



that the exclusion of the amounts claimed results in a shortfall of the diversion mandates. Board staff will recommend that CIWMB issue a notice of deficiency to the jurisdiction.

■ FUTURE MEETINGS

April 27-28 in Orange County.

May 25 in Sacramento.

June 29 in Sacramento.

July 27-28 in East San Gabriel Valley.

DEPARTMENT OF PESTICIDE REGULATION

Director: James Wells
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The California Department of Food and Agriculture's Division of Pest Management officially became the Department of Pesticide Regulation (DPR) within the California Environmental Protection Agency (Cal-EPA) on July 17, 1991. DPR's enabling statute appears at Food and Agricultural Code (FAC) section 11401 *et seq.*; its regulations are codified in Titles 3 and 26 of the California Code of Regulations (CCR).

With the creation of Cal-EPA, all jurisdiction over pesticide regulation and registration was removed from CDFA and transferred to DPR. Pest eradication activities (including aerial malathion spraying, quarantines, and other methods of eliminating and/or preventing pest infestations) remain with CDFA. The important statutes which DPR is now responsible for implementing and administering include the Birth Defect Prevention Act (FAC section 13121 *et seq.*), the Pesticide Contamination Prevention Act (section 13141 *et seq.*), and laws relating to pesticide residue monitoring (section 12501 *et seq.*), registration of economic poisons (section 12811 *et seq.*), assessments against pesticide registrants (section 12841 *et seq.*), pesticide labeling (section 12851 *et seq.*), worker safety (section 12980 *et seq.*), restricted materials (section 14001 *et seq.*), and qualified pesticide applicator certificates (section 14151 *et seq.*).

DPR includes the following branches:

1. The Pesticide Registration Branch is responsible for product registration and coordination of the required evaluation process among other DPR branches and state agencies.

2. The Medical Toxicology Branch reviews toxicology studies and prepares risk assessments. Data are reviewed for chronic and acute health effects for new active ingredients, label amendments on currently reg-

istered products which include major new uses, and for reevaluation of currently registered active ingredients. The results of these reviews, as well as exposure information from other DPR branches, are used in the conduct of health risk characterizations.

3. The Worker Health and Safety Branch evaluates potential workplace hazards resulting from pesticides. It is responsible for evaluating exposure studies on active and inert ingredients in pesticide products and on application methodologies. It also evaluates and recommends measures designed to provide a safer environment for workers who handle or are exposed to pesticides.

4. The Environmental Monitoring and Pest Management Branch monitors the environmental fate of pesticides, and identifies, analyzes, and recommends chemical, cultural, and biological alternatives for managing pests.

5. The Pesticide Use and Enforcement Branch enforces state and federal laws and regulations pertaining to the proper and safe use of pesticides. It oversees the licensing and certification of dealers and pest control operators and applicators. It is responsible for conducting pesticide incident investigations, administering the state pesticide residue monitoring program, monitoring pesticide product quality, and coordinating pesticide use reporting.

6. The Information Services Branch provides support services to DPR's programs, including overall coordination, evaluation, and implementation of data processing needs and activities.

Also included in DPR are the Pesticide Registration and Evaluation Committee (PREC), the Pesticide Advisory Committee (PAC), and the Pest Management Advisory Committee (PMAC). PREC meets monthly, bringing together representatives from all public agencies with an interest in pesticide regulation to consult on pesticide product registration, renewal, and reevaluation issues. PAC meets bimonthly, bringing together representatives from public agencies with an interest in pesticide regulation to discuss all policy issues regarding pesticides. PMAC, established in conjunction with CDFA, also meets bimonthly, and seeks to develop alternative crop protection strategies enabling growers to abandon traditional, chemical-dependent systems and reduce the potential environmental burden associated with pesticide use.

■ MAJOR PROJECTS

DPR Releases Semiannual Reevaluation Report. On October 14, pursuant to section 6225, Title 3 of the CCR, DPR

released its semiannual report summarizing its reevaluation of the registration status of pesticide products; the report covers reevaluation occurring from January 1 through June 30, 1993. California regulations require DPR to investigate all reports of actual or potential significant adverse effects to people or the environment resulting from the use of pesticides; if an adverse impact has occurred or is likely to occur, the regulations require DPR to reevaluate the registration of the pesticide. Factors that may initiate reevaluation are specified in the regulations and include public or worker health hazard; environmental contamination; residue over-tolerances; fish or wildlife hazard; lack of efficacy; hazardous packaging; inadequate labeling; and availability of an effective and feasible alternative material or procedure which is demonstrably less destructive to the environment. Reevaluation is often triggered by ongoing DPR registration reviews, state and county pesticide use surveillance and illness investigations, pesticide residue sample analyses, environmental monitoring activities, or information from other state or federal agencies.

