

Green Flag Level Two Survey: Integrated Pest Management Program

You have chosen to work on the Integrated Pest Management (IPM) program to earn a Green Flag Award. Answering these survey questions will take you on a tour of your school and you will become an IPM Detective. Be investigative, and leave no stone unturned, in your quest to understand how your school manages (gets rid of) insects and other pests and to reduce the use of toxic chemicals. The survey will not only tell you results, it will also teach you about the concepts used in IPM, and give you a baseline from which you can measure your progress.

Remember that the IPM section of your Green Flag Environment Survey may have some of the answers you need for level two, so please refer to level one when the questions overlap.

To make your job easier, schedule an interview with the administrator in charge of pest management, and schedule a tour with a custodian or facilities manager to assist your Green Flag team in compiling the answers to these survey questions.

Information About Your School

Name of Your School: _____

School Address: _____

City: _____ State: _____ Zip: _____

Survey Date: _____

Section A: INFORMATION ABOUT PEST MANAGEMENT AT YOUR SCHOOL:

Remember that the IPM section of your Green Flag Environment Survey you completed at level one may have some of the answers you need for level two, so please refer to the Green Flag Environment Survey where it makes sense.

1. Does your school or school district have a written policy that covers any of the following areas? A policy might address issues such as who is in charge of managing pests and responding to problems, what methods may be used to manage pests, which pesticides may be used and where, when and how staff and students are to be notified (told in advance) when pesticides are going to be applied, etc.

Indoor pest management: Yes No

Outdoor pest management: Yes No

Outdoor grounds management: Yes No

* You can locate the name of a pesticides product on its label or on a product invoice. The labels or invoices should be kept at the school, or at a school district office. Record the name on the chart provided above.

7. When you have recorded the names of the products compare them with the list of hazardous pesticides commonly used in schools, (provided by Beyond Pesticides) located on page eight of the survey, and note if any of the pesticides listed on the form are used at your school. If so, mark the name with an asterisk.
8. You can then find out information on the pesticide product’s chemical ingredients by examining Material Safety Data Sheets (MSDS Sheets). These are required by a government agency called the Occupational Safety and Health Administration (OSHA). OSHA requires that schools have MSDS for all chemicals used on file and available for public inspection. Does your school or school district keep MSDS Sheets on file?

Yes No

If yes, where are they located? _____

If your school does not keep MSDS on file, you can still found out if there are hazardous chemicals in the pesticides used in your school by going on line. The MSDS information available on pesticides can be most easily located at the Northwest Coalition for Alternatives to Pesticides website “Identifying Pesticide Ingredients Using an MSDS”-- <http://www.pesticide.org/MSDS.html> and the Pesticide Action Network of North America’s pesticide database <http://www.pesticideinfo.org/Index.html>

9. If pesticides are used, what types of records are kept of applications? How are they kept?

___ Log book

___ Invoice

___ Other _____

10. Where are these records kept?

___ School District office ___ School Principal office ___ Facility Manager office

___ School Business office ___ other _____

11. How long are records kept? (please specify number)

__ days __ weeks __ years __ other

12. Is pest control at your school done by an outside contractor or managed by a school employee? Refer to the Green Flag School Environment Survey.

	Private Firm	School Employee	Other (specify)
Indoor pest control			
Outdoor pest control:			
Weed control:			

13. If your school uses an outside company, who is responsible for monitoring that company's performance after the contract to hire the company has been signed?

Facility Manager School staff IPM Coordinator Other _____

Please include the contractor service agreement with your returned survey.

14. Does your school district require that the people applying pesticides in your school district meet any standards for training, certification, or age?

Yes No If YES, which of these is required?

Over 21 years of age State certification State License

Other _____

15. Are pesticides applied on a regular basis (weekly, monthly, for example) or only as needed, for example, when school staff sees pests, or when a parent complains? Regular basis (please specify interval: _____)

Only as needed Are pesticides applied when children are in school? If not, when are they applied? weekends after hours holidays

16. Does your school or school district have information about "inert ingredients in the pesticide products used, including what they are and how toxic they are?"

Yes No

Inert ingredients are added to a pesticide to make the active ingredient more effective in killing whatever pest it is being applied to. But inert ingredients can be very toxic themselves. They are not always identified on a product label or MSDS, which is why it is very important that your school find out what inert ingredients are contained in any pesticide product.

