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**VIA EMAIL & FACSIMILE**

Re: Comments on Draft Light Brown Apple Moth Eradication Program  
Programmatic Environmental Impact Report

Dear Mr. Rains:

The City of Oakland has reviewed the Draft Light Brown Apple Moth Eradication Program Programmatic Environmental Impact Report (“DEIR”) prepared by the California Department of Food and Agriculture (“CDFA”). As the City Attorney of Oakland, I am submitting these comments on behalf of the City.

As you know, last year, the State proposed an “emergency” eradication program, which included a number of components that appeared to pose health and safety risks to Oakland residents and the surrounding environment. Most notably, the State proposed to conduct aerial spraying to eradicate the Light Brown Apple Moth (“LBAM”) without sufficient study or compliance with the California Environmental Quality Act (“CEQA”). Subsequently, the State announced that it had abandoned plans to conduct aerial spraying in urban areas, and that it would prepare an EIR prior to undertaking any eradication program. In a November 4, 2008 CDFA press release, Secretary Kawamura stated that the sterile moth technique alternative would “eliminate the need for aerial spraying over urban areas,” and that the “use of aerial spraying of pheromone products would be reserved only for remote areas inaccessible by ground vehicles.”

Although the City applauds the State’s announcement to study the eradication

program and abandon urban aerial spraying, the DEIR raises a number of questions and concerns about the State's current plans and the associated effects on Oakland residents and the surrounding environment, particularly given the DEIR's lack of specificity regarding its eradication program. Most significantly, the DEIR appears to leave open the possibility that aerial spraying could be conducted in "unpopulated" areas that are surrounded by or adjacent to densely populated urban centers such as the City of Oakland. In addition, there are several other deficiencies in the DEIR rendering this document legally inadequate under CEQA, as discussed below.

## SUMMARY

The City's comments on the DEIR include the following:

- 1) The DEIR does not specify *where* and *when* treatments will occur. Given the lack of specificity, the project description fails to satisfy CEQA's requirements.
- 2) The DEIR's analysis of environmental effects is flawed. These flaws include, without limitation:
  - a. The DEIR does not adequately analyze the health and environmental effects of drift spray resulting from the various pesticide application techniques.
  - b. The DEIR does not disclose the complete chemical formulas of the pesticides to be used in the eradication program, including the active and "inert" chemical ingredients, their concentrations, and all information related to the toxicity of all such chemical ingredients.
  - c. The DEIR does not adequately analyze the risks the eradication program would pose to additional sensitive populations, such as the elderly, the chronically ill and pregnant women.
- 3) The DEIR does not analyze the combined and cumulative impacts of the program alternatives or provide a cumulative impacts analysis of past, present and future eradication projects.
- 4) The DEIR does not consider a reasonable range of alternatives or provide a meaningful analysis of alternatives.
- 5) Given these deficiencies, the DEIR is so fundamentally flawed that it does not provide opportunity for meaningful public review and must be recirculated per CEQA Guidelines 15088.5.

## DISCUSSION

### I. The DEIR Does Not Specify *Where* and *When* Treatments Will Occur.

The DEIR generally fails to inform the public which treatments will occur, where and when. The DEIR identifies the Program Area broadly to include “all portions of the state in which climatic conditions are suitable” for apple moths. DEIR 2-1 (Program Area includes all counties in California except for Alpine, Inyo, and Mono counties). Yet, the DEIR does not describe which treatments might be employed in any specific areas, singly or in combination, when or how those treatments would be applied, or what the criteria are for choosing the treatments in more than general terms. The DEIR also contains numerous inconsistencies regarding where and when treatments will occur. As a result, DEIR fails to fulfill CEQA’s requirements for an accurate, stable and finite project description and fails adequately to inform the public of the nature and extent of the proposed eradication program. Given that the EIR is not clear on whether aerial spraying will occur near or in our City, all Bay Area counties must be excluded from aerial until further analysis of health impacts is evaluated.

Also, given the lack of specificity, the project description fails to satisfy CEQA’s requirements. “An accurate, stable and finite project description is the sine qua non of an informative and legally sufficient EIR.” *County of Inyo v. City of Los Angeles* (3d Dist. 1977) 71 Cal. App. 3d 185, 193; see also CEQA Guidelines § 15124.

