

[SCHOOL DISTRICT/COUNTY NAME HERE]

INTEGRATED PEST MANAGEMENT SYSTEM

Board of Education
Board of Education
Dept of Education

IPM Policy
IPM System Overview
IPM Plan

SUBMITTED BY: [name, title & contact info for IPM Coordinator or authorized individual]

EFFECTIVE DATE: [enter effective date of this version of the MDA approved plan]

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BOARD OF EDUCATION REQUIREMENTS - SCHOOL IPM SYSTEM**BOARD OF EDUCATION IPM SYSTEM****[15.05.02.03(A)(1)(a)]**

"A. County Board of Education Requirements.

(1) Each county board of education shall:

(a) Develop and implement for its schools an integrated pest management system approved by the Department; and
(b) File a written integrated pest management plan with the Department for approval.

(2) When any change is made to the integrated pest management system, the county board of education shall submit the revised integrated pest management plan to the Department for approval before the initiation of the new plan."

MODEL Board of Education IPM SYSTEM (a.k.a. BOE Regulations)**SCOPE [15.05.02.01]**

The County Board of Education [BOE] recognizes its duty and responsibility to develop, implement and enforce an Integrated Pest Management [IPM] System in accordance with Annotated Code of Maryland, Agricultural Article, §5-208.1 Integrated Pest Management, Maryland Department of Agriculture [MDA] Regulations 15.05.02 and BOE's IPM in Schools Policy [\[BOE policy number here\]](#) [\[BOE policy name here\]](#).

Therefore, the BOE instructs the Department of Education [DOE] to develop, implement and enforce an Integrated Pest Management Plan **[IPM Plan]** based on BOE **IPM Policy** and this BOE **IPM System Overview** (a.k.a. BOE IPM Regulations). The Department of Education is instructed to develop and implement in its schools and on school grounds an integrated pest management system which includes procedures for notifying a parent or guardian of a student attending a public school, a student, or a school staff member before a pesticide is applied in a school building or on school grounds during the school year.

ROLES AND RESPONSIBILITIES [15.05.02.03(B)(2)]

The **IPM Plan** must include and document descriptions of pest management roles and responsibilities of decision makers, identify decision makers and include the name, address, and telephone number of the decision makers and the District's **IPM Contact Person** in the **IPM Plan**. Review and update of all contact information for decision makers will be included in the ANNUAL EVALUATION [15.05.02.03(B)(9)]. Contact information will be updated as needed.

This section of the **IPM Plan** documents the roles and responsibilities for;

1. **IPM Contact Person** (a.k.a. IPM Coordinator)
2. **SCHOOL ADMINISTRATOR** (i.e. Principal)
3. **STUDENTS and STAFF**
4. **CUSTODIAL STAFF**
5. **GROUNDS DEPARTMENT STAFF**
6. **PESTICIDE APPLICATOR**
7. **CONTRACT SERVICE PROVIDER** [CSP]

The **IPM System** will require the assistance and cooperation of the BOE, DOE administration, staff, and students. The District, with the approval of the Board of Education, will establish an **IPM Contact Person** to serve as a liaison between the administration and pest control system in order to provide oversight, consistency in the pest control system, and ensure the provisions of the **IPM System** are fulfilled.

The **IPM Contact Person** will advise the BOE, DOE administration, any contracted service providers, staff, parents and guardians and students as necessary of **IPM System** changes including new laws and regulations effecting the **IPM System** and submit any BOE and DOE approved **IPM Plan** revisions to the Maryland Department of Agriculture [MDA] for approval prior to adopting the change [15.05.02.03(A)(2)].

The **IPM Contact Person** will oversee the implementation and enforcement of the **IPM System** including the Annual Evaluation, identify responsibilities and roles of administrators (and staff), oversee contracts and contractors, review problem areas identified through the inspection and monitoring, address pest problems reported and determine pest control method to employ to correct the pest problem.

