chemical in agriculture will guarantee substantial releases to air, surface waters and groundwater, and will result in exposures for many people. In addition to the potential for increased cancer incidence, EPA's own evaluation of the chemical also indicates that methyl iodide causes thyroid toxicity, permanent neurological damage, and fetal losses in experimental animals." The letter concludes, "It is astonishing that the Office of Pesticide Programs is working to legalize broadcast releases of one of the more toxic chemicals used in manufacturing into the environment."

We were pleased by the California Department of Pesticide Regulation's decision to consider the registration of methyl iodide through an open and public process that promised to include an independent scientific review of DPR's risk assessment and ample opportunity for public input. Therefore, we were surprised to learn that your administration has begun to explore the possibility of "fast tracking" the approval of methyl iodide through an abbreviated process that could make it available for use as early as this fall. Considering the well-documented health and environmental risks methyl iodide poses, the prospect that your administration would jettison a careful, public and scientifically-driven approach is, at best, alarming.

The draft risk assessment prepared by DPR's own staff details the serious health risks of methyl iodide exposure. DPR toxicologists point out that methyl iodide can disrupt maternal and fetal thyroid function, explaining that because iodide is concentrated in the mammary gland, California's nursing infants would receive excess iodide through breast milk if their mothers were exposed. In conclusion, the risk assessment finds that "air concentrations estimated for human exposure to [methyl iodide] under the proposed use conditions will result in significant risks for workers and the general population, with anticipated exposures up to 3,000 times the acceptable dose for some proposed soil fumigation use scenarios." (Emphasis added.)

The workers and residents of California's rural agricultural communities have too often been unnecessarily exposed to highly toxic pesticides in the name of agricultural efficiency and economic gain. We urge you to place the health and well being of our state's residents ahead of calls for expediency from the pesticide and agriculture industry. You have the opportunity to move California forward toward much safer methods of pest control. We strongly believe that methyl iodide has no role to play in building a secure, viable and healthy agricultural economy in the 21<sup>st</sup> Century.

Sincerely,



Bill Monning  
Assemblymember, 27<sup>th</sup> District



Mark Leno  
Senator, 3<sup>rd</sup> District

Paul Fong

Signature

PAUL FONG

Printed Name

22ND

Assembly District

Tom Ammiaro

Signature

TOM AMMIARO

Printed Name

13

Assembly District

Dave Jones

Signature

DAVE JONES

Printed Name

09

Assembly District

Nancy Skinner

Signature

Nancy SKINNER

Printed Name

14

Assembly District

Bob Blumentield

Signature

Bob Blumentield

Printed Name

40

Assembly District

Jerry Hill

Signature

Jerry Hill

Printed Name

19<sup>th</sup>

Assembly District



Signature

Norma J. Torres

Printed Name

61

Assembly District



Signature

Pedro NAVA

Printed Name

35

Assembly District



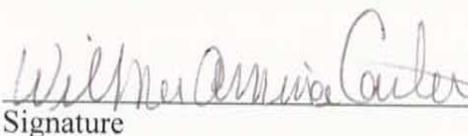
Signature

Jared Huffman

Printed Name

6<sup>th</sup>

Assembly District



Signature

Wilmer Amina Carter

Printed Name

62<sup>nd</sup>

Assembly District



Signature

Tom TORLAKSON

Printed Name

11<sup>th</sup>

Assembly District



Signature

Ted Lieu

Printed Name

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Assembly District

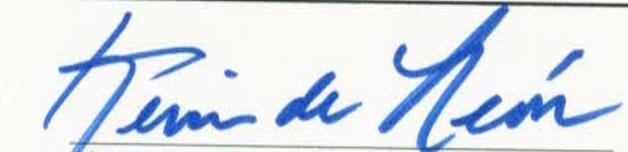
  
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John A. Pérez  
Printed Name

46  
Assembly District

  
Signature  
Sandor R. Swanson  
Printed Name

16<sup>th</sup>  
Assembly District

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Signature  
Kevin de León  
Printed Name

45<sup>th</sup>  
Assembly District

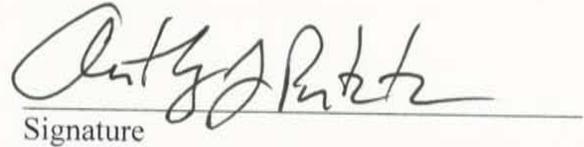
  
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Hector De La Torre  
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Signature  
Wesley Chess  
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1<sup>st</sup>  
Assembly District

  
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Anthony Portantino  
Printed Name

44  
Assembly District



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Mike Fener

Printed Name

42<sup>0</sup>

Assembly District



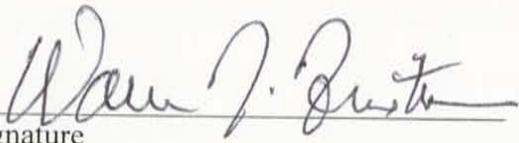
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IRA RUSKIN

Printed Name

21

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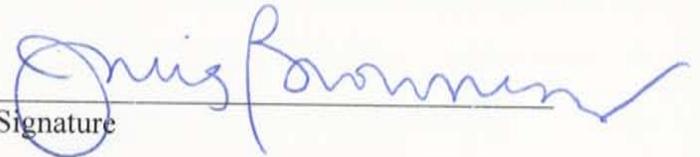
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WARREN T. FURUTANI

Printed Name

53<sup>0</sup> AD

Assembly District



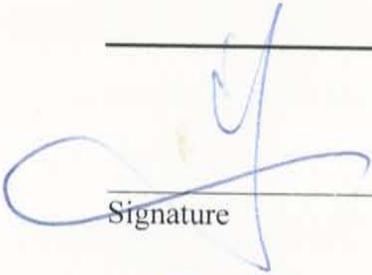
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JULIA BROWNLEY

Printed Name

41

Assembly District



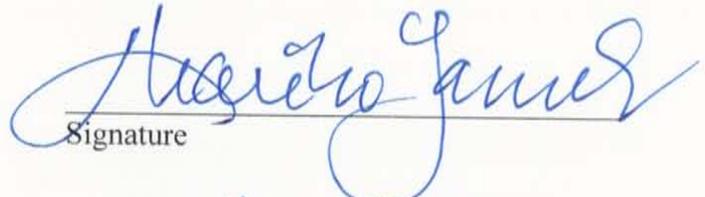
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FIONA MA

Printed Name

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MARIKO YAMADA

Printed Name

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V. Manuel Perez  
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V. Manuel Perez  
Printed Name

80<sup>th</sup> AD  
Assembly District

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**From:** [Susan Kegley](#)  
**To:** [undisclosed-recipients:](#)  
**Subject:** Good news from DPR--Scientific Review will proceed  
**Date:** Thursday, July 30, 2009 5:49:21 PM

---

FYI. Good news.

Media Contact: Lea Brooks  
916-445-3974 [lbrooks@cdpr.ca.gov](mailto:lbrooks@cdpr.ca.gov)

July 29, 2009 (09-09)  
**FOR IMMEDIATE RELEASE**

## **Methyl Iodide Risk Assessment Will Undergo External Review**

SACRAMENTO — The Department of Pesticide Regulation's draft risk assessment for the fumigant methyl iodide will undergo an external peer review as planned, DPR Director Mary-Ann Warmerdam announced today. The intent of a risk assessment is to determine potential risks to human health and the environment and the circumstances under which a product can be used if it is registered.

"Although an external peer review is not required by law, we want to confirm that our draft risk assessment of methyl iodide is based on sound science," she said. "The risk assessment will serve as the basis for our decision on whether methyl iodide should be registered in California."

Because of budget uncertainties, there had been concern that various projects might have to be delayed. With resolution of the budget, DPR is continuing to move forward with the external peer review process.

Following standard procedure, DPR's draft methyl iodide risk assessment has already undergone peer review by the Office of Environmental Health Hazard Assessment, also part of the California Environmental Protection Agency, and the U.S. Environmental Protection Agency (U.S. EPA). DPR is reviewing the comments received and will revise the document as appropriate before the external review begins.

The external review will be spearheaded by John Froines, Ph.D., director of the Center for Occupational and Environmental Health at the University of California, Los Angeles. He has convened a panel of eight nationally and internationally renowned experts in various scientific fields to evaluate DPR's risk assessment of methyl iodide.

The panel will hold a workshop Sept. 24-25 that will be open to the public at a Sacramento location to be announced. The first day will be devoted to presentations by state scientists. The second day will provide opportunity for public comments.

Methyl iodide is among replacements being considered for methyl bromide, another fumigant. Methyl bromide is being phased out as part of the Montreal Protocol, an international treaty initially signed in 1987 to protect the ozone layer. Methyl iodide has been registered by U.S. EPA and is being used in other states.

Pesticides must be registered by DPR before they can be sold or used in California. "DPR will not register any pesticide unless we can determine it can be used safely,"

Warmerdam said.

This process includes scientific evaluation of the hazards of pesticides to ensure they can be used safely without harming people and the environment. On occasion, DPR chooses to conduct a full risk assessment of a new active ingredient before registration - this was the case with methyl iodide.

For additional information about the risk assessment process, please review this fact sheet on DPR's Web site at:

<http://www.cdpr.ca.gov/docs/risk/riskassessment.htm>.

One of six departments and boards within the California Environmental Protection Agency, DPR regulates the registration, sale and use of pesticides to protect people and the environment. Additional information about DPR is posted at

[www.cdpr.ca.gov](http://www.cdpr.ca.gov).

**From:** [Susan Kegley](#)  
**To:** [Froines, John](#); [Elinor Fanning](#); [Robert Bergman](#)  
**Subject:** hearing sponsored by Assembly Bill Monning, Aug. 19  
**Date:** Tuesday, August 04, 2009 3:36:29 PM

---

Hi Bob and John,

Monning's staff has asked us to develop a list of invitees to the Aug. 19 hearing on methyl iodide. Here is the draft list of invitees and draft questions to be asked of the individuals. Please take a look and see if you would like to add or edit any questions, particularly those questions aimed at you. Send all edits to me and I will incorporate them.

Bob, I know you can't be there, but your feedback is still welcome.

Susan

### **Scientific/Technical**

Professor John Froines, UCLA, [jfroines@ucla.edu](mailto:jfroines@ucla.edu)

Professor Robert Bergman, UC Berkeley, [REDACTED]

>From DPR: One of the principal authors of DPR's Volume I, the Human Health Risk Assessment (Dr. Nu-May (Ruby) Reed or Dr. Lori Lim)

>From OEHHA: One of the principal OEHHA reviewers of Volume I, the Human Health Risk Assessment

Ms. Anne Katten, Worker Health and Safety Specialist, [REDACTED]

Professor Robert Spear, UC Berkeley, **need email**

Dr. Susan Kegley, Chemist and Consulting Scientist, PANNA,  
[skegley@pesticideresearch.com](mailto:skegley@pesticideresearch.com)

### **Organic Growers**

Jim Cochran, organic strawberry grower, [REDACTED]

CCOF, Claudia Reid, Policy and Program Director, [claudia@ccof.org](mailto:claudia@ccof.org)

Agriculture and Land-Based Training Organization (ALBA), **Brett (need contact info and last name)**

### **Worker Advocates**

Lupe Martinez, California Rural Legal Assistance, [REDACTED]

### **Community Members**

Marilyn Lynds, Moss Landing, [REDACTED]

Glen Chase, Santa Cruz, [REDACTED]

### **First draft of questions to ask the panel:**

For Professor Froines:

\*Tell us why you think this scientific peer review process is important.

\*What exactly will the SRP do that is different than what DPR and EPA have already done?

### **For Professor Bergman:**

\*You took the lead on sending a letter to US EPA from yourself and fellow National Academy of Sciences members expressing concern about the potential use of methyl iodide as a pesticide. Why? What are your concerns about this chemical?

**For the DPR toxicologist:**

- \* From your risk assessment, methyl iodide appears to be toxic to the thyroid, the developing fetus, and the nervous system. There are also some concerns about cancer, since methyl iodide is on the Prop 65 list of carcinogens. Please tell us more about methyl iodide's effects in these areas.
- \* With normal use patterns, are people likely to be exposed to methyl iodide at levels high enough to exceed DPR's levels of concern? Who would be exposed the most?
- \* What might be the potential disease or illness outcomes in humans?
- \* In broad strokes and for the layperson, how does DPR's risk assessment differ from US EPA's?

**For the OEHHA reviewer:**

- \* Please tell us more about the cancer-causing potential of this chemical. When was it listed under Proposition 65? What kinds of cancer did it cause in the animal studies?

**For Dr. Susan Kegley:**

- \* You have done air monitoring for fumigant pesticides in the Moss Landing community, an area where methyl iodide is likely to be used if approved. What are your concerns about methyl iodide and the potential for community exposures?
- \* Do you have concerns about water or other environmental contamination?

**For Marilyn Lynds:**

- \* You live in Moss Landing. What are your concerns about this chemical being used near your home?
- \* Do others in your community share your concerns?

**For Ms. Anne Katten (or Prof. Robert Spear, UC Berkeley)**

- \* Ms. Katten, you are a worker health and safety specialist. What are your concerns about this chemical in regards to worker health?
- \* What might be the potential disease or illness outcomes for workers?
- \* Are there any areas where you feel DPR may have underestimated exposure or risk to workers in their risk assessment?

**For Mr. Lupe Martinez:**

- \* Mr. Martinez, from your experience working with farm workers in the community, what are the specific concerns for this group?
- \* Why is this an issue? Aren't workers given protective gear?

**For the organic strawberry grower:**

- \* You grow strawberries organically, using no fumigants. How do you do it? What methods do you use to get rid of the pests that methyl iodide would be targeting?
- \* What are the barriers to using these methods compared to using fumigants like methyl iodide?
- \* What type of support would help growers move to fumigant-free farming?

--  
Susan E. Kegley, Ph.D., Principal and CEO  
Pesticide Research Institute  
2768 Shasta Rd.  
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**From:** [Susan Kegley](#)  
**To:** [Froines, John](#)  
**Subject:** agenda to date  
**Date:** Monday, August 17, 2009 12:41:18 PM  
**Attachments:** [Agenda-SK-8-13-09.rtf](#)

---

draft attached, FYI. There have been a few changes since then, but I don't have the latest version. I'll call later in the day.

