BEFORE THE DIRECTOR OF THE
DEPARTMENT OF PESTICIDE REGULATION
STATE OF CALIFORNIA

In the Matter of the Decision of
the Agricultural Commissioner of
the County of Tulare
(County File No. 54-07/08-16)

Docket No. 155

DECISION

Bakhtawar S. Brar
31974 Cecil Avenue
Delano, California 93215
Appellant/

Procedural Background

Under Food and Agricultural Code (FAC) section 12999.5 and section 6130 of Title 3, California Code of Regulations (3 CCR), county agricultural commissioners may levy a civil penalty up to $5,000 for certain violations of California's pesticide laws and regulations.

The Tulare County Agricultural Commissioner (CAC) issued a notice of proposed action (NOPA) against the appellant, Bakhtawar S. Brar (Brar), alleging 12 Class A violations and two Class B violations of FAC 12973, seeking a fine of $34,640. After hearing, the CAC adopted the hearing officer's decision, finding ten Class A violations, one Class B violation, and one Class C violation of FAC section 12973, and imposed a total penalty of $28,600 for the violations.

Brar appealed from the commissioner's civil penalty decision to the Director of the Department of Pesticide Regulation. The Director has jurisdiction in the appeal under FAC section 12999.5.

Standard of Review

The Director decides the appeal on the record before the Hearing Officer. In reviewing the commissioner's decision, the Director looks to see if there was substantial evidence, contradicted or uncontradicted, before the Hearing Officer to support the Hearing Officer's findings and the commissioner's decision. The Director notes that witnesses sometimes present contradictory testimony and information; however, issues of witness credibility are the province of the Hearing Officer.

The substantial evidence test requires only enough relevant information and inferences from that information to support a conclusion, even though other conclusions might also have been reached. In making the substantial evidence determination, the Director draws all reasonable inferences from the information in the record to support the findings, and reviews the record in the light most favorable to the commissioner's decision. If the Director finds substantial evidence in the record to support the commissioner's decision, the Director affirms the decision.

Factual Background

There is information in the record that on July 21, 2007, Brar's employees made an application of Nufos 4E (registration number 67760-28-AA) to Brar's almond orchard, identified as site 01-101. The application was by ground using three air blast sprayers. Nufos 4E, an insecticide, contains 44.9 percent chlorpyrifos as the active ingredient. The label bears the signal word, "Warning." The application rate of Nufos 4E was four pints per acre.

The Nufos 4E application began at approximately 6:00 a.m. at the south end of Brar's almond orchard. At approximately 6:30 a.m., fieldworkers began pulling grape leaves in Mr. Frank Martin, Jr.'s (Martin) grape vineyard adjacent to Brar's almond orchard. At approximately 7:00 a.m., during the Nufos 4E application, Martin's fieldworkers began feeling ill. Martin arrived at the site and several fieldworkers reported their illness to Martin. Martin and Martin's son, Jonathan, transported ten of the fieldworkers who had become ill to Delano Regional Medical Center (DRMC) shortly thereafter. At the hospital, the ten fieldworkers were decontaminated, treated, and released. An additional fieldworker who had become ill at the vineyard site had gone home, showered, and changed before going to the hospital. She was also treated and released. Of the 11 fieldworkers who went to DRMC in the morning of July 21, 2007, three had been vomiting. All 11 fieldworkers displayed symptoms consistent with exposure to chlorpyrifos. Two fieldworkers who had been vomiting left DRMC against the advice of the physician who wanted them to remain for observation due to the severity of their symptoms. The initial 11 effected fieldworkers were told to return to DRMC at 8:30 p.m. that evening to get rechecked.

Between 1:30 p.m. and 2:00 p.m. that same day, 17 additional fieldworkers who were working in Martin's vineyard at the time of the Nufos 4E application arrived at DRMC. According to the Supplemental Report Narrative (Exhibit 13), two of the 17 had previously been vomiting. All 17 fieldworkers were triaged, but only 13 fieldworkers were evaluated by a physician. Fifteen of the 17 fieldworkers interviewed said they had developed symptoms of chlorpyrifos exposure. Four fieldworkers left before they were medically evaluated. The other 13 were treated and released.