17. If your school notifies people before they apply pesticides, whom do they tell?

Parents Teachers and staff Students Community

Other _____

18. Is notification given before or after the pesticide application?

Before After

19. If before, How soon before application is notice given? (Specify number)

__ hours __ days

20. How long after the pesticides are applied do notices, postings, or signs remain? (Specify number)

__ hours __ days __ none

21. How are people notified?

Bulletin Board posting Letter home to parents Letter to Staff

Students are told Teachers are told Signs posted indoors

Signs posted outdoors Other _____

22. What information is provided in the notification of pesticide use?

Site(s) of use Date of use Time(s) of use

Product(s) applied Health effect(s) of product(s)

Contact information Information on how to avoid exposure

Information on how to appeal proposed application

Other _____

23. Is the school nurse or health unit staff trained to recognize pesticide poisonings?

Yes No

24. Does the school's emergency management plan address possible pesticide accidents or exposures due to pesticide use on the school grounds or on property next to the school?

Yes No

25. Are you aware of staff bringing in their own pest control products to school?

- Yes No

26. Based on what you know now, do you think it is legal in your state for staff to bring in and use their own pest control products?

- Yes No Not Sure

27. Please describe any IPM or non-chemical methods used to reduce pest problems at your school, including measures to keep food away so as not to attract pests, and measures to physically keep pests out. Examples are: emptying all waste baskets at the end of every school day, keeping food refrigerated and/or in tightly sealed containers, placing screens on windows, keeping external doors shut when not in use, installing door sweeps on external doors, etc. *For a complete list of practices, see the IPM Standards for Schools at www.ipminstitute.org.*

28. How much does your school or school district spend per year on pest management activities? \$ _____

29. Is a pest-sighting log used at your school?

- Yes No

30. If yes, who in the school community uses the log and what is the procedure for reporting complaints and sightings in the log?

- Teachers Custodial staff school nurse administration students
 cafeteria staff other

31. Does the school board receive an annual report on the pest management program at your school, including products and amounts used?

Yes No

32. Does your school have a designated IPM Coordinator and IPM Committee for pest management questions and complaints?

Yes No

33. Does the school IPM Coordinator monitor the outside company or the school employee in charge of pest management and regularly report on their performance to the IPM Committee?

Yes No

Submit the completed survey, along with the following documents, if available:

1. Copy of the written pest management policy.
2. Copy of any contracts with private firms for indoor or outdoor pest management services.

Health Effects of 48 Commonly Used Toxic Pesticides in Schools

A Beyond Pesticides Fact Sheet

Pesticide	Cancer	Reproductive Effects	Neurotoxicity	Kidney / Liver Damage	Sensitizer / Irritant
Insecticide					
Acephate	C ⁱ	X ⁱⁱ	X ⁱⁱⁱ	X ^{iv}	X ²
Allethrin			X ²	X ²	X ²
Avermectin		X ²	X ²		X ²
Bendiocarb		X ³	X ³		X ²
Bromacil	C ¹			X ²	X ^v
Chlorpyrifos			X ²		X ²
Cyfluthrin		X ²	X ²	X ²	X ²
Cypermethrin	C ¹	X ^{vi}	X ²	X ²	
Diazinon		X ^{vii}	X ²		X ²
Dichlorvos	C ¹		X ²	X ²	X ²
Fenoxycarb	Likely ¹			X ²	X ²
Fenvalerate			X ²		X ²
Hydramethylnon	C ¹	X ^{viii}		X ²	X ²
Isophenfos			X ⁵		
Lamda Cyhalothrin	D ¹		X ²		X ²
Permethrin	C ¹	X ^{ix}	X ²	X ²	X ²
Phenothrin			X ^x	X ³	
Piperonyl butoxide	C ¹	X ^{xi}	X ¹¹	X ^{xii}	X ¹¹
Propetamphos			X ²		
Propoxur	B2 ⁵		X ²	X ²	
Pyrethrin	Likely ¹	X ²	X ²	X ²	X ²
Tetramethrin	C ¹		X ³		
Trichlorfon		X ²	X ²	X ²	X ²
Herbicides					
Atrazine	2B ^{xiii}	X ⁷	X ²	X ²	X ²
Bensulide			X ²		X ²
2,4-D	2B ^{xiv}	X ^{xv}	X ²	X ²	X ^{xvi}
DSMA			X ^{xvii}		X ¹⁷
Dacthal	C ¹			X ²	X ¹⁵