--

Susan E. Kegley, Ph.D., Principal and CEO  
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## Informational Hearing

### "Methyl Iodide: Does Approval Threaten California Workers and Others?"

#### AGENDA

#### I. Welcome and Introductions

- Assemblymember Bill Monning
- Other Assemblymembers

#### II. Overview of Department of Pesticide Regulation Registration and External Peer Review Processes

- Anne Downs, Chief Legislative Analyst, Department of Pesticide Regulation

#### III. Scientific Concerns with Methyl Iodide

- ~~Neil Schore, Ph.D., Professor, Department of Chemistry, University of California at Davis~~ ← [REDACTED]
- ~~Susan Kegley, Ph.D., Chemist and Consulting Scientist, Pesticide Action Network North America~~
- ~~Robert C. Spear, Ph.D., Professor of Environmental Health, School of Public Health, University of California at Berkeley~~
- Kathleen Collins, Ph.D., Professor, Division of Biochemistry and Molecular Biology, Department of Molecular and Cell Biology, University of California at Berkeley
- ~~Robert C. Spear, Ph.D., Professor of Environmental Health, School of Public Health, University of California at Berkeley~~ ← [REDACTED]
- ~~Amy D. Kyle, Ph.D., M.P.H., Associate Adjunct Professor, Environmental Health Sciences, School of Public Health, University of California at Berkeley~~
- Anne Katten, M.S., Worker Health and Safety Specialist, California Rural Legal Assistance Foundation
- ~~Dr. Susan Kegley, Chemist and Consulting Scientist, Pesticide Action Network North America~~ ← [REDACTED]

#### IV. Worker Advocate Perspectives

- Martha Guzman Aceves, California Rural Legal Assistance Foundation
- ~~Lupe Martinez~~Gustavo Aguirre, Center on Race, Poverty and the Environment
- *Others?*

#### V. Manufacturer Industry Perspective

- Bill Lewis, President and CEO, Arysta LifeScience North America, LLC

#### VI. Agriculture Industry Perspectives

- Robert Dolezal, Executive Vice President, California Association of Nurseries and Garden Centers
- Manuel Cunha, President, Nisei Farmers League
- Dave Puglia, Senior Vice President, Western Growers

#### VII. ~~Potential~~ Alternatives to Methyl Iodide

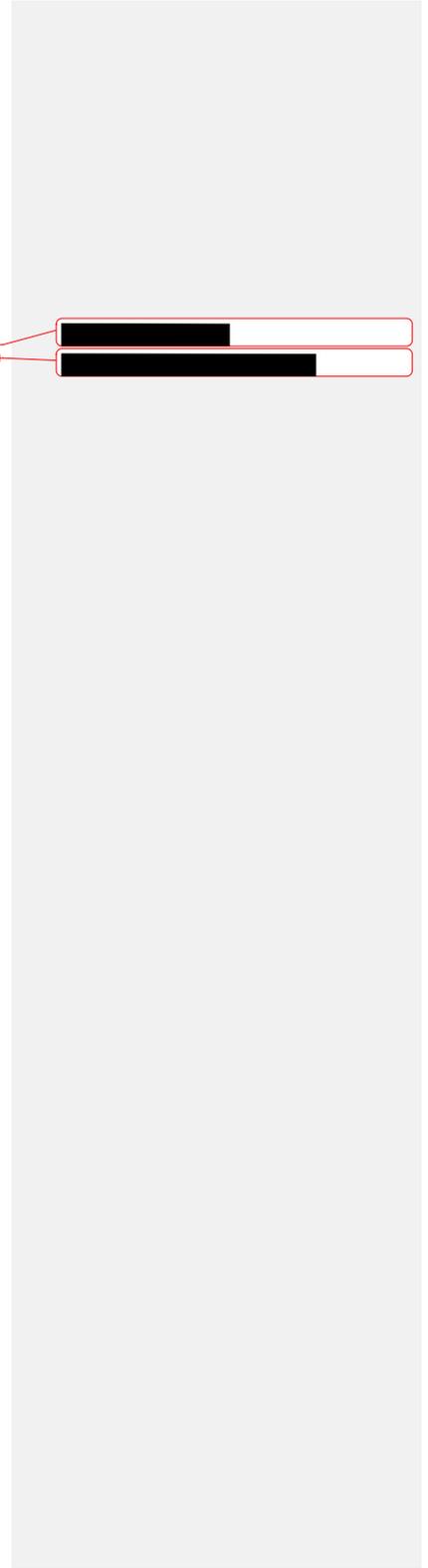
- Jim Cochran, Swanton Berry Farms
- ~~Claudia Reid, Policy and Program Director, California Certified Organic Farmers~~
- ~~Brett Malone, Agriculture and Land-Based Training Organization~~
- Others here—not finalized yet

**VIII. Local Community Member Perspectives**

- Marilyn Lynds, Resident of Moss Landing
- Statement from Lynda Uvari, Deborah Bechtel, and Mary Haffner, Ventura

**IX. Public Comment**

**X. Closing Remarks**



**From:** [Susan Kegley](#)  
**To:** [Froines, John](#)  
**Subject:** Re: agenda to date  
**Date:** Monday, August 17, 2009 6:40:34 PM

---

Hi John,

Ben Ebbink is the contact in Monning's office. His email is

[Benjamin.Ebbink@asm.ca.gov](mailto:Benjamin.Ebbink@asm.ca.gov)

*Ben Ebbink, Chief Consultant*

*Assembly Committee on Labor and Employment*

*(916) 319-2091*

*(916) 319-2191 fax*

*Susan*

John Froines wrote:

If I decide to attend, even if in the audience, I should talk to someone in the legislative office. Do you have a name and phone number. I could be available as a resource.  
John

-----Original Message-----

From: Susan Kegley [<mailto:skegley@pesticideresearch.com>]

Sent: Monday, August 17, 2009 12:41 PM

To: John Froines

Subject: agenda to date

draft attached, FYI. There have been a few changes since then, but I don't have the latest version. I'll call later in the day.

--

Susan E. Kegley, Ph.D., Principal and CEO  
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**From:** [Susan Kegley](#)  
**To:** [Froines, John](#)  
**Subject:** PAN comment letter on EPA's MeI risk assessment, Jan 2006  
**Date:** Thursday, August 20, 2009 2:42:59 PM  
**Attachments:** [PANNATechCommMeI-FINAL2.pdf](#)

---

attached. The first six pages provide a summary. There's not much I would change, except maybe to re-think the mortality of the rats in the cancer study.

Susan

--

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February 21<sup>st</sup>, 2006



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#### Networking Council

**David Bennett**  
Canadian Labour Congress

**Neva Hassanein**  
University of Montana  
Environmental Studies Program

**Rod MacRae**  
Food Policy Consulting

**Janet May**  
Toronto Environmental Alliance

**Tirso Moreno**  
The Farmworker Association  
of Florida, Inc.

**Claudio Torres Nachón**  
Centro de Derecho Ambiental e  
Integración Económica del Sur

**Sharyle Patton**  
Commonwealth Health and  
Environment Program

**Anna María Ruiz Díaz**  
Red de Permacultura México

**Bryony Schwan**  
Women's Voices for the Earth

**Lucy Sharratt**  
Polaris Institute

**Gregg Small**  
Washington Toxics Coalition

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#### Co-Directors

Monica Moore  
Stephen Scholl-Buckwald

Re: Comments on the Methyl Iodide Preliminary Risk Assessment

Ms. Mary L. Waller, Product Manger  
Registration Division (7505C)  
Office of Pesticide Programs  
Environmental Protection Agency  
1200 Pennsylvania Av NW  
Washington, DC 20460-0001  
(703)308-9354  
(703)308-1825(fax)  
waller.mary@epa.gov

Dear Ms. Waller:

This letter and the attachment that follows are a submission to docket:

Iodomethane Risk Assessment, EPA-HQ-OPP-2005-0252

These comments are submitted by Pesticide Action Network North America, California Rural Legal Assistance Foundation, Northwest Coalition for Alternatives to Pesticides, Center for Environmental Health, Alaska Community Action on Toxics and The Endocrine Disruptor Exchange, Inc. Thank you for the opportunity to comment on this risk assessment.

Our comments on the methyl iodide risk assessment fall into the following general areas:

1. Data Quality and Toxicology Assessment
2. Bystander Exposure Assessment
3. Occupational Exposure Assessment
4. Fumigant Usage, Need, and Alternatives

Each area has a corresponding section in the attachment that follows. Because of the diversity of expertise required to write each section, the sections have separate leads. The authors for Section 1 are Susan Kegley, Ph.D., Senior Scientist, PANNA and Michael J. DiBartolomeis, PhD, DABT, Consulting Toxicologist, PANNA. For Section 2, Brian R. Hill, PhD, Staff Scientist, PANNA. For Section 3, Anne Katten, MPH, Pesticide and Work Safety Specialist, California Rural Legal Assistance Foundation (CRLAF). For Section 4, Katherine Mills, Assistant Scientist, PANNA and Kathryn Gilje, Campaigns Department Director. Questions or requests for clarifications can be directed to the respective section leads via PANNA, (415) 981-1771, and CRLAF, (916) 446-7904.

What follows are highlights of the respective sections.

**From:** [Susan Kegley](#)  
**To:** [Robert Bergman](#); [Roald Hoffmann](#); [Froines, John](#); [Elinor Fanning](#)  
**Subject:** [Fwd: Re: Journalist inquiry from Nature - methyl iodide]  
**Date:** Thursday, August 27, 2009 11:42:37 AM

---

I thought you all might be interested in Kathy Collins' response to the Nature journalist. She said it would be OK to forward to you all. Perhaps some of this will end up in the Nature article.

----- Original Message -----

**Subject:** Re: Journalist inquiry from Nature - methyl iodide  
**Date:** Wed, 26 Aug 2009 20:59:15 -0700  
**From:** Kathleen Collins <[kcollins@berkeley.edu](mailto:kcollins@berkeley.edu)>  
**To:** [REDACTED]  
**CC:** [spear@berkeley.edu](mailto:spear@berkeley.edu), [skegley@pesticideresearch.com](mailto:skegley@pesticideresearch.com),  
[schore@chem.ucdavis.edu](mailto:schore@chem.ucdavis.edu)

**References:** [REDACTED]

Hello [REDACTED],

Dr. Kegley has accumulated impressive research relevant to agricultural use of methyl iodide (MeI), and as chemists she and Neil Shore would have the most direct experience handling it. My expertise is in chromosome biology (as you could figure out from my Nature journal publications), so I was testifying about MeI toxicity and carcinogenicity as a potent DNA methylation agent.

I'm not sure how you could capture this in print, but in case you are inspired to do so, I'm inclined to try to explain what I learned from the testimony of others (I would be happy to talk to you about my testimony as well, but it was just a recap of DNA modification and polymerase biochemistry studies from the literature).

We scientists are hesitant to stick our neck out and say "this is BAD" even when we know something is really quite bad. I have no doubt that MeI is NOT suitable for large-scale environmental release, but I came armed with facts, literature references, and so on just in case anyone challenged me. We testified before the ag-business people, who obviously had no similar issues stretching the truth; fortunately for our blood pressures, we didn't have a chance to call them on it.

The deepest impressions that I have from my experience are how inadequate the entire system of guidelines and review processes are. The company that will make MeI here in the USA touts its pioneering system of training for those applying the chemical in the fields - so that they know how to keep the poisoning of innocents to a supposed minimum. But in reality, as we heard in testimony from farm workers, citizens, and their advocates, none of these "required" aspects of training and chemical application in the fields are really required. It was shocking - approval is granted based on essential regulations that have little chance of actually being applied in the field. Furthermore, we heard how regulations favor the toxic poisoning approach over the equally successful organic one: if you say that you have poisoned the ground before planting your nursery crop for export, you don't have to test that crop for parasites before export. But if you didn't use toxic chemicals, then you do have to test the crop; if one parasitic nematode is detected for the entire nursery operation, apparently the entire crop is banned from export.

No wonder they are willing to poison the earth.

Perhaps you have similar problems in B.C., or perhaps the province has more logical agricultural codes.

Again, I'm not sure that this is Nature-relevant, but somehow it should be some kind of call to attention. And don't hold my session compadres accountable for my own experience ....

Kathy

On Aug 21, 2009, at 1:51 PM, Nicola Jones wrote:

Dear all,

Hello. I am a science journalist with Nature, the international science journal based in London England [REDACTED] I am looking into a story about the possible regulation of methyl iodide in California, and the use of the chemical generally. I understand that you recently testified at a government hearing about this, and I would greatly appreciate if you could answer the following questions for me by end-of-day Friday 28 August. Your help and input would be greatly appreciated. Should you raise a particular point of interest, it would be fantastic if I could follow up with a phone call.

- 1) Could you summarize your main concerns about the use of methyl iodide?
- 2) What, in your opinion, should California, the United States, and the world at large do with methyl iodide (ie ban it from all uses; ban it from agricultural use; allow it for some uses with restrictions...)?
- 3) are you aware of any suitable alternatives to methyl iodide that would be commercially viable for strawberry farmers?
- 4) do you have faith in the current independent review process in California; ie do you believe it will come to fair and valid conclusions, and that their advice will be taken by the CDPR (and maybe even the EPA)?
- 5) Given that the fumigant has been regulated for use by the EPA since October 2007, are you aware of any studies on acute toxic effects on human workers over the past 2 years?

Many thanks for your time,

Sincerely,

[REDACTED]

[REDACTED]

--

Susan E. Kegley, Ph.D., Principal and CEO  
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**From:** [Susan Kegley](#)  
**To:** [Froines, John](#)  
**Subject:** Re: PAN comment letter on EPA's MeI risk assessment, Jan 2006  
**Date:** Monday, August 31, 2009 11:11:20 AM  
**Attachments:** [rm\\_rm\\_r\\_lesions\\_survival\\_crlcd-sd\\_br\\_rats.pdf](#)  
[MeI.Cancer.assessment.pdf](#)

---

Hi John,

> What do you mean about the "mortality of the rats in the cancer study".

> Thanks.

>

In EPA's risk assessment (the HIARC report, attached), it was noted for the rat study that:

"Though survival was low (34-38% for control and 60 ppm males and females, 46-48% for the other groups), it did not appear to be affected by exposure to the test article since the high-dose and control groups had comparable mortality rates."

This looked fishy to me that the control group would have a LOWER survival rate than the treated group. Seems to indicate that there were some issues with animal care or perhaps some of the control animals were dosed by accident? or something. To verify that these survival rates were indeed "low", I went to the Charles River Lab site and found a document that discussed survival rates and tumors in control groups for CrI:CD(SD)BR IGS rats. This document is also attached---see esp. pp. 9 and 10 with bar graphs of typical survival rates. The 34-48% appears to be in the normal range of survival, and the variability among studies is quite large. So maybe this is a non-issue? I don't feel like I have enough experience looking at these kinds of studies to know for sure, so if someone on the panel could take a look at this, it would be good.

Another potential issue is a footnote in Table 1 on p. 7 of the HIARC document: "Number of tumor bearing animals/Number of animals examined, excluding those that died or were sacrificed before week 53."

So it looks like they didn't actually examine ALL of the rats--not the ones that died, even. That seems counterintuitive and could possible skew the data. It's hard to tell how many rats were dead by week 53 that were not examined. You need an answer to that question.

Susan

--

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# **Compilation of Spontaneous Neoplastic Lesions And Survival in Crl:CD<sup>®</sup>(SD) BR Rats From Control Groups**

**March, 2001**

**Information Prepared by**

*Mary L. A. Giknis, Ph.D.*

*Charles B. Clifford, D.V.M., Ph.D.*

  
**CHARLES RIVER**  
LABORATORIES

**From:** Susan Kegley [skegley@pesticideresearch.com]  
**Sent:** Tuesday, September 01, 2009 6:01 PM  
**To:** Froines, John; Elinor Fanning; Sarah Kobylewski  
**Subject:** Kathy Collins comments and references.  
**Attachments:** Kathy Collins' comments.zip

attached

--

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U.S. Code)

Date: 9/1/09  
To: John Froines, Professor of Toxicology, UCLA  
From: Kathleen Collins, Professor of Molecular and Cell Biology,  
UC Berkeley, kcollins@berkeley.edu  
Re: Summary of 8/21/09 testimony at legislative hearing

**The general biological responses to DNA damage by methylation are:**

1. DNA repair (if damage is at a low level),
2. Cell suicide (highly damaged human cells kill themselves or attract killers)
3. Genome mutation (cumulative increments of cancer risk)

DNA methylation reactions often yield modified bases that are unable to serve as template for a DNA polymerase. These DNA lesions will recruit repair activities both directly (by recognition of distorted DNA) and as the consequence of stalled DNA replication (when the DNA is being copied prior to cell division). However, there is growing awareness that some DNA modifications will be copied over by a DNA polymerase if they are not repaired in advance of DNA replication, thus increasing the probability of genome mutation. Genome mutation in somatic tissues (most of our body) accelerates the progression of cancer. Genome mutation in germline cells (cells that develop into sperm and egg) leads to infertility and disease inheritance.