On July 25, 2007, the articles of clothing from three of the initial 11 fieldworkers taken to DRMC was submitted to the California Department of Food and Agriculture's (CDFA's) Center for Analytical Chemistry (Laboratory) to be tested for the presence of chlorpyrifos. Also submitted that day for chlorpyrifos testing was almond foliage from Brar's almond orchard, three grape foliage samples taken from Martin's vineyard, and Martin's shirt. All samples came back positive for chlorpyrifos. On August 2, 2007, additional articles of clothing from eight of the initial 11 fieldworkers were submitted to the CDFA Laboratory for the presence of chlorpyrifos. Seven pieces of clothing came back positive for chlorpyrifos and one came back negative.

In the adopted decision, the county found ten of the violations of FAC section 12973 were in Class A and proposed a fine of $2,720 per violation. The violations were for the ten fieldworkers

who showed symptoms consistent with exposure to chlorpyrifos, and whose clothing tested positive for chlorpyrifos.[1] The Hearing Officer dismissed two of the Class A violations, stating that the evidence was hearsay evidence and that the fieldworkers' symptoms that were treated at approximately 2:30 p.m. on July 21, 2007, was not "acute," citing too much time had passed before the symptoms began.

The county found an eleventh violation of FAC section 12973 in the Class B range and proposed a fine of $1,000, the maximum level. The violation alleged that the resulting pesticide drift (drift) onto the grape vineyard caused a reasonable possibility of a health effect to the other fieldworkers pulling grape leaves.

The county found a twelfth violation of FAC section 12973 for the drift onto Martin's grape crop in the Class C range, and proposed a fine of $400. The Hearing Officer found that since the grapes were not tested for chlorpyrifos residue there was insufficient evidence to uphold the initially alleged Class B violation, but found a Class C violation because "allowing any pesticide to drift onto an adjacent crop which is close to harvest must be avoided through extra precaution."

The total fine imposed on Brar for the twelve violations was $28,600.

Appellant's Contentions

Brar contends that the drift incident took place not due to his negligence, but rather, was instigated by a former employee. Brar recites several incidents of serious criminal activity of which he and his family, his employees, and his farming operations were the victims. Brar contends that he never received a telephone call on the morning of the Nufos 4E application from his employees warning him that fieldworkers were in the adjacent vineyard. Brar contends that his former employee and his former employee's mother were not called as witnesses and that his cross-examination of them would prove his contention. Brar asks that the Department grant him an interview to bring facts into evidence that were not part of the hearing record; however, the hearing record is the sole basis for this appellate review. Civil and criminal courts may consider Brar's allegations and the Department urges Mr. Brar to pursue his claim in those venues if he deems it appropriate.

FAC Section 12973

FAC section 12973 provides, "The use of any pesticide shall not conflict with labeling registered pursuant to this chapter which is delivered with the pesticide or with any additional limitations applicable to the conditions of any permit issued by the director or commissioner." In this case, the elements of proving a violation of FAC section 12973 are: (1) a pesticide was applied; and (2) the pesticide was applied in a manner that conflicted with the directions on the label of the pesticide applied. In addition, FAC section 12996.5(b) provides in relevant part, "(b) [t]he

[1] There was a discrepancy in the record regarding the number of fieldworkers who arrived at DRMC around 7:30 a.m. on July 21, 2007. One county report shows 12 fieldworkers were taken to DRMC in the morning. Eleven outwear clothing samples were submitted to CDFA Laboratory; ten came back positive. The fieldworker whose clothing sample came back negative was not charged in the NOPA as a violation of FAC section 12973.

exposure of each person to a pesticide resulting from the violation of Section . . . . 12973 . . . . that causes acute illnesses or injury, shall constitute a separate violation of the statute or regulation."