#### Aerial Spray

Of particular concern is the DEIR’s failure to provide any geographical detail regarding the nature and extent of the program’s use of the controversial aerial spray (Alternative MD-3). The DEIR fails to provide sufficient information about where and when treatments will occur to enable the public to meaningfully comment on the proposal. The DEIR variously refers to the areas where spraying will occur as “essentially uninhabited,” as “forests and chaparral,” and as “agricultural and undeveloped areas.” DEIR 2-2, 2-11. In Chapter 6 of the DEIR, CDFA states that treatment compounds would be sprayed from a plane for coverage in essentially “unpopulated areas,” though the EIR fails to explain what are considered “unpopulated areas” and if any of these areas are adjacent to populated areas. DEIR 6-20.

For example, there are a number of parks and other open space areas located within or adjacent to densely populated areas of Oakland. Although these areas technically may be “uninhabited,” aerial spraying in such areas could still negatively impact people who frequent parks, including children, and/or by drift spray. Further, aerial spray treatments in “forested” and “agricultural” areas could include many open-space areas adjacent to urban areas such as the East Bay hills, where many Oakland residences are located. The final EIR must define precisely the areas that may be aerially sprayed and the actual populations and recreational users potentially affected at those locations. Then, the DEIR must provide a detailed health risk assessment regarding the potential health, safety, environmental and other effects associated with spraying in the affected areas.

Ground Treatments, Including Hydraulic Spray

Alternative MD-2 consists of ground treatments of pheromone pesticides in residential yards and on public property, and Alternatives Btk and S consist of hydraulic spray of insecticides *Bacillus thuringiensis kurstaki* (Btk) and Spinosad on both private and public property. DEIR 2-10; 6-22. The final EIR must be clear regarding whether and how ground treatments of chemical pesticides might be applied to private property. Our citizens have serious concerns about this issue. The Earth Justice comment letter cites reports about CDFA's ground treatment program for the gypsy moth in the Ojai area in spring 2009, which involved spray of Btk on private property. Residents of that area reported that applicators arrived with little or no notice, accompanied by law enforcement, and forced their way onto private property over the objections of property owners, some of whom were ill and specifically asked that their property not be sprayed. See 9/28/09 *Earth Justice comment letter to CDFA*, citing "Officials Force Gypsy Moth Spraying at Ojai Valley News Blog, *Ojai Valley News*, March 31, 2009." At a minimum, the CDFA must adopt a written notice and objection process for eradication treatments on private property. Such notices must include full disclosures about the chemical substances to be applied on the private property, and how these substances will affect residents.

**II. The DEIR's analysis of environmental effects is flawed. These flaws include, without limitation:**

**a) The DEIR Does Not Adequately Analyze the Potential Health and Environmental Effects Resulting from Drift Spray.**

The DEIR fails to include an accurate and complete analysis of the risks of drift associated with the proposed eradication methodologies and application techniques. The Earth Justice comment letter points out that chemical pesticide sprayed in Monterey and Santa Cruz in 2007 was found up to 3.3 miles from the aerial spray target zones, according to a study of the Department of Pesticide Research. See *Earth Justice comment letter*, citing Department of Pesticide Regulation 2008. Second, the DEIR asserts that "[a]lthough application over water bodies is not intended, *spray drift was not uncommon*." DEIR 11-19 (emphasis added). The DEIR assumed that the primary delivery mechanism of treatment chemicals into water would be through drift, and that "surface areas of water bodies would be exposed at the same deposition rate as deposition onto soils and vegetation from acute (24-hour maximum) concentrations." DEIR F4-9.

Moreover, the DEIR fails to conduct a complete drift analysis (the DEIR only analyzes the potential for pesticide drift with respect to chemicals used in aerial spray and hydraulic spray of Btk and spinosad). In the air quality impacts analysis, the DEIR admits that the "distance that drift particles or gases could travel was not assessed." See DEIR 6-18 ("the distance to the maximum concentrations or deposition rates was estimated, but concentrations or depositions beyond a few hundred meters were not assessed"). With respect to aerial spray, the DEIR concluded that drift from aerial application of SPLAT would be approximately 30 percent of the applied material, but failed to quantify the distance that drift could occur beyond the arbitrarily selected 800-

meter area analyzed by CDFA's model. DEIR 6-21 to 6-22, Appendix C C4-10. The DEIR also dismissed the potential for drift of the Bio-Flake product because its model concluded that none of the product would drift beyond the same, arbitrary 800-meter area analyzed by the model, but failed to describe what amount of the product drifted within this area. DEIR 6-22, Appendix C C4-10.