**Mechanisms of carcinogenicity of methyl halides.**

**Bolt HM, Gansewendt B. Crit Rev Toxicol. 1993;23(3):237-53.**

“methyl iodide, upon oral and inhalation administration to rats and mice, caused systemic DNA methylation. Specifically, 3-methyl-adenine, 7-methyl-guanine, and O6-methyl-guanine were formed”

O6-methyl-guanine is a particularly dangerous form of DNA methylation: it can be repaired, but it can also be replicated without repair (see below). Thus, the type of DNA methylation damage caused by methyl iodide has both short-term toxicity (from repair-induced delay of cell growth or damage-induced cell death) and cumulative long-term deleterious impact (by permanent genome mutation, leading for example to cancer).

**The structural basis for the mutagenicity of O(6)-methyl-guanine lesions.**

**Warren JJ, Forsberg LJ, Beese LS. Proc Natl Acad Sci USA. 2006;103(52):19701-6.**

“Methylating agents are widespread environmental carcinogens that generate a broad spectrum of DNA damage. Methylation at the guanine O(6) position confers the greatest mutagenic and carcinogenic potential. DNA polymerases insert cytosine and thymine with similar efficiency opposite O(6)-methyl-guanine (O6MeG). ... Our structures reveal that both thymine and cytosine O6MeG base pairs evade proofreading by mimicking the essential molecular features of canonical substrates

### **Hazardous waste classification**

UC Berkeley Environmental Health & Safety (EH&S) regulations classify methyl iodide as the most toxic category of compound (zero-release, class C). This is a greater hazard level than most radioactivity (class B). See drain disposal pdf for complete guidelines.

#### *Class designation for hazardous waste disposal*

- Class A includes chemicals that pose little or no hazard in dilute aqueous solution.
- Class B includes chemicals of moderate hazard in dilute aqueous solution. These aqueous solutions are suitable for disposal down the drain with excess water.
- Class C includes chemicals that may not be drain disposed in any amount...requests for exceptions are made to EH&S who obtains any necessary additional information and coordinates review.

**From:** [Susan Kegley](#)  
**To:** [Froines, John](#); [elinor Fanning](#)  
**Subject:** upstream-downstream  
**Date:** Friday, September 04, 2009 12:32:25 AM  
**Attachments:** [Miller2009-ThyroidUpstreamMarkers.pdf](#)  
[Woodruff2009-UpstreamMarkersMtgReport.pdf](#)

---

Hi John,

I found the upstream-downstream papers on thyroid toxicity. EHP, July 2009 issue, two articles, attached. Perhaps one of the authors would be interested in presenting?

Susan

--

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# Thyroid-Disrupting Chemicals: Interpreting Upstream Biomarkers of Adverse Outcomes

Mark D. Miller,<sup>1,2</sup> Kevin M. Crofton,<sup>3</sup> Deborah C. Rice,<sup>4</sup> and R. Thomas Zoeller<sup>5</sup>

<sup>1</sup>Office of Environmental Health Hazard Assessment, California Environmental Protection Agency, Oakland, California, USA; <sup>2</sup>Pediatric Environmental Health Specialty Unit, University of California at San Francisco, San Francisco, California, USA; <sup>3</sup>National Health and Environmental Effects Laboratory, Office of Research and Development, U.S. Environmental Protection Agency, Research Triangle Park, North Carolina, USA; <sup>4</sup>Maine Center for Disease Control, Augusta, Maine, USA; <sup>5</sup>Biology Department, Morrill Science Center, University of Massachusetts at Amherst, Amherst, Massachusetts, USA

**BACKGROUND:** There is increasing evidence in humans and in experimental animals for a relationship between exposure to specific environmental chemicals and perturbations in levels of critically important thyroid hormones (THs). Identification and proper interpretation of these relationships are required for accurate assessment of risk to public health.

**OBJECTIVES:** We review the role of TH in nervous system development and specific outcomes in adults, the impact of xenobiotics on thyroid signaling, the relationship between adverse outcomes of thyroid disruption and upstream causal biomarkers, and the societal implications of perturbations in thyroid signaling by xenobiotic chemicals.

**DATA SOURCES:** We drew on an extensive body of epidemiologic, toxicologic, and mechanistic studies.

**DATA SYNTHESIS:** THs are critical for normal nervous system development, and decreased maternal TH levels are associated with adverse neuropsychological development in children. In adult humans, increased thyroid-stimulating hormone is associated with increased blood pressure and poorer blood lipid profiles, both risk factors for cardiovascular disease and death. These effects of thyroid suppression are observed even within the “normal” range for the population. Environmental chemicals may affect thyroid homeostasis by a number of mechanisms, and multiple chemicals have been identified that interfere with thyroid function by each of the identified mechanisms.

**CONCLUSIONS:** Individuals are potentially vulnerable to adverse effects as a consequence of exposure to thyroid-disrupting chemicals. Any degree of thyroid disruption that affects TH levels on a population basis should be considered a biomarker of adverse outcomes, which may have important societal outcomes.

**KEY WORDS:** children’s health, endocrine disruption, hazard identification, risk assessment, science policy, thyroid hormone, toxicologic assessments. *Environ Health Perspect* 117:1033–1041 (2009). doi:10.1289/ehp.0800247 available via <http://dx.doi.org/> [Online 12 February 2009]

Recent epidemiologic studies have demonstrated significant relationships between circulating levels of thyroid hormones (THs) and exposures to environmental chemicals (Blount et al. 2006; Boas et al. 2006; Longnecker et al. 2003; Steinmaus et al. 2007). In controlled animal studies, environmental chemicals have been shown to cause a reduction in serum TH levels, also supporting a causal association (Boas et al. 2006; Brucker-Davis 1998; DeVito et al. 1999; Zoeller 2007). In this article we review the role of THs in development and adult life, the impact of xenobiotics on thyroid status, the relationships between adverse outcomes of thyroid disruption and upstream causal biomarkers, and the societal implications of perturbations in THs by xenobiotic chemicals.

## The Role of THs in Development

THs include both thyroxine (T<sub>4</sub>) and triiodothyronine (T<sub>3</sub>). The independent regulation of circulating levels of these two forms of TH is complex, but in this review we refer generally to both forms as TH. THs are evolutionarily conserved molecules present in all extant vertebrates and some invertebrates (Heyland and Moroz 2005). Molecular

signaling pathways regulated by these hormones affect development, energy balance, and metabolism in all taxonomic groups. For example, TH induces metamorphosis in the sand dollar (Heyland et al. 2004), flounder (Yamano et al. 1994), and frogs (Buchholz et al. 2005), and TH is essential for development in birds (McNabb 2006) and mammals (Zoeller and Rovet 2004). In humans, TH is important for normal development of brain (Bernal 2007; Oerbeck et al. 2007), lungs (Bizzarro and Gross 2004; van Tuyl et al. 2004), heart (Danzi et al. 2005; Grover et al. 2005; Stoykov et al. 2006), and other organs. Likewise, the mechanism(s) by which THs exert their actions through nuclear receptors that influence gene expression is highly conserved across the vertebrate taxa (Bertrand et al. 2004; Buchholz et al. 2006; Whitfield et al. 1999).

The regulation of serum TH levels and of TH action in various tissues involves a complex interplay of physiologic processes. Thyroid function depends on iodine uptake, TH synthesis and storage in the thyroid gland, stimulated release of hormone into and transport through the circulation, hypothalamic/pituitary control of TH synthesis,

cellular TH transporters, tissue-specific TH deiodination, and degradation of THs by catabolic hepatic enzymes (Figure 1). Given the key role of TH for normal development and physiologic function in all vertebrates, it is important to identify environmental factors that may adversely affect thyroid function and/or TH signaling and to evaluate their ability to adversely affect public health (Brucker-Davis 1998). In addition, because of the highly conserved nature of TH chemistry, synthesis, signaling, and regulation, environmental factors that affect thyroid function or TH signaling in one species may well affect thyroid function or TH signaling in others—including humans.

**THs and nervous system development.** It is becoming clear that, although somatic and brain growth retardation occur with severe TH insufficiency, moderate or even transient TH insufficiency can cause specific developmental defects in rodents (Auso et al. 2004; Crofton 2004; Crofton et al. 2000; Goldey et al. 1995a, 1995b; Goodman and Gilbert 2007; Morreale de Escobar 2003) and in humans (Haddow 2005; Haddow et al. 1999;

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This review developed from conversations among the four authors as a result of a workshop sponsored by the California Environmental Protection Agency and the U.S. Environmental Protection Agency (EPA) in May 2007 to explore ways to integrate information from testing for upstream biochemical events when conducting hazard identification and risk assessment.

The information in this document has been funded wholly (or in part) by the U.S. EPA.

The manuscript has been reviewed following the policy of the National Health and Environmental Effects Research Laboratory, U.S. EPA, and was approved for publication. Approval does not signify that the contents necessarily reflect the views and policies of the agency, nor does mention of trade names or commercial products constitute endorsement or recommendation for use. The views expressed by M.D.M. are his and do not necessarily represent those of the Office of Environmental Health Hazard Assessment, the California Environmental Protection Agency, or the State of California.

The authors declare they have no competing financial interests.

Received 2 October 2008; accepted 12 February 2009.

## Meeting Report: Moving Upstream—Evaluating Adverse Upstream End Points for Improved Risk Assessment and Decision-Making

Tracey J. Woodruff,<sup>1</sup> Lauren Zeise,<sup>2</sup> Daniel A. Axelrad,<sup>3</sup> Kathryn Z. Guyton,<sup>4</sup> Sarah Janssen,<sup>5,6</sup> Mark Miller,<sup>2,7</sup> Gregory G. Miller,<sup>3</sup> Jackie M. Schwartz,<sup>1</sup> George Alexeeff,<sup>2</sup> Henry Anderson,<sup>8</sup> Linda Birnbaum,<sup>9</sup> Frederic Bois,<sup>10</sup> Vincent James Coglianò,<sup>11</sup> Kevin Crofton,<sup>9</sup> Susan Y. Euling,<sup>4</sup> Paul M.D. Foster,<sup>12</sup> Dori R. Germolec,<sup>12</sup> Earl Gray,<sup>9</sup> Dale B. Hattis,<sup>13</sup> Amy D. Kyle,<sup>14</sup> Robert W. Luebke,<sup>9</sup> Michael I. Luster,<sup>15</sup> Chris Portier,<sup>12</sup> Deborah C. Rice,<sup>16</sup> Gina Solomon,<sup>5</sup> John Vandenberg,<sup>4</sup> and R. Thomas Zoeller<sup>17</sup>

<sup>1</sup>Program on Reproductive Health and the Environment, Department of Obstetrics and Gynecology, University of California, San Francisco, San Francisco, California, USA; <sup>2</sup>Office of Environmental Health Hazard Assessment, California Environmental Protection Agency, Oakland, California, USA; <sup>3</sup>Office of Policy, Economics and Innovation, and <sup>4</sup>National Center for Environmental Assessment, U.S. Environmental Protection Agency, Washington, DC, USA; <sup>5</sup>Department of Medicine, University of California, San Francisco, San Francisco, California, USA; <sup>6</sup>National Resource Defense Council, San Francisco, California, USA; <sup>7</sup>Pediatric Environmental Health Specialty Unit, University of California, San Francisco, California, USA; <sup>8</sup>Wisconsin Division of Public Health, Madison, Wisconsin, USA; <sup>9</sup>National Health and Environmental Effects Research Laboratory, U.S. Environmental Protection Agency, Research Triangle Park, North Carolina, USA; <sup>10</sup>Institut National de l'Environnement Industriel et des Risques, Verneuil-en-Halatte, France; <sup>11</sup>International Agency for Research on Cancer, Lyon, France; <sup>12</sup>National Institute of Environmental Health Sciences, National Institutes of Health, Department of Health and Human Services, Research Triangle Park, North Carolina, USA; <sup>13</sup>George Perkins Marsh Institute, Clark University, Worcester, Massachusetts, USA; <sup>14</sup>School of Public Health, University of California, Berkeley, Berkeley, California; <sup>15</sup>National Institute for Occupational Safety and Health, Atlanta, Georgia, USA; <sup>16</sup>Environmental and Occupational Health Program, Maine Center for Disease Control and Prevention, Augusta, Maine, USA; <sup>17</sup>Department of Biology, University of Massachusetts, Amherst, Amherst, Massachusetts, USA

**BACKGROUND:** Assessing adverse effects from environmental chemical exposure is integral to public health policies. Toxicology assays identifying early biological changes from chemical exposure are increasing our ability to evaluate links between early biological disturbances and subsequent overt downstream effects. A workshop was held to consider how the resulting data inform consideration of an “adverse effect” in the context of hazard identification and risk assessment.

**OBJECTIVES:** Our objective here is to review what is known about the relationships between chemical exposure, early biological effects (upstream events), and later overt effects (downstream events) through three case studies (thyroid hormone disruption, antiandrogen effects, immune system disruption) and to consider how to evaluate hazard and risk when early biological effect data are available.

**DISCUSSION:** Each case study presents data on the toxicity pathways linking early biological perturbations with downstream overt effects. Case studies also emphasize several factors that can influence risk of overt disease as a result from early biological perturbations, including background chemical exposures, underlying individual biological processes, and disease susceptibility. Certain effects resulting from exposure during periods of sensitivity may be irreversible. A chemical can act through multiple modes of action, resulting in similar or different overt effects.

**CONCLUSIONS:** For certain classes of early perturbations, sufficient information on the disease process is known, so hazard and quantitative risk assessment can proceed using information on upstream biological perturbations. Upstream data will support improved approaches for considering developmental stage, background exposures, disease status, and other factors important to assessing hazard and risk for the whole population.

**KEY WORDS:** adverse health effects, androgen antagonists, hazard identification, immunotoxicants, risk assessment, science policy, thyroid hormone, toxicologic assessments. *Environ Health Perspect* 116:1568–1575 (2008). doi:10.1289/ehp.11516 available via <http://dx.doi.org/> [Online 10 July 2008]

To evaluate the potential of environmental chemicals to cause harm, to estimate the risks that chemical exposures pose to the population, and to identify opportunities for prevention and intervention, the type and extent of adverse effects associated with exposure to a chemical must be elucidated. To date, hazard and risk assessments have relied largely on data from traditional toxicologic studies, such as the 2-year, chronic toxicology and carcinogenesis studies or the two-generation reproductive toxicity assay. A primary goal of these studies is to identify whether chemical exposures cause overt disease outcomes, such as birth defects and neoplasia. These studies also provide data on biological events that precede these overt disease outcomes, often referred to as precursor effects. Adverse effects identified in existing

hazard and risk assessments have often been the more overt diseases or defects, rather than events that occur earlier in the disease process.

