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ENFORCEMENT OF PESTICIDE REGULATION IN CALIFORNIA:
A CASE STUDY OF THE EXPERIENCE WITH METHYL BROMIDE

BY VICTORIA CLARK*

I. INTRODUCTION

Pesticide regulation in California is a labyrinth of statutes and regulations.¹ Those statutes and regulations detail the authority and duties of the Department of Pesticide Regulation ("DPR"), a branch of the California Environmental Protection Agency ("CalEPA"), and the County Agricultural Commissioners ("CACs"), offices established in individual counties in California to carry out the day-to-day operations of the pes-

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ticide regulatory program ("the Program"). The California Department of Food and Agriculture carried out DPR's administration responsibilities under the Program prior to the establishment of DPR under the CalEPA rubric in 1991.2

Because the Program is driven by regulations and policies written at the state level but actually implemented at the local level, there is every opportunity for, and very often is, a disconnect between DPR regulations and its guidance and actual implementation of the Program at the local level. Because of this disconnect, the Program is not carried out in a uniform manner, and conditions placed on pesticide applications and any enforcement of the pesticide laws and regulations varies widely from CAC to CAC. The complexity of the Program and the variation in its implementation often leads to confusion about Program requirements and the environmental and health impacts of pesticide applications on neighboring communities.

Given the complexity of the Program, it requires considerable effort merely to become familiar with the provisions and agencies involved in the Program and its implementation. There are various non-profit organizations in California providing education, organizing, and legal support around pesticide issues in various contexts, including the Environmental Defense Center ("EDC"), California Rural Legal Assistance, Inc. ("CRLA"), California Rural Legal Assistance Foundation, the Environmental Center of San Luis Obispo ("ECOSLO"), Pesticide Watch, Environmental Working Group, Pesticide Action Network. EDC, CRLA, and ECOSLO teamed up and obtained grant funding for the Central Coast Environmental Health Project ("CCEHP") in 1997. CCEHP is a collaborative effort where the groups involved provide education and outreach to farmworkers and communities regarding pesticide issues at the agricultural/urban interface in Ventura, Santa Barbara, San Luis Obispo, Monterey, San Benito, and Santa Cruz Counties. CCEHP also organizes physician trainings so that pesticide illnesses can be better diagnosed and reported in emergency rooms and doctors' offices. Another part of the work performed by CCEHP includes legal work on pesticide

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issues on behalf of farmworkers by CRLA as well as legal analysis of legal remedies for pesticide exposure and rulemaking in the pesticide context by CRLA and EDC. CCEHP has been quite effective at educating farmworkers, physicians, and the public about pesticide exposure issues.

One of the pesticide issues that CCEHP has been actively involved in is the regulation of methyl bromide. Methyl bromide is an acutely toxic pesticide that is a known reproductive toxicant (e.g., is known to cause birth defects), and a known ozone-depleting chemical. When inhaled, it is irritating to the lower respiratory tract, and is known to induce pulmonary edema and/or pneumonia. It can cause immediate and long-term nervous system effects, including tremors, seizures, convulsions, and behavioral disturbances as well as severe burning and blistering of the skin. Methyl bromide is a fumigant that is injected into the ground and is used to kill most, if not all, organisms in the ground prior to planting. It has been used prior to the installation of vineyards and is used annually prior to planting strawberries, a huge economic agricultural commodity in California.

Under the Montreal Protocol on Substances that Deplete the Ozone Layer, a treaty signed by the United States, dealing with ozone depletion on an international level, and the United States' implementation of that treaty under Title VI of the Clean Air Act Amendments of 1990, methyl bromide is on a schedule for phase-out. The phase-out schedule for the production and consumption of methyl bromide is as follows: beginning January 1, 2001, a 50 percent reduction in baseline (1991) levels; beginning January 1, 2003, a 70 percent reduction in baseline levels, beginning January 1, 2005, a complete

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4 See 42 U.S.C. §§ 7671-7671q.
5 See 64 Fed. Reg. 29241 (1999). Use of the term consumption is misleading. Consumption does not mean the "use" of a controlled substance, but rather is defined as production plus imports minus exports of controlled substances under Article I of the Montreal Protocol, and section 601 of the Clean Air Act (42 U.S.C. § 7671(6)). Unless they are subject to use restrictions, class I controlled substances (which include methyl bromide) can generally continue to be "used" after their "production and consumption" phase-out dates. As a practical matter, it is unlikely that enough methyl bromide can be stored long-term to continue its use much longer than its phase-out date.
phase-out of the production and consumption with emergency and critical use exemptions permitted under the Montreal Protocol.  

Even though methyl bromide is on a schedule for phase-out, methyl bromide is also subject to regulation under the Program, and regulations were specifically required to be promulgated by April 1, 1989. By 1998, that deadline was not met, and Friends of the Earth, Pesticide Watch, the Tides Foundation, and Pesticide Action Network filed suit to require their promulgation, and prevailed. The Office of Administrative Law (“OAL”) approved those regulations on December 15, 2000. The process of that approval will provide an illustrative case-study of one aspect of the Program for review in this article.

This article will attempt to provide an overview of the Program and its pitfalls, as well as the track record of the administration of California Governor Gray Davis (“the Davis Administration”) regarding pesticide issues. The first section will detail the regulatory agency structure of the Program, particularly the authority and duties of DPR and the CACs. The second section will discuss the pesticide permitting system, its requirements, and some anecdotes to illustrate the public participation process in this system. To present a case study of the Program’s implementation, the methyl bromide regulations will be discussed at length in the third section, including public participation, the progressive weakening of the regulatory language, DPR’s lack of compliance with various aspects of the rulemaking process, and why various environmental, farmworker advocacy, and legal assistance organizations are working so hard on the regulations. The article will then conclude with some final thoughts on pesticide regulation in California, and how the Program could be improved.

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6 See 40 C.F.R. § 82.7 (1999).
7 Congress is currently considering whether or not to amend the Clean Air Act to further extend the phase-out deadline for methyl bromide, which would violate the Montreal Protocol.
The information and observations in this article are based on the experiences of CCEHP, EDC, CRLA, and CRLAF with many aspects of the Program. There is no caselaw to detail the requirements of the Program, only statutes, regulations, and the experience of advocates and educators with the Program's requirements. As a result, many of the references and citations in this article are to anecdotal, on-the-ground experience and publications distributed by the organizations working in the trenches.

II. THE CALIFORNIA PESTICIDE AGENCY REGULATORY STRUCTURE

As stated, the Program is a labyrinth of statutes and regulations. It may be due to the complexity of the Program that it is so inaccessible and dysfunctional. The Program does not make it easy for the communities affected by pesticide use permitting, reporting, and enforcement to fully participate in or be fully informed about the issues affecting them. Further, the Program is designed to give the appearance of a comprehensive enforcement scheme, but it actually is not.

One thing is clear. Excluding the Federal Insecticide, Fungicide, and Rodenticide Act ("FIFRA"), the statutes in the California Food and Agricultural Code, and the regulations promulgated under those statutes, occupy the whole field of regulation in California regarding the registration, sale, transportation, or use of pesticides, and the Director of DPR and the CACs have the duty to enforce those rules and regulations. Preemption generally refers to the federal government occupying the field of regulation in an area, but allowing for states to promulgate more stringent regulations. However, California has statutorily preempted CACs and counties from further regulation of pesticides at the local level. CACs may undertake local regulations, but they must go through the full rulemaking process through DPR, and the regulations are not intended to more stringently regulate, only to implement the Program under "local conditions."

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10 See 42 U.S.C. §§ 7671-7671 et seq.
12 See CAL. FOOD & AGRIC. CODE § 11503 (West 1986).
Pesticide is defined under California law as "any substance, or mixture of substances which is intended to be used for defoliating plants, regulating plant growth, or for preventing, destroying, repelling, or mitigating any pest . . . which may infest or be detrimental to vegetation, man, animals, or households, or be present in any agricultural or nonagricultural environment whatsoever." That definition is broad, and DPR and the CACs regulate the use of many pesticides, and require use reporting regarding many more. While DPR and the CACs work in tandem on pesticide regulation to a certain degree, each has its own powers and duties.

A. DPR—Its Functions and Duties

The Department of Pesticide Regulation is a subagency of CalEPA. The purposes of regulating pest control operations are as follows:

(a) To provide for the proper, safe, and efficient use of pesticides essential for production of food and fiber and for protection of the public health and safety.
(b) To protect the environment from environmentally harmful pesticides by prohibiting, regulating, or ensuring proper stewardship of those pesticides.
(c) To assure the agricultural and pest control workers of safe working conditions where pesticides are present.
(d) To permit agricultural pest control by competent and responsible licensees and permittees under strict control of the director and commissioners.
(e) To assure consumers and users that pesticides are properly labeled and are appropriate for the use designated by the label and that state or local governmental dissemination of information on pesticidal uses of any registered pesticide

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13 The rulemaking process is very time-consuming and requires scientific and documentary support. Because CACs are generally overworked and underpaid, they do not have the resources to undertake local regulations. In fact, in Ventura County, that option has been discussed as a method of addressing pesticide exposures at the agriculture/urban interface, especially regarding exposure of school children to pesticides. The CAC is investigating this opportunity and is working with EDC and the Ventura County Farm Bureau to propose statewide legislation and propose statewide regulation changes by DPR.


product is consistent with the uses for which the product is registered.

(f) To encourage the development and implementation of pest management systems, stressing application of biological and cultural pest control techniques with selective pesticides when necessary to achieve acceptable levels of control with the least possible harm to nontarget organisms and the environment. ¹⁶

DPR’s duties include: (1) pesticide use regulation; (2) pesticide registration, suspension and cancellation; (3) administration of the Pesticide Contamination Prevention Act; (4) administration of the Birth Defect Prevention Act; (5) pesticide Toxic Air Contaminant listings; (6) classification of pesticides for permitting; (7) rulemaking; and (8) enforcement oversight.

Governor Davis appointed Paul Helliker as Director of DPR in 1999. Environmentalists and farmworker advocacy and legal assistance organizations viewed this appointment as positive. Helliker’s background is in air quality issues. However, as time has passed, there has been a lack of any real initiative to make positive changes in the Program. Governor Davis’ heavy campaigning, and subsequent catering, to the agricultural community have influenced the rulemaking and enforcement decisions that have come down from DPR since his election. This statement is supported by the press on Governor Davis’ infamous micromanagement of his administration. ¹⁷ As reported in a December 4, 2000 Fresno Bee article, “As governor, Davis has micromanaged to the nth degree, pointedly—and often angrily—reminding appointees that he alone was elected governor, and unceremoniously dumping any underlings who embarrassed him.”¹⁸ “The governor’s office wants agencies to keep a lid on anything remotely controversial, take care of those with political pull, and not do anything big without specific permission.”¹⁹ This micromanagement makes change of any kind slow and laborious, which leads to disappointment and frustration on the part of those directly affected by these issues.

¹⁷ See Dan Walters, Davis’ Tight Control Chokes Administration, FRESNO BEE, Dec. 4, 2000.
¹⁸ See id.
¹⁹ See id.
I. Pesticide Registration

One of the main regulatory duties carried out by DPR is the registration of pesticides and the licensing of anyone that sells pesticides in California. Before any pesticide may be manufactured or sold in California, the manufacturer, importer, or dealer must obtain a certificate of registration from DPR. DPR may waive specific data requirements for a period not to exceed three years if the pesticide is registered pursuant to FIFRA, the pesticide is used under a Federal Experimental Use Permit, or the pesticide is for use in California only, and specified data is submitted. The registrant/applicant must also submit proof of EPA registration, if required, and a summary reflecting the documents submitted to EPA in support of registration. As a result, applicants must have EPA registration in hand before they can even begin the California application process.

However, there is a huge exemption to the Federal and State registration requirements. That exemption is Section 18 of FIFRA:

The Administrator may, at the Administrator's discretion, exempt any Federal or State agency from any provision of this subchapter if the Administrator determines that emergency conditions exist which require such exemption.

This is the loophole that you could drive the proverbial farm truck through. Instead of registrants going through the expensive process of registering pesticides, states apply to EPA for emergency exemptions and get them year after year. This is

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22 See 42 U.S.C. §§ 7671-7671q.
23 See CAL. CODE REGS. tit. 3, § 6200(a & b).
24 See CAL. CODE REGS. tit. 3, § 6170.
a ripe area for legislative change (e.g., putting a limit on the number of emergency exemptions granted for any given pesticide, especially those pesticides used on labor-intensive crops).