The **IPM Contact Person** also serves as the liaison between the school administration, contractors, and parents, guardians, students, and staff to address questions and concerns regarding the **IPM System** and pest control practices. The **IPM Contact Person** will make recommendations and decide how to address pest issues and correct problem areas.

Students and staff will comply with the provisions of the **IPM System** by ensuring that areas requiring maintenance or repair, sanitation problems, and pest problems they encounter or any sightings are reported to the **IPM Contact Person** and documented in the **IPM SYSTEM LOG** notebook maintained in each school or facility in a publicly accessible areas. Students and staff will be instructed during annual **IPM System EDUCATION AND TRAINING** [15.05.02.03(B)(8)] to follow good sanitation practices, how to report problems to the **IPM Contact Person** and what their rights are to notification and access to **IPM System** documents.

PEST MANAGEMENT PROCEDURES AND OBJECTIVES [15.05.02.03(B)(3)]

Manage pests that may occur on school sites to prevent interference with the learning environment of the students. Eliminate potential injury to students, staff and other occupants. Preserve the integrity of the school building or structures. Ensure that the method used to control the pest does not become a barrier to students and staff accessing and using the building or the grounds.

The pest control procedures used must ensure the least possible risk and hazard to students, staff, property, and the environment (including Indoor Air Quality [IAQ], drinking/ground water, etc.) with consideration to employing the most economical means possible that meets this objective. The pest control procedure chosen cannot become a barrier to students or staff accessing the school or school property, cause harm to students or staff, compromise IAQ, or cause any damage to the school or the grounds.

Pests are populations of living organisms (insects, animals, plants, or microorganisms) that may interfere with the use of the school site for human purposes. 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. The **IPM System** relies on the coordinated use of pest and environmental information to identify the best available pest management methods to prevent unacceptable levels of pest damage while ensuring the choice of control does not expose students, staff, property, and/or the environment (including groundwater) to hazardous materials that impact public health or compromise the environment, both indoors and outdoors or become a barrier to access the school campus or buildings.

Long term control of pests is achieved by using information about biology and habits of the pest and its interaction with its surroundings. Proper installation of plants, appropriate watering regimes, and choosing plant species that are suited to specific sites and usage are some of the most effective measures for achieving long term pest control for school landscapes and grounds.

Exclusion is the first line of defense against pest infestation. Employing exclusion practices (i.e. mow strips (around buildings and under fences), door sweeps, screens, sealing cracks, addressing water incursion, etc.) are the best method for ensuring that pests do not enter the school building thereby reducing or eliminating the need for chemical means of pest control. Good maintenance, custodial and sanitation practices are vital to ensuring pests do not have access to food, water or shelter.

INSPECTION AND MONITORING ACTIVITIES [15.05.02.03(B)(4)]

The **IPM Plan** must include and document procedures for regular inspection and monitoring activities to determine the presence and distribution of pests. Records must be created and maintained for inspections and monitoring activities. These records will be maintained in the **IPM SYSTEM LOG** notebook which is located at a publicly accessible at each school or facility.

STANDARDS FOR THRESHOLD AND CORRECTIVE ACTIONS [15.05.02.03(B)(5)]

The **IPM Plan** must have standards to determine the severity of pest infestation and the need for corrective action. These standards must be documented in the **IPM Plan**.

RECORD KEEPING [15.05.02.03(B)(6)]

Each school within the District is required to make on-site records documenting pest sightings, pest control procedures, pest control actions taken and any communications to students and staff members regarding integrated pest management or pesticide use. All records are public and will be made promptly available to students, staff and the interested persons upon request. These records are to be stored in the **IPM SYSTEM LOG** notebook maintained in each school or facility in a publicly accessible area.

Records of pesticide use [15.05.01.12] shall be provided to the school by the licensee, permittee, or certified applicator at the time of the pesticide application [including work order, Environmental Protection Agency [EPA] Product Label [PL] and Safety Data Sheet [SDS] information] and will be maintained for a minimum of 2 years. Records must be current and accurate. Following any pesticide application, application records including the EPA PL and SDS information will be immediately provided upon request as these are public documents.