Increasingly, toxicology assays are providing more information on how chemicals can interfere with cellular signaling or metabolism, disrupt hormone homeostasis, alter gene expression, or otherwise play a role early in disease processes. As scientific understanding of the mechanisms through which chemical exposures advance pathologic processes resulting in disease increases, so too does the opportunity for effective and efficient hazard identification and risk assessment. A necessary step in incorporating data on early biological perturbations is to consider how these early events relate to the concept of “adverse effects.” The U.S. Environmental Protection Agency (EPA)

defines an adverse effect as “a biochemical change, functional impairment, or pathologic lesion that affects the performance of the whole organism, or reduces an organism’s ability to respond to an additional environmental challenge” (U.S. EPA 2007a) and, for example, considers such end points as alterations in circulating levels of sex hormones to be an adverse effect (U.S. EPA 1996). Identifying an adverse effect forms the basis for hazard identification and for defining the critical effect for quantitative risk assessment.

The evolution in toxicology testing from overt disease to elucidating toxicologic pathways has been recognized and endorsed by the

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This work was supported by California Environmental Protection Agency, Office of Environmental and Health Hazard Assessment, contract OEHHA-06-S34; the U.S. Environmental Protection Agency, Office of Policy, Economics, and Innovation, National Center for Environmental Economics and National Center for Environmental Assessment, contract EP07H001060; the Intramural Research Program of the National Institute of Environmental Health Sciences (NIEHS), National Institutes of Health (NIH); University of California, Berkeley, NIEHS Superfund Program at Berkeley, NIH grant P42 ES04705; and University of California, San Francisco.

This report has been reviewed by the National Institute of Occupational Safety and Health and the U.S. Environmental Protection Agency’s Office of Research and Development, and approved for publication. Approval does not signify that the contents necessarily reflect the views and policies of the agency. The findings and conclusions in this report are those of the authors and do not necessarily represent the views of institutions affiliated with the authors.

The authors declare they have no competing financial interests.

Received 27 March 2008; accepted 9 July 2008.

**From:** Susan Kegley [skegley@pesticideresearch.com]  
**Sent:** Friday, September 25, 2009 4:00 PM  
**To:** Elinor Fanning; Froines, John  
**Subject:** modified PPT  
**Attachments:** PAN\_SRP\_Presentation9-25-09revised.ppt

Hi John and Elinor,

You will probably get my modified PPT from Mary Lou, but here it is anyway.

Susan

--

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# Methyl Iodide: DPR Risk Characterization



Susan E. Kegley, PhD  
Consulting Scientist  
Pesticide Action Network  
[skegley@pesticideresearch.com](mailto:skegley@pesticideresearch.com)

# Overview

- Chemical profile
- CA fumigant use trends
- Comments on human health risk assessment
- Comments on exposure assessment

**From:** [Solomon, Gina](#)  
**To:** [Froines, John](#)  
**Subject:** Report  
**Date:** Monday, February 08, 2010 11:42:27 AM

---

Hi John,

Thanks for your call last week. Any updates? Did it get done?

I'm reachable on cell anytime – [REDACTED]

Thanks for your hard work!

Best

-Gina

**From:** [Solomon, Gina](#)  
**To:** [Froines, John](#)  
**Subject:** Fw: Final MeI release  
**Date:** Thursday, February 11, 2010 4:21:01 PM  
**Attachments:** [FINAL Release-SciencePanelReport-2-11-10.doc](#)  
[ATT141555.txt](#)

---

John,  
DPR posted the report on their website an hour ago. Thought you might be interested in this release which just went out, FYI.  
Best wishes  
-Gina

Sent from my Blackberry

----- Original Message -----

From: Tracey Brieger <tracey@igc.org>  
To: Solomon, Gina; Anne Katten <akatten@crlaf.org>; Susan Kegley <skegley@pesticideresearch.com>; Paul S. Towers <paul@pesticidewatch.org>; Kathryn Gilje <kat@panna.org>; Rome, Victoria; Martha Guzman Aceves <mguzmanaceves@crlaf.org>; David Chatfield <dchatfield@igc.org>; Megan Buckingham <megan@panna.org>; Sarah Aird <sarah\_aird@igc.org>  
Sent: Thu Feb 11 16:05:12 2010  
Subject: Final MeI release

thanks for the quick footwork, everyone. attached is the final release.

paul & i are contacting the LA times, AP, fresno bee, sac bee, chron, ventura county star and a couple of monterey papers now.

**For more information, contact:**

Tracey Brieger, Californians for Pesticide Reform, 415-215-5473

Paul Towers, Pesticide Watch, 916-916-216-1082

*For immediate release:* Thursday, February 11, 2010

**NEWS RELEASE**

## **World-Class Scientific Panel Strongly Criticizes Highly Toxic, Potential Strawberry Pesticide**

*Decision on potent carcinogen and water contaminant expected soon*

SACRAMENTO, CA—An external Scientific Panel convened by state agencies to evaluate the risks of a potential new strawberry pesticide released its findings today outlining serious concerns for rural residents and farm workers if the chemical were approved for widespread use in California's fields. Under pressure from methyl iodide manufacturer Arysta LifeScience Corporation, the California Department of Pesticide Regulation's Director Mary Ann Warmerdam is expected to make a decision on whether or not to register the chemical—which would be one of the most toxic pesticides on the market—in the coming weeks.

“The science is in. Using methyl iodide in the fields would be a ticking time bomb,” said Dr. Susan Kegley, Consulting Scientist with Pesticide Action Network North America. “If the Department of Pesticide Regulation approves methyl iodide, we can expect to see increased numbers of late-term miscarriages for women who live or work near methyl iodide applications, increased thyroid disease, and more cancers.”

The Scientific Review Committee noted in their report: “Based on the data available, we know that methyl iodide is a highly toxic chemical and we expect that any anticipated scenario for the agricultural or structural fumigation use of this agent would result in exposures to a large number of the public and thus would have a significant adverse impact on the public health. Due to the potent toxicity of methyl iodide, its transport in and ultimate fate in the environment, adequate control of human exposure would be difficult, if not impossible.”

“The clear scientific consensus of the independent expert panel carries great weight. It would be a mistake to ignore the science, since the people of California would pay the price with their health,” commented Dr. Gina Solomon, Senior Scientist, Natural Resources Defense Council.

The pesticide, methyl iodide, has raised concerns from scientists across the country, including five Nobel Laureates in Chemistry, who were “astonished” that a chemical posing such high risks to human health would be considered for use in agriculture. Methyl iodide is so reliably carcinogenic that it's used to induce cancer in the lab. It is currently listed on California's Proposition 65 list of “chemicals known to cause cancer.” The chemical also has high potential to contaminate groundwater.

Methyl iodide poses the most direct risks to farm workers and neighboring communities because of the volume that could be applied to fields and its tendency to drift off site. The chemical could be applied to California's strawberry fields at rates up to 175 lbs per acre, millions of pounds total, on the over 38,000 acres in strawberry production.

"It's clear that there's no possible way to use methyl iodide safely in California's fields," said Anne Katten, Pesticide and Work Safety Specialist at California Rural Legal Assistance Foundation. "It's the responsibility of California's regulators to reject Arysta's request to approve this chemical that would pose serious health risks to untold numbers of people across the state."

Arysta, the largest privately held agrichemical company in the world, has launched a concerted campaign to influence California regulators' decision on the chemical. California would be the biggest market in the country.

Based on results of California's external scientific review, which found "in each and every instance where DPR findings differed from the USEPA risk assessment it was attributable to a more insightful and scientific approach having been undertaken by the DPR." U.S. EPA should clearly reconsider their decision to allow the chemical to be used in other states. According to U.S. EPA, methyl iodide is only being used in twelve states. In New York, Arysta pulled its request to register the chemical because the state asked tough questions on health and environmental impacts – and because the New York market for the chemical is small. Like California, Washington State is also in the process of reviewing the risks of methyl iodide to determine if it should be permitted for use in the state.

Farmers and researchers gathered on Monday at a Senate Food & Agriculture Committee hearing convened by the committee Chair, Senator Dean Florez, to testify about the availability of non-fumigant alternatives to methyl iodide.

"I've been growing strawberries without using pesticides in California for 25 years," said Jim Cochran, owner of Swanton Berry Farm in Davenport, California. "It's certainly possible to grow commercially-viable and ecologically sound strawberry crops without using methyl iodide or any other chemical pesticides."

###

**Available for interviews:**

Susan Kegley, Ph.D., Consulting Scientist, Pesticide Action Network North America, 510-759-9397, skegley@pesticideresearch.com.

Gina Solomon, M.D., M.P.H., Senior Scientist, Natural Resources Defense Council, 415-595-0432, gsolomon@nrdc.org.

Anne Katten, Pesticide and Work Safety Specialist, California Rural Legal Assistance Foundation, 916-446-7904 x 19, akatten@crlaf.org.

## Resources:

Department of Pesticide Regulation's website with External Scientific Panel's Report:  
<http://www.cdpr.ca.gov/docs/risk/methyliodide.htm>

Pesticide Action Network information on methyl iodide, including legislator letter:  
<http://www.panna.org/fumigants/mei>

Pesticide Action Network information on fumigant pesticides: <http://www.panna.org/fumigants>

Letter from National Academy of Sciences members to US EPA:  
[http://www.epa.gov/pesticides/factsheets/iodomethane\\_letter.pdf](http://www.epa.gov/pesticides/factsheets/iodomethane_letter.pdf)

## Methyl Iodide Facts

### • Methyl Iodide is a soil fumigant

Fumigant pesticides are volatile, drift-prone chemicals injected into the soil at application rates of 50-400 pounds per acre. The maximum application rate for methyl iodide is 175 pounds per acre.

### • Methyl iodide can cause cancer and other very serious illnesses

The state of California lists methyl iodide as a carcinogen under Proposition 65. Methyl iodide reacts rapidly with DNA to cause mutations, and the presence of iodine in methyl iodide results in particularly damaging levels being sequestered in the thyroid gland, causing cancers of the thyroid in laboratory animals.

In addition to the thyroid tumors observed in the study, large and significant changes were observed in thyroid hormone levels, which are intimately tied to metabolic disorders, immune function, and developmental disorders of the fetus, leading to miscarriages in laboratory animals. Other animal studies demonstrate that exposure to methyl iodide causes respiratory tract lesions and neurological effects.

### • Methyl iodide is a threat to state groundwater supplies

In California, thousands of drinking water wells are already contaminated with the banned, extremely toxic fumigants DBCP and EDB. Use of methyl iodide would place our scarce water resources at risk of further contamination. Since methyl iodide is very soluble in water, there is a real danger of leaching to ground water, especially if it rains or irrigation occurs soon after fumigation tarps are removed. In a recently published study, scientists from USDA and UC Riverside concluded that methyl iodide may pose a risk of groundwater contamination in vulnerable areas.

### • Growers do not need methyl iodide

The rush to register methyl iodide has been rationalized by the upcoming withdrawal of methyl bromide from the agricultural market, as mandated by the Montreal Protocol, an international treaty to phase out production and use of ozone-depleting substances. Yet prior to the proposed substitution of methyl iodide, conventional growers were exploring a variety of non-fumigant methods for controlling soil pests.

Organic and pesticide-free farmers have been successfully managing soil pathogens and soil fertility with agroecological practices such as crop rotation, composting, and the application of broccoli and mustard residues.

### • DPR's draft risk assessment finds methyl iodide highly toxic

California's Department of Pesticide Regulation has held off registration and has completed a draft risk assessment that reviews methyl iodide's toxicity and environmental hazards and scheduled an outside peer review of this work. The draft risk assessment prepared by CDPR details serious health risks of methyl iodide exposure.

DPR toxicologists explain that iodide is concentrated in the mammary gland, so nursing infants would receive excess iodide exposure through breast milk if their mothers were exposed to methyl iodide. The toxicologists conclude that methyl iodide can upset maternal and fetal thyroid function. The chemical causes thyroid tumors in laboratory animals, as well as miscarriages. DPR conclude that "... air concentrations estimated for human exposure to MeI under the proposed use conditions will result in significant risks for workers and the general population, with anticipated exposures up to 3,000 times the acceptable dose for some proposed soil fumigation use scenarios."

**From:** [Susan Kegley](#)  
**To:** [Froines, John](#)  
**Subject:** Re: [Fwd: Re: Journalist inquiry from Nature - methyl iodide]  
**Date:** Friday, February 12, 2010 11:05:23 AM

---

Hi John,

Tried to call---no answer. Will try again soon, but I'm off the phone now, so if you want to call, please do. [REDACTED]

Susan

Froines, John wrote:

**Urgent: call me at [REDACTED]**  
John

---

**From:** Susan Kegley [mailto:[skegley@pesticideresearch.com](mailto:skegley@pesticideresearch.com)]  
**Sent:** Thursday, August 27, 2009 11:42 AM  
**To:** Robert Bergman; Roald Hoffmann; John Froines; Elinor Fanning  
**Subject:** [Fwd: Re: Journalist inquiry from Nature - methyl iodide]

I thought you all might be interested in Kathy Collins' response to the Nature journalist. She said it would be OK to forward to you all. Perhaps some of this will end up in the Nature article.

----- OriginalMessage-----

**Subject:** Re: Journalist inquiry from Nature - methyl iodide

**Date:** Wed, 26 Aug 2009 20:59:15 -0700

**From:** Kathleen Collins <[kcollins@berkeley.edu](mailto:kcollins@berkeley.edu)>

**To:** [REDACTED]

**CC:** [spear@berkeley.edu](mailto:spear@berkeley.edu), [skegley@pesticideresearch.com](mailto:skegley@pesticideresearch.com),  
[schore@chem.ucdavis.edu](mailto:schore@chem.ucdavis.edu)

**References:** [REDACTED]

Hello [REDACTED]

Dr. Kegley has accumulated impressive research relevant to agricultural use of methyl iodide (MeI), and as chemists she and Neil Shore would have the most direct experience handling it. My expertise is in chromosome biology (as you could figure out from my Nature journal publications), so I was testifying about MeI toxicity and carcinogenicity as a potent DNA methylation agent.

I'm not sure how you could capture this in print, but in case you are inspired to do so, I'm inclined to try to explain what I learned from the testimony of others (I would be happy to talk to you about my testimony as well, but it was just a recap of DNA modification and polymerase biochemistry studies from the literature).

We scientists are hesitant to stick our neck out and say "this is BAD" even when we know something is really quite bad. I have no doubt that MeI is NOT suitable for large-scale environmental release, but I came armed with facts, literature references, and so on just in case anyone challenged me. We testified before the ag-business people, who obviously had no similar issues stretching the truth; fortunately for our blood pressures, we didn't have a chance to call them on it.

The deepest impressions that I have from my experience are how inadequate the entire system of guidelines and review processes are. The company that will make MeI here in the USA touts its pioneering system of training for those applying the chemical in the fields - so that they know how to keep the poisoning of innocents to a supposed minimum. But in reality, as we heard in testimony from farm workers, citizens, and their advocates, none of these "required" aspects of training and chemical application in the fields are really required. It was shocking - approval is granted based on essential regulations that have little chance of actually being applied in the field. Furthermore, we heard how regulations favor the toxic poisoning approach over the equally successful organic one: if you say that you have poisoned the ground before planting your nursery crop for export, you don't have to test that crop for parasites before export. But if you didn't use toxic chemicals, then you do have to test the crop; if one parasitic nematode is detected for the entire nursery operation, apparently the entire crop is banned from export. No wonder they are willing to poison the earth.

Perhaps you have similar problems in B.C., or perhaps the province has more logical agricultural codes.

Again, I'm not sure that this is Nature-relevant, but somehow it should be some kind of call to attention. And don't hold my session compadres accountable for my own experience ....