There are four types of emergency exemptions: specific, quarantine, public health, and crisis exemptions. Specific exemptions may be authorized in an emergency condition to avert a significant economic loss or a significant risk to endangered species, threatened species, beneficial organisms, or the environment.\(^\text{27}\) Quarantine exemptions may be granted in an emergency condition to control the introduction or spread of any pest new to or not before known to be widely prevalent or distributed throughout the U.S.\(^\text{28}\) A public health exemption may be authorized in an emergency condition to control a pest that will cause a significant risk to human health.\(^\text{29}\) Crisis exemptions may be granted in an emergency condition when the time from discovery of the emergency to the time when the pesticide use is needed is insufficient to allow for the authorization of a specific, quarantine, or public health exemption.\(^\text{30}\)

An “emergency condition” is:

an urgent, non-routine situation that requires the use of a pesticide(s) and shall be deemed to exists when: (1) No effective pesticides are available under the Act that have labeled uses registered for control of the pest under the conditions of the emergency; and (2) No economically or environmentally feasible alternative that provide adequate control are available; and (3) the situation: (i) Involves the introduction or dissemination of a pest new to or not theretofore known to be widely prevalent or distributed within or throughout the United States and its territories; or (ii) Will present signifi-

\(^{27}\) See 40 C.F.R. § 166.2(a).
\(^{28}\) See 40 C.F.R. § 166.2(b).
\(^{29}\) See 40 C.F.R. § 166.2(c).
\(^{30}\) See 40 C.F.R. § 166.2(d).
cant risks to human health; or (iii) Will present significant risks to threatened or endangered species, beneficial organisms, or the environment; or (iv) Will cause significant economic loss due to: (A) An outbreak or an expected outbreak of a pest; or (B) A change in plant growth or development caused by unusual environmental conditions where such change can be rectified by the use of a pesticide(s).^{31}

“Significant economic loss” means that:

under the emergency conditions: for a productive activity, the profitability would be substantially below the expected profitability for that activity; or for other types of activities, where profits cannot be calculated, the value of public or private fixed assets would be substantially below the expected value for those assets. Only losses caused by the emergency conditions, specific to the impacted site, and specific to the geographic area affected by the emergency conditions are included. The contribution of obvious mismanagement to the loss will not be considered in determining loss. In evaluating the significance of an economic loss for productive activities, the Agency will consider whether the expected reduction in profitability exceeds what would be expected as a result of normal fluctuations over a number of years, and whether the loss would affect the long-term financial viability expected from the productive activity. In evaluating the significance of an economic loss for situations other than productive activities, the Agency will consider reasonable measures of expected loss.^{32}

These exemptions are fairly broad despite their specificity, and granted in most cases.

EPA must issue a notice of receipt in the Federal Register for a specific, quarantine, or public health exemption and request public comment when any of seven criteria are met.^{33} The ones most likely to apply are:

(1) The application proposes use of a new chemical; (2) The application proposes the first food use of an active ingredient; . . . (6) The application proposes use of a pesticide for a specific or public health exemption, if: (i) An emergency exemption has been requested or granted for that use in any

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^{31} See 40 C.F.R. § 166.3(d).
^{32} See 40 C.F.R. § 166.3(h).
^{33} See 40 C.F.R. § 166.24(a).
three previous years, and (ii) A complete application for reg-
istration of that use and/or a petition for tolerance for resi-
dues in or on the commodity has not been submitted to the
Agency; or (7) The Administrator determines that publica-
tion of notice is appropriate.34

A "new chemical" is "an active ingredient not contained in any
currently registered pesticide."35 "First food use" "refers to the
use of a pesticide on a food or in a manner which otherwise
would be expected to result in residues in a food, if no perma-
nent tolerance, exemption from the requirement of a toler-
ance, or food additive regulation for residues of the pesticide
on any food has been established under section 408(d) or (e) of
the Federal Food, Drug and Cosmetic Act."36 EPA very rarely
finds it necessary to issue notice in the Federal Register re-
garding applications for emergency exemptions.

EPA may authorize the emergency exemption after:

(1) The [EPA] Administrator determines that: (i) An emer-
gency condition exists; (ii) The use of the pesticide under the
exemption will not cause unreasonable adverse effects on the
environment; (iii) Registration of the pesticide use for which
the exemption is requested has not been suspended under
section 6(c) of the Act or cancelled following a notice under
section 6(b) of the Act, unless the use is authorized in accord-
cance with the provisions of §§ 164.130 through 164.133 of
this chapter; (2) Giving due consideration to: (i) Whether the
pesticide is reasonably likely to be used in compliance with
the requirements imposed by the Agency under the exemp-
tion; and (ii) The progress which has been made toward re-
gistration of the proposed use, if a repeated specific or public
health exemption is sought. It shall be presumed that if a
complete application for registration of a use, which has
been under a specific or public health exemption for any 3
previous years, has not been submitted, reasonable progress
towards registration has not been made.37

Past experience has shown that EPA does not seriously con-
sider some of these factors, especially the presumption of rea-
sonable progress towards registration, since many of these

34 See 40 C.F.R. § 166.24(a)(1, 2, 6, & 7).
35 See 40 C.F.R. § 166.3(g).
36 See 40 C.F.R. § 166.3(e).
37 See 40 C.F.R. § 166.25(b).
emergency registrations are granted year after year. While Section 18 pesticides are subject to the permitting requirements of the Program, they are still problematic because they allow the use of toxic pesticides without full scientific information, which does not provide assurance that their use is not causing great public health and environmental harm.

2. Pesticide Registration, Suspension, and Cancellation

In addition to the exemption under FIFRA, the Director of DPR must “prohibit or regulate the use of environmentally harmful materials” by considering the effect of all such materials upon the environment and taking whatever steps necessary to protect the environment as well as collaborating with the University of California and other agencies in research designed to reduce and eliminate the use of environmentally harmful materials. In carrying out these duties, the Director “may cancel the registration of, or refuse to register, any pesticide that has demonstrated serious uncontrollable adverse effects either within or outside the agricultural environment.” The registrant does have a duty during the registration process or at any time after the registration of a pesticide to submit factual or scientific evidence of any adverse effect or risk of the pesticide to human health, livestock, crops, or the environment that has not been previously submitted to the Department in a timely manner. That information may then be used by the Director to begin suspension or cancellation of the pesticide.

The authority to suspend or cancel a pesticide registration is rarely exercised. The process for doing so is cumbersome, and allows a hearing opportunity for the registrant.

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38 See supra note 26.
40 See CAL. FOOD & AGRIC. CODE § 12825(a) (West Supp. 2000).
41 See CAL. FOOD & AGRIC. CODE § 12825.5 (West Supp. 2000).
42 A February 15, 1995 letter from DPR to Senator Nicholas Petris details the suspension of Cyhexatin and Cycloheximide. Letter from James W. Wells, Director of DPR, to Senator Nicholas C. Petris (Feb. 15, 1995) pp. 1 and 4. A personal communication between Anne Katten of CRLAF and a DPR toxicologist determined that no other pesticides have been suspended since then.
43 See CAL. FOOD & AGRIC. CODE § 12825 (West Supp. 2000). In fact, DPR issued
At the federal and state levels, pesticides tend to be voluntarily withdrawn when they are under threat of suspension or cancellation.44

3. Pesticide Contamination Prevention Act

One of the programs that DPR administers is the Pesticide Contamination Prevention Act.45 Under that program, the Director must compile a list of pesticides that have the potential to pollute groundwater,46 and any person using a pesticide that has been placed on the Groundwater Protection List must file a report with the CAC to use those pesticides.47 If a pesticide is shown to migrate towards groundwater, the Director may cancel its registration unless it would cause "severe economic hardship on the state's agricultural industry."48 When a pesticide is shown to migrate towards groundwater, soil and groundwater monitoring must be performed, and if the Director determines that the adverse health effects of the pesticide are carcinogenic, mutagenic, teratogenic, or neurotoxic, the pesticide use will be banned in two years.49 However, this process is purely discretionary, and involves convening a subcommittee of the Director's pesticide registration and evaluation committee.50 The law shifts the burden of proof to the pesticide manufacturer. However, the Department of Food and Agriculture, when it administered the act, construed the law to allow continued use of leaching pesticides except where the state finds that groundwater has already been contaminated.51 Thus, in practice, the banning of pesticides under this

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44 See discussion infra Section II.A. In 1990, high concentrations of Telone II were found at a school site and the Department of Food and Agriculture cancelled all permits for its use. Telone II was voluntarily withdrawn. However, it was later reintroduced.


46 See CAL. FOOD & AGRIC. CODE § 13145(d) (West Supp. 2000).


law happens rarely, if ever.52


DPR also administers the Birth Defect Prevention Act of 1985,53 which is designed “to prevent pesticide induced abortions, birth defects, and infertility.”54 The program requires the Director to identify and fully test 200 active pesticide ingredients in widespread use for chronic health hazards, including birth defects, sterility, cancer, and other diseases.55 A “data gap” “means that the department does not have on file a full set of valid mandatory health effects studies.”56 “Mandatory health effects study means adverse reproductive effect, chronic toxicity, mutagenicity, neurotoxicity, oncogenicity, and teratogenicity studies required for full registration or licensing of pesticides in California, as of July 1, 1983.”57 After that, the Director must notify each registrant of a pesticide containing any of the 200 active ingredients that a data gap exists, and the intent to suspend the registration of any pesticide product containing any of the identified active ingredients for which the registrant has not submitted the required data.58 The Director must suspend the registration of any pesticide product that contains one of the identified ingredients if the registrant fails (1) to respond to the Director's notification of a data gap; (2) to submit required progress reports;59 or (3) to demonstrate reasonable progress toward completion of all the mandatory health effects studies.60 If an active ingredient is found to present “significant adverse health effects, including reproduction, birth defects, or infertility abnormalities,” the Director must commence proceedings to cancel or suspend

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52 See id. at 207-208.
54 See CAL. FOOD & AGRIC. CODE § 13122 (West 1986).
55 See CAL. FOOD & AGRIC. CODE § 13127(a) (West Supp. 2000).
56 See CAL. FOOD & AGRIC. CODE § 13123(b) (West Supp. 2000).
57 See CAL. FOOD & AGRIC. CODE § 13123(c) (West Supp. 2000).
59 As required in CAL. FOOD & AGRIC. CODE § 13127.9.
60 See CAL. FOOD & AGRIC. CODE § 13127.91 (West Supp. 2000).
its registration.61
The tests were to begin in March of 1987 and be completed by March of 1991.62 104 of the 200 priority pesticides did not meet the 1991 deadline.63 Many studies were not even begun.64 As Ralph Lightstone, a former attorney for CRLAF, stated in the chapter he wrote for the 1993 book, California's Threatened Environment, Restoring the Dream, "Five of the ten required studies of metam sodium had not been done when the pesticide catastrophically spilled into the Sacramento River in 1991."65

The purpose of the statute was to fill data gaps, evaluate the risks from certain pesticides, and cancel the ones with the greatest risks. The data gaps specified have been filled or exempted for most older pesticides, and it is unclear if or when data gaps will be filled for new registrations. Governor Davis' administration has been a little faster at completing risk assessments than the previous administration, which also made some controversial exemptions.66 However, only one pesticide registration has been cancelled as a result of this process, and others have been voluntarily withdrawn because they might have been cancelled.67 While the goal of the statute was to provide some scientific certainty regarding the health effects of some (and eventually more) pesticides, there are study areas that are not covered, and should be, including developmental neurotoxicity, endocrine disruption, and filling data gaps for pesticide breakdown products that can be just as toxic as the registered pesticide, if not more so. This law is a good start to providing scientific information about pesticides that have reproductive effects, but there continue to be gaps in that information and how it is used.

63 See id.
64 See id.
65 See id.
66 See Letter from Ronald J. Oshima, Assistant Director of the Division of Registration and Health Evaluation, to William Thomas (Feb. 17, 1995) (on file with author). In 1995, DPR waived the chronic dog study for methyl bromide based on studies available for the methyl bromide risk assessment.
67 See supra note 44.
5. Toxic Air Contaminants

The Toxic Air Contaminant ("TAC") legislation was passed in 1983, and vested regulation of TACs in the California Air Resources Board ("CARB"). A TAC is "an air pollutant that may cause or contribute to an increase in mortality or an increase in serious illness, or which may pose a present or potential hazard to human health. A substance that is listed as a hazardous air pollutant pursuant to subsection (b) of Section 112 of the federal act (42 U.S.C. Sec. 7412(b)) is a toxic air contaminant." See CAL. HEALTH & SAFETY CODE § 39655 (West 1996). "Pesticides that have been identified as hazardous air pollutants pursuant to Section 7412 of the United State Code shall be identified by the director [of DPR] as toxic air contaminants," See CAL. FOOD & AGRIC. CODE § 14021(b) (West Supp. 2000), and 34 pesticides have been listed through this process, including captan, carbaryl, and methyl bromide. See CAL. CODE REGS. tit. 3, § 6860(b). Pesticides that are identified as toxic air contaminants are to be regulated in their pesticidal use by DPR. See CAL. HEALTH & SAFETY CODE § 39655 (West 1996).

DPR is to evaluate, in consultation with the Office of Environmental Health Hazard Assessment ("OEHHA") and the CARB, the health effects of pesticides that are or may be emitted to the ambient air, and that may be determined to be toxic air contaminants, that pose a present or potential hazard to human health. See CAL. FOOD & AGRIC. CODE § 14022(a) (West Supp. 2000). Upon completion of the evaluation, a report on the health effects of the pesticide must be prepared. See CAL. FOOD & AGRIC. CODE § 14023(a) (West Supp. 2000). The report must contain the findings of OEHHA, and must assess the availability and quality of data on the health effects of the substance, including potency, mode of action, and other relevant biological factors. See id. The report must also contain an estimate of the levels of exposure that may cause or contribute to adverse health effects, and if there is no threshold of significant adverse health effects, the range of risk to humans resulting from current or anticipated exposure. See id. The report is reviewed by the Scientific Review Panel.

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68 See CAL. HEALTH & SAFETY CODE § 39655 (West 1996).
69 See CAL. FOOD & AGRIC. CODE § 14021(b) (West Supp. 2000).
70 See CAL. CODE REGS. tit. 3, § 6860(b).
71 See CAL. HEALTH & SAFETY CODE § 39655 (West 1996).
72 See CAL. FOOD & AGRIC. CODE § 14022(a) (West Supp. 2000).
73 See CAL. FOOD & AGRIC. CODE § 14023(a) (West Supp. 2000).
74 See id.
75 See id.
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in a manner similar to that used for panel review of CARB reports. The Director of DPR then lists by regulation those pesticides determined to be TACs. To date, only three pesticides have been identified by DPR as TACs through this process: Ethyl Parathion, Methyl Parathion, and S,S,S-tributyl phosphorotrithioate (DEF, tribufos).