In addition, pest surveillance data sheets that record the number of pests or other indicators of pest populations are to be maintained to verify the need for corrective action or treatments. Pest control procedures, including cultural practices utilized on school grounds and required maintenance actions (i.e. installing door sweeps, addressing water incursion, sealing cracks and crevasses, etc.) will be tracked.

Documentation of communications to students and staff regarding IPM procedures and pesticide use will be maintained by the School and the **IPM Contact Person**. All records will be made promptly available to students, staff and the public upon request.

An **IPM SYSTEM LOG** notebook will be maintained in each school or facility with the following information:

- a. Integrated Pest Management Procedures [IPM Plan]
- b. Observation Log
- c. Inspection reports including observations, monitoring techniques and all actions taken
- d. EPA Product Labels [*documents Federal Law requirements when a pesticide is used*]
- e. Safety Data Sheets (SDS) [*documents health impacts of the pesticide used*]

- f. Notification Reports [*including copies of all notification memos, postings, etc.*]
- g. Maintenance Work Orders
- h. Contacts for Information and decision makers

PEST MANAGEMENT STRATEGIES [15.05.02.03(B)(7)]

Each school within the District is required have and document pest management strategies. Strategies include methods that are integrated or institutionalized at the School and throughout the District to keep pests from causing economic, health-related, or aesthetic injury through the utilization of site or pest inspections, pest population monitoring, evaluating the need for control, and the use of one or more pest control methods, including sanitation, structural repair, maintenance, physical, cultural, and biological control, nonchemical methods, and, when nontoxic options are unreasonable or have been exhausted, pesticides, in order to minimize the use of pesticides; and minimize the risk to human health and the environment associated with pesticide applications. The method selected cannot become a barrier to students and staff accessing the school.

The **IPM Plan** will include any proposed pest management measures including exclusion, prevention, maintenance, custodial and repair solutions PRIOR to considering any chemical means of pest control. Pests will be managed to:

- Maximize the quality of the educational environment for students, staff, and the public by providing a safe and health learning environment ensuring that the control method chosen does not become a barrier to accessing the school or the school grounds.
- Reduce or eliminate any potential human health hazards or environmental threat from either the pest or the choice of pest control selected.
- Prevent loss or damage to school structures or property and prevent a reoccurrence of the problem.
- Prevent pests from spreading into the community, or areas beyond the site.
- Enhance the quality of life for students, staff, and others.

EDUCATION AND TRAINING [15.05.02.03(B)(8)]

Each school within the District is required develop educational materials and document that they provide annual education and training to staff members, students and parents or guardians in integrated pest management procedures, roles and responsibilities, and how to access records available for public review.

Staff, students, pest managers, and the public will be educated annually about potential school pest problems and the **IPM System** including policies and the procedures to be used to achieve the desired pest management objectives and will be informed of their role in meeting these objectives as well as their rights to notification.

ANNUAL EVALUATION [15.05.02.03(B)(9)]

The District is required perform an annual evaluation of the IPM Strategies in order to ensure **IPM System** quality assurance. The annual evaluation includes a review of where, when, why and how chemical means of pest control were used. Every effort should be made to determine if non-chemical corrective actions can be taken in order to eliminate the need for chemical means of pest control when future occurrence of such a pest problem arise.

An annual review of the **IPM System** will be conducted to determine the effectiveness of the program and that program objectives have been achieved. This will include the review of inspection and monitoring reports, sanitation reports, pesticide application records, and other records to establish current conditions, progress of the program against pest problems and conditions, effectiveness of action thresholds, and to identify problem

areas in the **IPM System** that may need to be modified or changed to reduce the need for pesticide use in the future.

Evaluation is a critical part of both the structural and grounds management program and should include quantitative and qualitative assessments of pest population densities, densities of natural enemies, and the quality of the site after intervention takes place.