Kathy

On Aug 21, 2009, at 1:51 PM, Nicola Jones wrote:

Dear all,

Hello. I am a science journalist with Nature, the international science journal based in London England ( [REDACTED] ). I am looking into a story about the possible regulation of methyl iodide in California, and the use of the chemical generally. I understand that you recently testified at a government hearing about this, and I would greatly appreciate if you could answer the following questions for me by end-of-day Friday 28 August. Your help and input would be greatly appreciated. Should you raise a particular point of interest, it would be fantastic if I could follow up with a phone call.

- 1) Could you summarize your main concerns about the use of methyl iodide?
- 2) What, in your opinion, should California, the United States, and the world at

large do with methyl iodide (ie ban it from all uses; ban it from agricultural use; allow it for some uses with restrictions...)?  
3) are you aware of any suitable alternatives to methyl iodide that would be commercially viable for strawberry farmers?  
4) do you have faith in the current independent review process in California; ie do you believe it will come to fair and valid conclusions, and that their advice will be taken by the CDPR (and maybe even the EPA)?  
5) Given that the fumigant has been regulated for use by the EPA since October 2007, are you aware of any studies on acute toxic effects on human workers over the past 2 years?

Many thanks for your time,  
Sincerely,

[REDACTED]

--

Nicola Jones

[REDACTED]

--

Susan E. Kegley, Ph.D., Principal and CEO  
Pesticide Research Institute  
2768 Shasta Rd.  
Berkeley, CA 94708

Phone: (510) 759-9397  
Fax: (510) 848-5271  
E-mail: [skegley@pesticideresearch.com](mailto:skegley@pesticideresearch.com)  
Web: <http://www.pesticideresearch.com>

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**From:** [Susan Kegley](#)  
**To:** [Froines, John](#)  
**Subject:** Articles on Mel report  
**Date:** Friday, February 12, 2010 11:16:04 AM

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<http://www.vcstar.com/news/2010/feb/11/toxicologists-say-methyl-iodide-poses-health/>

<http://www.capitalpress.com/newest/ws-Methyl-Iodide-021910--for-WEB-021110->

--

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**From:** [Susan Kegley](#)  
**To:** [Froines, John](#)  
**Subject:** CPR's Press Release on MeI  
**Date:** Friday, February 12, 2010 11:20:32 AM  
**Attachments:** [FINAL Release-SciencePanelReport-2-11-10.doc](#)

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attached

--

Susan E. Kegley, Ph.D., Principal and CEO  
Pesticide Research Institute  
2768 Shasta Rd.  
Berkeley, CA 94708

Phone: (510) 759-9397  
Fax: (510) 848-5271  
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**For more information, contact:**

Tracey Brieger, Californians for Pesticide Reform, 415-215-5473

Paul Towers, Pesticide Watch, 916-916-216-1082

*For immediate release:* Thursday, February 11, 2010

**NEWS RELEASE**

## **World-Class Scientific Panel Strongly Criticizes Highly Toxic, Potential Strawberry Pesticide**

*Decision on potent carcinogen and water contaminant expected soon*

SACRAMENTO, CA—An external Scientific Panel convened by state agencies to evaluate the risks of a potential new strawberry pesticide released its findings today outlining serious concerns for rural residents and farm workers if the chemical were approved for widespread use in California's fields. Under pressure from methyl iodide manufacturer Arysta LifeScience Corporation, the California Department of Pesticide Regulation's Director Mary Ann Warmerdam is expected to make a decision on whether or not to register the chemical—which would be one of the most toxic pesticides on the market—in the coming weeks.

“The science is in. Using methyl iodide in the fields would be a ticking time bomb,” said Dr. Susan Kegley, Consulting Scientist with Pesticide Action Network North America. “If the Department of Pesticide Regulation approves methyl iodide, we can expect to see increased numbers of late-term miscarriages for women who live or work near methyl iodide applications, increased thyroid disease, and more cancers.”

The Scientific Review Committee noted in their report: “Based on the data available, we know that methyl iodide is a highly toxic chemical and we expect that any anticipated scenario for the agricultural or structural fumigation use of this agent would result in exposures to a large number of the public and thus would have a significant adverse impact on the public health. Due to the potent toxicity of methyl iodide, its transport in and ultimate fate in the environment, adequate control of human exposure would be difficult, if not impossible.”

“The clear scientific consensus of the independent expert panel carries great weight. It would be a mistake to ignore the science, since the people of California would pay the price with their health,” commented Dr. Gina Solomon, Senior Scientist, Natural Resources Defense Council.

The pesticide, methyl iodide, has raised concerns from scientists across the country, including five Nobel Laureates in Chemistry, who were “astonished” that a chemical posing such high risks to human health would be considered for use in agriculture. Methyl iodide is so reliably carcinogenic that it's used to induce cancer in the lab. It is currently listed on California's Proposition 65 list of “chemicals known to cause cancer.” The chemical also has high potential to contaminate groundwater.

Methyl iodide poses the most direct risks to farm workers and neighboring communities because of the volume that could be applied to fields and its tendency to drift off site. The chemical could be applied to California's strawberry fields at rates up to 175 lbs per acre, millions of pounds total, on the over 38,000 acres in strawberry production.

"It's clear that there's no possible way to use methyl iodide safely in California's fields," said Anne Katten, Pesticide and Work Safety Specialist at California Rural Legal Assistance Foundation. "It's the responsibility of California's regulators to reject Arysta's request to approve this chemical that would pose serious health risks to untold numbers of people across the state."

Arysta, the largest privately held agrichemical company in the world, has launched a concerted campaign to influence California regulators' decision on the chemical. California would be the biggest market in the country.

Based on results of California's external scientific review, which found "in each and every instance where DPR findings differed from the USEPA risk assessment it was attributable to a more insightful and scientific approach having been undertaken by the DPR." U.S. EPA should clearly reconsider their decision to allow the chemical to be used in other states. According to U.S. EPA, methyl iodide is only being used in twelve states. In New York, Arysta pulled its request to register the chemical because the state asked tough questions on health and environmental impacts – and because the New York market for the chemical is small. Like California, Washington State is also in the process of reviewing the risks of methyl iodide to determine if it should be permitted for use in the state.

Farmers and researchers gathered on Monday at a Senate Food & Agriculture Committee hearing convened by the committee Chair, Senator Dean Florez, to testify about the availability of non-fumigant alternatives to methyl iodide.

"I've been growing strawberries without using pesticides in California for 25 years," said Jim Cochran, owner of Swanton Berry Farm in Davenport, California. "It's certainly possible to grow commercially-viable and ecologically sound strawberry crops without using methyl iodide or any other chemical pesticides."

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**Available for interviews:**

Susan Kegley, Ph.D., Consulting Scientist, Pesticide Action Network North America, 510-759-9397, [skegley@pesticideresearch.com](mailto:skegley@pesticideresearch.com).

Gina Solomon, M.D., M.P.H., Senior Scientist, Natural Resources Defense Council, 415-595-0432, [gsolomon@nrdc.org](mailto:gsolomon@nrdc.org).

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## **Resources:**

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<http://www.cdpr.ca.gov/docs/risk/methyliodide.htm>

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## **Methyl Iodide Facts**

### **• Methyl Iodide is a soil fumigant**

Fumigant pesticides are volatile, drift-prone chemicals injected into the soil at application rates of 50-400 pounds per acre. The maximum application rate for methyl iodide is 175 pounds per acre.

### **• Methyl iodide can cause cancer and other very serious illnesses**

The state of California lists methyl iodide as a carcinogen under Proposition 65. Methyl iodide reacts rapidly with DNA to cause mutations, and the presence of iodine in methyl iodide results in particularly damaging levels being sequestered in the thyroid gland, causing cancers of the thyroid in laboratory animals.

In addition to the thyroid tumors observed in the study, large and significant changes were observed in thyroid hormone levels, which are intimately tied to metabolic disorders, immune function, and developmental disorders of the fetus, leading to miscarriages in laboratory animals. Other animal studies demonstrate that exposure to methyl iodide causes respiratory tract lesions and neurological effects.

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**From:** [Solomon, Gina](#)  
**To:** [Froines, John](#); [Blanc, Paul](#)  
**Subject:** Methyl iodide hearing  
**Date:** Wednesday, March 03, 2010 8:07:18 PM

---

John and Paul,

It looks like Florez wants to schedule another hearing on methyl iodide for March 16th. It's important for someone from the SAC to be there to present the findings, if that's at all possible.

Any chance either of you might be able to do it? If not, is there anyone from the committee that could?

Thanks!

-Gina

Gina Solomon, M.D., M.P.H.

Co-Director, UCSF Occupational and Environmental Medicine Residency Program

Associate Clinical Professor of Medicine

Associate Director, UCSF Pediatric Environmental Health Specialty Unit

University of California at San Francisco

Phone: 415-206-4279

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[gina.solomon@ucsf.edu](mailto:gina.solomon@ucsf.edu) <<mailto:gina.solomon@ucsf.edu>>

**From:** [Solomon, Gina](#)  
**To:** [Froines, John](#); [Blanc, Paul](#)  
**Cc:** [S Katharine Hammond](#)  
**Subject:** RE: Methyl iodide hearing  
**Date:** Thursday, March 04, 2010 10:57:34 AM

---

Paul and John,

Apparently Senator Florez ONLY wants members of the SRC to speak at the hearing. No advocates or anyone else. He wants to focus on the committee's report.

I'm not sure why you think that the committee shouldn't be there to explain their findings. It seems likely that the SRC's report will continue to be misconstrued and misinterpreted by others unless members of the SRC explain the findings. That's what happened in DPR's press communications, and it will continue to happen unless members of the advisory committee speak out to clarify.

However, the decision is obviously yours.

Best

-Gina

---

From: Froines, John [mailto:[jfroines@ucla.edu](mailto:jfroines@ucla.edu)]  
Sent: Thursday, March 04, 2010 10:29 AM  
To: Blanc, Paul; Solomon, Gina  
Cc: S Katharine Hammond  
Subject: RE: Methyl iodide hearing

I agree with Paul.

John

-----Original Message-----

From: Blanc, Paul [mailto:[Paul.Blanc@ucsf.edu](mailto:Paul.Blanc@ucsf.edu)]  
Sent: Thursday, March 04, 2010 8:36 AM  
To: Froines, John; Solomon, Gina  
Cc: S Katharine Hammond  
Subject: RE: Methyl iodide hearing

Gina I would not be able to do this. John's idea of Dr. Hammond is fine if she is in to it. I am not necessarily of the opinion that anyone from the advisory committee should be there, however. Paul

-----Original Message-----

From: Froines, John [mailto:[jfroines@ucla.edu](mailto:jfroines@ucla.edu)]  
Sent: Wednesday, March 03, 2010 9:44 PM  
To: Solomon, Gina; Blanc, Paul  
Subject: RE: Methyl iodide hearing

I have to be at a conference for half a day on the 16 th so it will be difficult. I am skiing and I have no materials with me, so it would be almost impossible to prepare. I won't be back until the 14th and have to fly to Sacramento for the meeting. Paul or Kathie would be the better choice. I don't want to testify unprepared.

John

-----Original Message-----

From: Solomon, Gina [mailto:[Gina.Solomon@ucsf.edu](mailto:Gina.Solomon@ucsf.edu)]  
Sent: Wednesday, March 03, 2010 8:06 PM  
To: Froines, John; Blanc, Paul  
Subject: Methyl iodide hearing

John and Paul,

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Thanks!

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Gina Solomon, M.D., M.P.H.

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gina.solomon@ucsf.edu <<mailto:gina.solomon@ucsf.edu>>

**From:** [Solomon, Gina](#)  
**To:** [Froines, John](#); [Blanc, Paul](#)  
**Cc:** [S Katharine Hammond](#)  
**Subject:** RE: Methyl iodide hearing  
**Date:** Thursday, March 04, 2010 11:17:38 AM

---

I thought the SRC had concerns about comments in the press that the committee had somehow overstepped their charge and stated that methyl iodide should not be registered. I thought you had requested a retraction or clarification from DPR about that issue. That's what I meant by misconstrued and misinterpreted.

I don't think they will be interested in doing written questions.

-Gina

---

From: Froines, John [jfroines@ucla.edu]  
Sent: Thursday, March 04, 2010 11:08 AM  
To: Solomon, Gina; Blanc, Paul  
Cc: S Katharine Hammond  
Subject: RE: Methyl iodide hearing

I don't know what you mean by misconstrued and misinterpreted. My time is such that I cannot make it. What about our answering written questions. Paul: give me a call at [REDACTED]  
John

-----Original Message-----

From: Solomon, Gina [<mailto:Gina.Solomon@ucsf.edu>]  
Sent: Thursday, March 04, 2010 10:54 AM  
To: Froines, John; Blanc, Paul  
Cc: S Katharine Hammond  
Subject: RE: Methyl iodide hearing

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To: Blanc, Paul; Solomon, Gina  
Cc: S Katharine Hammond  
Subject: RE: Methyl iodide hearing

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John

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Sent: Thursday, March 04, 2010 8:36 AM

To: Froines, John; Solomon, Gina  
Cc: S Katharine Hammond  
Subject: RE: Methyl iodide hearing

Gina I would not be able to do this. John's idea of Dr. Hammond is fine if she is in to it. I am not necessarily of the opinion that anyone from the advisory committee should be there, however. Paul

-----Original Message-----

From: Froines, John [<mailto:jfroines@ucla.edu>]  
Sent: Wednesday, March 03, 2010 9:44 PM  
To: Solomon, Gina; Blanc, Paul  
Subject: RE: Methyl iodide hearing

I have to be at a conference for half a day on the 16 th so it will be difficult. I am skiing and I have no materials with me, so it would be almost impossible to prepare. I won't be back until the 14th and have to fly to Sacramento for the meeting. Paul or Kathie would be the better choice. I don't want to testify unprepared.

John

-----Original Message-----

From: Solomon, Gina [<mailto:Gina.Solomon@ucsf.edu>]  
Sent: Wednesday, March 03, 2010 8:06 PM  
To: Froines, John; Blanc, Paul  
Subject: Methyl iodide hearing

John and Paul,

It looks like Florez wants to schedule another hearing on methyl iodide for March 16th. It's important for someone from the SAC to be there to present the findings, if that's at all possible.

Any chance either of you might be able to do it? If not, is there anyone from the committee that could?

Thanks!

-Gina

Gina Solomon, M.D., M.P.H.  
Co-Director, UCSF Occupational and Environmental Medicine Residency Program  
Associate Clinical Professor of Medicine  
Associate Director, UCSF Pediatric Environmental Health Specialty Unit  
University of California at San Francisco  
Phone: 415-206-4279  
Fax: 415-206-8949  
[gina.solomon@ucsf.edu](mailto:gina.solomon@ucsf.edu)<<mailto:gina.solomon@ucsf.edu>>

**From:** [Solomon, Gina](#)  
**To:** [Froines, John](#)  
**Subject:** Spring recess  
**Date:** Tuesday, March 09, 2010 8:29:30 PM

---

John,  
Unfortunately, spring recess for the leg. is the last week in March, including the 30, 31, and April 2nd.  
How's the following week?  
-Gina

Gina Solomon, M.D., M.P.H.  
Co-Director, UCSF Occupational and Environmental Medicine Residency Program  
Associate Clinical Professor of Medicine  
Associate Director, UCSF Pediatric Environmental Health Specialty Unit  
University of California at San Francisco  
Phone: 415-206-4279  
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EMAIL ADDRESS  
rschuda@mckennalong.com

July 27, 2011

***BY CERTIFIED MAIL— RETURN RECEIPT REQUESTED***

Kevin S. Reed, Esq.  
Vice Chancellor, Legal Affairs  
University of California, Los Angeles  
Box 951405  
Los Angeles, CA 90095-1405

**Re: FAILURE TO COMPLY WITH PUBLIC RECORDS ACT REQUEST SUBMITTED BY  
ARYSTA LIFESCIENCE NORTH AMERICA, LLC, No. 2011-0041**

Dear Mr. Reed,

This letter concerns the response of the University of California, Los Angeles (“UCLA” or “the University”) to California Public Records Act (“CPRA” or “the Act”) request PRR No. 2011-0041. My client, Arysta LifeScience North America, LLC (“Arysta”), submitted this request to UCLA on July 21, 2010.

