## Model IPM Policy Statement and Plan for Integrated Pest Management in Utah Schools

**Model School IPM Policy**

It is the policy of *(school district)* to conform to the requirements of Utah Administrative Rule R392-200 (Design, Construction, Operation, Sanitation, and Safety of Schools) and specifically to Section 7 (12) which requires the adoption of Integrated Pest Management (IPM) practices and principles for the control of structural and landscape pests. Structural and landscape pests can pose significant problems in the urban environment. The pesticides used to remediate such pests can also pose health risks to people, non-target organisms and the environment. Through the use of IPM, the *(school district)* will maintain effective pest control while minimizing pesticide use.

**School Integrated Pest Management Plan**

This IPM plan is written in accordance with the Health, Disease Control and Prevention, and Environmental Services Rule R392-200 (Design, Construction, Operation, Sanitation, and Safety of Schools) Amendment, section 7 (pest management).

The bold sections of text in this document are taken directly from R392-200 and must be addressed in the final IPM plan. Additional paragraphs (shown in regular non-bold text) provides suggestions on how to best accomplish the bolded, mandatory sections of the plan. These paragraphs can be altered or eliminated from the district’s final plan; however, successful IPM programs typically contain all suggestions given in this plan. Text in blue is intended to give guidance on what should be contained in a particular section.

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ district will implement the following IPM principles:

1. **The governing body shall minimize in school buildings or on school grounds the presence of pests that are disease vectors, carry allergens that are likely to affect individuals with allergies or respiratory problems, or may sting or bite causing mild to serious reactions in some individuals**.

Create a general statement indicating who will develop and implement the IPM program, both inside and/or outside of school buildings. Outline who will be in charge of overseeing and applying pesticides within the district: in-house or contracted professional. Use the options below as guidance.

* 1. Contract with a Pest Management Professional or PMP to handle all or some inside and/or outside\* pest related problems.
	2. Handle some or all inside and outside pest related problems with in-house personnel.
	3. Contracted landscaping services must be licensed to commercially apply any pesticide, including herbicides.
1. **The governing body shall adopt integrated pest management (IPM) practices and principles to prevent unacceptable levels of pest activity with the least possible hazard to people, property, and the environment, including:**At a minimum, your program should include details about the following IPM principles: education, sanitation, pest exclusion/maintenance, pest monitoring, and pesticide use/storage/notification. Below are suggestions on practices and principles your plan will recognize. In your plan, describe how each principle will be achieved.

	1. Education and communication. Everybody in the school district will be educated on IPM basics and their role in the program, including students and parents. The IPM Coordinator will receive additional, in-depth training and provide IPM training to the primary practitioners (generally: custodians, maintenance, and grounds staff) on a regular basis.
	2. Improved sanitation in schools and on school grounds to minimize pest-conducive conditions, harborage, food, and water.
	3. Improved building and grounds maintenance to exclude pests and minimize pest-conducive conditions.
	4. The use of least toxic and appropriately formulated pesticides only when absolutely necessary.
	5. Contract with a PMP who understands and practices IPM and can implement and manage a comprehensive program that meets all the requirements of the Rule
	6. Develop, implement and manage an in-house IPM program that meets all the requirements of the Rule.
	7. The district shall appoint an IPM Coordinator. The IPM Coordinator shall:

	Appointing or hiring an IPM Coordinator is a critical component to a successful IPM program. They will serve as the champion for the program, overseeing the day-to-day functions of the program and provide guidance and education to key players.

		1. Have primary responsibility for ensuring that this IPM plan is carried out.
		2. Oversee custodial, building and grounds, and maintenance staff to ensure implementation of pest prevention measures.
		3. Manage pest control contractors and staff engaged in monitoring and control of pest problems.
		4. Communicate with principals and district administration to carry out posting and notification, recordkeeping and education provisions in this policy.
		5. Provide IPM information to the school community (including parents) and answer questions on IPM topics. Coordinators are encouraged to use IPM educational materials developed by Utah State University, or request materials for topics not currently addressed.
		6. Present an annual report to the facilities management evaluating the progress of the IPM program.
		7. Attend a minimum of 4 hours of IPM training per year.

