ALAMEDA COUNTY BOARD OF SUPERVISORS

** MINUTE ORDER **

The following is action taken by the Board of Supervisors on May 8, 2001

Approved as Recommended ☑ **Other** ☐

Unanimous ☒ **Carson** ☐ **Lai-Bitker** ☐ **Miley** ☐ **Steele** ☐ **Haggerty** ☐ **- 5**
Vote Key: A=Yes; N=No; AB=Abstain; X=Excused

Documents accompanying this matter:

☒ **Resolution(s)** R-2001-568
☐ **Ordinance(s)** _____
☐ **Contract(s)** _____

File No. 15626
Item No. 10

Copies sent to:

Supervisor Carson

Special Notes:

I certify that the foregoing is a correct copy of a Minute Order adopted by the Board of Supervisors, Alameda County, State of California.

ATTEST:
Crystal Hishida, Clerk of the Board
Board of Supervisors

By: _____
Deputy

BOARD OF SUPERVISORS

KEITH CARSON
SUPERVISOR, FIFTH DISTRICT

May 1, 2001

Members, Board of Supervisors
Alameda County
HAND DELIVERED

Dear Colleagues:

SUBJECT: Approve a Resolution to Establish a Policy on Pesticide Use and Creating The Alameda County Integrated Pest Management Committee

It was recently brought to my attention that Alameda County's gardeners use pesticides for weed and vermin control. I am concerned about the environmental and health consequences of this practice. As such, I asked staff to investigate what, if any, weed and pest management policies existed within the county and whether such policies were integrated along cross-departmental lines.

In response, the Environmental Health Department surveyed County programs using chemical pesticides. These pesticides are used, along with non-chemical methods, to manage pest populations below a level of economic, public health or quarantine concern (for example, Africanized Honey Bee infestations). Seven agencies or special districts operating within Alameda County routinely use a significant volume of chemical pesticides to control weeds, insects, rodents, microbes and other pests. These organizations include:

- Public Works Agency - To maintain flood control channels, roadsides and other transportation corridors.
- General Services Agency - To maintain County buildings and grounds
- Zone 7 Flood Control District - To maintain flood control channels
- Alameda County Medical Center - To minimize cross-contamination of patient care items
- Mosquito Abatement District - To manage mosquito populations
- Health Care Services Agency (Vector Control Division of Environmental Health Department) - To manage disease vectors, stinging insects and other pests
- Community Development Agency (Agricultural Commissioner's Office) - To manage weeds and other pests of range land, open space, roadside and other county properties, and to enforce agricultural quarantines.

Given the large scope of agencies involved in pesticide application, I thought it prudent to support the recommendations of the ad-hoc Integrated Pest Management committee's report (see attached) that calls for a *Resolution to Establish a Policy on Pesticide Use and Creating The Alameda County Integrated Pest Management Committee*.

This resolution has been approved as to form by County Counsel and heard before the PAL and Health sub-committees where it was greeted with support. If you have any questions please contact Lara Bice (272-6685) of my staff or Pamela Evans (567-6770) of Environmental Health.

Sincerely,

Keith Carson

Keith Carson, Supervisor
Alameda County, 5th District

Approved as to Form
RICHARD E. WINNIE, County Counsel
By

R-2001-568

RESOLUTION FOR THE COUNTY OF ALAMEDA ESTABLISHING A POLICY ON PESTICIDE USE AND CREATING THE ALAMEDA COUNTY INTEGRATED PEST MANAGEMENT COMMITTEE

Whereas, the Board of Supervisors finds that the County agencies and personnel, particularly, the General Services Administration, the Community Development Agency, the Public Works Agency, the Mosquito Abatement District, the Flood Control District, Zone 7 and the Health Care Services Agency have taken steps to successfully practice integrated pest management ("IPM");

Whereas, IPM is defined as a pro-active problem solving and decision making process for managing pests that uses pest population and damage monitoring, that relies on pest prevention strategies and a combination of cultural, mechanical, physical, biological and chemical tools to manage pests in a safe, cost effective and environmentally sound manner.