**b) The EIR must disclose the complete chemical formulas of the pesticides to be used in the program, both the active and "inert" chemical ingredients, their concentrations, and all information related to the toxicity of all such chemical ingredients.**

State law requires that CDFA's plan for addressing an invasive pest must include for each pesticide likely used: "A list of each active ingredient and inert material, to the extent that the disclosure of the inert material is permitted by state and federal law." Food & Agric. Code, §§ 5261, 5262 The DEIR should disclose the active and inert ingredients of each pesticide that may be used.

Even in those instances where the DEIR discloses inert ingredients, its analysis of the health impacts of exposure to the pesticide formulations is insufficient. For example, the DEIR's Human Health Risk Assessment discloses that permethrin, a chemical used in the Male Moth Attractant alternative, contains inert ingredients ethylbenzene and trimethylbenzene, and discloses that ethylbenzene is carcinogenic and can cause tumors and pathological liver changes, and also affects the pituitary and thyroid glands. DEIR Appendix D. However, the DEIR fails to disclose that ethylbenzene also causes birth defects and is an eye irritant, and trimethylbenzene has been linked to genetic damage, according to the National Institute of Occupational Safety and Health (NIOSH) database. See *Earth Justice comment letter*, citing National Institute of Occupational Safety and Health (NIOSH)/RTECS, Benzene, ethyl - RTECS #: DA0700000; Benzene, 1,2,4 - trimethyl-RTECS#: DC332500.

**c) The DEIR Does Not Analyze Adequately the Risks the Eradication Program Would Pose to Sensitive Populations.**

State law requires that CDFA include a summary of "up-to-date scientific information on the impacts of the pesticide and its inert materials" on healthy children and adults, children and adults with compromised health, domestic animals, fish and wildlife, and the environment. Food & Agric. Code § 5262(b). Aerially spraying pesticides could have unique impacts on sensitive populations, including children, the elderly, and those with chronic health conditions, as well as pregnant women, because of the potential risk to fetuses.

The DEIR's human health risk assessment states that it "assessed the potential for adverse health effects using conservative exposure assumptions designed to be protective of all populations, including the most sensitive." DEIR 8-1. In fact, the risk assessment addresses only two hypothetical categories of sensitive population: "child resident" and "child recreational park user." Although addressing children specifically is indeed important, the vulnerabilities and exposure risks of children are different than

those of these other categories of human populations, such as seniors, the chronically ill or pregnant women, which the DEIR fails to account for.

### **III. The DEIR Does Not Analyze the Combined and Cumulative Impacts of the Program Alternatives or Provide a Cumulative Impacts Analysis of Past, Present and Future Eradication Projects.**

CEQA requires that EIRs analyze the direct, indirect, and “cumulative” impacts of a proposed action. CEQA Guidelines, §§ 15355, 15358. Cumulative impacts are defined as “two or more individual effects which, when considered together, are considerable or . . . compound or increase other environmental impacts.” CEQA Guidelines, § 15355. Stated another way, “a cumulative impact consists of an impact which is created as a result of the combination of the project evaluated in the EIR together with *other projects* causing related impacts.” CEQA Guidelines, § 15130(a)(1).

The DEIR analyzes each proposed treatment method individually, even though the Program Alternative “anticipates using *all* of the chemical and nonchemical alternatives (and options) in combination as part of an integrated pest management Program.” DEIR 2-2 (emphasis added). Thus, the DEIR fails to evaluate adequately the combined impacts of the program’s multiple chemical methods or the possible interactions from exposure to multiple treatments/chemicals simultaneously. In addition to violating CEQA in the manner described above, the DEIR’s failure to analyze the combined effects of the various treatment options violates CEQA’s requirement to consider the cumulative effects of a proposed action.

Not much is known about the impact of exposure to multiple chemicals although a number of studies have noted that exposure to multiple pesticides increases the risk of adverse health consequences. See *Earth Justice 9/28/09 Comment Letter*, citing, Rull, R., et al., Neural Tube Defects and Maternal Residential Proximity to Agricultural Pesticide Applications, *American Journal of Epidemiology* 163: 743-753; De Roos, A., et al., Integrative Assessment of Multiple Pesticides as Risk Factors for Non-Hodgkins Lymphoma Among Men, *Occupational and Environmental Medicine* 60:11. Thus, a strategy of combining chemical treatments, such as that proposed here, is experimental with regard to human health impacts, and thus, should be analyzed in the DEIR.