3 CCR Section 6130 – Violation Class

Pursuant to 3 CCR section 6130, there are three classes of violations: Class A, defined as "Violations which created an actual health or environmental hazard" for which the fine range is $700-$5,000; Class B, defined as, "Violations which posed a reasonable possibility of creating a health or environmental effect" for which the fine range is $250 to $1,000; and, Class C, defined as, "Violations that are not defined in either Class A or Class B" for which the fine range is $50 to $400. In the NOPA, the CAC had charged 14 violations of FAC section 12973: 12 as Class A violations for each fieldworker that suffered acute illness or injury, and two as Class B violations for the drift onto the fieldworkers and the grape vineyard. [2]

Analysis of Violation of FAC Section 12973

The burden was on the county's advocate to provide substantial evidence that: (1) Brar applied Nufos 4E on July 21, 2007, on site 01-101; and (2) that the application was in conflict with the Nufos 4E label directions. Since there were no permit conditions, that portion of FAC section 12973 is not relevant. Since Brar stipulated to the application of Nufos 4E on his almond orchard adjacent to Martin's grape vineyard, the county's burden was only to show the application was in conflict with the label directions.

The Nufos 4E label directions states in relevant part, "Do not allow spray to drift from the application site and contact people," and "Do not allow spray to drift from the application site and contact nontarget crops."

In the Hearing Officer's decision adopted by the Commissioner, Brar was found to have violated FAC section 12973 on July 21, 2007, by applying Nufos 4E in such a manner that it drifted onto the fieldworkers pulling grape leaves in the adjacent grape vineyard. The Hearing Officer made a finding that chlorpyrifos, the active ingredient found in Nufos 4E, was found on the clothing of the affected fieldworkers and that residues of chlorpyrifos was found on Martin's vineyard. The July 21, 2007, Nufos 4E application was the only possible source of the chlorpyrifos found on the fieldworkers and grape vineyard.

The record shows clothing samples from eleven fieldworkers and Martin were submitted to CDFA's Laboratory. Ten of the samples from the 11 fieldworkers tested positive for chlorpyrifos, as did Martin's shirt (a total of 11 samples). The 11 positive samples tested ranged from 3.44 to 27.7 micrograms.

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[2] It is noted that the county did not allege a violation in the NOPA of the eleventh fieldworker who arrived at DRMC in the morning of July 21, 2007, and that no violations were alleged in the NOPA for the 15 of the 17 fieldworkers who sought medical assistance in the afternoon of July 21, 2007; thirteen of which were treated and released.

The Nufos 4E label states under the heading, "First Aid . . . . Note to Physician: Chlorpyrifos is a cholinesterase inhibitor affecting the central and peripheral nervous systems and producing cardiac and respiratory depression."

The Material Safety Data Sheet for Nufos 4E, attached to the Supplemental Report Narrative from DRMC, states under the heading, "Hazards Identification . . . . Signs and Symptoms of Exposure," "Headaches, nausea, vomiting, cramps, weakness, blurred vision, pin-point pupils, tightness in chest, labored breathing, nervousness, sweating, watering of eyes, drooling or frothing of mouth and nose, muscle spasms and coma."

A summary of the laboratory results, along with the symptoms reported by DRMC of the fieldworkers, is as follows:

1. Laboratory Sample number R07C00224 = 16.3 micrograms – Fieldworker experienced vomiting, headache, dizziness, difficulty breathing, numbness of the mouth and fingers, and hot and cold hands.
2. Laboratory Sample number R07C00225 – 27.7 micrograms – Fieldworker experienced vomiting, headache, dizziness, and weakness.
3. Laboratory Sample number R07C00226 = 10.0 micrograms – Fieldworker experienced headache, dizziness, itchy neck, sore throat, and cough.
4. Laboratory Sample number R07C00240 = 5.76 micrograms – Fieldworker experienced headache and itchiness.
5. Laboratory Sample number R07C00241 = 3.44 micrograms – Fieldworker experienced headache, nausea, numbness of the tongue, itchiness, and difficulty breathing.
6. Laboratory Sample number R07C00242 = 22.1 micrograms – Fieldworker experienced nausea, chest pain, and itchiness.
7. Laboratory Sample number R07C00243 = 7.46 micrograms – Fieldworker experienced headache, chills, blurred vision, and itchiness.
8. Laboratory Sample number R07C00244 = negative results (0.00 micrograms) – Fieldworker experienced headache, nausea, and itchiness.
9. Laboratory Sample number R07C00245 = 5.04 micrograms - – Fieldworker experienced headache, nausea, numbness of tongue, and difficulty breathing.
10. Laboratory Sample number R07C00246 = 8.57 micrograms – Fieldworker experienced headache, nausea, numbness of tongue, and difficulty breathing.
11. Laboratory Sample number R07C00247 = 7.35 micrograms – Fieldworker experienced vomiting, headache, nausea, dizziness, and itchiness.