When a pesticide enters the reevaluation process, existing data are reviewed; further additional data that may be required to determine the nature and extent of the potential hazard or the appropriate mitigation measure are identified and requested from the registrants. There are several possible outcomes of a reevaluation. For example, the data may demonstrate that the issue is resolved and that no significant adverse effect will occur; DPR may determine that there is no need to adopt a regulation restricting the use of the pesticide in some manner to mitigate the potential adverse effect; or the reevaluation may indicate that there is an adverse effect which cannot be mitigated, in which case the reevaluation may end with a recommendation that the registration of the pesticide be cancelled.

DPR's October 14 report details its progress in the formal reevaluation of 21 pesticides; formal reevaluation is undertaken when investigations have indicated that a significant adverse impact has occurred or is likely to occur. One of the pesticides formally reevaluated was the "Blizzard" liquid nitrogen system, which is registered for use as a termiticide; liquid nitrogen was placed into reevaluation on March 1, 1990, after an applicator died while using it. After review of the label on file with DPR at the initiation of the reevaluation, it was determined that the label did not mitigate possible hazards of use. The registrant proposed revisions to



the product's label, which were submitted to the U.S. Environmental Protection Agency (EPA) and DPR. After reviewing the amended label, DPR determined that although a few more changes are needed, it is significantly improved; therefore, the amended label was accepted for use in California. DPR is currently awaiting a letter from EPA to the registrant requiring further changes to the product's label.

The report also summarizes DPR's preliminary investigations, which are conducted on products for which possible hazards have been identified by DPR or other state or county agencies; results of a preliminary investigation may indicate the need for formal reevaluation. The report indicates that DPR is currently conducting preliminary investigations for products which are labeled for direct application to domestic animals; DPR has concerns about exposure to both pet groomers and pet owners who may become exposed to these products while applying them to cats and dogs.

On December 6, DPR announced that it has commenced reevaluation of seven pesticide products containing the active ingredients potassium orthobenzyl parathion, potassium paratertiary-amylphenate, sodium dodecyl benzene sulfonate, and potassium orthophenylphenate; the economic poisons to be reevaluated are disinfectants that contain one or more of those active ingredients and bear label claims stating that the products are effective as a tuberculocide. DPR's reevaluation of these products is based upon data recently submitted with regard to one of the products listed for reevaluation; the data indicate that the product may be ineffective as a tuberculocide. According to DPR, this has raised the concern that other products containing the same active ingredients may also be ineffective as a tuberculocide. In addition, after a review of the data currently on file to support the registrations of the seven products listed for reevaluation, DPR determined that the database is inadequate to support certain other label claims regarding the efficacy of the products. According to DPR, the use directions on all seven labels are inadequate in that they fail to specify the length of time the disinfectant must remain on the surface or the temperature that must be maintained in order for the products to be effective as a disinfectant.

Public Comments to DPR on NAS Report. DPR received a wide variety of responses to its request for public comment on the National Academy of Sciences' (NAS) June 1993 report on the effect of pesticides on children; the report concluded that current government standards

allow infants and children to be exposed to excessive levels of cancer-causing and neurotoxic pesticides. [13:4 CRLR 158] DPR formed an interagency committee to review the report; this committee, chaired by DPR Chief Deputy Director Elin Miller, includes representatives from CalEPA's Office of Environmental Health Hazard Assessment, the Department of Health Services, and CDFA. The committee, which solicited public input on the report, will determine how the report's findings and recommendations relate to federal and state pesticide registration and food safety systems, and how to utilize the information to improve California's pesticide regulatory program.