We thank UCLA for providing certain documents. As you and I have discussed, however, the University’s response is not adequate. In particular, on June 14, 2011, as counsel for UCLA, you provided an email message (a copy of which is contained in Attachment A) stating:

“I have also confirmed with our staff that they requested documents in the date range for which you stated there is a gap [*i.e.*, from September 2009 through February 2010]. They also had already inquired of Professor Froines as to whether he had any ‘sent’ emails in his possession from his account, and he asserted to them that he does not maintain any copies of emails he has sent.”

I replied by email on June 30, 2011 (also contained in Attachment A) that “[w]e believe that UCLA should conduct a search of its email/computer back-up systems for responsive records, and request that UCLA do so.”

You and I then spoke on July 7. While I expressed Arysta’s thanks for records provided by UCLA in May and June 2011, I reiterated Arysta’s position that in light of Dr. Froines’ reply

Kevin S. Reed, Vice Chancellor, Legal Affairs  
University of California, Los Angeles  
July 27, 2011  
Page 2

UCLA should search its email/computer back-up systems for responsive records. You offered to investigate UCLA's electronic back-up system, but we have not since received an update from UCLA, and no other records have been forthcoming.

For the reasons discussed herein, UCLA's apparent consideration of its inquiry to be at an end based on the response of Dr. Froines that he does not "maintain any copies of emails he has sent" is insufficient to comply with the Public Records Act. As we discussed on July 7, the University should search its computer back-up systems for records responsive to Arysta's request, which is now more than a year outstanding, and provide such records immediately.

Arysta maintains the hope that these issues can be resolved without litigation. Of course, Arysta offers to pay the reasonable cost of producing responsive records if this request results in UCLA performing computer services under California Government Code section 6253.9(b). Moreover, in the spirit of resolving these issues quickly and amicably, if it would be helpful, I would be happy to facilitate a meeting or telephone call between UCLA's information technology support personnel and my support personnel.

***Factual Background.*** The California Department of Pesticide Regulations ("DPR") performed a risk assessment of the chemical methyl iodide in 2009. DPR contracted with the University of California to establish an SRC to review and provide an analysis of DPR's risk assessment. A copy of the contract between DPR and the University of California is contained at Attachment B.<sup>1</sup> Under the contract, UCLA had many duties, including:

- UCLA's external peer review committee Chair was to select a group of scientists to "independently review the risk assessment to ensure the high quality of the work conducted by DPR."
- The Chair was to identify the SRC candidates and consult with DPR for final selection.
- The SRC reviewed the risk assessment.
- The SRC held public meetings.
- The Chair assigned staff to arrange for meetings including all logistics, including setting conference calls and video conferences.
- The Chair assigned staff to arrange for travel of all members. (We believe that, under this provision, SRC members submitted invoices to UCLA for expense reimbursement.)

---

<sup>1</sup> While our copy of the contract is unsigned, we believe that the executed contract is the same or substantially similar in all relevant respects.

Kevin S. Reed, Vice Chancellor, Legal Affairs  
University of California, Los Angeles  
July 27, 2011  
Page 3

Dr. John Froines, a professor of environmental science at UCLA's School of Public Health, served as Chair of the SRC. UCLA assisted the SRC in fulfilling its duties and provided staffing. On or about February 5, 2010, the SRC issued a "Report of the Scientific Review Committee on Methyl Iodide to the Department of Pesticide Regulation."

DPR registered methyl iodide for use in California in December, 2010. On December 30, 2010, the Pesticide Action Network North America ("PANNA") sued DPR over the registration of methyl iodide. PANNA's complaint was verified by Dr. Susan Kegley in her capacity as "a consulting scientist" for PANNA. Dr. Kegley verified allegations, among others, that the SRC was a panel of independent experts convened by DPR and that the SRC "expressed great concern about the toxicity of methyl iodide as well as the significant gaps in DPR's risk assessment data." PANNA quoted extensively from the SRC's work to support its allegations.

On July 21, 2010, Arysta submitted a Public Records Act Request to UCLA for SRC records. A copy of Arysta's request is contained at Attachment C.

There is now a chain of communications between Arysta and UCLA related to this request that is more than a year long. Arysta contacted UCLA on August 18, September 7, September 21, October 22, November 4, November 29, December 7 and December 13, 2010, and April 27 and April 28, 2011, each time asking when UCLA would complete its review and provide responsive documents. My letter of May 17, 2011 (Attachment C) followed, to inform UCLA that it had not responded to Arysta's request for ten months. Our communications since then have been: UCLA's reply of May 23, 2011 purporting to provide documents (Attachment D); our telephone conversation on May 26, 2011 that UCLA had not provided documents; your email message of that date providing redacted documents (Attachment E); our discussion of June 1 that most of the redactions made by the University were not appropriate; UCLA's letter of June 4 attaching documents with some of the redactions removed (Attachment F, without enclosures); our further discussion of June 6 regarding the remaining redactions; and our most recent communications detailed herein.

By June 14, in what is at best only a partial response to Arysta's request, UCLA provided several email messages *from* Dr. Kegley at PANNA *to* Dr. Froines and Ms. Elinor Fanning at UCLA. These messages are dated April 7, 2009; April 29, 2009; July 3, 2009; a second email on July 3, 2009; a third email on July 3, 2009; July 9, 2009 (to Dr. Froines only); a second email on July 9, 2009; a third email of July 9, 2009 (to Dr. Froines only); July 13, 2009; July 16, 2009; a second email on July 16, 2009, forwarding the July 13 email; a third email on July 16, 2009; July 29, 2009; August 4, 2009; August 17, 2009 (to Dr. Froines only); a second email on August 17, 2009 (to Dr. Froines only, with this email containing an embedded email *from* Dr. Froines); August 20, 2009 (to Dr. Froines only); August 27, 2009; August 31, 2009 (to Dr. Froines only, and responding to an email *from* Dr. Froines); September 25, 2009; February 12, 2010 (to Dr. Froines only); and a second email on February 12, 2010 (to Dr. Froines only). Other than the embedded messages, UCLA provided nothing originating from Dr. Froines' "sent items."

Kevin S. Reed, Vice Chancellor, Legal Affairs  
University of California, Los Angeles  
July 27, 2011  
Page 4

UCLA also produced email messages *from* Dr. Gina Solomon of the University of California at San Francisco *to* Dr. Froines, among others, dated February 8, February 11, March 4, and March 9, 2010. Dr. Solomon's March 4 email message embeds and replies to several email messages from Dr. Froines. Again, UCLA provided nothing originating from Dr. Froines' sent items.

As described above, your June 14 email message (Attachment A) stated:

"I have also confirmed with our staff that they requested documents in the date range for which you stated there is a gap [*i.e.*, from September 2009 through February 2010]. They also had already inquired of Professor Froines as to whether he had any 'sent' emails in his possession from his account, and he asserted to them that he does not maintain any copies of emails he has sent."

I replied by email (Attachment A) that "[w]e believe that UCLA should conduct a search of its email/computer back-up systems for responsive records, and request that UCLA do so." On July 7, you offered to investigate UCLA's electronic back-up system, but we have not since received an update from UCLA, and no other records have been forthcoming.

**University of California Policy.** Electronic communications records pertaining to the business of the University are public records. (*Electronic Communications Policy*, University of California Office of the President (issued November 17, 2000, revised August 18, 2005), at 5.) Moreover, University electronic communications resources, systems and services are University property. (*Id.*) University electronic communications are backed up to assure system integrity and reliability, and to prevent potential loss of data, which may allow for future retrieval. (*Id.* at Attachment 1, *User Advisories*, at 7.) University policy advises that:

"Users of electronic communications resources should be aware that even if they have discarded copies of an electronic communication stored on devices they can control, back-up copies could exist on other devices. ***Back-up copies that are able to be retrieved might be subject to disclosure under the California Public Records Act*** or, in litigation, as the result of the discovery process." (*Id.*, emphasis supplied.)

In turn, the sender of an email message is responsible for retaining the University's official copy of an email generated from within the University. (*Managing E-mail as a University Record*, University of California Office of the President (January 18, 2011), at 4.) UCLA policy recognizes that a legal hold may be placed on email when a Public Records Act Request has been received. (*Id.* at 5.)

Kevin S. Reed, Vice Chancellor, Legal Affairs  
University of California, Los Angeles  
July 27, 2011  
Page 5

***Inadequacy of UCLA's Search and Response.*** As you and I have discussed, we are troubled that Dr. Froines has no "sent" email messages that are responsive to Arysta's request, in view of his status as the custodian of official records under the University's policy and the email messages from him embedded in the email from Drs. Kegley and Solomon described above. UCLA has not offered any acceptable explanation for this, and we know of none.

We also are troubled by the gap in ***any*** communications from October 2009 through February 2010, given the frequency of the communications immediately preceding and following that time and given that the SRC's report was pending and was issued in early February 2010. As above, UCLA has not offered any acceptable explanation for this, and we know of none.

The CPRA provides that a public agency must locate and provide responsive electronic records. Public records under the CPRA include any "writing containing information relating to the conduct of the public's business prepared, owned, used or retained by any state or local agency ***regardless of physical form or characteristics.***" (Govt. Code section 6252(e), emphasis added.) "Writing" means "any handwriting, typewriting, printing, photostating, photographing, photocopying, transmitting by electronic mail or facsimile, and every other means of recording upon any tangible thing any form of communication or representation, including letters, words, pictures, sounds, or symbols, or combinations thereof, and any record thereby created, ***regardless of the manner in which the record has been stored.***" (Govt. Code section 6252(g), emphasis added.) The CPRA further provides that "any agency that has information that constitutes an identifiable public record not exempt from disclosure pursuant to this chapter that is in an electronic format shall make that information available in an electronic format when requested...." (Govt. Code section 6253.9(a).)

Additional authority under the federal Freedom of Information Act ("FOIA"), which is analogous to the CPRA, is directly on point. FOIA requires federal agencies to make reasonable efforts to search for requested records in electronic form. (5 U.S.C. § 552(a)(3)(C).) Congress defined the term "search" as requiring an agency to "review, manually or by automated means, agency records for the purpose of locating those records which are responsive to a request." (5 U.S.C. § 552(a)(3)(D).) In *Albino v. U.S. Postal Service* (W.D. Wisconsin 2002) 2002 WL 32345674, the District Court held that an agency's search under FOIA for e-mails spanning a five year period was inadequate because the agency did not enlist the help of information technology personnel who would have access to e-mail archives possibly containing requested records. Instead, the agency only asked the named individuals for the records.

Based on the law, on UCLA's policies, and on the pattern of Dr. Froines' communications with Dr. Kegley and Dr. Solomon, UCLA has not yet completed an adequate search for responsive records. The records Arysta seeks are public records and UCLA is the California agency responsible for allowing Arysta to access them. UCLA limited its search in part to asking Dr. Froines to provide email in his possession. Despite the University's policy and his position as the custodian of official University records, Dr. Froines responded that he does not maintain sent email.

Kevin S. Reed, Vice Chancellor, Legal Affairs  
University of California, Los Angeles  
July 27, 2011  
Page 6

Even so, that does not end the inquiry. The CPRA requires a public agency to retrieve electronic records, when requested, regardless of where those records are stored. UCLA most likely has responsive electronic records backed up. If Dr. Froines, as custodian, does not maintain official UCLA public records as required by the University's policy, then it is incumbent upon UCLA to search its computer back-up systems and locate, extract and provide responsive records.

You and I have been communicating regarding these records for more than two months now, and Arysta's request is now more than a year outstanding (*see* Attachment C). As we informed UCLA previously, any reasonable period of time allowed by the Act for the University to complete its review and provide responsive records expired long ago. *See* Government Code section 6253. Although Arysta has long hoped to resolve these issues without resort to litigation, if forced to litigate, Arysta will seek discovery of UCLA's system back-ups and court costs and attorneys fees for seeking judicial relief. *See* Government Code sections 6258 and 6259. We urge UCLA to complete its search now and provide responsive records immediately.

As stated above, Arysta will pay reasonable costs if the computer services listed under Government Code section 6253.9(b) are necessary to extract these records. If you are able to estimate such costs in advance, please inform me. Moreover, if it would be helpful to the University, I would be happy to facilitate a meeting or telephone call between UCLA's information technology support personnel and my support personnel.

Thank you for your assistance in this matter.

Very truly yours,



Robert S. Schuda  
Counsel for Arysta LifeScience  
North America, LLC

RSS:jr  
Attachments

cc: Ms. Aimee Felker, Director of Records Management and Information Practices, UCLA  
Ms. Frances Thompson, Public Records Coordinator, UCLA

LA:17866419.1

---

# ATTACHMENT A

## Schuda, Robert

---

**From:** Schuda, Robert  
**Sent:** Wednesday, July 27, 2011 11:46 AM  
**To:** Schuda, Robert  
**Subject:** FW: PRA Request PRR 2011-041

Robert S. Schuda | Partner  
McKenna Long & Aldridge LLP  
300 South Grand Avenue, 14th Floor | Los Angeles, CA 90071  
Tel: 213.243.6136 | Fax: 213.243.6330 | [rschuda@mckennalong.com](mailto:rschuda@mckennalong.com)

Please consider the environment before printing this email.

---

-----Original Message-----

**From:** Schuda, Robert  
**Sent:** Thursday, June 30, 2011 10:07 AM  
**To:** 'Reed, Kevin'  
**Cc:** 'Felker, Aimee'  
**Subject:** PRA Request PRR 2011-041

Kevin,

Thank you for your response, and for the information provided below.

I would like to speak with you to discuss the indication from Dr. Froines that he does not maintain copies of his sent email, the gap from September 2009 through February 2010, and UCLA's search for those records. In short, it appears that UCLA limited its search for responsive records to making discrete inquiries of certain individuals, such as Dr. Froines. We believe that UCLA should conduct a search of its email/computer back-up systems for responsive records, and request that UCLA do so.

I propose that we get together by phone to discuss this in more detail. Please let me know when it would be convenient for me to call you, and I will do so. On the other hand, please feel free to call me at your earliest convenience. I am generally available over the next few days.

Thank you,

Bob

Robert S. Schuda | Partner  
McKenna Long & Aldridge LLP  
300 South Grand Avenue, 14th Floor | Los Angeles, CA 90071  
Tel: 213.243.6136 | Fax: 213.243.6330 | [rschuda@mckennalong.com](mailto:rschuda@mckennalong.com)

Please consider the environment before printing this email.

-----Original Message-----

**From:** Reed, Kevin [<mailto:kreed@conet.ucla.edu>]  
**Sent:** Tuesday, June 14, 2011 12:16 PM  
**To:** Schuda, Robert  
**Cc:** [jeff.tweedy@arystalifescience.com](mailto:jeff.tweedy@arystalifescience.com); Felker, Aimee  
**Subject:** RE: Redactions to PRA Request Response PRR 2011-041

Bob:

Since we spoke, I was able to contact counsel at earthjustice. After inquiry, they called me back and stated that they agreed that any attorney/client privilege in the emails to them from Dr. Kegley had been waived.