NOTIFICATION PROCEDURES [15.05.02.03(B)(10)]

The District is required to have procedures for notification of a parent or guardian of a student attending the school and of a staff member at the school before a pesticide is applied to a school building or on school grounds.

Either the District or the Board of Education will notify the school staff, students, parents, and guardians prior to pesticide applications made in school buildings or on school grounds in accordance with Maryland regulations. Notices will be posted in designated areas at school and sent home to parents and guardians of elementary school students and parents. Staff, as well as parents/guardians of students, at middle and high school who wish to be informed in advance of pesticide applications must be provided a system to register annually for pesticide notification. Parents/guardians of middle and high school students and staff who are registered for notification will be provided the required notices prior to a pesticide application.

Procedures and forms will be developed included to allow for an **Annual Notification Registration Form** for Middle School and High School students and staff [15.05.02.04(B)]. Procedures and Forms will also be included to provide to new students entering after the start of the academic year of the **BOE IPM Policy**, **BOE IPM System** and **IPM Plan**. Students and Staff should be informed of procedures for registration for notification at the start of the school year, however, applications for notification will be promptly processed and allowed at any time during the academic year.

The **IPM Plan** will include samples for all required notifications and forms including:

1. Annual Notification [15.05.02.04(A)]
2. Annual Notification Registration Form Middle School and High School [15.05.02.04(B)]
3. New Student/Staff Initial Notification [15.05.02.04(A)(3)]
4. Structural Application Notification – Students/Staff [15.05.02.05]
5. Structural Application Notification – Posting [15.05.02.08(A)]
6. Bait Station Notification – Students/Staff [15.05.02.08]
7. Bait Station Notification – Posting [15.05.02.08(B)]
8. Grounds Application Notification – Students/Staff [15.05.02.05]
9. Grounds Application Notification – Posting [15.05.02.08(C)]
10. Grounds Application – Turf Flag – Posting [15.05.01.15(B–G)]
11. Space Spraying Application Notification – Students/Staff [15.05.02.07(B)]
12. Space Spraying Application Notification – Posting [15.05.02.07(C)]

The **IPM Plan** will also include resources to facilitate implementation and institutionalization of IPM including:

1. Structural IPM CONTRACT Requirements [15.05.02]
2. IPM Best Management Practices Resources [15.05.02.03]

Board of Education Requirements - School IPM System

BOARD OF EDUCATION IPM PLAN

[15.05.02.03(A)(1)(b)]

*"(b) File a written integrated pest management **plan** with the Department for approval."*

MODEL Department of Education [DOE] IPM Plan

The DOE **IPM Plan** must be submitted by the District to the Maryland Department of Agriculture [MDA] for compliance review and approval. In addition, the District is required perform an Annual Evaluation [15.05.02.03(B)(9)] of the **IPM System** in order to ensure quality assurance. If the review warrants any changes to the **IPM System**, the revised **IPM Plan** must be submitted by the District to the MDA for compliance review and approval before it is implemented.

Refer to the **IPM Model Plan** included in this document – see **Table of Contents** entry:

"Required Components of a Maryland School IPM Plan"

Board of Education Requirements - School IPM System

BOARD OF EDUCATION POLICY

[15.05.02.03(B)(1)]

"B. The integrated pest management system of a county board of education shall meet the following minimum requirements:

(1) Have an integrated pest management policy;"

MODEL Board of Education [BOE] IPM Policy

It is the policy of the County Board of Education to develop, implement and enforce an Integrated Pest Management [IPM] System in accordance with Annotated Code of Maryland, Agricultural Article, §5-208.1 Integrated Pest Management.

The District's BOE will adhere to the statutory definition of IPM and implement a system based on this statutory definition of "Integrated pest management" as a managed pest control program in which methods are integrated and used to keep pests from causing economic, health-related, or aesthetic injury through the utilization of site or pest inspections, pest population monitoring, evaluating the need for control, and the use of one or more pest control methods, including sanitation, structural repair, nonchemical methods, and, when nontoxic options are unreasonable or have been exhausted, pesticides, in order to:

- (a) Minimize the use of pesticides; and
- (b) Minimize the risk to human health and the environment associated with pesticide applications.