6. Classification of Pesticides

DPR also has the responsibility under the California Food and Agricultural Code to classify pesticides as “restricted materials,” which can be used only with a permit from the CACs and under certain conditions. Pesticides are evaluated to determine if they are restricted materials based on the following criteria:

(a) Danger of impairment of public health.
(b) Hazards to applicators and farmworkers.
(c) Hazards to domestic animals, including honeybees, or to crops from direct application or drift.
(d) Hazard to the environment from drift onto streams, lakes, and wildlife sanctuaries.
(e) Hazards related to persistent residues in the soil resulting ultimately in contamination of the air, waterways, estuaries or lakes, with consequent damage to fish, wild birds, and other wildlife.
(f) Hazards to subsequent crops through persistent soil residues.

Once a pesticide is designated as a restricted material, CACs must issue permits and conditions for their use based on gui-

76 See CAL. FOOD & AGRIC. CODE § 14023(b), 14023(c) (West Supp. 2000); CAL. HEALTH & SAFETY CODE § 39661(b & c) (West 1996).
77 See CAL. FOOD & AGRIC. CODE § 14023(d) (West Supp. 2000). In contrast to the provisions of Health & Safety Code section 39662(c), Food & Agricultural Code section 14023(d) does not provide for a regulatory determination of the level below which no significant adverse health effects are anticipated.
78 See CAL. CODE REGS. tit. 3, § 6860(a). Thirty-four other pesticides automatically have been listed because they are hazardous air pollutants pursuant to Section 7412 of the Clean Air Act; CAL. FOOD & AGRIC. CODE § 14021 (West Supp. 2000); CAL. CODE REGS. tit. 3, § 6860(b).
80 See CAL. FOOD & AGRIC. CODE § 14004.5 (West 1986).
dance from DPR, which will be discussed in more detail in Section II. Permit conditions are not required to be subjected to any public or scientific peer review process.

7. Enforcement Initiative

On May 24, 1999, Winston Hickox, Secretary of CalEPA, addressed a memo to Directors, Executive Officers, and Board Chairs calling for reports on the various agencies' enforcement programs by September 1, 1999, and how they could be improved. DPR met with various stakeholders in July and August of 1999, and put forth its "Enforcement Initiative" for public review in November 1999. The Enforcement Initiative ("the Initiative") is DPR's effort to prioritize enforcement activities and improve efficiency.

The document is comprehensive and much of what is discussed in it would improve the enforcement program. The Initiative acknowledges that there is ambiguity and debate about the respective roles of DPR and the CACs, and that a joint policy statement should be adopted. DPR calls for a comprehensive review of the Program to ensure that it is compliant with the California Environmental Quality Act ("CEQA") certified regulatory program requirements. The Initiative also discusses the need for CACs to perform inspections for compliance and promotes legislation to make interference with those inspections unlawful. Compliance assistance is also recognized as a need and a study is to be done on its feasibility. Penalties are addressed in the Initiative and legislation is recommended to raise penalties for violations. The Initiative also recommends a study to establish enforcement for home use pesticides, which is not currently part of the Program. There is also an acknowledgment that the Program is perceived as catering to the agricultural industry. The Initiative therefore seeks to serve all equally well, and will make it a priority to promptly respond to and investigate complaints. The Initia-

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81 See Memorandum from Winston H. Hickox, Secretary for Environmental Protection, to Directors, Executive Officers, and Board Chairs (May 24, 1999) (on file with author).

82 See <http://www.cdpr.ca.gov/> (last visited February 14, 2001). Enforcement Initiative documents are on file with author, and may also be obtained from DPR. DPR's website contains current information about what DPR is working on as well.
The Initiative also discusses the need for performance standards in the form of written, up-to-date, uniform guidelines. Experience shows that some CACs are operating and enforcing under guidance from DPR that is outdated and inconsistent with more recent guidance. The Initiative also discusses pesticide use issues, including the need for more stringent conditions placed on pesticide use near sensitive sites; clarification of pesticide drift laws for enforceability; revision of use restrictions in response to violations; better protection for workers by outreach and education; improvement of illness reporting and incident investigations; and revising the Program based on illness investigations.

The Enforcement Initiative is comprehensive and contains laudable goals. Its problems will come in implementation. While the Initiative calls for amending various sections of the California Food and Agricultural Code to increase penalties, those sections were amended by S.B. 1970 on September 28, 2000, but did not increase penalties. The only thing that the bill provided for in those sections was that the person charged with a violation would have the opportunity to review the evidence prior to the hearing. This requirement is form over substance, and provides no extra protection for public health. The bill also gives the Director of DPR the authority to convene a trial board to enforce pesticide laws. However, this authority merely brings the law up-to-date in recognizing DPR as the agency in control of pesticide regulation, not the Department of Food and Agriculture. A positive aspect of the bill is that California Food and Agricultural Code section 14008 was re-

84 DPR provides CACs with “Enforcement Letters” periodically throughout each year, and most of the recent ones can be found on DPR’s website. The Enforcement Letters provide guidance from DPR to the CACs on enforcement and implementation of the Program. While DPR issues many of these letters, it does not make a practice of rescinding old and inconsistent guidance. Recently, it was determined that inconsistent Enforcement Letters remain in effect in subject areas, such as pesticide drift and methyl bromide fumigations.
vised to include failure to pay a penalty as a reason for revocation or suspension of a permit. However, this bill did little, if anything, to deter future violations of pesticide laws and regulations.

Further, there has been no movement on the part of DPR toward improved compliance with CEQA. In recent rulemakings, there has been no discussion of environmental impacts, alternatives, or mitigation measures. For example, in the recent methyl bromide field fumigation regulations Initial Statement of Reasons and Public Report, DPR noted the alternatives of banning methyl bromide and retaining the status quo, but stated that it had not identified any satisfactory alternatives to the Regulations. The Initial Statement of Reasons and Public Report did not discuss any environmental impacts from the Regulations. In the Final Statement of Reasons and Public Report, DPR added a new heading: Identification of Any Significant Adverse Environmental Effect that can Reasonably be Expected to Occur from Implementing the Proposal, and stated, "The adopted regulations in effect are new restrictions on the field fumigation use of methyl bromide when compared to the status quo. DPR’s review of the adopted regulations showed that no significant adverse environmental effect to California’s air, soil, water, plants, fish, or wildlife can reasonably be expected to occur from implementing the proposal. Therefore, no alternatives or mitigation measures are proposed to lessen any significant adverse effects on the environment.” Similarly, the recently proposed and adopted regulations for methyl bromide structural fumigations as well as permit requirements did not contain any analysis of environmental impacts.

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87 See id.
88 See Initial Statement of Reasons and Public Report, Department of Pesticide Regulation, Title 3. California Code of Regulations, Amend Sections 6000, 6450, and 6784 and Adopt Section 6450.1, 6450.2, and 6450.3 Pertaining to Methyl Bromide Field Fumigations, DPR Regulation No. 00-001 13-14 (on file with author).
89 See Final Statement of Reasons and Public Report, Department of Pesticide Regulation, Title 3. California Code of Regulations, Adopt Section 6450.1, 6450.2, and 6450.3 and Amend Sections 6000, 6450, and 6784 Pertaining to Methyl Bromide Field Fumigations, p. 10 (on file with author).
90 See Initial and Final Statement of Reasons and Public Report, Department of Pesticide Regulation, Title 3. California Code of Regulations, Amend Sections 6000, and 6454 Pertaining to Methyl Bromide and Structural Fumigation (on file with au-
In addition, there has been no change in complaint response. For example, in July 2000 in Ventura County, a grower applied Captan, a non-restricted material, but listed Proposition 65 chemical, to a field adjacent to a school where a track meet was underway. When EDC requested information from the CAC about the pesticide applied, the grower responded that they had been spraying water, and that detail was relayed by CAC staff to EDC staff. The pesticide use report filed the next month with the CAC's office did not show that the pesticide was applied on the date in question because the application was completed several days later (See Section II.F.). This is an example of where the use reporting documents do not reflect accurate information, and pesticide drift was not documented because the CAC was not informed soon enough to collect samples. Neither of these problems have been addressed by DPR.

Finally, in Fiscal Year 1996-1997, there were 49,350 agricultural permits issued. Penalties ranged from $50 to $8000. Fines assessed from $50 to $150 (minor) represented 45%; assessed from $151 to $400 (moderate) represented 37%; assessed from $401 to $1000 (serious) represented 15%; assessed from $1,001 to $8000 (serious) represented 3%; and fines rescinded or dismissed (19) represented 3%. 42 of the state's 58 counties, which are represented by 54 commissioners, reported a total of 685 administrative civil penalties that represented $210,682 in proposed fines. The amount of fines levied totaled $197,432 (the reduction was due to cases where

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91 This information became known to EDC when a spectator at the track meet provided a video of the incident.


93 See Penalty and enforcement information for Fiscal Year 1996-1997 can be found on DPR's website: <http://www.cdpr.ca.gov/> (last visited February 20, 2001).


95 See COUNTY AGRICULTURAL COMMISSIONER ADMINISTRATIVE CIVIL PENALTY REPORT, CALIFORNIA ENVIRONMENTAL PROTECTION AGENCY, DEPARTMENT OF PESTICIDE REGULATIONS, PESTICIDE ENFORCEMENT BRANCH at 2 (Nov. 1999) (on file with author).

96 See id.
fines were reduced or dismissed). Averaged over the total number of penalties that year, that is about $288 per violation. Averaged over the total number of permits issued, that is $4.00 per permit issued. These fines are abysmally small, and too low to have any deterrent effect on behavior that puts the public's health at risk, not to mention that DPR and the CACs actually lose money on permit issuance and enforcement. Improvement is definitely needed for increased enforcement and levying of penalties.

B. CACs—Their Responsibilities

Each county in California has a Department of Agriculture that is under the control of the County Agricultural Commissioner. The County Board of Supervisors appoints the Agricultural Commissioner. However, the County Board of Supervisors must choose an appointee from among those persons who have received a license from the Director of DPR. State regulations provide:

The minimum qualifications for admission to the licensing examination for County Agricultural Commissioner are: (1) possession of a valid statewide Deputy County Agricultural Commissioner license; and (2) four years of experience in the enforcement of agricultural or weights and measures laws; at least two years of which shall have included management, supervisory, or program responsibility experience; and (3) a minimum of 80 hours of instruction in management and/or supervisory practices, obtained through organized classroom training, in-service training, or accredited correspondence courses.

The minimum qualifications for admission to the licensing examination for Deputy County Agricultural Commissioner are: (1) Possession of valid statewide County Agricultural Inspector/Biologist licenses in all categories for which licenses are issued; and (2) Two years of experience in the enforce-

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97 See id.
98 Author's mathematical calculation.
99 See id.
101 See CAL. FOOD & AGRIC. CODE § 2121 (West 1986).
103 See CAL. CODE REGS. tit. 3, § 103.
ment of agricultural or weights and measures laws or in agricultural pest control or in the production, processing, or marketing of agricultural commodities. This experience must have been at a level comparable to county agricultural or weights and measures inspector; and (3) Education: Possession of a bachelor's degree from an accredited four-year college with specialization in one or more appropriate disciplines in agricultural or biological sciences as determined by the Secretary of the Department of Food and Agriculture. This requirement does not apply to any person holding a valid certification of qualification prior to January 1, 1985.\textsuperscript{104}

The term of office for a CAC is four years.\textsuperscript{105}

The process for removing a CAC is quite onerous. When satisfactory evidence is presented to the Director of DPR that the CAC is guilty of neglect of duty, incompetence, or misconduct in office, a trial board is selected to hold a hearing.\textsuperscript{106} The trial board consists of the Director of the Department of Food and Agriculture,\textsuperscript{107} a person who has knowledge of, or experience in, agriculture selected by the County Board of Supervisors, and a hearing officer from the Office of Administrative Hearings, who is chairperson and a voting member of the board.\textsuperscript{108} When the evidence involves a CAC's pesticide regulatory activities, the trial board will include the Director.\textsuperscript{109} Ten days prior to the hearing the Director gives notice to the CAC of the time and place of the hearing as well as information as to the nature of the charges in order to enable the CAC to present a defense.\textsuperscript{110} An order dismissing the charges or disqualifying the CAC must be issued within 10 days of the conclusion of the hearing.\textsuperscript{111} The license of a deputy commissioner may be revoked in the same manner and for the same causes

\textsuperscript{104} See CAL. CODE REGS. tit. 3, § 104.
\textsuperscript{105} See CAL. FOOD & AGRIC. CODE § 2122 (West 1986).
\textsuperscript{106} See CAL. FOOD & AGRIC. CODE § 2181 (West 1986). See also S.B. 1970 (Sept. 28, 2000)
\textsuperscript{107} This process has been amended by S.B. 1970. In January of 2001, the Secretary of Food and Agriculture convenes the trial board for offenses that come under the jurisdiction of the Department of Food and Agriculture, and the Director of DPR convenes the trial board for offenses that come under the jurisdiction of DPR.
\textsuperscript{108} See CAL. FOOD & AGRIC. CODE § 2182 (West Supp. 2000).
\textsuperscript{110} See CAL. FOOD & AGRIC. CODE § 2183 (West 1986).
\textsuperscript{111} See CAL. FOOD & AGRIC. CODE § 2185 (West 1986).
that a license of a CAC may be revoked.\footnote{See \textit{CAL. FOOD \\ \\ & AGRIC. CODE} § 2187 (West Supp. 2000).}

On the other hand, the County Board of Supervisors can remove a CAC by a simple vote to terminate employment. While this seems simple enough, agricultural production and cost savings are often a higher priority. For example, Ventura County considered termination of their CAC, Earl McPhail, in 1999, when his contract expired.\footnote{EDC became aware that Mr. McPhail’s contract was due to expire because a concerned citizen called asking that an effort be made to call attention to Mr. McPhail’s lack of enforcement. Letters were written and phone calls made to county supervisors requesting an evaluation of whether or not Mr. McPhail was performing the functions of his job.} There seemed to be a strong will to remove Mr. McPhail from office due to his documented failure to enforce pesticide laws; however, the process was very political, and ultimately Mr. McPhail was retained.\footnote{Ventura County supervisors John Flynn, Frank Schillo, Kathy Long, and Susan Lacy investigated the allegations made by the public while Mr. McPhail was on probation for six months. During that time, Mr. McPhail developed a plan for improving his employment performance, and his contract was renewed.}