Whereas, Alameda County agencies currently utilize IPM and have already realized significant overall reductions in chemical pesticide use; eliminated the most hazardous pesticides; established employee safety programs; required appropriate State pest control licensing and continuing education for employees; maintained high compliance with Federal and State pest control laws and regulations; established biological pest control; and adopted integrated pest management activities;

Whereas, a number of Alameda County agencies have adopted policies that analyze the risk versus benefits of all pest management practices and have adopted mitigation measures which take into consideration the health and safety of County employees as well as the health, safety, comfort, and commercial interests of Alameda County residents while being mindful of departmental responsibilities and their missions;

Whereas, it is the intent of the County Board of Supervisors to implement a comprehensive pesticide use policy and to promote coordination and information sharing on non-chemical pesticide control measures among the County agencies that must control pests;

Whereas, it is the purpose and intent of this policy to ensure that County agencies and all those who apply pesticides to property owned or managed by Alameda County utilize integrated pest management practices, eliminate or reduce pesticide applications on County owned or County managed property to the maximum extent feasible, and take all reasonable precautions to ensure that pest control activities do not threaten environmental or human health;

THEREFORE, be it:

Resolved, that the policy of the County of Alameda in carrying out its pest management operations shall focus on long term prevention or suppression of pest problems with minimum negative impect on human health, non target organisms, and the environment; and be it

Further Resolved, that the County of Alameda establishes the Alameda County IPM committee to advise and make recommendations to the Board of Supervisors and to provide for review and oversight of the agencies' IPM policies as needed; and be it

Further Resolved, that the IPM Committee also shall identify and if necessary, conduct ongoing education programs for County staff to acquaint them with IPM principles, inform members of the public of the County's program to utilize non-chemical pesticide pest management strategies, to reduce chemical pesticide use, and to shift to less harmful formulations when chemical pesticides must be used, and respond to questions from the public about the County's pest management practices; and be it

Further Resolved, that the IPM Committee shall be chaired by the Director or designee of the Agriculture Department and composed of the directors or designees of the Public Works Agency, General Services

Agency, Alameda County Medical Center, the Mosquito Abatement District, the Flood Control District, Zone 7, the Environmental Health Department, Vector Control Services, and a public member and it shall meet as needed; and be it

Further Resolved, that the County hereby establishes a policy that each County agency that uses pesticides shall adopt a formal, written Integrated Pest Management policy; and be it

Further Resolved, that each IPM plan which shall include at least the following elements:
(1) Evaluate and identify conditions that encourage pest problems. Modify pest ecosystems to reduce food and living space through cultural and physical practices.
(2) Establish surveillance procedures to monitor pest population levels. Perform thorough in field assessments of each pest problem. Keep records of such monitoring, which shall be performed by designated personnel or contractors knowledgeable in IPM methods;
(3) Establish for each pest an IPM implementation plan which evaluates the biological, aesthetic, and economic loss each site can tolerate and set pest population levels at which corrective action should be taken to ensure that pests do not exceed tolerance levels;
(4) Determine corrective actions when an action threshold is reached. Review and consider all available pest management options for acceptability and feasibility. As a last resort, consider the use of chemicals in accordance with Federal and State law. Corrective actions will be chosen which are the least damaging to humans and the environment, which do not cause other foreseeable human and environmental health and other safety hazards, and which are most likely to permanently prevent ongoing pest problems.
(5) Evaluate the effectiveness of the IPM program through an accurate record system that catalogs monitoring information and documents the effectiveness of pest management procedures, and make adjustments as needed.
(6) Track pesticide use changes and prepare an annual summary on the status of the IPM program; and be it

Further Resolved, that no person, government official, board, commission, agency or employee shall be liable for any criminal or civil liability or penalty for violation of the provisions of this resolution.