The Board of Education authorizes the Department of Education Superintendent to develop an **IPM Plan** that states the regulations and procedures necessary to comply with the requirements of the State of Maryland in relation to IPM and the use of pesticides in and around schools. The Superintendent is further authorized to clarify roles and responsibilities of staff and appoint a **IPM SYSTEM Contact Person** to serve as the IPM Coordinator. The **IPM SYSTEM** requires an annual evaluation of IPM Strategies and IPM program quality assurance, ensuring the safest, most up-to-date methods are identified and employed.

Required Components of a Maryland School IPM Plan

ROLES AND RESPONSIBILITIES

[15.05.02.03(B)(2)]

*“B. (2) Have a policy on pest management **roles and responsibilities** of decision makers, including the name, address, and telephone number of the contact person;”*

MODEL IPM PLAN – ROLES AND RESPONSIBILITIES

The **IPM Plan** includes and documents descriptions of pest management roles and responsibilities of decision makers, identifies decision makers and includes the name, address, and telephone number as well as the contact information for the District’s **IPM Contact Person** [*IPM Coordinator*]. Review and update of all contact information for decision makers will be included in the ANNUAL EVALUATION [15.05.02.03(B)(9)]. The primary contact person for the District’s **IPM System** as well as each School’s **IPM Contact Person** are included on the last page of this **IPM Plan**. Refer to **Table of Contents: IPM SYSTEM CONTACTS – District and School Level**.

This section of the **IPM Plan** documents the roles and responsibilities for;

- 1) **IPM Contact Person** (a.k.a. IPM Coordinator)
- 2) **SCHOOL ADMINISTRATOR** (i.e. Principal)
- 3) **STUDENTS and STAFF**
- 4) **CUSTODIAL STAFF**
- 5) **GROUNDS DEPARTMENT STAFF**
- 6) **PESTICIDE APPLICATOR**
- 7) **CONTRACT SERVICE PROVIDER** [CSP]

IPM CONTACT PERSON – a.k.a. the IPM Coordinator:

The District’s [*enter title only of the person identified as IPM SYSTEM Contact Person – e.g. Department of School Facilities Safety and Regulatory Affairs Specialist*] will be the primary **IPM Contact Person** and serve as the **IPM Coordinator** for the District. The **IPM Coordinator** will be responsible for implementing the **IPM Policy** [15.05.02.03(B)(1)] and **IPM Plan** [15.05.02.03(A)(1)(b)] as outlined by the **IPM System** [15.05.02.03(A)(1)(a)]. All names and contact information for the **IPM System** are listed and maintained in the “**IPM SYSTEM CONTACTS – District and School Level**” section of manual – refer to **Table of Contents**.

IPM CONTACT PERSON Responsibilities:

The **IPM System** requires the assistance and cooperation of the BOE, DOE administration, staff, and students and in some cases, outside contractors. The District, with the approval of the Board of Education, will establish an **IPM Contact Person** to serve as a liaison between the administration and pest control system in order to provide oversight, consistency in the pest control system, and ensure the provisions of the **IPM System** are fulfilled.

The **IPM Contact Person** is responsible for the implementation of the program and facilitates the communication between the decision makers and site workers. They oversee the program and assure the program requirements are met. They are also available to answer questions from building occupants and parents as well as address any concerns with achieving pest management objectives and with customer satisfaction.

The **IPM Contact Person** will advise the BOE, DOE administration, staff, parents and guardians and students as necessary of **IPM System** changes including new laws and regulations effecting the **IPM System** and submit any

BOE and DOE approved **IPM Plan** revisions to the Maryland Department of Agriculture [MDA] for approval prior to adopting and implementing any changes to the **IPM System** or **IPM Plan**. [15.05.02.03(A)(2)].