In addition, DPR may withhold funds from the CACs when they are not performing their jobs properly. However, this rarely, if ever, occurs even in the face of repeated inadequacies. Again, the Ventura CAC is notorious for not meeting enforcement and other requirements,\footnote{See letter from Jahan Motakef, Senior Pesticide Use Specialist, to W. Earl McPhail (Nov. 15, 1996). For example, in 1996, DPR performed an Effectiveness Evaluation of the Ventura CAC’s pesticide regulatory program, and found that the CAC did not enforce in instances where (1) an employee did not receive medical cares after an exposure to methyl bromide, (2) a grower allowed farmworkers into a field before the restricted entry interval had expired, (3) substantial pesticide drift occurred, and (4) substantial pesticide drift occurred. In fact, during the fiscal year 1995/1996, Ventura County did not take any enforcement action.} and while funding has been withheld from that program, it has only been small sums of money.\footnote{See \textit{MARGARET REEVES, ET AL., FIELDS OF POISON: CALIFORNIA FARMWORKERS AND PESTICIDES} 33 (1999). DPR withheld $11,000 of funding from the Ventura CAC (from the pesticide mill tax) in 1994 due to pesticide enforcement program weaknesses. However, DPR rarely withholds funds based on enforcement program deficiencies found in annual and semi-annual evaluations of each CAC.}

The CAC has various powers and duties. The Director of DPR is responsible for the overall statewide enforcement of the laws and regulations in the California Food and Agricul-

\footnote{See \textit{CAL. FOOD \\ \\ & AGRIC. CODE} § 2187 (West Supp. 2000).}
tural Code, and DPR’s instructions and recommendations govern the procedures to be followed by the CAC, who is responsible for local administration of the laws and regulations. The CAC must keep a record of his/her official acts. In addition, he/she must make an annual report to the Director on the condition of agriculture in his or her county and on what is being done to eradicate, control, or manage pests, and may also include information relating to organic farming methods, biotechnology, integrated pest management, and biological control activities in the county. A monthly report to the County Board of Supervisors is required when the Board so chooses. The CAC also issues permits for pesticide use in their respective counties.

Even though there is no inherent conflict between supporting a viable agricultural industry and enforcing pesticide laws, many CACs appear to act as if promoting agriculture is their primary responsibility. This leads to inadequate enforcement of pesticide laws. In fact, CACs issue fines for only about one-tenth of the violations documented, and from 1991 to 1997, almost one-half of all fines issued statewide were less than $151, and less than 5% exceeded $1000.

III. THE CALIFORNIA PESTICIDE PERMITTING SYSTEM

A permit for the use of pesticides is only required if the pesticide is a “restricted material,” and even then a permit may not be required. This distinction in and of itself is confusing enough to make the permitting process complicated and difficult for the public to understand. There have not been any recent efforts to make this process any less confusing and more user-friendly for those being exposed to toxic pesticides.

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A. RESTRICTED V. NON-RESTRICTED MATERI­ALS

DPR controls and regulates the use of restricted materials.124 A list of restricted materials can be found in the regulations.125 As stated above, the criteria for designating restricted materials includes:

(a) Danger of impairment of public health.
(b) Hazards to applicators and farmworkers.
(c) Hazards to domestic animals, including honeybees, or to crops from direct application or drift.
(d) Hazard to environment from drift onto streams, lakes, and wildlife sanctuaries.
(e) Hazards related to persistent residues in the soil resulting ultimately in contamination of the air, waterways, estuaries or lakes, with consequent damage to fish, wild birds, and other wildlife.
(f) Hazards to subsequent crops through persistent soil residues.126

In addition to these criteria, DPR designates pesticides labeled as a “restricted use pesticide” pursuant to section 3 of FIFRA127 (registration of pesticides); pesticides used under an “emergency exemption” issued pursuant to section 18 of FIFRA;128 pesticides formulated as dust, labeled to permit outdoor use, and packaged in containers of more than 25 pounds with two exceptions; and pesticide products containing active ingredients with the potential to pollute groundwater,129 when labeled for agricultural, outdoor institutional, or outdoor industrial use.130 A restricted materials permit is valid for the period specified in the permit, which must be site and time specific, but not longer than one year.131

DPR is also required to adopt regulations governing the possession and use of any restricted material that is determined to be injurious to the environment or to any person,

animal, crop, or other property. The regulations may prohibit use or possession in certain areas of the state, and a restricted material may only be used in "those situations in which it is reasonably certain that no injury will result," or where "unrestricted materials or procedures are not equally effective and practical." Notwithstanding these requirements, past experience has demonstrated that CACs in fact do not evaluate whether or not unrestricted materials or procedures are equally effective and practical, and DPR has never enforced this requirement. Experience has not turned up evidence that CACs ask permittees to show proof that they have considered use of unrestricted materials and found them to be ineffective or impractical. This is indicative of DPR's and the CACs' lack of compliance with CEQA, which requires consideration and adoption of feasible alternatives and mitigation measures for significant environmental impacts. That deficiency will not be covered in this article, however.

The CACs' and DPR's failure to comply with CEQA is also indicative of the leniency in the issuance of permits. Growers seek permits from the CAC each year and the growers provide information on the commodities to be grown and the list of pesticides to be used. The CACs then generally issue the permit with standard conditions for the pesticides to be used. Past experience indicates that CACs do not spend a lot of time analyzing what pesticides have been chosen by the grower and what effects they will have on the neighboring community. There are a few CACs that do add conditions

134 See CAL. FOOD & AGRIC. CODE § 14006 (West Supp. 2000), and CAL. CODE REGS. tit. 3, § 6556. Pesticide statutes and regulations specify that agricultural pesticide uses must be approved by Pest Control Advisors ("PCA") Recommendations, including consideration of alternatives. In a personal communication with Roy Rutz of the Pesticide Enforcement Branch of DPR, the author found that PCAs merely check a box that alternatives were considered without providing any other information or analysis. DPR reviews those recommendations only through record reviews, and cannot possibly determine the adequacy of those recommendations on the consideration of alternatives.
135 The author has found no written support for this statement. However, given the high volume of permits that CACs approve each year, it is implausible that they undertake a detailed review of each one.
136 Evidence of this lack of attention to impacts to neighboring communities and continued use of toxic chemicals instead of non-toxic alternatives comes from the
for various toxic pesticides and who, in some cases, refuse to grant permits for certain pesticides in certain situations. However, those CACs are few, and the practice is a more lenient process.

In addition, if pesticide residues, symptoms, or health hazards appear generally throughout any area, DPR or the CAC may perform a field inspection. If it appears that substantial loss, damage or injury is likely to result from continued application of a specific pesticide within that area, DPR or the CAC may cancel all permits for application of that pesticide and specify that no additional permits will be issued.

For example, the CARB conducted ambient air monitoring for Telone II (1,3-dichloropropene) in 1990, and found alarmingly high air concentrations of Telone II with levels of up to 885 times the state safety standards at Hilmar Junior High School. As a result of the testing results, the Department of Food and Agriculture took the unusual step of canceling the permits of all users of Telone II. Unfortunately, less than five years later, DPR agreed to reintroduce Telone II under “controlled” conditions (e.g., specific application depth, ground preparation, etc.). Air monitoring was performed in 1995, and unusually rainy weather contributed to low readings in Merced County. The health significance of higher levels measured in Kern County was never evaluated. Without

many calls that EDC receives from neighbors relaying health effects and physical impacts from neighboring pesticide applications. Further evidence comes from permits issued by CACs that do not include decreased use of toxic pesticides or conditions that protect neighbors from the health and physical impacts of the pesticides used.

Personal communication from the San Luis Obispo CAC to Lori Schiraga, Project Coordinator for the CCEHP. The San Luis Obispo CAC denied a methyl bromide permit because the application would occur too close to residences. The San Luis Obispo CAC encouraged the grower to research non-toxic alternatives.


See Cal. Code Regs. tit. 22 § 12000.1, 3-dichloropropene (Telone II) is listed on the Safe Drinking Water and Toxic Enforcement Act of 1986 (hereafter “Proposition 65”) list as a carcinogen.


See id. (citing P. Jacobs, Pesticides OK’d for use in rare reversal of bans, Los Angeles Times, Jan. 16, 1995).


See id. (citing P. Jacobs, supra, note 135).
evaluating the health significance of the monitoring, DPR re­

laxed the suggested permit conditions in 1996 (i.e., no restric­

tion on counties where used, no restriction on when can be 

applied).144 Despite the acknowledgement that Telone II is a 

listed Proposition 65 carcinogen and a dangerous pesticide, it 

continues to be used without any formal peer review or public 

input on the safety of currently-used conditions.145 Further, no 

new efforts have been made to cancel the use of Telone II by 

DPR or any other authority.

The increased use of such pesticides as Telone II146 runs 

counter to Governor Davis’ campaign promises regarding can­

cer-causing pesticides. In a letter to Sarah Rose, Political Di­

rector of the California League of Conservation Voters, Gray 

Davis stated, “The state should enact laws to significantly re­

duce the use of cancer-causing pesticides. However, it is also 

important that we continue to support California’s agricul­

tural industry, which has led the country and much of the 

world for decades. Along these lines, I support a combined ap­

proach to the approval of pesticides; streamlining the process 

for the agricultural industry, while concurrently aggressively 

researching effective alternatives to products containing can­

cer-causing agents. I also support providing the Department 

of Pesticide Regulation with the resources it will need to ac­

complish these goals.”147 To date, Governor Davis and Paul 

Helliker, Director of DPR, have not made any observable at­

tempts to reduce the use of cancer-causing pesticides, espe­

cially near sensitive sites. They have catered to the agricul­

tural industry continuing, and in some cases increasing, the 

use of the most toxic pesticides in California at the expense of 

public health and the environment.148

144 See id.

145 See id. at 21.

146 See SUSAN KEGLEY, PH.D., ET AL, HOOKED ON POISON: PESTICIDE USE IN CALIFOR­


147 See Letter from Gray Davis, Gubernatorial Candidate, to Ms. Sarah M. Rose, 

Political Director, California League of Conservation Voters (Apr. 8, 1996) (on filed 

with author).

148 See SUSAN KEGLEY, PH.D., ET AL, HOOKED ON POISON: PESTICIDE USE IN CALIFOR­


tween 1991 and 1998, from 12.1 million pounds to 27.6 million pounds, an average 

increase of 2.4 million pounds per year").
B. Exemptions from Permitting Requirements

A pesticide use permit is not required in the following circumstances: (1) for any pesticide not designated as a restricted material unless the CAC determines that its use will present an undue hazard when used under local conditions; (2) for persons found to be qualified by the CAC who are engaged in experimentation or research on the use of pesticides; (3) for the possession of pesticides by a registrant or by a licensed pest control dealer when operating pursuant to the registration or license; (4) by commercial warehouses storing pesticides; (5) for the possession or use of the materials when specifically exempted by regulation, in cases in which the mitigation measures provided by the permit system are not necessary to avoid injury to the environment or to any person, animal, crop, or property; and (6) for persons operating pursuant to a structural pest control operator license.149 A permit is also not required for the use of an exempt material, which is a pesticide that "the director finds additional restrictions, other than registration and labeling requirements, are not necessary," so long as the use conforms with the registered label or printed instructions.150

These exemptions from permitting requirements create more and more concern because many pesticides are on various lists indicating their toxicities,151 but some of those pesticides are not listed as restricted materials. For example, Captan is listed as a chemical known to the State of California to cause cancer pursuant to Proposition 65,152 yet it is not listed as a restricted material. DPR does not designate pesticides that are listed on the Proposition 65 list as restricted materials, even though those pesticides are carcinogens and reproductive toxicants.

149 See CAL. FOOD & AGRIC. CODE § 14006.6 (West Supp. 2000); CAL. CODE REGS. tit. 3, § 6414(a), 6414(d), 6414(e).
150 See CAL. FOOD & AGRIC. CODE § 14006.7 (West 1986).
151 For example, FIFRA "restricted use pesticides," Federal Clean Air Act "Hazardous Air Pollutants," State Clean Air Act, "Toxic Air Contaminants," Resource Conservation and Recovery Act chemicals, and Proposition 65 chemicals known to cause cancer or reproductive harm.
C. PERMIT CONDITIONS AND LOCAL CONDITIONS: LAND USE CONFLICTS

A permit from the CAC is required for the use or possession of restricted materials. Before issuing a permit for any pesticide, the CAC must consider, at a minimum, the following local conditions:

(a) Use in vicinity of schools, dwellings, hospitals, recreational areas, and livestock enclosures.
(b) Problems related to heterogeneous planting of crops.
(c) Applications of materials known to create severe resurgence or secondary pest problems without compensating control of pest species.
(d) Meteorological conditions for use.
(e) Timing of applications in relation to bee activity.
(f) Provisions for proper storage of pesticides and disposal of containers.