Alameda County Board of Supervisors, Oakland, California, _____, 2001
passed by the following vote:
ayes-
noes-
absent-
abstention-
Attest_____

Clerk of the Board of Supervisors,
County of Alameda, California

Summary of Integrated Pest Management (IPM) Policies and Chemical Pesticide Use Reductions Among Alameda County Agencies

Prepared April 5, 2001
Alameda County Environmental Health Department

IPM Policies Summary:

In response to a request by Supervisor Keith Carson, the Environmental Health Department surveyed County programs that use chemical pesticides. These pesticides are used, along with non-chemical methods, to manage pest populations below a level of economic, public health or quarantine concern (for example, Africanized Honey Bee infestations). Seven agencies or special districts operating in Alameda County routinely use a significant volume of chemical pesticides to control weeds, insects, rodents, microbes and other pests. These organizations include:

- Public Works Agency - To maintain flood control channels, roadsides and other transportation corridors.
- General Services Agency - To maintain County buildings and grounds
- Zone 7 Flood Control District - To maintain flood control channels
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These organizations have training programs in place for staff who apply chemical pesticides. Many employees have passed written pesticide law examinations and have earned applicator certificates from the State of California. Most organizations are members of the Pesticide Applicators Professional Association, which provides continuing education in pesticide safety, regulations, and integrated pest management. Some organizations use pest control contractors to apply chemical pesticides. In these cases, only properly licensed companies with qualified applicators are used.

Each of these organizations reported using Integrated Pest Management (or IPM) principles in its approach to pest control. IPM can be defined as a proactive problem-solving approach to managing pests that combines cultural, mechanical, physical, biological and chemical tools with other management practices in a safe, cost effective and environmentally sound manner. Many of the listed organizations currently have a written IPM policy to manage pest problems using the safest, most effective tools available. These IPM policies have a number of features in common:

- Pest prevention, rather than after-the-fact pest control, is the primary strategy for pest management.

- If chemical pesticides must be used, toxicity and safe use issues of the various alternatives are evaluated.
- Chemical pesticides are used in situations in which other methods are not feasible due to emergencies such as quarantines or threats to public health or safety.

Some pest management programs also include pest population and damage evaluation, public education or cooperative approaches with other stakeholders, including property owners and other agencies.

Program managers cite the following driving forces toward non-chemical pest management strategies:

- Efficacy: Pest prevention, rather than pest control, is both more effective and less costly than responding to an established pest problem. Many pest prevention strategies are non-chemical, for example physical barriers and pest habitat removal.
- Employee and public safety: Avoiding the use of chemical pesticides when safe alternative pest management tools are available means lowering the risk of exposure and injury to staff and the public. However, it is important to note that non-chemical pest control methods, such as mowing weeds, sometimes involve employee, public, and environmental risks as well (flying debris, mechanical injury, increased risk to workers working longer periods outside vehicles along roadways). The risks of the various alternatives must be considered and evaluated in deciding which pest management method or combination of methods to use.
- Cost: Some alternative pest management practices are cheaper than chemical pest control, others are not. However, it is important to also look beyond the immediate costs and benefits of a pest management strategy to evaluate its immediate and long term costs related to employee safety, public and environmental health, and public funding issues.
- Regulatory restrictions, obligations and liability: Use of chemical pesticides entails employee certification, record keeping and reporting, employee training and possibly permits and medical monitoring, Actual or suspected pesticide illnesses among employees require medical attention and treatment as well as extensive investigation and follow-up. Also, pest control activities, especially those related to quarantine enforcement, are required by law, and may not allow for non-chemical control methods.

Chemical Pesticide Use Reductions:

The following agencies and districts reported on changes in pesticide use over the last 10-20 years, since IPM has become a well understood and widely applied concept among County pest managers. Some programs have pesticide use reduction data extending back as many as 50 years.

Agricultural Commissioner: The most significant reductions over the past 10 years gave been in the use of chemical herbicides and rodenticides. Use of mulch to control weeds, control of grass mowing heights, better livestock grazing practices, and use of biological control agents for yellow star thistle control are among the non-chemical pest control methods used by this Office. Where chemical use is concerned, application timing alone has reduced the total volume of herbicides used. A switch to early season "pre-emergent" herbicides (used before weeds emerge in the spring) from "post-emergents" (used on growing or mature weeds) brought a drop from 5-

10 lbs. of chemical per acre to 3-5 oz. per acre. Where no plant growth is wanted, for example, in fire break strips, pre-emergent use has reduced herbicide volume from a high of 48 oz/acre down to only 8 oz/acre. Newer, more effective herbicide formulations enable broadleaf weed control in grasses with as little as 0.5-1.5 oz/acre, down from 64-96 oz/acre.