Further, the DEIR does not provide a cumulative impacts analysis of past, present and probably future projects producing related or cumulative impacts including projects outside of the CDFA’s control, as required under CEQA. CEQA Guidelines, § 15130(b)(1). The DEIR dismisses this CEQA requirement, simply stating that “[t]he list method requires a discussion of related past, present, and future projects; and in the case of human health, it would require discovering and disclosing impacts to public health from all of these projects. This approach is not practical given the LBAM Program’s nearly statewide extent of the LBAM Program, which makes the development of a list of projects most difficult and would then require a human health impact assessment for a very long list and variety of projects potentially creating a physical change in the environment.” DEIR 14-1. A cumulative analysis, particularly regarding human health impact, is precisely the type of analysis the public needs to be able to meaningfully comment on this DEIR.

#### **IV. The DEIR Does Not Consider a Reasonable Range of Alternatives or Provide a Meaningful Analysis of Alternatives.**

The DEIR defines each proposed eradication method as a “Program Alternative” in addition to the No Program Alternative. This does not fulfill CEQA’s requirements that an EIR analyze a reasonable range of reasonably feasible alternatives. To the contrary, each of the seven Program Alternatives are component parts of CDFA’s eradication program. That is, they are *component parts of the project*, not alternatives to the project or its location. The DEIR affirms that “[t]he Program anticipates using all of the chemical and nonchemical *alternatives* (and options) in combination as part of an integrated pest management Program.” DEIR 2-2 (emphasis added). Defining the individual treatment methods to be used in the eradication program as “alternatives” is misleading and misrepresents the true nature of the CDFA’s eradication program. More egregiously, the DEIR does not consider any approach other than its eradication program, thus the DEIR fails to analyze any true alternatives. This omission violates CEQA. See *Earth Justice comment letter, citing Laurel Heights Improvement Association v. Regents of the University of California*, 47 Cal. 3d at 404 (EIRs must provide “meaningful analysis of alternatives”).

Furthermore, an EIR “must consider a reasonable range of potentially feasible alternatives that will foster informed decisionmaking and public participation,” which the DEIR fails to do. See *CEQA Guidelines* § 15126.6(a). To comply with CEQA, the final EIR should analyze a reasonable range of alternatives, including without limitation one or more a “geographic” alternative(s) that (1) omits aerial spraying, and (2) all eradication treatment, in urban areas as defined by county (i.e., an alternative that excludes aerial spraying in Alameda County and other densely populated Bay Area counties).

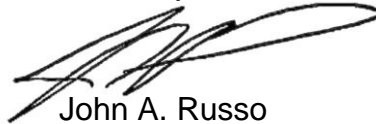
#### **V. Given these deficiencies, the DEIR is so fundamentally flawed that it does not provide opportunity for meaningful public review and must be recirculated per CEQA Guidelines 15088.5.**

The DEIR’s discussion of where and when treatments will occur (notably, aerial and ground spraying) and the associated environmental impacts is so fundamentally flawed as to provide the opportunity for meaningful public review. See *CEQA Guidelines* 15088.5(a)(4) (recirculation is required when the draft EIR is so “fundamentally and basically inadequate and conclusory in nature that meaningful public review and comment is precluded”). Additionally, the deficiencies in the human health risk assessment and lack of meaningful cumulative impact analysis further prohibits meaningful public review. For these reasons, the DEIR needs to address the deficiencies set forth above and must be recirculated in order for the public to make an informed review of the CDFA’s LBAM eradication program.

## CONCLUSION

The DEIR does not disclose all the environmental and public health consequences of the CDFA's Light Brown Apple Moth eradication program. The citizens of Oakland deserve full disclosure of when and where CDFA plans to spray pesticides, and what CDFA plans to spray, including the identity, toxicity and cumulative impact, of all of the pesticide chemicals. The CDFA cannot move forward with plans to spray pesticides until this information has been publicly vetted in a meaningful way and analyzed pursuant to the requirements of CEQA.

Sincerely,

A handwritten signature in black ink, appearing to read "John A. Russo", written over a horizontal line.

John A. Russo

cc: Mayor Ronald V. Dellums  
City Council President Jane Brunner  
City Councilmember Ignacio De La Fuente  
City Councilmember Pat Kernighan  
City Councilmember Desley Brooks  
City Councilmember Larry Reid  
City Councilmember Jean Quan  
City Councilmember Nancy Nadel  
City Councilmember Rebecca Kaplan  
City Auditor Courtney Ruby  
City Administrator Daniel Lindheim