Each permit issued for any pesticide shall include conditions for use in writing. Applicants for a permit are required to provide information identifying “all known areas that could be adversely impacted by the use of the pesticide(s) including but not limited to hospitals; schools, and playgrounds; residential areas (including labor camps); parks; lakes, waterways, estuaries, and reservoirs; state wildlife management areas; critical habitats of rare, endangered or threatened species; and livestock and crops.” Again, notwithstanding this requirement, permits are routinely issued with standard conditions by rote and without meaningful consideration or analysis for site-specific conditions. This practice is becoming more and more

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153 See CAL. FOOD & AGRIC. CODE \$ 14006.5 (West 1986).
154 See CAL. FOOD & AGRIC. CODE \$ 14006.5(a - f) (West 1986).
155 See CAL. CODE REGS. tit. 3, \$ 6428.
156 For example, most, if not all, restricted materials permits are issued with standard conditions, and growers are instructed to comply with pesticide label requirements. In May of 1999, a grower applied metam sodium, the pesticide that was spilled into the Sacramento River at Dunsmuir, California in 1991, under standard permit conditions. The application took place next to a school in New Cuyama, California, and three days later when a second water seal was applied, the pesticide's active ingredient, methylisothiocyanate (“MITC”) off-gassed and made several children and teachers at the neighboring school ill. On the date of the application, neighbors complained of odors to the Fire Department, but the Fire Department referred the incident to the Sheriff instead of the CAC and County Health Officer. The investigation
problematic due to interactions at the agriculture/urban interface where more and more schools, residences, and other sensitive sites are being located.

There are some counties where site-specific conditions have been implemented. Based upon a Public Records Act search in June of 1997, the following information was found:

1. In Contra Costa County, aerial application of restricted materials within 500 feet of school property is prohibited.158
2. In Kern County, no aerial applications of restricted materials within one-quarter mile of a residential area, occupied labor camp, a school in session, or other areas designated by the CAC are allowed.159
3. In Riverside County, when the field borders homes or businesses, no foliar pesticide applications are allowed within: 150 feet by ground rig, 300 feet by helicopter, or 500 feet by fixed wing airplane application. Notification is required 24 hours prior to the application to adjacent property owners/operators. No application is allowed adjacent to a school when it is in session or children are present, and there is a one-quarter mile buffer zone required for ground rig applications and one-half mile for aerial applications.160
4. In Santa Cruz County, no application of restricted, Category I pesticides is allowed within 200 feet of a school or child care center during that institution's stated business hours or one hour before or after those stated business hours.162

took months to complete and the parents were never fully informed of what happened. The CAC issued a fine of $2000. If site-specific conditions, such as restricted application methods and times for application, and extended buffer zones, had been required for this pesticide, which is a known carcinogen, these illnesses may have been avoided.

158 See Contra Costa County Department of Agriculture, Conditions for Application of Pesticides in or Near Environmentally Sensitive Areas, Condition I.A.2.
159 See Kern County—General Permit Conditions, Condition I.
160 See Riverside County additional permit conditions—for case by case consideration.
161 See 40 C.F.R. § 156.10. The most toxic classification of pesticides. Labels are required to bear the words DANGER and POISON.
162 See 1997 Santa Cruz County Restricted Materials Conditions and Regulations, Condition 7.
5. In Orange County, people responsible for application of pesticides must notify school officials prior to treatment.\textsuperscript{163}

6. In Yolo County, aerial application of restricted materials within one mile of residential areas is not allowed unless the air movement is 90 degrees to 180 degrees away from the residential areas.\textsuperscript{164}

These are just examples of how restrictions vary from county to county. Further, while these conditions are more protective of public health, they have generally been implemented after episodes of exposure illness, not for preventative reasons before such occurrences happen.

In addition, pursuant to the California Food and Agricultural Code, no permit may be granted if the CAC makes any of the following determinations: (1) the use would cause serious, uncontrollable, adverse effects within or outside the agricultural environment; (2) the benefits of its use are outweighed by the harm to the environment; or (3) a reasonable alternative exists that is demonstrably less destructive to the environment.\textsuperscript{165} Further, if an applicant seeks to use the restricted material in any manner other than pursuant to its registration, the CAC may not issue the permit without the approval of the Director of DPR.\textsuperscript{166}

D. PESTICIDE DRIFT

The agriculture/urban interface conflicts are especially apparent in the area of pesticide drift. In California, pesticide drift is to be prevented: "The use of any pesticide by any person shall be in such a manner as to prevent substantial drift to nontarget areas."\textsuperscript{167} "Substantial drift" "means the quantity of pesticide outside of the area treated is greater than that which would have resulted had the applicator used due

\textsuperscript{163} See \textit{Orange County Special Permit Conditions, Condition F.}

\textsuperscript{164} See \textit{Yolo County Conditions Covering the Use of Restricted Materials, Condition #1: Conditions Covering the Use of Restricted Materials in the Proximity of Environmentally Sensitive Areas, Condition 2.}


\textsuperscript{166} See \textit{Cal. Food \& Agric. Code § 14006.5 (West 1986)}.

\textsuperscript{167} See \textit{Cal. Food \& Agric. Code § 12972 (West 1986)}.
The regulation further describing the implementation of the pesticide drift policy states:

Notwithstanding that substantial drift will be prevented, no pesticide application shall be made or continued when:

1. There is a reasonable possibility of contamination of the bodies or clothing of persons not involved in the application process;
2. There is a reasonable possibility of damage to nontarget crops, animals or other public or private property; or
3. There is a reasonable possibility of contamination of nontarget public or private property, including the creation of a health hazard, preventing normal use of such property. In determining a health hazard, the amount and toxicity of the pesticide, the type and uses of the property and related factors shall be considered.

The drift prevention statute, regulations, and policy are problematic because they contain many legally amorphous terms, such as "substantial," "due care," and "reasonable possibility." The Pesticide Drift Incident Response Policy ("Drift Response Policy") provides some clarification, but little guarantee that the public will be protected from pesticide exposures.

According to the Drift Response Policy, drift "does not include the movement of pesticide and associated degradation compounds off the target area after the application, such as by translocation, volatilization, evaporation, or the movement of pesticide dusts or pesticide residues on soil particles that are windblown after application." In fact, the Drift Response Policy states, "Some pesticide drift is expected from aerial and other above-ground pesticide applications," which is why the Legislature only required prevention of "substantial drift." Further, the Policy recognizes that establishing "due care" can be difficult because the CAC must present sufficient evidence, including weather conditions, establishing good practices, and an analysis of decisions made by the applicator and whether

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170 See Pesticide Drift Incident Response Policy from David Duncan, Acting Chief of the Pesticide Enforcement Branch, to County Agricultural Commissioners ENF 2000-034 (Sept. 2000).  
171 See id. at p. 3.
that judgment was poor. To prove a violation of Section 12972, each of the following must be shown: (1) the applicator charged with the violation applied a pesticide to a particular target area, (2) the application resulted in pesticide being deposited outside the target area, and (3) the applicator failed to use the care that was due under the circumstances that existed at the time of the application. Moreover, the establishment of a “reasonable possibility of harm or damage” is even less clear than “due care.” As a result, although pesticide drift happens often, enforcement action is rarely taken by the CACs. This is an area ripe for legislative change, especially since the statute, regulations, and policy do not adequately protect farmworkers or the public.

DPR and the CACs are currently revising the drift policy and preparing to promulgate new drift regulations. This is a necessity given that the regulations and policy in place are difficult to apply and practically ineffective. For example, the metam sodium incident discussed in footnote 116 demonstrates the difficulty the CAC had investigating the incident and the lack of procedures in place for full notification to occur to the CAC, the County Health Officer, and school officials. A similar incident occurred in Earlimart, California in 1999, where the community had to be evacuated because of exposure to MITC, the active ingredient in metam sodium. While CACs take enforcement actions in these situations where fumigants volatilize after application, including methyl bromide cases, CACs do not have the capacity to take air samples, which would provide better information regarding exposure and drift.

In another drift incident, on November 6, 2000 an application of a non-restricted pesticide, Lorsban (active ingredient: chlorpyrifos) took place adjacent to an elementary school in Ventura, California. Because the pesticide was unrestricted, the grower was not required to apply for a permit

172 See id. at p. 5.
173 See id. at 6-7.
174 See id. at 8-10.
175 EDC became aware of this incident when a local pesticide advocacy group, Community and Children Advocates Against Pesticide Poisoning (“CCAAPP”), called to relay the details of the incident.
Further, documentation of drift is problematic if swab, leaf, or clothing samples are not promptly taken, and are not analyzed for all pesticides applied. If the samples are not properly taken and analyzed, the establishment of the drift gradient is nearly impossible. In addition, when growers are interviewed by CACs, their stories are often different than eyewitness accounts. In fact, experience has shown that growers have been known to claim that they were only applying water. Thus, there are often disputes of fact between growers and applicators and other eyewitnesses. Inspectors often fail to equally evaluate the credibility of all parties' statements. There also have been instances where fieldworkers outside the pesticide target area report symptoms highly specific to exposure, such as face numbness, but CACs do not consider it evidence of drift without a positive sample. Thus, pesticide drift is highly problematic, especially in light of the lack of concrete standards and the difficulty of proof.

E. PUBLIC PARTICIPATION IN THE PERMITTING PROCESS

Interested parties178 "may request that the CAC review his or her action in issuing, refusing, revoking, suspending, or conditioning a permit to use or posses a restricted material."179 The CAC must then review the request and issue a written decision within 10 days or as soon as practicable.180

176 See discussion supra, Section II.A.
177 As related by CCAAPP, approximately 40 people became ill. However, none of those cases were reported to the County Health Officer or CAC.
178 This term is not defined in the statute. However, EDC has appealed a permit issuance and was not denied for a lack of interest.
179 See CAL. FOOD & AGRIC. CODE § 14009(a) (West Supp. 2000).
180 See id.
He or she may affirm, modify, or cancel the permit action reviewed, and the interested party may then appeal to the Director of DPR. The request for review must be in writing and meet the statutory criteria. The issues in an appeal of an CAC's action are limited to:

(1) Whether the proposed permit use is consistent with applicable pesticide label restrictions and applicable regulations.
(2) Whether the commissioner properly considered the provisions of Section 14006.5.
(3) Whether the commissioner abused his or her discretion in issuing, refusing, revoking, or conditioning the permit.

The decision of the CAC "will be reversed only for a clear abuse of discretion in applying the applicable provisions of the Food and Agricultural Code and regulations in Title 3, California Administrative Code. The burden of establishing the abuse of discretion is upon the person requesting the review." In addition, "the review is limited to the particular permit involved and each person requesting the review must have a direct interest in the commissioner's action."

Judicial review of DPR's decision is allowed pursuant to Section 1094.5 of the California Code of Civil Procedure, and is limited to whether the proposed permit use is consistent with applicable pesticide label restrictions, and regulations and whether the director abused his or her discretion.

In July 1997, EDC represented a Ventura County community group challenging the CAC's issuance of a methyl bromide permit to a grower farming directly adjacent to a residential area. The challenge was based on a 1996 methyl bromide application where nearby residents documented violations of the same grower's methyl bromide permit. When methyl bromide was applied in 1996 over 15 residents complained of health problems, including burning eyes, sore throats, headache, severe dizziness, lethargy, nausea and

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181 See id.
182 See CAL. FOOD & AGRIC. CODE § 14009(c) (West Supp. 2000).
183 See CAL. FOOD & AGRIC. CODE § 14009(d) (West Supp. 2000).
184 See CAL. CODE REGS. tit. 3, § 6442(d).
185 See supra note 128. This term is not defined in the regulations.
186 See CAL. CODE REGS. tit. 3, § 6442(c).
187 See CAL. FOOD & AGRIC. CODE § 14009(g) (West Supp. 2000).
vomiting, as well as breathing problems, which are indicative of methyl bromide exposure. As the residents became aware of the application they found that the grower had used their properties as the buffer zone, without their permission. This was particularly alarming because one resident had a home daycare center, and the sandbox and play toys were located directly in the buffer zone area. Based on the 1996 experience, the residents were shocked to learn that the CAC had issued an identical methyl bromide permit in 1997, with no additional use restrictions. The CAC’s decision was conveyed in four sentences, the substance of which stated, “After thorough review of the permit and your request, I find no legal cause for the permit to be revoked.” The CAC’s decision was appealed to the Director of DPR whose ultimate decision required that additional conditions be placed on the use of methyl bromide in this particular location. Subsequently, the grower chose to farm another crop and the residents were protected from future methyl bromide exposures.

F. PESTICIDE USE REPORTING REQUIREMENTS

All agricultural uses of pesticides must be reported whether restricted or non-restricted materials. In addition, once a restricted materials permit is issued, the grower, his/her representative, or operator who will apply the pesticide must submit a notice of intent to the CAC at least 24 hours prior to commencing the use of a pesticide requiring a permit. The notice of intent is only required for California restricted materials, not federal restricted use pesticides or other EPA toxicity categories. The CAC “may allow less than 24 hours notice if he or she determines that because of the nature of the commodity or pest problem effective pest control cannot be attained or when 24 hours are not necessary to adequately evaluate the intended application.” The main prob-
lem with the notice of intent is that DPR has an old Enforcement Letter from 1980 that refers to the term "time specific," which is defined in section 6000 of the regulations, and states that the use may commence within four days following the date of the intended application if delays are caused by uncontrollable conditions. "Uncontrollable conditions" includes circumstances which could not have been anticipated or which are beyond the control of the permittee (i.e., not only adverse weather or unavailability of equipment, but also such things are unavailability of the pesticide, bees, or other susceptible animals having been moved into an adjacent field, etc.). This interpretation is alarming, given that the regulations no longer even refer to the phrase "time specific" in the notice of intent regulation, and the Enforcement Letter is so old.

Within seven days after each use of a restricted material, the holder of a restricted materials permit must submit a pesticide use report to the CAC. However, in practice, CACs only require Pesticide Control Operators ("PCO"), or commercial applicators, to submit use report forms within 7 days of the application. Growers themselves are only required to submit use reports by the tenth day of the following month. Within one month after the pesticide use reports are received by the CAC, the CAC must submit to DPR a copy of each pesticide use report. DPR then must publish or distribute quarterly summaries specifying the types and quantities of restricted materials used.