In reaction to the NAS report, DPR received 21 responses from representatives of public interest groups, academia, the chemical industry, and growers; for example, comments were submitted by the Children's Advocacy Institute, California Coalition Against Pesticides, Natural Resources Defense Council, California Farm Bureau Federation, San Jose State University, DuPont, Western Agricultural Chemicals Association, and the Western Growers Association. According to DPR, the majority of respondents agreed that dietary exposure of pesticides to infants and children should be a major consideration in evaluating and regulating pesticides; beyond that, comments varied from full support of the NAS report to qualified support or complete repudiation. Some criticized the NAS report as being incomplete and seriously flawed because it deals with theoretical risk, not observed clinical incidents; others consider the report to be a thorough, balanced summary; several respondents criticized the report for failing to consider multiple-source exposures, such as water, air, dust, soil, and pets.

The working group will be taking the comments into consideration as it prepares its analysis; at this writing, DPR is expected to report the group's findings to the legislature in January.

DPR to Monitor Agencies' Worker Pesticide Exposure. DPR recently announced plans to assist the California Department of Transportation (Caltrans) and the U.S. Forest Service (USFS) in efforts to protect their workers from overexposure to pesticides. Because there were no data for the pesticides Caltrans and USFS were actually using, the agencies substituted data from "surrogate" chemicals similar to those being used in order to estimate pesticide exposure levels to workers. However, based on studies DPR has on file from pesticide manufacturers, the Caltrans estimates are not accurate; USFS is also concerned about possible

inaccuracies. By measuring exposure to the chemicals actually used in specific work environments, a more realistic assessment of potential risk is possible.

Beginning in October, DPR began monitoring USFS workers who are using the herbicide hexazinone to eradicate vegetation which is competing with pine seedlings; DPR will be monitoring up to fifteen workers in each of four California forests: El Dorado, Shasta, Stanislaus, and Lassen. Under the Caltrans contract, DPR is monitoring highway landscape workers who use herbicides to keep weeds off of roadsides. DPR measures worker exposure in several ways; glass-fiber filters are placed in the worker's breathing zone and measuring devices in clothing. Hand, face, and neck wipes are also analyzed for residues, and urine samples are being collected from Caltrans workers handling certain herbicides. Both studies are expected to run through March.

Enforcement of the Birth Defect Prevention Act. In its continuing efforts to enforce the Birth Defect Prevention Act of 1985, DPR recently took the following actions:

• **Data Collection Under SB 550.** On November 17, DPR reported on the status of the 57 active ingredients which were noticed for suspension in early 1992; the manufacturers of these ingredients, which are contained in more than 3,000 products sold in California, are those which failed to provide toxicity studies needed to assess the health effects of their uses as mandated by the Act. SB 550 (Petris) (Chapter 1228, Statutes of 1991) amended the Act and established the timeframe by which manufacturers of 200 pesticides on DPR's priority list had to submit chronic health effects studies or face suspension; these 57 chemicals are on that priority list. [13:4 CRLR 158; 13:2&3 CRLR 171-72; 13:1 CRLR 104]

According to its November report, DPR has received the required data on 17 active ingredients since December 31, 1991, and has discontinued the suspension process for these ingredients pending completion of its evaluation of the data submitted. The report also indicates that a full set of acceptable studies is now on file for seven active ingredients; DPR finalized its suspension of products containing bendiocarb, coumaphos, or parathion; and all registered products containing amitrole or sodium arsenite have been withdrawn by the registrants. DPR has granted petitions for extension of time for fifteen active ingredients and denied such petitions for fourteen active ingredients; DPR is considering a petition for extension of time for the active ingredient vinclozolin;



DPR is reviewing petitions for deferral of suspension for ten active ingredients; DPR granted a petition for deferral of suspension for DEET; and DPR is reviewing requests for exemption from data requirements based on limited use and insignificant exposure for four active ingredients. Finally, DPR reported that in the near future it may issue a notice of intent to suspend the registration of products containing the active ingredients formaldehyde and tributyltin oxide.