The **IPM Contact Person** will oversee the implementation and enforcement of the **IPM System**, identify responsibilities and roles of administrators (and staff), oversee contracts and contractors, review problem areas identified through the inspection and monitoring, address pest problems reported and determine (and approve) pest control method to employ to correct the pest problem. The **IPM Contact Person** also serves as the liaison between the DOE, the school administration and parents, guardians, students, and staff to address questions and concerns regarding the **IPM System** and pest control practices.

The **IPM Contact Person** will make recommendations and determine the best procedure to address pest issues, correct problem areas, and must approve the use of any pesticides PRIOR to application. The **IPM Contact Person** will decide when and if a pesticide is to be used, after utilizing site and pest inspections, performing pest population monitoring, evaluating the need for control (based on established **IPM Plan** thresholds), and the ensure the use of one or more pest control methods, including sanitation, structural repair, and other nonchemical methods are employed.

The **IPM Contact Person** will decide, when non-chemical/non-toxic options are unreasonable or have been exhausted, if and when a pesticide is to be used and what pesticide should be used. Any pest control method used must minimize the use of pesticides and minimize the risk to human health and the environment associated with pesticide applications.

Summary of IPM CONTACT PERSON role and responsibilities:

- Evaluate each school's implementation and progress with the **IPM Plan**, oversee the Annual Evaluation [15.05.02.03(A)(9)], report the Evaluation annually to the BOE, and oversee any corrective action needed based on the BOE and DOE review of the Evaluation.
- Ensure that the staff, contracted Pest Control Operator [PCO], school system certified pest control applicators, school administrators, Facilities Dept, Custodial, Maintenance and Grounds Services comply with the **IPM System**, Maryland Statute [Education and Agriculture Articles] and Maryland Regulations.
- Ensure that pesticides are only applied after evaluating and documenting the need for control, and the use of one or more pest control methods (including sanitation, structural repair, nonchemical methods) have been employed. Only when non-chemical/non-toxic options are unreasonable or have been exhausted, determine least toxic pesticide option to control the pest.
- Coordinate any required postings and/or notification of parents and staff about pesticide use as required by statute and the District's notification procedure as documented in this **IPM Plan**.
- Maintain each school's **IPM SYSTEM LOG** notebook and ensure it is available in a publicly accessible area.
- Review **IPM SYSTEM LOG** notebook to ensure pest sightings are recorded and share information with contracted Pest Control Operator [PCO], school administrators, Facilities Dept, Custodial, Maintenance and Grounds Services for determination of pest control method selected to resolve the issue.
- Ensure that the PCO's, Custodial, Maintenance, or Grounds recommendations on maintenance and sanitation solutions are promptly communicated to the District staff member (i.e. Facilities Department) so that corrective action can be taken, evaluate whether the method addressed the pest problem and determine if any additional action is needed to resolve the pest issue.
- Record all pesticide use in **IPM SYSTEM LOG** notebook and make records available to upon request.
- Ensure that any pesticide applications are performed when school is not in session, or after regular school hours and that no unprotected persons are in the area where the pesticide is being applied.

- Evaluate all pesticide products prior to use on school property to determine if they are the least risk and least toxic to public health and the environment, do not warn of groundwater (or well) contamination, and are appropriate for use on in school building and on school grounds.
- When pesticide use is deemed necessary and **prior to application**, review and approve all pesticide products selected by the PCO, certified pesticide applicators, or Grounds Department and confirm that it is the least toxic available, and that required notifications and posting are completed as required in the **IPM Plan**.

SCHOOL ADMINISTRATOR (i.e. Principal) Responsibilities:

The Principal of each school is responsible for the **IPM System** at their respective school. This **IPM Plan** documents how the **IPM System** is to be implemented and followed at each school. Principals will receive, from the **IPM Contact Person**, updates about the **IPM System** whenever necessary. The Principal will work with the **IPM Contact Person** to ensure staff, students, pest managers, and parents/guardians are educated annually about potential school pest problems, how to report these problems, the **IPM System** (including policies and the procedures to be used to achieve the desired pest management objectives), ensure that they are informed of their role in meeting **IPM System** objectives, their rights to notification and their right to access the school's **IPM SYSTEM LOG** notebook.