In many instances, experience has demonstrated that pesticide use reports do not provide complete information about pesticide applications, especially for non-restricted materials. The regulations provide that growers must maintain records of pesticide use, including the date of application, the name of the operator of the property treated, the location of the property treated, the crop commodity or site treated, the total

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193 See, letter from R.E. Rominger, Director of Department of Food and Agriculture to County Agricultural Commissioners (Oct. 2, 1980) (on file with author).
194 See id.
199 See id.
acreage of units treated at the site, the pesticide used, including the EPA or State registration number, the hour the treatment was completed, and other information. Unfortunately, DPR has interpreted the “date of application” and “hour the treatment was completed” as “time of completion,” and drawn up reporting forms with only a “date of completion” box. This is extremely misleading to the public. Many applications of non-restricted materials take place over several days. If the public would like information about what pesticides were applied on a particular date, unless the date in question is the “date of completion,” they will receive inaccurate information. This is especially problematic when someone has suffered physical ailments due to exposure and a doctor wishes to investigate the various source(s) of potential pesticide exposure.

G. PESTICIDE WORKER PROTECTION STANDARDS

DPR oversees the regulations that govern work practices for employees who handle pesticides for any use other than manufacturing, formulating, or repackaging of pesticides, and for employees who are exposed to residues of pesticides after field application. The worker safety regulations “are designed to reduce risk of exposure and to ensure availability of medical services for employees who handle pesticides, and to provide safe working conditions for field and other workers.” Experience indicates that these protections are unreliable and prone to failure.

Before any employee is allowed to handle pesticides, the employer must “display a copy of a complete Written Hazard Communication Program for Employees Handling Pesticides (Pesticide Safety Information Series Leaflet A-8) at a central location at the workplace.” The employer must also maintain pesticide use records and copies of applicable Pesticide Safety Information Series Leaflets and Material Safety Data Sheets at a central location. The posting of this information

200 See CAL. CODE REGS. tit. 3, § 6424(b), 6424(c).
201 See CAL. CODE REGS. tit. 3, § 6700. Regulations governing pesticide manufacturers are overseen by California Occupational Safety and Health Administration.
202 See id.
203 See CAL. CODE REGS. tit. 3, § 6723(a).
204 See CAL. CODE REGS. tit. 3, § 6723(b).
without explanation is only effective to those who read and understand it.

The employer must also provide training so that each employee handling pesticides understands the following: (1) the hazards involved, including acute and chronic effects, delayed effects, and sensitization; (2) safety procedures to be followed; (3) engineering controls and clothing and protective equipment to be used; (4) routes by which pesticides can enter the body; (5) signs and symptoms of overexposure; (6) emergency first aid for pesticide overexposure; (7) how to obtain emergency medical care; (8) routine and emergency decontamination procedures, including spill clean up and the need to thoroughly shower with soap and warm water after the exposure period; (9) environmental concerns such as drift, runoff, and wildlife hazards; (10) warnings about taking pesticides or pesticide containers home; and (11) the employee's rights, including the right to personally receive information about pesticides to which he or she may be exposed, for his or her physician or employee representative to receive information about pesticides to which he or she may be exposed, and to be protected against retaliatory action due to the exercise of any of his or her rights.²⁰⁵

The regulations also prohibit employees from working alone in certain circumstances,²⁰⁶ and require the employer to provide an area where employees who regularly handle pesticides with the signal word “danger” or “warning” may change their clothes and wash themselves.²⁰⁷ The employer is also required to ensure that employees are provided with clean work clothing if the workers handles pesticides with the signal word “danger” or “warning.”²⁰⁸

Another protection for workers is restricted entry intervals. Employees must not be permitted to enter any fields treated with a pesticide before the restricted entry interval stated on the pesticide product labeling or in conformance with Section 6772 of Title 3 of the California Code of Regulations has expired, or otherwise expressly authorized by the

²⁰⁵ See CAL. CODE REGS. tit. 3, § 6724(b) (not a complete list).
²⁰⁶ See CAL. CODE REGS. tit. 3, § 6730.
²⁰⁷ See CAL. CODE REGS. tit. 3, § 6732.
²⁰⁸ See CAL. CODE REGS. tit. 3, § 6736.
Director. Reentry warnings must be orally provided to workers who might reasonably be anticipated to enter an area being treated, and, in certain circumstances, warning signs must be posted. However, if a pesticide application has a worker reentry interval of at least 24 hours, and if the application takes place on school grounds, parks, or other public rights-of-way where public exposure is foreseeable, warning signs in English and Spanish must be posted.

H. Notification

As a general rule, the California Food and Agricultural Code and regulations do not require notification of pesticide applications to neighboring properties or to sensitive sites. CCEHP has been working hard to institute such a requirement, especially to schools and parents. The incidents in New Cuyama and Ventura are prime examples for the need for such notification.

On October 10, 1999, Governor Davis vetoed A.B. 1207, which would have required such notification. Governor Davis stated in his veto,

"While laudable in much of its intent, this legislation contains a serious flaw which precludes me from signing it. My main concern with this bill is the overly prescriptive requirements on the use of pesticides on school sites. Unfortunately the bill is drafted with such broad language that it creates costly requirements for schools that are not reasonable or optimal approaches to pest management.

AB 1207 would, for example, require school districts to notify parents of applications in schools of such commonly used household insecticides as Raid and Combat, or three days before applying insecticides to address pest emergencies such as hornets nests or fire ants on school property. The bill would require school districts to notify parents of applications of pesticides even during school vacations when

children would not normally be present in the school. For example, parents would need to be notified each time a summer baseball league applies weedkiller, such as Round-up, to delineate lines on a ballfield on school property.\textsuperscript{212}

These statements do not indicate an intent to protect children from harmful pesticides whether they are attending school or playing on school grounds.

On September 25, 2000, the Governor did sign A.B. 2260, The Healthy Schools Act of 2000.\textsuperscript{213} The law provides for a preference for managing pests with the least toxic pest management practices, but does not require that.\textsuperscript{214} The law also provides for notification to parents on an annual basis of expected pesticide use.\textsuperscript{215} Parents can then register to receive notice of applications 72 hours in advance of the applications.\textsuperscript{216} Areas of pesticide use also will be posted at the school 24 hours before and 72 hours after application;\textsuperscript{217} however, playing children are not likely to heed such signs. This is again a watered down version of notification and does not fully disclose pesticide exposure. Many parents inherently trust schools and will not seek the more comprehensive notification. In addition, records of pesticide use will be maintained for four years, but access to them would be after-the-fact via a Public Records Act request.

IV. Methyl Bromide Regulations

As stated in the Introduction, methyl bromide is an extremely toxic fumigant that is a known reproductive toxicant (e.g., is known to cause birth defects), and a known ozone-depleting chemical. While methyl bromide is listed pursuant to Proposition 65 as a reproductive toxicant, it is only listed for structural fumigation, not open field fumigation.\textsuperscript{218} As a result, the requirements of Proposition 65 (i.e., a warning of

\begin{itemize}
\item \textsuperscript{212} See Memorandum from Gray Davis, Governor, State of California to Members, California Assembly (Oct. 10, 1999) (on file with author).
\item \textsuperscript{213} See A.B. 2260 (Sept. 25, 2000).
\item \textsuperscript{214} See CAL. EDUC. CODE § 17610 (West Supp. 2001).
\item \textsuperscript{215} See CAL. EDUC. CODE § 17612(a) (West Supp. 2001).
\item \textsuperscript{216} See CAL. EDUC. CODE § 17612(a)(1) (West Supp. 2001).
\item \textsuperscript{217} See CAL. EDUC. CODE § 17612(d) (West Supp. 2001).
\item \textsuperscript{218} See CAL. CODE REGS. tit. 22, § 12000.
\end{itemize}
exposure or prohibition of discharge to sources of drinking water) do not apply to agricultural uses of methyl bromide.

Methyl bromide is a fumigant that is injected into the ground to sterilize the soil—it kills most, if not all, organisms in the ground prior to planting. This application is almost always used before strawberry pre-plant, and it has been used prior to the installation of vineyards. Strawberries are a huge economic commodity in California, making methyl bromide a toxic risk to public health. Pursuant to the Montreal Protocol, methyl bromide is on a schedule for phase-out in the United States in 2005.219

A. THE STATUTORY REQUIREMENT FOR METHYL BROMIDE REGULATIONS

Methyl bromide is subject to regulation under the Program, and regulations were specifically required to be promulgated by April 1, 1989.220 The California Department of Food and Agriculture did undertake a rulemaking for methyl bromide for field fumigation, and submitted the proposed regulations to OAL on February 27, 1989. On March 29, 1989, OAL disapproved DPR's proposed regulations because they did not satisfy the clarity, necessity, incorporation by reference, and consistency standards for regulations; omitted documents; did not summarize and respond to comments; and did not comply with procedural requirements.221

OAL found that the regulations did not comply with the clarity standard because they could not be easily understood by those directly affected by them, either because information was not specified or the language was vague and ambiguous. The necessity standard also was not met in some cases because there was no substantial expert evidence to support the

219 While most pesticide activists felt confident of this phase-out date due to the deadline in an international treaty, it appears that there are attempts in Congress to extend the deadline even further, in violation of the Montreal Protocol.

220 See CAL. FOOD & AGRIC. CODE § 14081 (West Supp. 2000). The regulations must also govern chloropicrin, the warning agent usually applied with methyl bromide, and a known carcinogen.

221 See In re Department of Food and Agriculture: Decision of Disapproval of Regulatory Action, OAL File No. 89-0227-03. The disapproval was based upon the standards that OAL applies to all agency rulemakings. Those standards can be found in California Government Code section 11349.1(a).
regulations. In addition, the consistency standard was violated because the regulations were inconsistent with other laws and regulations. OAL also determined that the regulations failed to incorporate by reference documents that were referred to in the regulations. As the reader will see in the following sections, DPR makes some of the same errors in the currently proposed regulations. Once the 1989 rulemaking was rejected by OAL, DPR submitted information from the proposed regulations to the CACs in the form of an Enforcement Letter, and suggested permit conditions. These were then used as a substitute for official regulations. This practice is prohibited as underground rulemaking. There was no opportunity for public or peer review of the enforcement letters and suggested permit conditions, nor were they based on science.

B. THE LAWSUIT TO ENFORCE THE REQUIREMENT FOR METHYL BROMIDE REGULATIONS

Because DPR failed to successfully promulgate regulations governing the use of methyl bromide by the April 1, 1989 statutory deadline, Friends of the Earth, Pesticide Watch, the Tides Foundation, and Pesticide Action Network filed a writ petition in 1999 to require their promulgation, and prevailed. The San Francisco Superior Court found that California Food and Agricultural Code section 14081 required the Department of Food and Agriculture and DPR to adopt regulations governing the use of methyl bromide as a field fu-

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222 See ENF 90-158: December 12, 1990 Memorandum from Douglas Y. Okumura, Chief of the Pesticide Enforcement Branch of the Department of Food and Agriculture to County Agricultural Commissioners.

223 See CAL. GOV’T CODE § 11340.5(a) (West Supp. 2000).

224 See Judgment Granting Peremptory Writ of Mandate, Friends of the Earth v. Cal. Dep’t of Pesticide Regulation, San Francisco County Superior Court Case No. 996187 (filed June 11, 1999). There was an 8-year lag between the requirement for promulgation of the regulations and the lawsuit to enforce the requirement. EDC, CRLA, CRLAF, and Earthjustice Legal Foundation began discussing the potential lawsuit in 1996 at a Californians for Pesticide Reform ("CPR") conference. CPR is a coalition of groups dealing with pesticide issues in California. In the discussions about the potential lawsuit, the groups realized that they would need to marshal scientific information to support the rulemaking process, but did not have the resources to pursue the litigation and rulemaking at that time. In 1998, the plaintiff groups decided not to wait any longer to bring suit.
migrant, that the Department of Food and Agriculture submitted amendments to its regulations governing the use of methyl bromide as a field fumigant to OAL for review, that OAL disapproved the amended regulations on March 29, 1989, and DPR had not submitted the required regulations to OAL. As a result, the court ordered DPR to begin the process of adopting amendments to its methyl bromide field fumigation regulations no later than 60 days after entry of the writ; submit a notice of proposed regulatory action, together with draft regulations to OAL no later than 180 days after entry of the writ; and submit the amended regulations to OAL no later than June 1, 2000.

On May 17, 2000, DPR filed a request to extend the deadline to submit the regulations to OAL until October 31, 2000. The Petitioners objected to the five-month extension as excessive and requested that the deadline only be extended for two months due to concerns about the methyl bromide fumigation season for the Central California Coast strawberry production region beginning in July and continuing through October. The court never ruled on the request for extension of the deadline. The request was neither granted nor denied. DPR submitted proposed regulations to OAL for approval on October 31, 2000. OAL approved the regulations on December 15, 2000. Another methyl bromide fumigation season in Central California ended without regulations in place governing the use of methyl bromide.

C. THE RULEMAKING PROCESS

DPR’s rulemaking process for the methyl bromide regulations has been long and arduous, and without satisfaction on the part of the organizations representing public health, the environment, and workers. After the court order, DPR began drafting the regulations. There has not been broad public participation in the process of promulgating these regulations. However, the incorporation of comments has been selective and the environmental and worker advocates’ comments were not accepted as readily as industry’s comments. The regulations have unfortunately grown weaker with each draft of the

225 See id.
226 See id.
regulations, and DPR failed to adhere to substantive and procedural requirements of the California Administrative Procedures Act\(^ {227} \) and the Health and Safety Code in the promulgation of these regulations.