• **Data Collection Under AB 1742.** In early 1992, DPR sent letters to the manufacturers of 390 active ingredients informing them that they must begin the process of ensuring that up-to-date toxicology data are submitted as required by the 1985 Birth Defect Prevention Act. These pesticides are those that were not subject to the original data call-in initiated in accordance with SB 550 (Petris) (*see above*). The data collection timetable for this second group of chemicals was established in 1991 with the passage of AB 1742 (Hayden) (Chapter 1227, Statutes of 1991). Registrants of 93 of the 390 active ingredients did not respond to the original letters sent early in 1992; this prompted DPR to send notices in November and December 1992 to the registrants of those 93 active ingredients, informing them that their products would be suspended unless they complied with the data call-in. Registrants of 27 of the 93 chemicals initially responded to those notices, and another 19 declined to renew their registrations, withdrawing their products from the market. Accordingly, in April 1993, DPR suspended the registrations of the remaining 47 chemicals. [13:4 CRLR 159; 13:2&3 CRLR 172]

According to DPR, 38 registrants have now responded; 24 of the registrations remain suspended; manufacturers have withdrawn the product registrations for 24 of the active ingredients for 1993; and DPR is still reviewing the responses from manufacturers of six of the active ingredients.

On December 17, DPR mailed notices to approximately 1,000 pesticide registrants, asking them to formalize their plans for generating toxicological data on 339 pesticide active ingredients. Once the data call-in is complete (a process expected to extend up to four years), complete up-to-date information on potential chronic health effects will be on file for all pesticides registered in the state. The December 17 notice requires registrants to provide a detailed description of the studies they plan to do and a timetable for their submission; those who fail to respond adequately will be subject to suspension ac-

tion. Up to eleven studies can be required for each active ingredient, including animal studies on chronic toxicity, oncogenicity, teratogenicity, neurotoxicity, reproductive toxicity, and mutagenicity. The majority of the products affected by the data call-in notice have institutional, industrial, or home uses, although some are used in agriculture; some of the affected products include disinfectants and sanitizers, plant insect dusts, lawn chemicals, repellents, and pet products.

Rulemaking Update. The following is a status update on DPR regulatory proposals covered in detail in recent issues of the *Reporter*:

• **Rulemaking Under the Birth Defect Prevention Act.** On November 9, the Office of Administrative Law (OAL) approved DPR's proposed amendment to section 6198.5, Titles 3 and 25 of the CCR; the amendment deletes the grouping of the active ingredients methylenebis (thiocyanate), 2-(2-butoxyethoxy) ethyl thiocyanate, and methylisothiocyanate. [13:4 CRLR 159] However, this amendment will not exempt these ingredients from the data submission requirements on an individual basis.

• **Regulation of Methyl Bromide and Sulfuryl Fluoride.** On June 25, DPR published notice of its proposed permanent adoption of section 6455 and amendments to section 6454, Titles 3 and 26 of the CCR, regarding the use of methyl bromide and sulfuryl fluoride in the fumigation of structures. These revisions would have increased aeration requirements for structures fumigated with these pesticides and required notice of potential hazards to building occupants when methyl bromide or sulfuryl fluoride are used in structural fumigation. [13:4 CRLR 159] However, due to EPA's amendment of its regulations governing the use instructions on methyl bromide and sulfuryl fluoride product labels, DPR's proposed amendments became unnecessary and will not be pursued (*see LITIGATION*).

• **Economic Poison Rulemaking.** On August 13, DPR published notice of its intent to amend section 6000 and adopt new section 6145, Titles 3 and 26 of the CCR, pertaining to economic poisons. Proposed amendments to section 6000 would provide that the term "economic poison," as used in FAC section 12995, includes any substance or product that the user intends to be used for the economic poison purposes specified in FAC sections 12753 and 12758; proposed section 6145 would define the term "intended to be used," as used in FAC sections 12753 and 12758. [13:4 CRLR 159] At this writing, DPR has not adopted the proposed

changes and is currently rewriting its statement of reasons.

• **Rulemaking Under the Pesticide Contamination Prevention Act.** In October 1992, DPR published notice of its intent to amend several regulations adopted pursuant to the Pesticide Contamination Prevention Act, FAC section 12141 *et seq.*, the purpose of which is to prevent pesticide pollution of groundwater aquifers throughout the state. The proposed action would have amended sections 6000.6, 6416, 6486.1-6486.5, 6800, and 6802, and renumbered section 6458, Titles 3 and 26 of the CCR. [13:4 CRLR 160; 13:2&3 CRLR 174] However, DPR has decided not to pursue the proposed amendments at this time.