Therefore, I am sending you these unredacted versions of the emails. I have marked them with the bates numbers from the original transmission to your client, with the suffix "b."

I have also confirmed with our staff that they requested documents in the date range for which you stated there is a gap. They also had already inquired of Professor Froines as to whether he had any "sent" emails in his possession from his account, and he asserted to them that he does not maintain any copies of emails he has sent.

I hope this resolves all outstanding issues relating to this PRA request. I understand your client will be sending us a follow up request. I will not strain credulity by claiming that I look forward to receiving it!

Kevin S. Reed  
Vice Chancellor, Legal Affairs  
UCLA  
310.206.1355

-----Original Message-----

From: Schuda, Robert [<mailto:rschuda@mckennalong.com>]  
Sent: Sunday, June 05, 2011 1:14 PM  
To: Reed, Kevin  
Cc: [jeff.tweedy@arystalifescience.com](mailto:jeff.tweedy@arystalifescience.com); Felker, Aimee  
Subject: RE: Redactions to PRA Request Response PRR 2011-041

Kevin,

Thank you for your response. I propose that we keep our appointment to talk tomorrow at 2:30 PM. If convenient for you, I will call you then.

Thank you,

Bob

Robert S. Schuda | Partner  
McKenna Long & Aldridge LLP  
300 South Grand Avenue, 14th Floor | Los Angeles, CA 90071  
Tel: 213.243.6136 | Fax: 213.243.6330 | [rschuda@mckennalong.com](mailto:rschuda@mckennalong.com)

Please consider the environment before printing this email.

-----Original Message-----

From: Reed, Kevin [<mailto:kreed@conet.ucla.edu>]  
Sent: Saturday, June 04, 2011 12:14 PM  
To: Schuda, Robert  
Cc: 'jeff.tweedy@arystalifescience.com'; Felker, Aimee  
Subject: Redactions to PRA Request Response PRR 2011-041

Bob:

Please see letter attached.

Kevin S. Reed  
Vice Chancellor, Legal Affairs  
UCLA  
310.206.1355

**CONFIDENTIALITY NOTICE:**

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# ATTACHMENT B

## ATTACHMENT 1 Standard Agreement

### Description of Work:

After the Department of Pesticide Regulation (DPR) finalizes their risk assessment on Methyl Iodide, the external peer review committee Chair from the University of California, Los Angeles (UCLA) will select a group of scientists who will independently review the risk assessment to ensure the high quality of the scientific review conducted by DPR. The scientists selected for the review process will be currently active in their areas of research and will be selected from appropriate scientific, academic, private or public entities. The review panel will hold or participate in three to four meetings:

- **First Meeting**

An initial meeting will be held in order that DPR is able to present the risk assessment and answer initial questions by the reviewers. This meeting will be open, but the panel will not take comments from the audience preferring to hear only from DPR. This meeting will occur *no sooner* than one month after the panel receives the revised risk assessment document.

At the end of the initial meeting the panel will define task areas and agree on work assignments. The review process will be defined and they shall identify an agreed upon approach to the review.

- **Second Meeting (optional at the discretion of the Chair and DPR leadership)**

A public meeting, where Stakeholders and other members of the public will provide testimony and input.

- **Third Meeting**

A meeting of the risk evaluation group to discuss the DPR risk assessment document as a collective effort to ensure the criteria defined above are being effectively reviewed and to discuss scientific issues

- **Fourth Meeting**

A final meeting to approve the findings of the panel. The findings will be prepared by the members in their respective areas of expertise; the overall findings will be reviewed on an individual basis and then the final determination will be made at a meeting

While members of the review group will have specific expertise, it is anticipated that the entire document will be evaluated by the total group. Assignments to specific areas will be made by the Chair based on expertise in consultation with the panel members. The findings will be prepared by the panel following specific assignments and the Chair will be responsible for creating the overall findings to be approved by the entire panel and a written report will be submitted to DPR.

**ATTACHMENT 1**  
Standard Agreement

UCLA responsibilities:

- 1) The Chair will identify a list of potential candidates for review by DPR. Final selection will result from discussion between the Chair and DPR leadership.
- 2) The panel will receive the risk assessment documents at the same time the documents are sent to the Office of Environmental Health Hazard Assessment (OEHHA) for review.
- 3) The panel will preview the original risk assessment document but will not hold any discussions or meetings until after receiving the revised risk assessment document that include OEHHA's peer review.
- 4) The first meeting will be a public meeting where DPR will present the risk assessment to the panel including the review by OEHHA. In this public meeting, the panel will only hear the presentation from DPR and not from the public. The panel will then hold meetings and conference calls to discuss, review and consult on the relevant issues to evaluate the risk assessment.
- 5) The findings will be prepared by the panel following specific assignments by the Chair.
- 6) The Chair will create the overall findings to be approved by the entire panel and a report will be provided to DPR.
- 7) The Chair will assign staff to arrange for the meetings including meeting locations, time, distribute meeting documents, and all logistics in consultation with the Chair and members of the panel. This includes conference calls and videoconferences when necessary.
- 8) The Chair will assign staff to arrange for travel and accommodations for all panel members to the location of the meetings.
- 9) The Chair will inform DPR leadership of the progress of the review and discuss issues when necessary.
- 10) The Chair will ensure that the review process time line will be between six (6) and nine (9) months from the date the panel receives the revised risk assessment documents, with OEHHA's comments, from DPR.

DPR responsibilities:

- 1) DPR will send risk assessment documents to the review panel at the same time the document is sent to the Office of Environmental Health Hazard Assessment for review.
- 2) After DPR receives comments from OEHHA and incorporates their comments in the document, the revised document will be sent to the panel.
- 3) DPR will present the risk assessment to the panel in the initial public meeting. The presentation will include the review and comments by OEHHA. This meeting will occur *no sooner* than one (1) month after receiving the revised document from DPR.

**ATTACHMENT 1**  
Standard Agreement

- 4) DPR will receive public comments after the presentation to the panel. Panel members will not be obliged to be present at this forum or at any subsequent meetings when DPR receives public comments.
- 5) DPR will receive the findings from the panel after its review and conclusions from the process which will be between 6 to 9 months from the panel receiving the revised document (with OEHHA's comments).

---

ATTACHMENT C

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& Aldridge LLP  
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ROBERT S. SCHUDA  
(213) 243-6136

EMAIL ADDRESS  
rschuda@mckennalong.com

May 17, 2011

***CERTIFIED MAIL; RETURN RECEIPT REQUESTED***

Ms. Frances Thompson  
UCLA Public Records Coordinator  
Records Management & Information Practices  
Corporate Financial Services  
10920 Wilshire Blvd., Suite 530  
Los Angeles, California 90024

Charles F. Robinson, Esq.  
Vice President and General Counsel  
Office of the General Counsel  
University of California  
1111 Franklin Street, 8th Floor  
Oakland, California 94607

**Re: FAILURE TO COMPLY WITH PUBLIC RECORDS ACT REQUEST BY ARYSTA  
LIFESCIENCE NORTH AMERICA, LLC, No. 2011-0041**

Dear Ms. Thompson and Mr. Robinson:

We have been retained to represent Arysta LifeScience North America, LLC (“Arysta”) in a matter arising under the California Public Records Act.<sup>1</sup> We are writing as a courtesy to the University, and trust that this letter will serve as a reminder that Arysta’s PRA request for records in the possession of the University and its School of Public Health (No. 2011-0041) remains outstanding and will prompt the University to provide responsive documents immediately.

On July 21, 2010, Arysta submitted a PRA request for Scientific Review Committee records to the UCLA School of Public Health (“School”). This request appears as Enclosure (1), and is the subject of this letter. After submitting its request, Arysta contacted UCLA on August 18, September 7, September 21, October 22, November 4, November 29, December 7 and December 13, 2010, and April 27 and April 28, 2011, each time asking when UCLA would complete its review and provide responsive documents. Enclosure (2) is a log of these communications. Although UCLA promised progress several times, UCLA has not released the documents and appears not even to have completed an internal review.

In its last communication to Arysta, dated December 17, 2010 (Enclosure 3), UCLA indicated only that documents related to Arysta’s request were being gathered and reviewed.

<sup>1</sup> California Government Code §§ 6250-70, hereinafter referred to as “the PRA” or “the Act.” All citations to “Sections” refer to the PRA.

Frances Thompson, UCLA Public Records Coordinator  
Charles F. Robinson, Vice-President and General  
Counsel  
May 17, 2011  
Page 2

The School did not inform Arysta when its review would be complete or whether responsive documents would be provided, as required under Section 6253. Nor has the School contacted Arysta to follow-up since that time.

UCLA's December 17, 2010 letter also calls into question whether UCLA's compilation of responsive documents has been adequate or reasonable. Although Arysta's request encompassed documents related to all seven members of the Scientific Review Committee, the letter implies that UCLA limited its search to three full-time members of the UCLA faculty, and excluded those Scientific Review Committee members who are not. If that is the case, we know of no authority to justify so limiting the School's search. We believe the Act obligates UCLA to conduct a reasonable search which, at a minimum, requires UCLA to ask each of the members of the Scientific Review Committee for their responsive records, to gather those records, and then to provide responsive records in the time period set forth in Section 6253(c).

Here, Arysta's request is now almost ten months outstanding, and any reasonable period of time allowed for the School to complete its review and provide responsive records expired long ago. *See* Section 6253. Under these circumstances, the School is leaving Arysta little choice but to file suit under the Act, and to request a court to compel the School to comply with the Act. *See* Section 6258. Should it be necessary to file suit, the record of delays and lack of communication, which compelled Arysta to retain counsel, will compel us in turn to request the Court to order UCLA to reimburse our client's court costs and attorney fees. *See* Section 6259.

I invite you to call me at the number above to discuss this matter as soon as possible to see if we can avoid that result. We are not in a position to exchange further letters and e-mails, however, as it appears that each prior promise of attention to this matter has created its own cycle of delay. Rather, we are requesting that responsive documents be provided now.

Very truly yours,



Robert S. Schuda  
Counsel for Arysta LifeScience  
North America, LLC

RSS:jr  
Enclosures  
LA:17849269.1



Arysta LifeScience

July 21, 2010

Dr. John Froines, Project Manager  
The Regents of the University of California  
UCLA School of Public Health  
650 Charles E. Young Drive, Sout  
Los Angeles, CA 90095-1772

Re: Public Records Act Request, Scientific Review Committee

Dear Dr. Froines:

In 2009, the Department of Pesticide Regulations (DPR) contracted with the University of California to review the risk assessment prepared by DPR for the chemical methyl iodide. This committee is referred to herein as the Scientific Review Committee (SRC) and the standard agreement entered into between DPR and the SRC is referred to herein as the "contract".

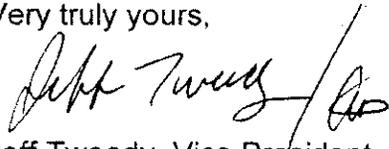
Please accept this letter as a Public Records Act request, pursuant to California Government Code Section 6250 et al. for certain documents relating to the contract. On behalf of Arysta LifeScience, the manufacturer of methyl iodide, I seek the following documents (to include, without limitation, written correspondence, email communication, forms, invoices and contracts):

- 1) Copies of written correspondence, or email communication or any other form of electronic communication between members of the SRC during the contract period and any of the following individuals, regardless of their position at the time of the correspondence:
  - A. Susan Kegley, Ph.D., Consulting Scientist Pesticide Action Network (PANNA) and independent environmental consultant.
  - B. Anne Katten, California Rural Legal Assistance
  - C. Kathleen Gilje, Executive Director, PANNA

Dr. John Froines  
The Regents of the University of California  
UCLA School of Public Health  
July 21, 2010  
Page 2

- D. Gina Solomon, Senior Scientist, National Resources Defense Council (NRDC) and Assistant Clinical Professor of Medicine at University of California, San Francisco
- E. Martha Guzman, Legislative Advocate, California Rural Legal Assistance
- F. Paul Schramski Towers, State Director, Pesticide Watch
- G. Megan Buckingham, Californians for Pesticide Reform
- H. Marilyn Lynds, Moss Landing Heights Homeowners
- I. Teresa DeAnda, Central Valley Coordinator, Californians for Pesticide Reform
- J. Paula Placencia, Assistant Coordinator, Central Coast, Lideres Campesinas Organizacion en California
- K. Karen Moyes, Resident of Sicquoc, California
- L. Senator Dean Florez and staff
- M. Assembly Member William Monning and staff

Very truly yours,



Jeff Tweedy, Vice President  
Business Development and Regulatory  
Arysta LifeScience North America, LLC  
15401 Weston Parkway, Suite 150  
Cary, NC 27513

cc: Polly Frenkel, General Counsel  
California Department of Pesticide Regulation

A	B	C	D	E
DATE	TYPE OF COMMUNICATION	FROM	TO	SUMMARY
7/21/2010	correspondence	Jeff Tweedy, Head of Business Development for Arysta	UCLA	Initial public records act request
8/9/2010	correspondence	Frances Thompson, UCLA Public Records Coordinator	Jeff Tweedy	Ms. Thompson acknowledged Arysta's submission and advised that she would provide an update on the status of the request by August 18, 2010
8/18/2010	phone call	Jeff Tweedy	Frances Thompson	Mr. Tweedy contacted Ms. Thompson for an update, at which time she advised that he should call back in two weeks
9/7/2010	phone call	Jeff Tweedy	Frances Thompson	Mr. Tweedy contacted Ms. Thompson for an update, and was again advised that he should call back in two more weeks for an update on the status of the request
9/21/2010	correspondence	Jeff Tweedy	Frances Thompson	Mr. Tweedy acknowledged that while Arysta's request may be somewhat time consuming, we sought assurance from Ms. Thompson that all responsive records would be provided by October 8, 2010, some 2 ½ months after the initial request was submitted
10/22/2010	phone call	Dayna Sussman, Senior Paralegal for Arysta	Frances Thompson	Ms. Thompson advised as follows regarding the status of Arysta's request: a. Many campuses and numerous other Records Coordinators would be involved in our request b. No internal review of documents had taken place c. No internal sign-off of documents had taken place d. She had 150 open requests pending and had no idea when she would get to Arysta's request
11/4/2010	correspondence	Dayna Sussman	Frances Thompson	Correspondence set out summary of above communications, offered assistance in photocopying and requested a date certain in which Arysta would receive all documents responsive to the public records request
11/5/2010	e-mail	Frances Thompson	Dayna Sussman	Ms. Thompson advised that progress was made on the request but no records are available yet for release. Advised that several CA Scientific Review Committee members indicated they had no responsive correspondence. Other members were gathering records or determining if they had responsive records. Further advised she would update Ms. Sussman on 11/19/10