Dicamba	D ¹		X ²	X ²	X ²
Diquat Dibromide		X ^{xviii}		X ²	X ⁵
Endothall				X ¹⁵	X ²
Glyphosate		X ¹⁵	X ¹⁵	X ²	X ⁵
Isoxaben	C ¹				
MCPA		X ²	X ¹⁵	X ¹⁵	
MCPP				X ²	X ²
MSMA		X ⁹	X ⁹	X ¹⁸	X ⁹
Pendimethalin	C ¹	X ¹⁵		X ²	X ²
Prometon	D ¹				X ^{xix}
Pronamide	B2 ¹	X ⁵		X ⁵	X ²
Siduron					X ⁹
Triclopyr	D ¹			X ²	X ²
Trifluralin	C ¹	X ⁷		X ²	X ²
Fungicides					
Benomyl	C ¹	X ⁸	X ¹⁵	X ²	X ²
Chlorothalonil	Likely ¹		X ¹⁵		X ¹⁵
Maneb	B2 ¹	X ¹⁵	X ²	X ²	X ²
PCNB	C ¹	X ¹⁵		X ¹⁵	
Sulfur					X ²
Triadimefon	C ¹	X ⁸	X ²	X ²	
Ziram	Likely ¹	X ²	X ¹⁵	X ¹⁵	X ²
Total	24 Probable, possible or likely	25	33	33	39

X = Adverse effects demonstrated.

B2 = U.S. EPA weight-of-evidence category, “probable human carcinogen, sufficient evidence in animals and inadequate or no evidence in humans.”

C = U.S. EPA weight-of-evidence category, “possible human carcinogen” rating.

D = U.S. EPA weight-of-evidence category, “not classifiable as to human carcinogenicity,” usually due to inadequate data.

2B = International Agency for Research on Cancer, World Health Organization (IARC) category, the agent (mixture) is possibly carcinogenic to humans.

Likely = U.S. EPA, “Likely to be carcinogenic to humans.”

ⁱ U.S. EPA. 2002. List of Chemicals Evaluated for Carcinogenic Potential. Office of Pesticide Programs. www.epa.gov/pesticides/carlist.

ⁱⁱ Extension Toxicology Network (EXTOXNET) Pesticide Information Profiles, ace.orst.edu/info/extoxnet/ghindex.html.

ⁱⁱⁱ U.S. EPA. 2000. Table 1: Toxicity Data by Category for Chemicals Listed Under EPCRA Section 313. Toxic Release Inventory (TRI) Program. www.epa.gov/tri/chemical/hazard_categories.pdf.

^{iv} National Institute for Occupational Safety and Health. Registry of Toxic Effects of Chemical Substances. www.cdc.gov/niosh/rtecs/tb48alc0.html.

^v U.S. EPA. Reregistration Eligibility Decision (RED) Factsheet. Office of Pesticide Program. www.epa.gov/oppsrrd1/REDS/.

^{vi} Illinois EPA. 1997. Illinois EPA Endocrine Disruptors Strategy. Springfield, IL. www.nihs.go.jp/hse/enviro/illiepatable.htm.

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- ^{vii} U.S. EPA. 2003. Handbook for Non-Cancer Health Effects Valuation, Appendix C: Case Studies, Economic Valuation of Endocrine Disruption: Introduction. Science Policy Council. www.epa.gov/osp/spc/Endoqs.htm.
- ^{viii} California EPA. 2003. Chemicals Known to the State to Cause Cancer or Reproductive Toxicity. Office of Environmental Health Hazard Assessment. www.oehha.org/prop65/prop65/list/71103LSTA.html.
- ^{ix} National Library of Medicine, TOXNET, Hazardous Substances Database, <http://toxnet.nlm.nih.gov/>.
- ^x World Health Organization. 1990. d-Phenothrin. Environmental Health Criteria. Geneva.
- ^{xi} Cox, C. 2002. "Piperonyl Butoxide." *Journal of Pesticide Reform* 22(2): 12-20. www.pesticide.org/PiperonylButoxide.pdf.
- ^{xii} National Pesticide Information Center. Pesticide Fact Sheets. <http://ace.orst.edu/info/npic/npicfact.htm>.
- ^{xiii} U.S. EPA. 1999. Table 4: Cancer Data for Chemicals Listed Under EPCRA Section 313.
- ^{xiv} National Cancer Institute epidemiological evidence.
- ^{xv} Environmental Defense Fund, Scoreboard Database, www.scorecard.org/chemical-profiles/.
- ^{xvi} U.S. EPA. 2003. 2,4-D. Technology Transfer Network, Air Toxics Website. www.epa.gov/ttnatw01/hlthef/di-oxyac.html.
- ^{xvii} Material Data Safety Sheet for DSMA, www.horizononline.com/MSDS_Sheets/195.txt.
- ^{xviii} New Jersey Department of Health and Senior Services. Right to Know Hazardous Substance Fact Sheets. <http://www.state.nj.us/health/eoh/rtkweb/rtkhsfs.htm>.
- ^{xix} Cornell University. 1985. Prometon Herbicide Profile. Ithaca, NY. <http://pmep.cce.cornell.edu/>.