* 1. Establish an active pest monitoring program.
	2. Complete regular pest inspections.
	3. Assure that pest concerns are addressed promptly.
	4. The district/facility will establish pest tolerance thresholds for common pests. These thresholds will serve as an indicator for pest population levels and the point at which control measures will be undertaken.
1. **The governing body shall have a written integrated pest management plan written by the governing body or provided by the contracted pest management contractor whether IPM is implemented as an internal process or contracted to a pest management professional. The plan shall include sections that cover the following topics:**
	1. **IPM policy statement**
		1. A model IPM policy can be located on the first page of this model plan.
		2. A policy statement conveys the “intent” of your IPM program.
		3. A policy statement typically references the procedures to be followed.
		4. Procedures describe the details of “how” your IPM program will accomplish your intent.
	2. **IPM implementation and education plan**Describe a general overview of your IPM program: who and how your IPM program will be managed; the roles, responsibilities and expectations for administrators, teachers, staff, students and parents and how training will be provided to these stakeholders both initially, and on-going into the future.
		1. Teachers, faculty, staff and students will receive information and/or training on IPM basics and their role in the overall IPM program.
		2. Education will be delivered in the form of hands-on training, lectures, workshops, online resources, fact sheets, newsletters, paper resources (books, etc.), and more.
		3. Parents will be informed annually about the IPM policy via electronic or paper notification.
		4. An IPM Coordinator will be trained in IPM techniques prior to fulfilling their role. For assistance with education and training contact the Utah State University Extension School IPM Program utahpests.usu.edu/schoolIPM/.
		5. The IPM Coordinator will be responsible for training those in charge of the day-to-day functions of the IPM program, typically: custodians and grounds and building maintenance.
	3. **pest identification, monitoring procedures, and reporting and control practices**
		1. Describe how your IPM program will educate teachers and staff about pests, their habits, and how to properly identify common pests.
		2. Describe how your IPM program will monitor for pests or pest activity, how this information will be used and how it will be reported to a contracted PMP or to in-house personnel, e.g., IPM Coordinator
		3. Describe the steps your IPM program will use to control pests
	4. **approved pesticides**
		1. Develop and list those pesticides, including insecticides, rodenticides, herbicides and fungicides that your District will approve for application either by a contracted PMP or in-house personnel
		2. Minimize risk by selecting only pesticides with the lowest level of toxicity for the intended application
	5. **procedures for pesticide use**Describe how pesticides will be stored, used, applied, who applies and how they are accounted for in your District. Cost or staffing considerations alone are *not* adequate justification for use of chemical control agents. Non-chemical pest management methods will be used whenever possible to provide the desired control. *All* pesticide applications must be approved by the IPM Coordinator in advance. Antimicrobial agents and insecticide and rodenticide baits applied in tamper-proof bait stations, are exempt from approval. Non-exempt pesticides will be applied only when target buildings or grounds are unoccupied.When pesticide use is deemed necessary, the least hazardous material (as described below) will be chosen. No pesticides with greater than a “Caution” label will be used. If the governing body chooses to not use contracted pest control, only *approved* school personnel will apply pesticides and shall follow the Utah Dept. of Agriculture pesticide regulation R68-7. The applicator shall apply all products according to the pesticide label directions. (It is advised to have at least one individual from each school/district obtain a pesticide applicator license from the Utah Department of Agriculture and Food. Ideally, those applying pesticides in the school district should be licensed.
2. No routinely-scheduled (e.g., seasonal, monthly or weekly) pesticide applications will be made indoors. No pesticide fogging or space spraying will be conducted inside or outside.
3. Pesticides will be used when appropriate, along with other management practices or when other pest prevention and non-chemical control measures have failed to reduce pests below tolerance thresholds. When a pesticide must be used, the smallest amount of the reduced-risk product that meets pest management goals will be used (i.e., spot treatments, *not* broadcast applications).
4. All pesticides will be stored in a lockable storage closet/room where children do not have access. Pesticide warning signs will be posted on the door of the storage device.
5. Districts must maintain up-to-date pesticide Material Safety Data Sheets (MSDS), pesticide product labels and available manufacturer information about inert ingredients and procedures for pesticide use.
6. A policy for the notification of students, parents, and staff of non-exempt pesticide applications and/or serious pest issues must be created.
7. Indoors, pesticides will be used only in containerized bait formulation, or for spot treatments targeted to insect infestations or problem areas where a minimal amount of material is used. Rodent baits must be applied in a Tier I, tamper-resistant bait box, and must be in a block formulation. Bait boxes shall be inaccessible to children and tethered/anchored when appropriate.
8. To ensure the safety of students and staff, the District will use the following criteria to ensure that the least hazardous pesticide and/or the least hazardous method of control be utilized:
	1. No use of any pesticide classified as highly acutely toxic by the U.S. EPA. This includes Hazard Category I and II, signal words DANGER and WARNING.
	2. The district/facility shall not use any pesticide unless all ingredients in the product have been evaluated by the U.S. EPA and found to include no possible, probable, known, or likely human carcinogens; no reproductive toxicants; no known, probable or suspected endocrine disruptors; and no nervous system toxicants (either cholinesterase inhibitors or listed as neurotoxins by the Toxics Release Inventory). A pesticide will not be used if the facility does not have information on its ingredients, including inert ingredients.
	3. All ingredients in pesticides used by the facility shall have a soil half-life of 30 days or less.
	4. Properly applied gel bait or tamper-resistant containerized bait can be exempted from 8a, 8b, and 8c if it represents the least hazardous treatment option.
9. Faculty and staff will be notified to remove all pesticides from their classrooms, lounges, etc., and that only approved personnel are permitted to apply pesticides.
	1. **a policy for the notification of students, parents, and staff**