1. Public Participation

As stated, there has been extensive public process for these regulations. DPR had several stakeholder meetings\(^ {228} \) to gather input for the regulations prior to putting them out for public comment. DPR then allowed the stakeholder groups to provide comments on two initial drafts of the regulations beginning in late October of 1999 and just before the holidays in December. Even with all of that initial public participation, the regulations were altered to incorporate many comments from agriculture producer and chemical industry representatives, but almost none from the public interest groups. The official version of the regulations was submitted to OAL with the Initial Statement of Reasons for publication in the California Register on January 10, 2000. Thus, the initial version of the methyl bromide regulations was already significantly weakened from the pre-draft regulations. Public health and the environment were already losing the battle for protective regulations.

The initial comment period for the regulations was 45 days, and the deadline was in March. During that time, DPR also held four public hearings to take oral testimony on the regulations. The hearings were held in Ontario, Ventura, Watsonville, and Parlier, and they were tense. DPR did a good job of acting in a neutral capacity and merely accepting public testimony. Many workers attended these hearings. At the Ventura hearing, it appeared that growers had paid their workers to attend the hearing in order to pack the room. The workers had signs, and there were shouting and chanting matches between workers and environmentalists outside the hearing venue. At that hearing, industry speakers inflated the impacts caused by the regulations and undoubtedly used those


\(^{228}\) These meetings drew from the pesticide activist community as well as the agricultural and chemical industries. However, the meetings were held separately for the different factions.
claims to explain the importance of workers' attendance at the hearing.

After the initial comments were submitted, DPR revised the language of the regulations and put them out for a second comment period that ended in June, after the court-imposed deadline for submittal to OAL. DPR received over 800 comment letters on the first public draft of the regulations. DPR revised the regulations again in response to the second round of comments, and those comments were due in August. DPR then submitted the regulations to OAL on October 31, 2000. On December 15, 2000, OAL approved the Regulations.

2. The Progressive Watering Down of the Methyl Bromide Regulations

While it is true that there have been many flaws in the methyl bromide regulations from the beginning of the process, the language of the regulations has become progressively weaker. The public went through a long, arduous process without adequate resolution of serious public health exposure questions. As stated above, the regulations went through major revisions before they were submitted to OAL, and those revisions mainly incorporated the comments of the agricultural and chemical industry representatives. As a result, the regulations that were put out for public comment in January of 2000 already compromised protections for public health and the environment. Having said that, the concerns with the regulations that were expressed by the environmentalists and farmworker advocates were consistent throughout the process. The following list of those concerns is in no way exhaustive, and is provided merely to illustrate the most glaring problems with these regulations.

First, the methyl bromide regulations neglected to include definitions of key terms used in the regulations, such as “adjoining property,” “inner buffer zone,” “outer buffer zone,” “application rate,” “isolated application block,” and “parcel.” Because of this, the regulations violate the “clarity” standard. Clarity “means written or displayed so that the meaning of regulations will be easily understood by those persons directly

affected by them. When undefined key terms are used in regulations, the people directly affected by them cannot easily understand the regulations.

Second, the regulations provide for notification by growers to neighbors within 300 feet of the perimeter of the outer buffer zone that a methyl bromide permit was issued as well as the earliest and latest dates that the applications will occur. This is a good requirement because prior to the regulations, there was no requirement that neighboring properties be notified of pesticide applications of any kind. The problem with this notification is that the notification of the permit issuance only has to be provided seven days prior to the first application. The notification will include how to request subsequent notification of specific dates and times of fumigation. This is problematic for several reasons: (1) notification of the issuance of a permit is not timely—it should occur within 10 days of the issuance of the permit, (2) the notification must be automatic and not require anyone to request notification, and (3) there is no provision for the manner of subsequent notification. Because of these deficiencies, this section also does not meet the "clarity" standard of Government Code section 11349.1(a)(3).

In the past, methyl bromide permits have been appealed just before a methyl bromide fumigation because CACs place additional conditions and figure buffer zones just prior to fumigation. Most fumigations have been stayed when such appeals are filed. When Paul Helliker became Director of DPR, various pesticide advocates recall him stating that stays of applications would no longer occur when court appeals were filed. To allow fumigations pending an appeal guts the appeal process and deprives the appellant(s) of their appeal rights. Since the administrative appeal must be exhausted before going to court for a temporary restraining order or preliminary injunction, the appellant(s) lose that remedy if the applications are allowed while the appeal is pending. In fact, in most cases, fumigations would be completed before an appeal was decided, and any lawsuit would be moot.

230 See CAL. GOV'T CODE § 11349(c) (West Supp. 2000).
231 See CAL. CODE REGS. tit. 3 § 6450.1(b)(1).
Paul Gosselin, Deputy Director of DPR, stated in a personal communication that the regulations sought to address this issue through the notification procedures. He stated that the notification process is intended to provide neighbors with notice of when a methyl bromide permit is issued, so that appeals may be brought early. However, notice of the methyl bromide permit issuance is not required until ten days before the first notice of intent is filed with the CAC. In addition, that would be the time that the CAC would figure buffer zones and add any conditions. As a result, the methyl bromide regulations do nothing to address the notification and appeal process issues. While DPR has no written policy to the effect stated above, it is likely that the permit appeal process will be a sham, and public health will remain unprotected.

Third, the buffer zone provisions of the regulations do not provide any protection for public health. The mandatory minimum buffer zones in the regulations are 50 feet for the "inner buffer zone" and 60 feet for the "outer buffer zone." The "inner buffer zone" corresponds to what has been referred to as the "worker buffer zone" and is the area where only workers directly involved in the fumigation may be. The "outer buffer zone" corresponds to what has been referred to as the "resident buffer zone," and is the area where people who are not involved in the fumigation may not be for any part of a 24-hour period. Mandatory minimum buffer zones of only 50 and 60 feet runs counter to the scientific consensus regarding health threats posed by methyl bromide. DPR scientists spent extensive time creating comprehensive charts and tables to be used to determine the size of a buffer zone, and some can be as large as 3,400 feet. However, DPR did not incorporate the comprehensive charts and tables into the regulations, which will allow CACs to institute only the mandatory minimum buffer zone, and public health will not be protected. The lack of incorporation of the buffer zone charts and tables is alarming because they can be changed without any public process or peer review. In addition, the buffer zone restrictions fail to sufficiently reduce worker and public exposure by restricting activities within the buffer zones, especially since the buffer zones are allowed to extend into adjoining properties, with permission. The extension of buffer zones onto adjoining properties is especially problematic because in the initial
drafts of the regulations, it was not allowed for either type of buffer zone. This was one of the glaring erosions in the regulations as far as protection of public health is concerned.

Fourth, DPR reduced the buffer zone duration from 60 hours to 36 hours. Again, the regulations set a mandatory minimum that is not sufficiently protective of human health and then leave it to the CACs to decide whether to adjust these inadequate buffer zone durations upward. This is an irresponsible delegation.

Fifth, the regulations do not address sub-chronic exposures to methyl bromide. Sub-chronic exposure is exposure that occurs over time, but is not a high exposure over a short period of time (acute) or fairly constant exposure over time (chronic). For example, a sub-chronic exposure would be application of a pesticide 500 yards from a school on 15 separate occasions during the school year where student(s) had some exposure to the pesticide, either contact, ingestion, or inhalation. Not only are sub-chronic exposures important for purposes of exposure to children, but sub-chronic exposures put application workers, field workers, and residents in areas of intense pesticide use at excess risk. This includes the growers themselves because they live and work near methyl bromide use. The NAS peer review supported DPR's own assessment that sub-chronic exposure levels need to be very low (1 part per billion ("ppb") for children; 2 ppb for adults) to assure protection from neurotoxic effects, or nervous system damage.232

This is not an exhaustive list of problems with the regulations. The list is provided to illustrate that the public process did not work to improve the regulations, and the agricultural and chemical industries had a much larger impact on the substance of the regulations. While the growers are impacted by the regulations, so are the farmworkers, and their health was not protected as a result of the regulations. The environment is also impacted, and those impacts were not addressed either.

232 See Methyl Bromide Risk Characterization in California, Subcommittee on Methyl Bromide, Committee on Toxicology, Board on Environmental Studies and Toxicology, Commission on Life Sciences, National Research Council 65 (2000).
3. DPR Did Not Meet Deadlines and Requirements

As stated previously, DPR did not meet the June 1, 2000 deadline for promulgation of the regulations set by the San Francisco Superior Court. DPR also failed to meet many substantive and procedural requirements for the regulations. Because these flaws appear fatal under the law, OAL should have rejected the regulations as submitted.

First, DPR did not fully involve OEHHA in the development of the regulations as required by the California Health & Safety Code for pesticide regulations affecting farmworker health and safety. California Food and Agriculture Code section 12980 states that, “The Legislature further finds and declares that the development of regulations relating to pesticides and worker safety should be the joint and mutual responsibility of the Department of Pesticide Regulation and the Office of Environmental Health Hazard Assessment.”233 California Food and Agriculture Code section 12981 states that “OEHHA shall participate in the development of any regulations adopted pursuant to this article. [Article 10.5, PESTICIDES AND WORKER SAFETY] Those regulations that relate to health effects shall be based upon the recommendation of the office.”234

There is no documentation or reference in the proposed regulations or in the Initial Statement of Reasons for the proposed regulations that OEHHA participated in the development of the regulations as required by the California Food and Agriculture Code. In fact, DPR’s internal records establish that OEHHA was not adequately consulted about the regulations throughout the process.235 DPR had already significantly shaped the regulations, and had even gone so far as to seek comments from other stakeholders, prior to OEHHA being made aware of the regulations’ existence for the first time in late October 1999 by a third party. OEHHA did not receive the regulatory package from DPR until November 17, 1999,

235 These internal records are available from the author. While OEHHA has since submitted a “letter of concurrence” to DPR regarding the regulations, the letter lists many faults with the regulations and never actually uses the word “concur” or “concurrence.”
and did not receive a complete and updated package until December 2, 1999. When staff from the two agencies met on December 14, 1999, it was the first time OEHHA was given an opportunity to discuss the regulatory package with DPR staff face to face. Even after that, DPR paid almost no heed to OEHHA recommendations regarding the text of the regulations. The email correspondence between the two agencies reflects the limitations placed on OEHHA's role in reviewing the methyl bromide regulations. Even with that limited participation in review, OEHHA did not "participate in the development" of the regulations.

In addition, California Health and Safety Code section 57004(b) requires that DPR enter into an agreement with the National Academy of Sciences ("NAS") or other approved groups of scientists to conduct an external scientific peer review of the scientific basis for any rule proposed for adoption.\textsuperscript{236} "Scientific basis" and "scientific portions" are defined as "those foundations of a rule that are premised upon, or derived from, empirical data or other scientific findings, conclusions, or assumptions establishing a regulatory level, standard, or other requirement for the protection of public health or the environment."\textsuperscript{237} DPR indicated in the Initial Statement of Reasons that the Methyl Bromide Risk Characterization Document for Inhalation Exposure was currently undergoing a yearlong review by a panel of NAS, and that buffer zone sizes were calculated using computer modeling procedures approved by DPR that had undergone scientific peer review. However, neither of the peer reviews were completed by the end of the public comment first period for the proposed regulations (March 17, 2000). When the peer reviews were completed, in April of 2000, much of the analysis was critical of the science supporting the regulations.\textsuperscript{238} In subsequent comment periods, pesticide activists provided scientific analysis of

\textsuperscript{236} See CAL. HEALTH & SAFETY CODE § 57004(b) (West Supp. 2000).

\textsuperscript{237} See CAL. HEALTH & SAFETY CODE § 57004(a)(2) (West Supp. 2000).

\textsuperscript{238} There is nothing in the statute indicating when the peer reviews must be completed, only that they must be done when there is a scientific basis for regulations. However, the better process would be to perform peer review on the scientific basis for the regulations, perform any further scientific analysis needed based on the results of the peer review, and then draft the regulations so that they are based upon sound science.
the regulations and the peer reviews.\textsuperscript{239}

The air modeling peer review by Dr. William Nazaroff concluded that key underpinnings of the proposed buffer zones were not scientifically sound, and that it is unlikely that the buffer zones would prevent excessive exposure in all cases. He stated that the buffer zones should be recalculated using historical weather data, worst case or near worst case and that these recalculations would not be costly. The only response by DPR was the elimination of the requirement for peer review approval of buffer zones.

NAS performed a peer review of the methyl bromide risk characterization document, and concluded that DPR failed to conduct a true risk assessment because their exposure assessment has major flaws, which resulted in underestimation of some exposures. The Subcommittee pointed out that fieldworkers and those at risk of residential exposure were completely omitted from the analysis. NAS also criticized the analytical methods used by DPR to determine atmospheric concentrations of methyl bromide, which called into question the adequacy of proposed mitigation measures. The Subcommittee also expressed concern that exposure to a higher concentration of methyl bromide (over the state 210 ppb standard) over a shorter period of time (than 24 hours) could cause significant health effects in light of scientific studies suggesting that relatively low levels of exposure (less than 2 to 3 ppm) of methyl bromide might produce slight neurotoxic effects in workers. These concerns were not addressed in the regulatory revisions.

Further, as with the failed attempt at promulgating methyl bromide regulations in 1989, DPR failed to incorporate critical information by reference in the regulations. The regulations require CACs to condition methyl bromide permits on text, charts, tables, graphs and definitions that are not currently contained in the text of the proposed regulations but are instead found in a document most recently titled “Recommendations for Methyl Bromide Buffer Zones for Field Fumigations.”\textsuperscript{240} To pass legal muster, all non-discretionary standards and all prescriptive steps to achieve those standards

\textsuperscript{239} Peer review documents and information are on file with author.

\textsuperscript{240} See Memorandum from John Sanders, (titled, Recommendations for Methyl Bromide Buffer Zones for Field Fumigations), to Randy Segawa (Jan. 21, 2000).
must be included in the regulation itself, or at a minimum appropriately incorporated by reference.

