

## **GUIDELINES FOR SCHOOLS NEXT TO AGRICULTURAL OPERATIONS**

### **Introduction**

In Washington State, there are more than 100 public schools (kindergarten through 12<sup>th</sup> grade) that are within 200 feet of agricultural operations and more than 200 that are within one-quarter mile. The proximity of schools and farms offers opportunities to educate students on the importance of agriculture in Washington. The proximity of schools and agricultural operations also comes with the risk of unintended exposure of students and school employees to agricultural pesticides through drift (movement of pesticides away from the intended target).

Washington State Departments of Health, Ecology, and Agriculture, the U.S. Environmental Protection Agency, and Washington State University Agricultural Extension are working together to define best practices to minimize drift and the impact of drift for schools and agriculturalists. The intent of this document is to provide guidelines that will enable agriculturalists and schools to make the most of their close association.

### **BEST PRACTICES FOR AGRICULTURALISTS**

#### **Be a Good Communicator**

Best practices for agriculturalists start with communication with your neighbors. Introduce yourself to the administrators at the school, and be sure to also leave contact information. They need to know who you are and how to reach you if they have any questions or concerns that pertain to activities on your land.

#### **Use Least Hazardous Agricultural Practices/Methods**

- Substitute minimum risk pesticides in blocks adjacent to schools when possible.
- Consider the use of granular applications whenever feasible instead of liquid formulations.
- Do not make applications during school hours.
- Attempt to make applications when the fewest people are present at the school site.
- Identify bus stops and routes near your fields and avoid applications when children will be at the stops or when buses will be near your fields.
- Make applications adjacent to schools when the general wind direction is moving away from the school even when the school is not occupied.
- Applications should not be made in low level inversion conditions, or if the air at ground-level is very stable (fog or wind direction is variable), or when winds are gusty, or under any other conditions which favor drift.
- Spray at the beginning of the application window to avoid having to spray under less than optimal conditions.

## **Equipment Modifications**

- Use the appropriate hand or ground equipment, properly adjusted to reduce drift as much as possible.
- Adjust sprayers to account for the density of the canopy and the size of the crop. If necessary shut off higher nozzles so that the spray is directed into the middle of the crop canopy. Block off upward pointed nozzles when there is no overhanging canopy.
- Use the largest droplet that will allow adequate coverage.
- Consider the use of hand-held equipment in the first several rows nearest the school.
- Use only enough air volume to penetrate the canopy and provide good coverage.

## **At the School/Agriculture Border**

- Establish living windbreaks to minimize spray drift. Windbreaks should extend the full length of the boundary between the treated crop and the school; there should be no gaps over this length from ground level to the top of windbreak and leaves should be visible over its entire length.
- Spray the last three rows windward of the school using nozzles on one side only, with spray directed away from the school.
- Shut off nozzles when turning at row ends and when passing gaps in crop rows.

## **BEST PRACTICES FOR SCHOOL OFFICIALS**

### **Establish and Maintain Relationships with Adjacent Growers**

- Identify appropriate school district staff, to establish and maintain an active relationship with the growers.
- Contact the grower and request a meeting to establish an ongoing relationship that will work for both the school and the grower.
- Request a written summary of the various activities (spray season, planting, harvest, etc.) that will take place on the agricultural property over the coming year.
- Provide the grower a written schedule of all after-school and weekend activities for the year and notify the grower of any schedule changes throughout the year.
- Provide the grower a map of bus routes and walking routes that may pass a grower's fields.
- Exchange contact information.
- Request that whenever possible, pesticide applications adjacent to the school be made when the school is not occupied.
- Request notification if a pesticide application will be made when the school is occupied (including outside school-related activities).
- Agree that you will communicate any problems if they arise.

## Notify All Appropriate People of the Relationship with Adjacent Growers

- The principal should notify all school staff, teachers and parents/guardians of the staff person who is now responsible for establishing and maintaining the relationship. This would include alerting all staff, teachers and parents that this staff person should be contacted with questions or concerns and to receive information on notification (if secured).
- The principal should include information in both teacher/staff newsletters/announcements and in parent newsletters/mailings of any upcoming cultural practices that the growers have advised the staff person about.

## Develop Emergency Procedures for Pesticide Drift

- The Principal will notify the Superintendent immediately.
- Until ordered to evacuate, assume that a shelter-in-place strategy will be employed and do the following:
  - Direct that all students and staff remain indoors until it is safe or directed otherwise.
  - Direct that all heating and ventilation systems (HVAC) are shut down.
  - Direct that all windows are closed.
- Contact the applicator to stop the application. Request information about the ingredients in the spray.
- Notify the Washington State Department of Agriculture (877-301-4555) for assistance in identifying the pesticides and any follow-up investigation.
- Contact the fire department for possible hazardous materials team deployment.
- Implement evacuation plans if needed.
- For health advice, contact your [local health department](#) or the following:
  - [Washington State Department of Health, Pesticide Program](#): 1-877-485-7316 (Monday-Friday, 8-5)
  - [Washington Poison Center](#): 1-800-222-1222
  - [National Pesticide Information Center](#): 1-800-858-7378
  - [Pediatric Environmental Health Specialty Unit, UW](#): 1-877-543-2436
- Be prepared to release students to parents or guardians following district reunification procedures.
- Notify other users of the campus, including students, after school clubs, Scout groups, athletic teams, providers of after school care, parents, and staff about:
  - The chemical involved, including how much and when the drift occurred.
  - Possible symptoms and effects to be monitored with the suggestion that the child be seen by their physician if any symptoms occur. The physician should be advised by the parent of a possible chemical exposure.
  - Recommended mitigation actions (showering, bagging of clothing, etc.).
  - A brief statement on the nature of the incident and what actions have been taken to keep students and staff safe.

## Post Event Clean-up/Safety Procedures

- The actual response will depend on the pesticide in use. For example, the actions taken on an oil-based insecticide may differ significantly from those taken when a powder or granulated substance mixed with water is used. Therefore, it is important to identify the pesticide so that the proper response is taken.
- In general, the following steps are recommended:
  - In most cases, a wash down of playground equipment, outdoor tables, railings, pillars, doors and drinking fountains with soap and water followed by a thorough rinsing will suffice.
  - In some cases, steam and/or a high pressure washer will also be effective.
  - Ensure that run-off from the washing process does not contaminate playgrounds or other areas of the campus including surface water.
  - After the outside air has cleared, open up the buildings to the fullest extent possible and run the ventilation system to thoroughly air out the buildings.
  - If indoor areas are exposed, clean contaminated surfaces with soap and water.
  - Classroom animals should be monitored for any adverse effects.
  - All HVAC filters should be changed.
  - Evaluate potentially contaminated material on the grounds (leafy debris, play sand, bark chips) for possible cleaning or removal.
  - Irrigate the grounds.
  - Consult with the Washington State Department of Agriculture if it is suspected that school gardens were contaminated.

Adapted by [UPEST](#) from Ventura County Ag Futures Alliance, Issue Paper No. 1, February 2002 and from the Washington State Department of Health, Pesticide Illness Monitoring and Prevention Program. August 2015.