	Describe where, how and when students, parents and staff will be notified prior to the application of pesticides by either a contracted PMP or in-house personnel. This Facility takes the responsibility to notify the school staff, students, and parents of upcoming pesticide treatments. Use of *exempt* pesticides will not require prior notification (see section 8 above). Notification will occur in accordance with local/state laws.

		1. All parents and staff will be notified of a pesticide application at least two school days prior to any pesticide applications in buildings or on grounds, with the exception of exempt and emergency applications. Parents should be notified each time a non-exempt pesticide is applied.
		2. Applications exempt from prior notification are: antimicrobial agents, insecticide and rodenticide baits; container-delivery systems (e.g. targeted aerosol spraying of a wasp nest); emergency situations.
		3. In situations where pesticides must be applied on an emergency basis and are not an antimicrobial agent, insecticide or rodenticide bait, or a container-delivery system, notification to parents and school staff will occur within two school days following the application.
		4. Contractors: School management will provide written notification to all current pest control, construction and landscape contractors of the need to adhere to the IPM policy in any pest control, planning, new construction, repair or maintenance work done. Any pest control contractors hired will be required to inspect for pest-conducive conditions, monitor for pests, and develop appropriate prevention measures and IPM practices, not simply apply pesticides. Pest control contractors will be expected to provide recommendations for structural improvements or repairs, and housekeeping and sanitation measures required to reduce or prevent recurrence of pest problems.
		5. Posting: Signs will be posted on facility doors and near the site of planned applications at least three business days in advance of pesticide use, and at the time of application. These signs will include:
			* 1. Name of the pesticide used.
				2. Date and time of application.
				3. Warning or cautionary statements from product label (including restrictions on entering the treated areas or special cautions for certain individuals).
				4. Information about availability of product labels, MSDS and inert ingredients lists at the facility office.
				5. Contact phone number for those seeking additional information.
		6. Outdoor applications will be corded-off and flagged. Signs shall remain in place for one week after pesticide application, or a longer period of time if specified by the pesticide label.
	2. **applicator requirements**Describe licensing requirements, if any, for in-house pesticide applicators. Licensing, however, is recommended to ensure applicators are knowledgeable and competent. Training and licensing are administered through the State Department of Agriculture and Food. Initial costs are minimal and continuing education credits of 24 hours every three years are required.
		1. All pesticide applications made on school grounds will be made by a pesticide applicator as designated in the school IPM plan or by the IPM Coordinator.

		Any person applying pesticides on school grounds should be licensed by the Department of Agriculture and Food, and receive continuing education on IPM and pesticide use/safety.
		2. Pesticide applicators must be educated and trained in the principles and practices of IPM and the use of pesticides approved by this district/facility. Personnel approved for pesticide application must follow regulations and label precautions, and comply with this IPM policy and any existing pest management plan. It is recommended that the IPM Coordinator, at a minimum, be licensed by the state of Utah to apply pesticides.

1. **The governing body shall use non-chemical management methods whenever possible to provide the desired control. The governing body shall use a full range of control alternatives including:**
	1. **identification and removal or repair of conditions that are conducive to pests;**
	2. **structural repair and sealing;**Replacing non pest-proof door sweeps is critical for pest exclusion. Replacing broken screens, windows, doors, etc. will also help to exclude pests.
	3. **improved sanitation;**
	4. **removal of clutter or harborage**
	5. **elimination of food sources**
	6. **exclusionary measures to protect doors, windows and any other openings to the outside against the entrance of insects, rodents, and other animals.**
	7. **A no-action alternative shall also be considered in cases where the pest has no public health or property damage significance.**