State law requires that "[n]o state agency shall issue, enforce, or attempt to enforce any guideline, criterion, bulletin, manual, instruction, order, standard of general application, or other rule, which is a regulations defined in subdivision (g) of Section 11342, unless the guideline, criterion, bulletin, manual, instruction, order, standard of general application, or other rule has been adopted as a regulation and filed with the Secretary of State pursuant to this chapter."241 "Regulation" is defined as "every rule, regulation, order, or standard of general application or the amendment, supplement, or revision of any rule, regulation, order, or standard adopted by any state agency to implement, interpret, or make specific the law enforced or administered by it, or to govern its procedure, except one that relates only to the internal management of the state agency."242

One example of the type of "guideline" that DPR does not include in the text of the current proposed regulation, though still intends for the CACs to implement is the size of the buffer zones. Currently, the only mandated size of buffer zones in the regulations are 50 feet and 60 feet for the "inner" and "outer" buffer zones, respectively.

DPR scientists have, however, developed tables of larger buffer zones depending on the total acreage of the field and the emission or "flux rate" of specific methods, rates of application and acreages. These tables indicate that outer buffer zones should range in size from 100 feet to 3,400 feet, while inner buffer zones should range in size from 50 feet to 1,300 feet, depending on the acreage and flux rate of a particular application. If DPR intends CACs and the regulated industry to follow these expanded buffer zones and other non-discretionary standards, the tables, instructions on how to use the tables, other charts, graphs, and definitions must be added to the text of the regulation, or appropriately incorporated by reference into the regulation.

Incorporation by reference is acknowledged in OAL regulations and has been upheld by the courts, though there are

241 See CAL. GOV'T CODE § 11340.5(a) (West Supp. 2000).
242 See CAL. GOV'T CODE § 11342(g) (West Supp. 2000).
limits. An agency may incorporate by reference only if: (a) it demonstrates in the final statement of reasons that it would be cumbersome, unduly expensive, or otherwise impractical to publish the document in the California Code of Regulations; (b) it demonstrates that the document was made available upon request directly from the agency, or was reasonably available to the affected public from a commonly known or specified source; (c) the informative digest in the notice of proposed action clearly identifies the document to be incorporated by the title and date of publication or issuance; (d) the regulation text states that the document is incorporated by reference and identifies the document by title and date of publication or issuance; and (e) the regulation text specifies which portions of the document are being incorporated by reference.

While cumbersome and impractical issues may be addressed in a document outside the regulation, non-discretionary standards and the steps required to meet those standards as well as definitions must be in the regulations. Further, once a document is incorporated by reference it “shall be deemed to be a regulation subject to all of the provisions of the APA.” If the criteria for application were changed, it would have to be “reincorporated” by new regulation. DPR failed to incorporate important standards and definitions by reference, and the major concern is that any of those documents, standards, or guidance relied upon in issuing methyl bromide permits may be changed without any public or peer review process, and that they are potentially non-binding because they are not part of the regulations.

Finally, DPR failed to perform environmental review pursuant to CEQA, which is required because the Program is a certified regulatory program. That environmental analysis must include a description of the project, alternatives, and mitigation measures to minimize any significant adverse environmental impact.

The pesticide regulatory program administered by DPR and the County Agricultural Commissioners consisting of (1)

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244 See Cal. Code Regs. tit. 1, § 20(c).
246 See Kings Rehabilitation Center, 69 Cal.App.4th at 220.
the registration of pesticides, (2) the adoption, amendment, or repeal of regulations and standards for licensing and regulation, (3) the adoption, amendment, or repeal of regulations for standards dealing with the monitoring of pesticides, and (4) the regulation of the use of pesticides through the permit system administered by the County Agricultural Commissioners is a certified regulatory program under CEQA.\textsuperscript{247} A certified regulatory program is exempt from the environmental impact report ("EIR") process and the various statutes of limitation for challenging agency decisions; however, certified regulatory programs must still perform environmental review that meets the standards, if not the regimented EIR process, of CEQA.\textsuperscript{248} Those standards include:

(1) Environmental documents must include a description of the project, alternatives to the project, and mitigation measures to minimize any significant adverse environmental impact.\textsuperscript{249}

(2) The agency must reasonably assess potential cumulative impacts, but a cumulative analysis is not required.\textsuperscript{250}

(3) The agency must consult with public agencies having jurisdiction over the proposed project.\textsuperscript{251}

(4) The agency may require the applicant to submit information necessary to determine whether the project will have a significant adverse impact on the environment, even if the agency's own regulations do not provide it with such authority.\textsuperscript{252}

(5) The environmental document prepared by the agency must support its conclusions with "references to specific scientific and empirical evidence."\textsuperscript{253}

(6) The agency must solicit meaningful public input on its environmental document.\textsuperscript{254}

\textsuperscript{247} See Cal. Code Regs. tit. 14, § 15251(i).


\textsuperscript{250} See discussion following Cal. Code Regs. tit. 22, § 15252.


\textsuperscript{253} See Mountain Lion Coalition v. California Fish and Game Comm'n, 214 Cal.App.3d 1043, 1047 (1989).

(7) The agency must respond in writing to all significant environmental points raised by the public during the administrative evaluation process.255

(8) The agency is authorized to substitute its analysis for either an EIR or a negative declaration, which includes the use of a short-form document equivalent to a negative declaration as an alternative to a document that would be a substitute for an EIR.256

Thus, in implementing the certified regulatory program, the agency must adhere to the basic policies and substantive obligations of CEQA.257 Cases supporting this proposition have generally found that exempting certified regulatory programs from the EIR requirements manifested an intent to retain the applicability of the other provisions of CEQA and of the Guidelines, particularly the substantive criteria and the specific aspects of environmental impacts that must be evaluated before a project may proceed.

As a result, DPR must perform an analysis of the environmental impacts of the use of methyl bromide under these regulations and its impact as an ozone depleter and the various applications methods (to name only two environmental impacts) and implement any feasible mitigation measures or alternatives. Because DPR's promulgation of regulations is a certified regulatory program and not subject to the EIR requirements of CEQA, the environmental analysis is contained in the Initial Statement of Reasons ("ISOR"). The ISOR for the methyl bromide regulations states that "DPR has not identified any satisfactory alternatives to the proposed regulatory action that would lessen any adverse impacts . . ." This conclusory statement does not satisfy the requirements of CEQA. Since DPR did not provide any analysis of the regula-

256 See CAL. CODE REGS. tit. 14 § 15252 (and discussion following).
257 See Sierra Club v. State Board of Forestry 7 Cal.4th 1215, 1236-1237 (1994); Environmental Protection Information Center ("EPIC") 170 Cal.App.3d 604, 618 (1985) (finding that exempting certified regulatory programs from the EIR requirements manifested an intent to retain the applicability of the other provisions of CEQA and of the Guidelines, particularly the substantive criteria and the specific aspects of environmental impacts that must be evaluated before a project may proceed); and Californians for Native Steelhead Salmon v. Department of Forestry 221 Cal.App.3d 1419, 1422 (1990).
tions except on an economic basis, there is no way to determine what options might be available to lessen any environmentally adverse impacts.

Public Resources Code section 21002, which are the legislative findings of CEQA, states:

The Legislature finds and declares that it is the policy of the state that public agencies should not approve projects as proposed if there are feasible alternatives or feasible mitigation measures available which would substantially lessen the significant environmental effects of such projects, and that the procedures required by [CEQA] are intended to assist public agencies in systematically identifying both the significant effects of proposed projects and the feasible alternatives or feasible mitigation measures which will avoid or substantially lessen such significant effects.258

Therefore, there is a “substantive mandate” in CEQA that public agencies refrain from approving projects with significant environmental effects if there are feasible alternatives or mitigation measures that can substantially lessen or avoid those effects.259

CEQA regulations provide that “the range of potential alternatives to the proposed project shall include those that could feasibly accomplish most of the basic objectives of the project and could avoid or substantially lessen one or more of the significant effects.”260 The “no project” alternative must be considered.261 While these regulations are specific to EIRs, they provide guidance about what alternatives should and must be analyzed in the environmental review performed for a certified regulatory program. In this case, DPR must analyze the impacts of the “no project” alternative, which in this case would be the status quo. Another alternative that could be analyzed would be a complete ban on the use of methyl bromide. While DPR discusses these first two alternatives, they are only discussed with regards to their economic impacts, not their environmental impacts. Further, the bases for those economic forecasts are conclusory and not supported by any evidence. Other alternatives that could be analyzed would

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258 See CAL. PUB. RES. CODE § 21002 (West 1996).
259 See Mountain Lion Foundation, 16 Cal.4th at 134.
260 See CAL. CODE REGS. tit. 14 § 15126.6(c).
261 See CAL. CODE REGS. tit. 14 § 15126.6(e).
be a more stringent or less stringent regulatory structure, or regulations that DPR has considered and discarded.

As a certified regulatory program, DPR is required to consider feasible mitigation measures. The Initial Statement of Reasons contains no discussion of mitigation measures for any environmentally adverse impacts. As a result, DPR failed to comply with CEQA by failing to discuss and consider alternatives and mitigation measures in the Initial Statement of Reasons.

4. The Impact of the Regulations

The methyl bromide regulations are extremely important in the grand scheme of the Program. Environmentalists and farmworker advocates are fighting hard for regulations that protect public health and the environment because these are the first regulations for a pesticide that is known to have toxic health effects that have been put through such a rigorous public and scientific peer review process. The science performed on methyl bromide demonstrates the health risks, and those risks have been evaluated by DPR scientists and peer reviewed by NAS and University of California scientists.

However, there is disagreement about the science between the peer reviewers and DPR scientists. DPR has not incorporated those concerns in the regulations, and has in fact ignored many of the concerns. This is unacceptable when the health of farmworkers, residences, and schools bordering and near methyl bromide fumigations are at risk. These regulations will provide precedent for how similarly toxic pesticides may be regulated in the future, and the goal is to provide for regulations that are protective of public health and the environment.

5. The Lawsuit Challenging the Regulations

On December 15, 2000, OAL approved the Regulations, and they became effective on January 14, 2001. On December 22, 2000, DPR filed a Notice of Decision with the California Resources Agency as required by Section 6116 of Title 3 of the California Code of Regulations.262 Since Section 6116 consti-

262 See CAL. CODE REGS. tit. 3 § 6116; Memorandum from Paul E. Helliker, Direc-
tutes compliance with the notice requirements of CEQA, anyone wishing to challenge the regulations for CEQA violations was required to file suit within 30 days.263

On January 22, 2001, EDC, Environmental Working Group, Pesticide Action Network, ECOSLO, and Roberto Solorio filed suit challenging the Regulations on all of the grounds discussed above. It is likely that other parties will also file lawsuits challenging the regulations.

V. CONCLUSION

A. SUMMARY OF THE PROGRAM

The Program is quite complicated. It is implemented by DPR and the CACs. DPR is responsible for: (1) pesticide use regulation; (2) pesticide registration, suspension, and cancellation; (3) administration of the Pesticide Contamination Prevention Act; (4) administration of the Birth Defect Prevention Act; (5) pesticide Toxic Air contaminant listings; (6) classification of pesticides for permitting; (7) rulemaking; and (8) enforcement oversight. CACs then undertake permit issuance and implementation of the Program at the county level.

As a generally matter, pesticides are registered for use in California and classified by DPR as restricted or non-restricted materials. CACs then issue restricted materials permits to growers before those pesticides are used. Those permits have conditions that have been provided by DPR, and may be modified to include more stringent conditions at the local level based upon local conditions. As a practical matter, most CACs do not spend a lot of time analyzing what pesticides have been chosen by the grower and what effects they will have on the neighboring community.

More and more often conflicts arise at the agriculture/urban interface, where pesticide applications impact neighboring residences, schools, and other occupied areas. Many more pesticide illnesses are being documented, and instances of evacuations due to pesticide exposures are becoming more common. As a result, it is imperative that enforcement of pesticide laws

263 See CAL. PUB. RES. CODE § 21080.5(g) (West Supp. 2000).
become more stringent in order to protect public health and the environment.

However, the Davis Administration has not stepped up to the plate to make necessary legislative changes to protect public health. In fact, experience shows that while lip-service is given to increased enforcement, it is not happening on the ground. Further, the recent precedent-setting methyl bromide fumigation rulemaking does not go far enough to protect public and farmworker health from exposures to methyl bromide. If this is what the future of pesticide regulation and enforcement looks like, we will continue to poison the environment, ourselves, and our children at unprecedented rates.

B. THE NEED FOR A LEGISLATIVE OVERHAUL OF THE PROGRAM

A legislative overhaul of the Program is needed. The Program is too complex to involve the public in important issues that affect the health and well-being of everyone. While a legislative overhaul is a huge undertaking, and there is not likely to be the political will to do it in the near future, the first stages of collaboration and consensus-building should be undertaken. It is unfortunate that power organizations have focused efforts on preserving the use of methyl bromide and other highly toxic pesticides rather than transition to more non-traditional, non-toxic alternatives. Further, Governor Davis has not implemented his campaign promise to promote the use of less toxic alternatives to protect public health. The passage of weak methyl bromide regulations, a weak "Health Schools Act," and the removal of funding for pesticide alternatives demonstrate the Governor's will to support growers at the expense of public health.

CCEHP is working to outreach to the farmworker community and educate them and the public about the dangers of pesticides. The Project works to educate medical caregivers to better diagnose and report pesticide illnesses. CCEHP is also actively working with local Farm Bureaus, CACs, and growers, where possible to make positive changes to pesticide regulations at the local level, as well as DPR to attempt to make change at the state level. These undertakings are slow, but

265 See A.B. 2663 (Sept. 26, 2000).
are necessary to build the groundswell of support that will be necessary to change pesticide regulation in California.