The almond foliage from Brar's almond orchard tested by CDFA's Laboratory came back at 31.7 parts per million (ppm). The gradient sample results from Martin's vineyard found .01 ppm for the sample taken farthest from the Nufos 4E application, .03 ppm for the middle sample, and .13 ppm for the sample taken closest to the Nufos 4E application. These sample results appear to be consistent with drift.

The label specifies only two prohibitions that were violated in this case: allowing the application to drift and contact people and allowing the application to drift and contact nontarget crops. There is sufficient evidence in the record to uphold the Hearing Officer's findings that Brar violated FAC section 12973 by (1) applying chlorpyrifos in such a manner that it drifted from the application site and contacted people and (2) by applying chlorpyrifos in such a manner that it drifted from the application site and contacted nontarget crops. FAC section 12996.5(b) also provides that a separate violation can be charged for each person exposed to a pesticide as the result of the violation that causes acute illness or injury. In the NOPA, the CAC charged twelve violations for each fieldworker affected by the drift in violation of FAC section 12973. The Hearing Officer's decision found only ten violations under this provision. The number of violations that can be found based upon the number of individuals who suffered acute illness from the prohibited drift is discussed below. The adopted decision also incorrectly found a violation for the potential harm to the fieldworkers pulling grape leaves in Martin's vineyard as a result of the drift. This is the same label violation, allowing drift to come into contact with people, charged for the ten affected fieldworkers, and does not constitute a separate violation of section 12973 unless actual illness or injury is shown (in which case, it would be a Class A violation).

Drift onto the fieldworkers: There is evidence in the record that Brar's application of Nufos 4E on July 21, 2007, drifted from his almond orchard application across the road onto the fieldworkers pulling grape leaves and onto Martin. The drift caused the fieldworkers to become ill; hence, Brar's application created an actual health hazard by exposing the fieldworkers to chlorpyrifos. This is a violation of the Nufos 4E label that states, "Do not allow spray to drift from the application site and contact people."

In the adopted decision, the Hearing Officer found violations for the ten field workers who reported to the hospital at 7:30 a.m., and whose clothes tested positive for Nufos 4E. The Hearing Officer dismissed two violations charged in the NOPA for two of the fieldworkers who had come into DRMC for treatment the same day, but after those taken in at 7:30 a.m. The Hearing Officer dismissed these violations stating that the two fieldworkers' symptoms were not "acute," and their illness was not "sudden." Both fieldworkers, identified here as CE and MS, exhibited symptoms consistent with chlorpyrifos exposure, and their symptoms were recorded by DRMC medical staff and Tulare CAC staff in their respective reports; nonetheless, the Hearing Officer states in the decision that CE's "*symptom did not manifest until approximately 3 ½ hours after alleged exposure. The standard for acute medical symptoms to have applicability per FAC section 12996.5(b) is 'sudden onset of symptoms' resulting from pesticide exposure. Webster's New Collegiate Dictionary (1979) defines 'sudden' as 'made or brought about in a short time.' Without more evidence it is inconclusive whether [CE's] symptoms meet the statutory definition of 'acute' which would allow [Tulare CAC] to find [Brar] in separate violation of FAC section 12973 with regard to [CE].*"

"Acute" illness is defined in FAC section 12996.5 as a sudden onset of symptoms that "requires prompt medical attention and has a limited duration," a definition that sets it apart from chronic or long-term exposure to pesticides where symptoms develop over time and are persistent. The fact that CE's symptoms did not manifest until 3 ½ hours later does not support the conclusion that the violation did not cause acute symptoms in these individuals for which a separate