	Tolerance for incidental pests.
	8. Educational efforts – Communicate how reducing pest conducive conditions reduces pest problems in pest vulnerable areas
	9. Behavior/cultural changes – Focus on better housekeeping, improved sanitation and less clutter, particularly in pest venerable areas
	10. Mechanical controls – Install screens, door sweeps and caulking as needed
	11. Pesticides – Use the least toxic available, targeted to the specific pest and used in the least amount possible after all other controls have be tried
2. **If the governing body chooses to not use a contracted pest control contractor, school personnel who apply pesticides shall follow the Utah Dept. of Agriculture pesticide regulation R68-7. The applicator shall apply all products according to the pesticide label directions.**

Do we really want to create a comprehensive “how to” plan by including everything that follows or should we incorporate some of the following into the appropriate sections of the model plan where appropriate?

*IPM Implementation: Non-Chemical Pest Management Considerations*

Pests are populations of living organisms (animals, plants, or microorganisms) that interfere with use of the facility by students and staff. Strategies for managing pest populations will be influenced by the pest species and whether that species poses a threat to people, property or the environment. Applying IPM principles prevents unacceptable levels of pest activity and damage with least possible hazard to people, property and the environment.

Pest type and number will determine if a pest is “actionable.” Actionable pests require management via mechanical, physical, biological, cultural or chemical means. It is the policy of \_\_\_\_\_\_\_\_\_\_\_\_ (district/school/etc.) to use IPM principles to manage pest populations. A full range of management actions, including no action, will be considered. Some, but not all, alternatives to chemical pest management are listed below:

*IPM Implementation: Chemical-Control Pest Management Considerations*

1. Indoors, pesticides will be used only in containerized bait formulation, or for spot treatments targeted to insect infestations or problem areas where a minimal amount of material is used. Rodent baits must be applied in a Tier I, tamper-resistant bait box, and must be in a block formulation. Bait boxes shall be inaccessible to children and tethered/anchored when appropriate.
2. Districts must prepare a current, approved pesticides list and a current list of pesticides used or stored.
3. Pesticide use and selection: to ensure the safety of students and staff, the management will use the following criteria to ensure that the least hazardous pesticide and/or the least hazardous method of control be utilized:
	1. No use of any pesticide classified as highly acutely toxic by the U.S. EPA. This includes Hazard Category I and II, signal words DANGER and WARNING.
	2. The district/facility shall not use any pesticide unless all ingredients in the product have been evaluated by the U.S. EPA and found to include no possible, probable, known, or likely human carcinogens; no reproductive toxicants; no known, probable or suspected endocrine disruptors; and no nervous system toxicants (either cholinesterase inhibitors or listed as neurotoxins by the Toxics Release Inventory). A pesticide will not be used if the facility does not have information on its ingredients, including inert ingredients.
	3. All ingredients in pesticides used by the facility shall have a soil half-life of 30 days or less.
	4. Properly applied gel bait or tamper-resistant containerized bait can be exempted from 8a, 8b, and 8c if it represents the least hazardous treatment option.
	5. The policy of the school district is that all current laws regarding pesticide application will be obeyed.
4. Pesticide applicator requirements: all pesticide applications made on school grounds will be made by a pesticide applicator as designated in the school IPM plan or by the IPM Coordinator. Any person applying pesticides on school grounds should be licensed by the Department of Agriculture and Food, and receive continuing education on IPM and pesticide use/safety.
5. Faculty and staff will be notified to remove all pesticides from their classrooms, lounges, etc., and that only approved personnel are permitted to apply pesticides.

*IPM Implementation*

Education

Staff, students, pest managers and the public will be educated about potential school pest problems and the IPM policies and procedures to be used to achieve desired pest management objectives.

1. Parents will be informed annually about the IPM policy.
2. Teachers, faculty, staff and students will receive information and/or training on their role in pest management.
3. An IPM Coordinator will be trained in IPM techniques prior to fulfilling their role. For assistance with education and training contact the Utah State University Extension School IPM Program (435-797-2435).

Record Keeping

Records of pesticide use shall be maintained on site to meet the requirements of the state regulatory agency and Facilities Management policy. Records must be current and accurate. These records shall be readily available upon request to school staff and the general public during normal operating hours, and shall be kept for at least three years. Records should be housed in one location such as the main office or in the Facilities office. The objective is to create records from which programs and practices can be evaluated in order to improve the system and eliminate ineffective and unnecessary treatments. Sample forms can be found at: utahpests.usu.edu/schoolIPM/.