• **Conflict of Interest Code Amendments.** DPR's current conflict of interest code designates employees who must disclose certain investments, income, interests in real property, and business positions, and employees who must disqualify themselves from making or participating in the making of governmental decisions affecting those interest. In March 1993, DPR proposed amendments to its conflict of interest code which would add several new positions within DPR that make or participate in the decisionmaking process and are not currently listed in the conflict of interest code; in addition, DPR's amendments would delete several positions which no longer exist. [13:4 CRLR 160; 13:2&3 CRLR 174] On June 28, DPR sent the proposed amendments to the Fair Political Practices Commission (FPPC) for review; at this writing, DPR has still not received FPPC's response. FPPC has up to six months to respond from the date on which it receives the proposal.

LEGISLATION

SB 532 (Hayden). Existing law authorizes the DPR Director to establish tolerances for a pesticide chemical in or on produce. As amended May 28, this bill would require the Director to determine if any adoption, amendment, revision, or extension of the tolerances adequately protects human health, including the health of infants, children, elderly, and other population categories and, if not, to take more stringent action, as specified.

Existing law requires the DPR Director to adopt regulations relating to restricting worker reentry into areas treated with pesticides determined by the Director to be hazardous to worker safety based on time limits and certain pesticide residue levels. This bill would require the Director to determine if any adoption, amendment, revision, or extension of the time limits



and pesticide residue levels adequately protects human health, including the health of infants, children, elderly, and other population categories and, if not, to take more stringent action, as specified. [S. Appr]

SB 422 (Petris). The Occupational Carcinogens Control Act of 1976 establishes standards and safeguards for the use of carcinogens in California. As introduced February 24, this bill would prohibit, on and after January 1, 1995, any employer from engaging in, or causing any employee to engage in, the dispersed use, as defined, of extremely toxic poisons, as defined, except as authorized by the Director of Industrial Relations, or the director of another state agency designated by the Governor, where the DIR Director finds, pursuant to regulation, that prohibition will cause severe economic hardship due to the lack of feasible alternative substances or practices. It would repeal as of January 1, 2000, the provisions allowing the DIR Director to authorize the use of an extremely toxic poison on the basis of economic hardship unless a later enactment, enacted before January 1, 2000, deletes or extends that date. [S. Appr]

SB 475 (Petris), as amended June 8, would enact the Pesticide Use Reduction Act of 1993, requiring the Cal-EPA Secretary to develop and implement a program to achieve a significant reduction in the use of the active ingredients in pesticides in California by 2000, if funds are appropriated for that purpose in the annual Budget Act. [A. Desk]

AB 1111 (Sher), as amended April 27, would codify the changes made by the Governor's Reorganization Plan No. 1 of 1991, which created Cal-EPA, created DPR in Cal-EPA, and transferred to DPR the pesticide regulatory program of Cdfa. [A. W&M]

AB 1480 (Johnson). Under existing law, DPR, the Department of Toxic Substances Control, and the State Water Resources Control Board are established within Cal-EPA. As introduced March 4, this bill would require all fees and penalties collected by those agencies to be deposited in a special account in the General Fund and would declare that all activities of those agencies shall be funded by appropriations from the General Fund. [A. EnvS&ToxM]

SB 106 (McCorquodale). Under existing law, officials of specified recreation and park districts are exempt from having to obtain an agricultural pest control adviser license from the DPR Director in order to act, or offer to act, as an agricultural pest control adviser if they make a

recommendation in writing as to a specific application of pesticide on a specific parcel. As amended June 21, this bill would continue that exemption until July 1, 1995. This bill would also permit the Director to adopt alternative minimum criteria based on education or technical expertise for applicants for an agricultural pest control adviser license who are officials of those recreation and park districts. [A. Desk]

AB 773 (Areias). Existing law prohibits any person from acting, or offering to act, as an agricultural pest adviser without first having secured an agricultural pest control adviser license from the DPR Director. As amended April 13, this bill would require the Director to develop a program for certifying the competency of pest control advisers in biologically intensive integrated pest management, as defined, on a voluntary basis. [S. AWR]

■ LITIGATION

Among other things, the Safe Drinking Water and Toxic Enforcement Act of 1986 (Proposition 65) generally prohibits businesses from knowingly and intentionally exposing individuals to substances known to the state to cause cancer or reproductive toxicity without first providing a clear and reasonable notice to such individuals. Proposition 65 also requires the state to publish a list of chemicals known to the state to cause cancer or reproductive toxicity. Once a substance is added to the list, businesses have a twelve-month grace period before they are required to issue the warning. Proposition 65 provides three mechanisms by which a substance may become listed: (1) in the opinion of the state's scientific review panel of experts, the substance has been clearly shown through scientifically valid testing according to generally accepted principles to cause cancer or reproductive toxicity; (2) a body considered to be authoritative by the state's experts has formally identified a substance as causing cancer or reproductive toxicity; or (3) an agency of the state or federal government has formally required a substance to be labelled or identified as causing cancer or reproductive toxicity. Because EPA required methyl bromide, one of the world's most widely used pesticides, to be so labelled, the state listed the substance as a reproductive toxin under Proposition 65 on January 1, 1993, thus triggering the warning requirement on January 1, 1994.