In rodent control, early season population and damage surveillance, trapping, encouraging natural predators, habitat modification and other non-chemical methods, combined with "pre-emptive" rodenticide use, typically keeps pest numbers in check. This combination of practices also prevents the need for larger rodenticide volumes that would be necessary to control an established and expanding population. Agriculture also now uses less acutely toxic rodenticides, and has reduced use of these materials about 95% since 1980. This change, along with improved baiting procedures, has reduced non target species impacts.

Mosquito Abatement District: The District has experienced a dramatic decrease in the use of organophosphate chemical pesticides in the last 20 years. This drop is related to use of IPM methods such as population surveys, breeding area modification, use of larval stage mosquito predator fish and use of highly specific "biorational" pest control strategies, which are specific to mosquitos and have less environmental impact than other chemical pesticides. Biorational materials interfere with maturation or other life processes required for a species to thrive and reproduce. Mosquito Abatement has experienced a drop in annual use of organophosphate pesticides since 1980 from around 1,000 lbs. to 0 lbs. in the year 2000.

Today, ACMAD relies mainly on a bacterium (Bti) that kills mosquito larvae and a few other insects, a synthetic growth hormone (Methoprene) that prevents larvae from becoming adult mosquitoes, and oil, which kills larvae and pupae. The District rarely kills adult mosquitoes, but when this is necessary, use a synthetic pyrethroid, Scourge®. ACMAD started using a new bacterial product, *Bacillus sphaericus*, which kills only mosquito larvae. ACMAD is also using a new ultra-thin surface-coating agent, Agnique®, which breaks down into carbon dioxide and water. These biological agents are much more expensive than the chemicals used by most mosquito control agencies. However, the District has weighed the environmental vs. economic costs, and has chosen to follow the biorational approach.

Healthcare Services Agency's Vector Control Program: The Vector Control Services District reports a downward trend in volume and variety of pesticides used since 1991. The amount of rodenticides (in pounds) used in sewers in 2000 was less than one fifth of that used in 1991, while average number of sewers surveyed has stayed roughly the same. This reduction was due to a revised policy of treating only those sewers which showed signs of active rodent infestations. The District currently uses approximately half the number of different pesticides today as it did 10 years ago. Also, Vector Control uses surveillance and risk assessment methods to evaluate pest problems and relies upon pest prevention strategies such as habitat modification, harborage removal and food source elimination, as well as physical barriers and traps. Chemical or biochemical pesticides are relied upon when there is a potential threat of disease transmission or human injury, or when non-chemical methods are impractical.

General Services Agency: GSA has reduced the numbers of, and volume of, chemical pesticides used by an estimated 20% over the past four years. These reductions and elimination resulted from control of vegetation through mulching and fabric barriers, adjustment of mowing

heights, better watering practices, and disking rather than applying chemical herbicides to fire break areas. Other pest control methods include elimination of pest habitat, harborage and food sources through better sanitation, and trapping on glue boards. GSA also uses physical barriers such as netting and uses "decoy" predators to discourage bird pests.

THE FOREGOING was **PASSED** and **ADOPTED** by the following vote of the Alameda County Board of Supervisors this 8th day of May, 2001, to wit:

AYES: Supervisors Carson, Lai-Bitker, Miley, Steele & President Haggerty - 5

NOES: None

EXCUSED: None

Scott Haggerty

PRESIDENT, BOARD OF SUPERVISORS

ATTEST:
Crystal K. Hishida, Clerk
Board of Supervisors

By: R. Bailey
Deputy

File: **15626**
Agenda No: **10**
Document No: **R-2001-568**

I certify that the foregoing is a correct copy of a Resolution adopted by the Board of Supervisors, Alameda County, State of California.

ATTEST:
Crystal K. Hishida, Clerk
Board of Supervisors

By: _____
Deputy