Facility Management will keep records of the following:

1. A current list of pesticides stored and used, pesticide Material Safety Data Sheets (MSDSs), pesticide product labels and available manufacturer information about inert ingredients.
2. A record of all pest control actions (location, purpose and complete information on the pesticide as indicated in 1).
3. Information on the number of pests or other indicators of pest activity that can verify the need for management action.
4. A pest sighting log to report and track pest complaints.
5. Pest monitoring log to track individual pest monitors and relevant pests.

Notification

This Facility takes the responsibility to notify the school staff, students, and parents of upcoming pesticide treatments. Use of *exempt* pesticides will not require prior notification (see section 8 above). Notification will occur in accordance with local/state laws.

Facility Management will see to the following:

1. All parents and staff will be notified \*\*\*How should they be notified? Mail, email, bulletin board?? Ideas appreciated\*\*\* of a pesticide application at least three business days prior to any pesticide applications in buildings or on grounds, with the exception of exempt and emergency applications. Parents should be notified each time a non-exempt pesticide is applied. Neighbors immediately adjacent to the school property will be notified at least two business days in advance of outdoor pesticide applications. \*\*\*Gregg, does the SLCSD notify all adjacent property owners and parents before every herbicide application, etc.?\*\*\*
2. Applications exempt from prior notification are: antimicrobial agents, insecticide and rodenticide baits; container-delivery systems (e.g. targeted aerosol spraying of a wasp nest); emergency situations.
3. In situations where pesticides must be applied on an emergency basis and are not an antimicrobial agent, insecticide or rodenticide bait, or a container-delivery system, notification to parents and school staff will occur within two business days following the application.
4. Contractors: School management will provide written notification to all current pest control, construction and landscape contractors of the need to adhere to the IPM policy in any pest control, planning, new construction, repair or maintenance work done. Any pest control contractors hired will be required to inspect for pest-conducive conditions, monitor for pests, and develop appropriate prevention measures and IPM practices, not simply apply pesticides. Pest control contractors will be expected to provide recommendations for structural improvements or repairs, and housekeeping and sanitation measures required to reduce or prevent recurrence of pest problems.
5. Posting: Signs will be posted on facility doors and near the site of planned applications at least three business days in advance of pesticide use, and at the time of application. These signs will include:
	* 1. Name of the pesticide used.
		2. Date and time of application.
		3. Warning or cautionary statements from product label (including restrictions on entering the treated areas or special cautions for certain individuals).
		4. Information about availability of product labels, MSDS and inert ingredients lists at the facility office.
		5. Contact phone number for those seeking additional information.
6. Outdoor applications will be corded-off and flagged. Signs shall remain in place for one week after pesticide application, or a longer period of time if specified by the pesticide label.

Pesticide Storage and Purchase

All pesticide use, storage, handling, and disposal will be conducted in accordance with Utah Statues, Administration regulations, school District policies and procedures, and local ordinances.

Pesticide Applicators

Pesticide applicators must be educated and trained in the principles and practices of IPM and the use of pesticides approved by this district/facility. Personnel approved for pesticide application must follow regulations and label precautions, and comply with this IPM policy and any existing pest management plan. It is recommended that the IPM Coordinator, at a minimum, be licensed by the state of Utah to apply pesticides.

*IPM: Pest Monitoring, Identification, Reporting, and Control Practices*

Monitoring

Monitoring is the keystone of an IPM program. All monitoring devices (glue/sticky traps and Tier I tamper-resistant rodent bait stations with non-toxic bait blocks, where appropriate) will be labeled with the installation date, a unique identification number, and recorded on a pest monitoring data sheet. Traps will be checked monthly, and pest presence and identification recorded. Pests with little or no tolerance threshold (medically significant pests) should be dealt with immediately. Pests with a high tolerance threshold will be noted, but no action taken, unless specifically requested. All pests and action steps should be recorded on the data form. Action for zero, or low-tolerance pests should be discussed with the IPM Coordinator before taken.

Pest Identification

The IPM Coordinator will be trained in basic recognition of Utah’s primary school pests. If a pest cannot be reasonably identified, the district will seek the help of a local USU Extension office or the USU Plant Pest Diagnostic Lab. Images of unknown pests will be sent to ryan.davis@usu.edu for assistance, or physical samples will be submitted via mail. Pesticides will never be used for a pest that has not been appropriately identified.

Pest Reporting

The governing body will develop a method of pest reporting (paper or electronic), where faculty, staff and students can report pests. Pests should be reported to the IPM Coordinator or an individual designated by the Coordinator, usually the facility’s Head Custodian. Records of pest reports will be maintained and summarized in a quarterly, bi-annual, or annual report to assess progress. The report will be reviewed by Facilities Administration.