On December 22, Cal-EPA's Office of Environmental Health Hazard Assessment (OEHHA), the state's lead agency overseeing the implementation of Proposition 65, announced that as of January 1, it was chang-

ing the Proposition 65 listing of methyl bromide to "methyl bromide as a structural fumigant." According to OEHHA, it modified the listing because EPA's formal requirements for reproductive toxicity labeling for methyl bromide—which triggered the original state listing—only applied to methyl bromide when used as a structural fumigant; accordingly, OEHHA modified its listing so that it is "no broader than the U.S. EPA formal requirements."

If the Wilson administration had not modified the listing, growers would have been required to warn agricultural workers and nearby residents before using methyl bromide for any use, starting on January 1; as a result of the state's listing modification, the Proposition 65 warning applies only to methyl bromide when used as a structural fumigant. Methyl bromide products used for structural fumigation are required to contain warning labels and exterminators must inform residents in writing that the chemical causes birth defects in animals, although there is not yet any direct evidence linking the chemical to birth defects in humans; the warning requirement does not apply when the chemical is used to kill pests on produce or to fumigate agricultural fields, although agricultural use accounts for an estimated 95% of the 19 million pounds of methyl bromide used in California each year. Governor Wilson defended his action, which was taken after heavy lobbying by growers and the chemical industry, by contending that methyl bromide notification requirements should "vary depending on how it is being used."

However, a number of environmental organizations harshly criticized Wilson's decision, and are challenging the action in court. In *Natural Resources Defense Council, et al. v. Wilson, et al.*, No. SCV-957488, filed in San Francisco Superior Court on December 28, plaintiffs NRDC, AFL-CIO, California Rural Legal Assistance, and Environmental Defense Fund allege that Wilson and other state officials are violating Proposition 65. Plaintiffs contend that, while the Governor has the authority to list or not to list chemicals, he may not limit when and how the Proposition 65-required warning will be provided. On December 29, however, San Francisco Superior Court Presiding Judge Raymond Arata refused to issue a temporary restraining order against Wilson and Cal-EPA; at this writing, a preliminary injunction hearing is scheduled for January 21.

■ RECENT MEETINGS

At PMAC's October 8 meeting, Committee member Mary Louise Flint pre-



sented a report of the Alternatives Task Force; Flint explained that the Task Force is attempting to identify when California agriculture will be without specific alternatives to certain pesticides, in order to direct research and/or regulatory action so as to prevent a lack of appropriate alternatives in the future. [12:4 CRLR 186] Flint noted that about 120 pesticide/crop combinations have been identified as being in jeopardy. The Task Force noted that although it would like to look at nonchemical, long-range alternatives (such as nutritional factors and biological control) rather than substitute chemical pesticides that may have registration problems in the future, it does not have the resources to take such action at this time.

DPR Director Jim Wells suggested that the Task Force explore the concept of pest management systems for crops which use several threatened pesticides for which there are no alternatives. Wells also noted that information from the Task Force should be shared with other interested parties such as EPA, the U.S. Department of Agriculture, commodity groups, and other potential funding sources. He further noted that the California Environmental Technology Partnership is interested in identifying activities which could spin off into businesses which would benefit California. One committee member expressed concern that small acreage crops with few chemicals registered for them would be very hard hit by the loss of a chemical, but would not attract research or funding; another committee member responded that state colleges are often looking for research projects for graduate students, and the Infrastructure Task Force is interested in finding ways to disseminate information on research needs of this kind.