violation can be charged. There is information in the record that symptoms of chlorpyrifos exposure may not manifest for up to 12 hours (Exhibit 9, Pesticide Incident Report 2007-691) and that continued absorption of chlorpyrifos may occur and relapse may occur after initial improvement (Exhibit 7, Nufos 4E label). It is reasonable to find that exposure to chlorpyrifos at 7:00 a.m. would not effect the victims until several hours later. The sudden onset of symptoms within at least the first 12 hours of exposure caused by the violation, and possibly even beyond, meets the definition of acute. In this case, the sudden onset of symptoms of limited duration experienced several hours after the exposure is acute within the meaning of FAC section 12996.5. The Hearing Officer made a mistake of law by finding "acute" did not apply to the symptoms experienced by CE in the late morning and into the afternoon when he reported to DMRC on the day of the violation. In addition, the Hearing Officer incorrectly concluded that since no clothing sample was taken from the affected fieldworker, all of the evidence entered was hearsay. The medical report (Exhibit 13) is a business record, made at or near the time of the incident and therefore considered reliable and excluded from the usual evidentiary limitations on hearsay evidence. The report states that CE was symptomatic. The county's map showing the fieldworkers positions show CE's position in relation to the application, thus providing additional evidence independent of the medical report. (Exhibit 15)

The Hearing Officer dismissed the twelfth violation of FAC section 12973 for the fieldworker MS. In addition to incorrectly finding that MS' symptoms were not acute, the Hearing Officer states in the decision that it was "*highly likely that [MS] contacted chlorpyrifos residues from the grape leaves*." The decision states that DRMC indicated that MS was symptomatic when MS arrived at DRMC at 2:00 p.m. on the afternoon of the incident. MS did not provide a clothing sample as MS had gone home, showered and changed prior to going to DRMC. However, MS is located on the county's map showing the fieldworkers positions, and the medical report indicated MS was symptomatic. There is corroborating evidence that MS became ill as a result of Brar's application. MS' symptoms were both acute and a result of the illegal drift.

These two violations for individuals who came to DMRC for treatment the day of the violation shortly after 2:00 p.m. that were charged in the original NOPA are reinstated, bringing the number of FAC section 12973 violations from ten to 12. All 12 violations were appropriately charged as Class A violations because they resulted in an actual health hazard. The proposed fine in the NOPA for Class A violations totaling $32,640 for 12 violations is reinstated. The Class B violation and fine in the adopted decision finding a FAC section 12973 violation for the potential harm to fieldworkers pulling leaves in Martin's vineyard is dismissed. There cannot be a separate violation of FAC section 12973 for drift coming into contact with a person in violation of the label unless the contact caused acute illness or injury. The Class B violation found by the Hearing Officer does not meet this criteria.

<u>Drift onto Martin's Grape Vineyard:</u> The laboratory evidence shows that the Brar application drifted into Martin's vineyard. That drift created an actual environmental hazard and therefore constitutes a Class A violation. The fact that the grapes were not tested is not dispositive one way or the other. However, the fact that the vineyard grape leaves taken at various distances moving from closer to farther away from the application site all tested positive for the Nufos 4E is strong evidence that the Nufos 4E came in contact with the with the grapes within the drift area those results defined; hence, the drift created an actual environmental hazard. The Class C violation

found in the adopted decision was originally a Class B violation in the NOPA. Since the violation level cannot be increased beyond the original violation alleged in the NOPA, the violation is reinstated as a Class B violation, with the original proposed fine of $1,000.

Conclusion

The record shows that the Commissioner's decision is supported by substantial evidence; however, the Director finds that the evidence supports the two additional Class A violations as charged in the NOPA, for a total of 12 violations for drift resulting in acute illness or injury. The penalty for each Class A violation was set in the NOPA at $2,720, resulting in a total fine of $32,640. The Class B violation for creating a hazard to fieldworkers is dismissed. The Class B violation and $1,000 penalty charged in the NOPA for drift onto nontarget crops is reinstated.

Disposition

The commissioner's decision is modified. The commissioner shall notify the appellant how and when to pay the $33,640 fine.

Judicial Review

Under FAC section 12999.5, the appellant may seek court review of the Director's decision within 30 days of the date of the decision. The appellant must file a petition for writ of mandate with the court and bring the action under Code of Civil Procedure section 1094.5.

STATE OF CALIFORNIA
DEPARTMENT OF PESTICIDE REGULATION

5/29/08
Date

Mary-Ann Warmerdam, Director
Department of Pesticide Regulation

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