A	B	C	D	E
10	11/29/2010 e-mail	Dayna Sussman	Frances Thompson	E-mail stated that on 11/5/10 Ms. Thompson advised that on 11/19/10 she would provide an update on the status of Arysta's public records request which was submitted 7/21/10, but she did not do so. Further stated Arysta had been very patient in awaiting a response, but if no response received by November 30, 2010 with either (a) confirmation that copies of all responsive documents are ready to be paid for and sent to Arysta; or (b) a date certain within the next week that the documents will be ready for payment and delivery to Arysta, we shall have no recourse but to pursue appropriate legal action by all means afforded to it
11	12/7/2010 phone call	Christine Mazzone, Regional Counsel for Arysta	Maria Shanle, UCLA attorney responsible for Public Records Act requests	Ms. Mazzone left a message for Ms. Shanle, who was out of the office until 12/10/10
12	12/13/2010 phone call and e-mail	Christine Mazzone	Maria Shanle	Ms. Mazzone spoke with Ms. Shanle, summarized the foregoing attempts for information pursuant to the Public Records Act request made in July and followed up with an e-mail to Ms. Shanle forwarding written communications with Ms. Thompson
13	12/17/2010 e-mail	Maria Shanle	Christine Mazzone	Ms. Shanle advised Arysta would be hearing from Ms. Thompson shortly (see below). Further advised she reviewed the circumstances, and it looked to her like the campus has been moving this request forward to the greatest extent possible, and will provide you with any disclosable records in fairly short order
14	12/17/2010 correspondence and e-mail	Frances Thompson	Jeff Tweedy	Ms. Thompson provided update that she requested documents from all members of the Scientific Review Committee. Two members have no responsive correspondence, one is still searching files and the Committee Chair's documents are under review to determine if they are responsive
15	4/27/2011 phone call	Jeff Tweedy	Frances Thompson	Mr. Tweedy left a voicemail message for Ms. Thompson, inquiring into the status of Arysta's PRA request, that has now been pending for nine months
16	4/28/2011 e-mail	Jeff Tweedy	Frances Thompson	Mr. Tweedy followed up on his voicemail message above, seeking a date certain in which Arysta will receive a response to its PRA request



RECORDS MANAGEMENT AND INFORMATION PRACTICES  
10920 WILSHIRE BOULEVARD, 5TH FLOOR  
LOS ANGELES, CALIFORNIA 90024-6302

VIA U.S. MAIL  
December 17, 2010

Jeff Tweedy  
Vice President  
Arysta LifeScience North America, LLC  
15401 Weston Parkway, Suite 150  
Cary, NC 27513

~~RE: Request No. 2011-041 — Correspondence between members of Scientific Review Committee and named individuals~~

Dear Mr. Tweedy:

I am writing regarding your request dated July 21, 2010. You have requested the following documents regarding the standard agreement "contract" between the California Department of Pesticide Regulations and the University of California Scientific Review Committee:

- Copies of written correspondence, or email communication or any other form of electronic communication between members of the Scientific Review Committee during the contract period and any of the following individuals, regardless of their position at the time of the correspondence:
  - Susan Kegley, Ph. D., Consulting Scientist Pesticide Action Network (PANNA) and independent environmental consultant;
  - Anne Katten, California Rural Legal Assistance;
  - Kathleen Gilje, Executive Director, PANNA;
  - Gina Solomon, Senior Scientist, National Resources Defense Council (NRDC) and Assistant Clinical Professor of Medicine at University of California, San Francisco;
  - Martha Guzman, Legislative Advocate, California Rural Legal Assistance;
  - Paul Schramski Towers, State Director, Pesticide Watch;
  - Megan Buckingham, Californians for Pesticide Reform;
  - Marilyn Lynds, Moss Landing Heights Homeowners;
  - Teresa DeAnda, Central Valley Coordinator, Californians for Pesticide Reform;
  - Paula Placencia, Assistant Coordinator, Central Coast, Lideres Campesinas Organizacion en California;
  - Karen Moyes, Resident of Sicquoc, California;
  - Senator Dean Florez and staff; and
  - Assembly Member William Monning and staff.

I have requested documents from all University of California members of the Scientific Review Committee. Two have responded that they had no correspondence with the persons listed above and therefore, there are no responsive documents from these committee members. One member is still searching the files for any responsive documents. I have just received documents from the Chair of the Committee and they are now under review to determine if these records are responsive to your request.

Jeff Tweedy Status  
Request 2011-041, Page 2  
December 17, 2010

Please email [UCLAPublicRecords@finance.ucla.edu](mailto:UCLAPublicRecords@finance.ucla.edu) or call me should you have any questions regarding the status of your request.

Sincerely,



*Frances Thompson*

UCLA Public Records Coordinator  
~~Records Management & Information Practices~~  
Corporate Financial Services  
10920 Wilshire Blvd., Suite 530  
Los Angeles, CA 90024-6502  
(310) 794-8741 | (310) 794-8691 (fax)  
[ftompson@finance.ucla.edu](mailto:ftompson@finance.ucla.edu) | [www.finance.ucla.edu](http://www.finance.ucla.edu)  
For public records requests email: [UCLAPublicRecords@finance.ucla.edu](mailto:UCLAPublicRecords@finance.ucla.edu)

CC: Dayna Sussman, Senior Paralegal to Christine Mazzone VIA EMAIL

**SENDER: COMPLETE THIS SECTION**

- Complete items 1, 2, and 3. Also complete item 4 if Restricted Delivery is desired.
- Print your name and address on the reverse so that we can return the card to you.
- Attach this card to the back of the mailpiece, or on the front if space permits.

## 1. Article Addressed to:

Ms. Frances Thompson  
 UCLA Public Records Coordinator  
 Records Management & Info Practices  
 Corporate Financial Services  
 10920 Wilshire Blvd., Suite 530  
 Los Angeles, CA 90024

2. Article Number:  
(Transfer from service label)

7009 1410 0001 2149 6256

PS Form 3811, February 2004

Domestic Return Receipt

102595-02-M-1540

**COMPLETE THIS SECTION ON DELIVERY**
 A. Signature:   Agent  
 Addressee

 B. Received by (Printed Name): Geoff C. Date of Delivery: 5-20-04

 D. Is delivery address different from item 1?  Yes  
 If YES, enter delivery address below:  No

 3. Service Type:  
 Certified Mail  Express Mail  
 Registered  Return Receipt for Merchandise  
 Insured Mail  C.O.D.
4. Restricted Delivery? (Extra Fee)  Yes**SENDER: COMPLETE THIS SECTION**

- Complete items 1, 2, and 3. Also complete item 4 if Restricted Delivery is desired.
- Print your name and address on the reverse so that we can return the card to you.
- Attach this card to the back of the mailpiece, or on the front if space permits.

## 1. Article Addressed to:

Charles F. Robinson, Esq.  
 Vice President and General Counsel  
 Office of the General Counsel  
 University of California  
 1111 Franklin Street, 8<sup>th</sup> Floor  
 Oakland, CA 94607

2. Article Number:  
(Transfer from service label)

7009 1410 0001 2150 1059

PS Form 3811, February 2004

Domestic Return Receipt

102595-02-M-1540

**COMPLETE THIS SECTION ON DELIVERY**
 A. Signature:   Agent  
 Addressee

 B. Received by (Printed Name): C. Date of Delivery: 5/19/04

 D. Is delivery address different from item 1?  Yes  
 If YES, enter delivery address below:  No

 3. Service Type:  
 Certified Mail  Express Mail  
 Registered  Return Receipt for Merchandise  
 Insured Mail  C.O.D.
4. Restricted Delivery? (Extra Fee)  Yes

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**ATTACHMENT D**



OFFICE OF THE CHANCELLOR  
BOX 951405  
LOS ANGELES, CALIFORNIA 90095-1405

May 23, 2011

Mr. Robert Schuda  
McKenna Long & Aldridge LLP  
300 South Grand Avenue, 14<sup>th</sup> Floor  
Los Angeles, CA 90071-3124

Re: Your Letter of May 17, 2011 Concerning Arysta LifeScience

Dear Mr. Schuda:

Your letter of May 17 to Charles Robinson and Frances Thompson has been forwarded to me for reply.

I can appreciate your consternation in not having received the documents requested by your clients last year. But I was a bit surprised by your letter, because an email attaching 17 mb of records, totaling 591 pages was sent by Ellen McGlynn in our Records Management Office to Jeff Tweedy at Arysta on May 13. Perhaps these correspondences simply crossed in the mail.

In any event, because these records have been delivered, I consider the matter resolved, and hope that you do as well. I note, as well, that the Records Management Office waived all duplication charges for these documents.

Please extend my apologies to your client for the extraordinary delay experienced in this process.

Sincerely,

A handwritten signature in black ink, appearing to read "Kevin S. Reed".

Kevin S. Reed  
Vice Chancellor, Legal Affairs

cc: Charles Robinson  
Frances Thompson  
Aimee Felker

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# ATTACHMENT E

## Schuda, Robert

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**From:** Reed, Kevin [kreed@conet.ucla.edu]  
**Sent:** Thursday, May 26, 2011 3:37 PM  
**To:** Schuda, Robert; 'jeff.tweedy@arystalifescience.com'  
**Subject:** FW: PRR 2011-041 Arysta/Methyl Iodide  
**Attachments:** PART I. 01.pdf; PART II. 02-12.pdf; PART III. 13-20.02.pdf; PART IV. 21-32.pdf; 2011-041 UCLA Response.pdf

Since I am leaving the office shortly, I wanted to re-send this before I left.

I know Bob said when we spoke on the phone that I would receive a letter indicating a third person to whom I should direct these documents. I am sorry I don't have that email address, so I am just sending to the two of you at this time. I did not want to create more delay by waiting for that correspondence.

I would appreciate your confirmation of receipt of this transmission, given the difficulties we have faced thus far.

Kevin S. Reed  
Vice Chancellor, Legal Affairs  
UCLA  
310.206.1355

**From:** UCLA Public Records  
**Sent:** Friday, May 13, 2011 4:48 PM  
**To:** 'Jeff.Tweedy@arystalifescience.com'  
**Subject:** PRR 2011-041 Arysta/Methyl Iodide

VIA EMAIL

May 13, 2011

Jeff Tweedy  
Vice President  
Arysta LifeScience North America, LLC  
15401 Weston Parkway, Suite 150  
Cary, NC 27513

RE: PRR 2011-041 – Correspondence re: Scientific Review Committee

Dear Mr. Tweedy:

I am writing in response to your July 21, 2010 request for records regarding correspondence between named individuals and the Scientific Review Committee.

There are 591 pages of responsive documents for your request and due to size they are broken up into four attachments as listed below. The fees have been waived for this request although subsequent requests may be subject to duplication fees.

Portions of the documents were withheld under the California Public Records Act, Government Code §6254 to protect personal private information, and California Evidence Code, Art. 3 protecting lawyer-client privilege. Additionally, attachment 21.01, found in Part IV of the attachment, was withheld to protect the copyright. The title of the article withheld is "*Mechanisms of Carcinogenicity of Methyl Halides*" authored by

Herman M. Bolt and Barbara Gansewendt, and published in Critical Reviews in Toxicology, Vol. 23, Issue 3 1993.

Please feel free to contact us if you have any questions or comments regarding this request.

Sincerely,



Ellen McGlynn  
Records Management & Information Practices  
(310) 794-8741 | [UCLAPublicRecords@finance.ucla.edu](mailto:UCLAPublicRecords@finance.ucla.edu)

Enclosure(s): PRR 2011-041

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# ATTACHMENT F



June 4, 2011

Robert Schuda  
McKenna Long & Aldridge LLP  
300 South Grand Avenue, 14<sup>th</sup> Floor  
Los Angeles, CA 90071-3124

OFFICE OF THE CHANCELLOR  
BOX 951405  
LOS ANGELES, CALIFORNIA 90095-1405

Re: Redactions to Arysta LifeScience Document Production

Dear Mr. Schuda:

Thank you for forwarding me copies of the pages you contend were improperly redacted by UCLA before being delivered to your client in response to its Public Records Act request.

I have now gone through each of the redactions in question and have found numerous instances in which it is possible to release the documents unredacted.

In my review, I determined that redactions in question were for four reasons.

- 1) Names of individuals unknown to the Records office were redacted in order to ensure that information concerning UCLA students would not be released.
- 2) In one instance (repeated twice via forwarded email), substantive information was released in order to protect the attorney client privilege. Those communications were between Dr. Kegley and counsel at EarthJustice and constitute Dr. Kegley's request to counsel for legal advice.
- 3) Private information in the form of non-corporate email addresses, and home and cell phone numbers were redacted to protect the privacy rights of persons referenced in the documents.
- 4) In about 10 instances, computer programming improperly redacted text.

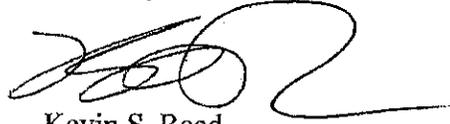
I have gone through each name redacted individually to determine whether the individuals named are, in fact students. Whenever I was unable to establish that the person named was a student, I have reversed the redaction. Similarly, I have produced clean versions of those pages that were inadvertently redacted via computer error. I have maintained the redactions of private email addresses and phone numbers, however, as well as the substance of the request for legal advice (though I modified the redactions in those instances in order to show that the communication in question was, indeed, addressed to counsel).

I have attached those pages where redactions were removed or modified. In each instance, I have designated the new page by the old bates number, with the numeral "a" following.



I hope that this delivery resolves this matter with your very patient client.

Sincerely,

A handwritten signature in black ink, appearing to read 'Kevin S. Reed', with a long horizontal flourish extending to the right.

Kevin S. Reed  
Vice Chancellor, Legal Affairs

cc: Aimee Felker  
Jeff Tweedy

---



OFFICE OF THE CHANCELLOR  
BOX 951405  
LOS ANGELES, CALIFORNIA 90095-1405

August 4, 2011

Robert Schuda, Esq.  
McKenna Long & Aldridge LLP  
300 South Grand Avenue, 14<sup>th</sup> Floor  
Los Angeles, CA 90071-3124

Re: PRA Request PRR 211-041

Dear Mr. Schuda:

Thank you for your letter of July 27. And thank you for recognizing the multitude of hours UCLA has devoted to responding to your client's Public Records Act request.

And, I'm sorry that you remain dissatisfied with the hundreds and hundreds of pages we have delivered to you, but I can confirm that they constitute a complete and diligent production of documents responsive to your request.

Since we last spoke, I have personally interviewed Professor Froines, who maintains that he has produced all responsive emails and other documents that are in his possession, and that he does not have "sent" emails in his possession responsive to your request.

I disagree that we have a duty to search backup systems for responsive documents. Backup systems are designed for disaster recovery and are not maintained in the ordinary course of the University's business. They don't constitute public records. Moreover, I will note that caselaw interpreting e-discovery rules holds that a party is not obligated to search backup systems for responsive documents where such systems exist for disaster recovery, viz document storage purposes. See, e.g., *Zubulake v. UBS Warburg LLC*, 220 F.R.D. 212, (S.D. New York 2003). The University of California guideline you cite in your letter, which pertains to personnel in the Office of the President, does not create a duty on the part of our faculty to maintain permanent copies of their sent emails.

That said, I did inquire of our IT team with respect to whether Prof. Froines' sent or received emails existed on any backup system for the period in question (recognizing, as I stated to you before, that any search into a faculty members email archives would require that faculty member's consent). I have learned that there are no backup tapes or archives of the email system used by Professor Froines older than a few months. This is

Robert Schuda, Esq.

-2-

August 4, 2011

to be expected, since backup tapes are, by design, a temporary media designed for disaster recovery, not data storage.

I believe the record establishes that UCLA has complied fully with our obligations to produce public records. I regret that your client seems unsatisfied with the hundreds of pages it has received, but we have given you what we have, and that is all that the law requires.

Sincerely,

A handwritten signature in black ink, appearing to read "K. S. Reed", with a stylized flourish extending to the right.

Kevin S. Reed  
Vice Chancellor, Legal Affairs

cc: Aimee Felker  
Jeff Tweedy