At the same October 8 meeting, PMAC member George Gowgani presented a report of the Infrastructure Task Force; among other things, Gowgani explained the Task Force's proposal to establish educational requirements for pest control advisors (PCAs). The proposal calls for a bachelor's degree in agricultural sciences, biological sciences, or pest management; six months of technical experience as an assistant to a licensed PCA, or equivalent experience; and completion of a curriculum which includes core courses in physical and biological sciences, crop health, management systems, and production systems. Following Gowgani's report, PMAC discussed various aspects of PCA training and preparation, including DPR's system of evaluating PCA applications, the need for the system to remain flexible enough to accommodate PCAs who receive their education outside California, assurance

that PCAs obtain a certain number of continuing education courses in biological areas, and the need for training in integrated pest management (IPM) to be incorporated into basic PCA preparation curricula as opposed to creation of a separate IPM PCA license category.

Also at the October 8 meeting, Elin Miller presented a report of the Pest Management Systems Task Force; Miller detailed a proposed process for identifying and developing pest management systems, as well as the development and approval of a pest management plan. The Task Force is now exploring incentives for adopting systems approaches to pest management. Miller also invited comments on a draft letter from the Task Force to EPA on the subject of fertilizers and soil amendments which should be exempted from federal registration under the Federal Insecticide, Fungicide, and Rodenticide Act because of pesticidal claims.

■ FUTURE MEETINGS

DPR's PAC, PREC, and PMAC meet regularly to discuss issues of practice and policy with other public agencies; the committees meet at DPR's headquarters in Sacramento.

WATER RESOURCES CONTROL BOARD

Executive Director: Walt Pettit
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The state Water Resources Control Board (WRCB) is established in Water Code section 174 *et seq.* The Board administers the Porter-Cologne Water Quality Control Act, Water Code section 13000 *et seq.*, and Division 2 of the Water Code, with respect to the allocation of rights to surface waters. The Board, located within the California Environmental Protection Agency (Cal-EPA), consists of five full-time members appointed for four-year terms. The statutory appointment categories for the five positions ensure that the Board collectively has experience in fields which include water quality and rights, civil and sanitary engineering, agricultural irrigation, and law.

Board activity in California operates at regional and state levels. The state is divided into nine regions, each with a regional water quality control board (RWQCB or "regional board") composed of nine members appointed for four-year terms. Each regional board adopts Water Quality Control Plans (Basin Plans) for its area and performs any other function concern-

ing the water resources of its respective region. Most regional board action is subject to State Board review or approval.

The State Board has quasi-legislative powers to adopt, amend, and repeal administrative regulations for itself and the regional boards. WRCB's regulations are codified in Divisions 3 and 4, Title 23 of the California Code of Regulations (CCR). Water quality regulatory activity also includes issuance of waste discharge orders, surveillance and monitoring of discharges and enforcement of effluent limitations. The Board and its staff of approximately 450 provide technical assistance ranging from agricultural pollution control and waste water reclamation to discharge impacts on the marine environment. Construction loans from state and federal sources are allocated for projects such as waste water treatment facilities.

WRCB also administers California's water rights laws through licensing appropriate rights and adjudicating disputed rights. The Board may exercise its investigative and enforcement powers to prevent illegal diversions, wasteful use of water, and violations of license terms.

■ MAJOR PROJECTS

EPA Issues Bay/Delta Standards. On December 15, a federal task force consisting of representatives from the U.S. Environmental Protection Agency (EPA), U.S. Bureau of Reclamation (USBR), U.S. Fish and Wildlife Service (FWS), and the National Marine Fisheries Service (NMFS) released a package of proposed standards to protect declining wildlife in the San Francisco Bay/Sacramento-San Joaquin Delta Estuary; coordinated by EPA, the four federal agencies worked together to draft standards for the Bay/Delta region after the state failed to do so and pursuant to the settlement of a lawsuit filed by the Sierra Club Legal Defense Fund and several other environmental groups. [13:4 CRLR 163]

EPA proposes three different sets of water quality criteria: salinity criteria of two parts per thousand in Suisun Bay, the productive nursery of the estuary; survival indices to protect migrating young chinook salmon; and salinity criteria to protect striped bass spawning on the lower San Joaquin River. According to EPA, each set of criteria is intended to protect a particular designated use or set of uses in the Bay/Delta Estuary. Additionally, FWS proposes to list the California population of the California splittail as threatened under the federal Endangered Species Act; identify critical habitat for the Delta smelt, which has been listed as threatened [13:2&3 CRLR 177, 189]; and, during