The Principal will be informed of pest sighting and coordinate with the **IPM CONTACT Person** the **IPM Plan** solution to address the issue. The Principal will engage the school staff as necessary to facilitate the use of non-chemical means of pest control (*including sanitation, structural repair, and other non-chemical methods*) and (*only after non-toxic options are unreasonable or have been exhausted*) execute the requirements for notification and posting of any pesticide application that the **IPM CONTACT Person** has determined to be least toxic, least risk pesticide option to control the pest.

The Principal is to ensure that their school has at least one qualified custodian trained in IPM methods and procedures including performing sanitation, reporting structural repair, and the use of non-chemical methods of managing pest situations. Typically, this is usually the lead custodian. The Principal is encouraged to ensure the training of all staff and custodians in IPM methods and the **IPM Plan** requirements.

STUDENTS and STAFF Responsibilities:

Each school's administration (i.e. principal and school personnel) is responsible for the **IPM System** at their respective school. The occupants (i.e. students and staff) are the "customers" and are the ones who should cooperate with the sanitation requirements of the school system. Their assistance with the program is also requested by reporting any evidence of pest activity which they find.

Students and staff will comply with the provisions of the **IPM System** by ensuring that areas requiring maintenance or repair, sanitation problems, and pest problems or sightings that they encounter at the school are reported to the **IPM Contact Person** by documenting the sighting in the **IPM SYSTEM LOG** notebook maintained in each school in a publicly accessible areas. Pest issues reported directly via phone call, email or in person to the **IPM Contact Person** must also be recorded in the **IPM SYSTEM LOG** notebook.

Students and staff will be instructed during annual **IPM System EDUCATION AND TRAINING** [15.05.02.03(B)(8)] to follow good sanitation practices and how to report problems to the school's Principal and the **IPM Contact Person**. They will also be educated on their rights to notification and how to obtain information regarding the **IPM System** including how and where to access the **IPM SYSTEM LOG** notebook.

Students can help prevent pest problems by

- cleaning up left over food and crumbs
- not leaving food in desk, cubbies or lockers

- not placing gum under desks
- removing paper clutter
- keeping food and beverages in designate areas
- reporting pest, when noticed, to teachers

Staff can help in the prevention of pest problems by

- leaving pest control and pest management to trained professionals
- not moving sticky traps or other pest monitoring devices
- not propping open windows, screens, or exterior doors
- removing trash, especially trash that contains food
- keeping areas dry by removing standing water and items that are wet or have been damaged by water
- storing animal feed in tightly sealed containers, cleaning up spills immediately and cleaning cages on a regular basis
- keeping instructional food items, such as dried beans used for math exercises, in tightly sealed containers
- keeping refrigerators, vending machines and microwaves clean and free of spills at ALL times
- avoiding the use of shelf paper or corrugated cardboard boxes (for storage)
- discarding any infested material or food items

CUSTODIAL STAFF Responsibilities:

Each school is to have at least one qualified custodian trained in IPM procedures in which methods are integrated into custodial activities and used to keep pests from causing economic, health-related, or aesthetic injury through the utilization of site or pest inspections, pest population monitoring, evaluating the need for control, and the use of one or more pest control methods, including sanitation, structural repair, nonchemical methods, and, when nontoxic options are unreasonable or have been exhausted, pesticides, in order to minimize the use of pesticides; and minimize the risk to human health and the environment associated with pesticide applications.

Typically, this is usually the lead custodian, however, school administrators are encouraged to train all custodians in IPM procedures. **Note that ONLY Maryland Department of Agriculture Certified Pest Control Applicators [Per MDA Regulations 15.05.01 - The Pesticide Applicator's Law] may apply pesticides and ONLY after receiving approval and instruction from the IPM CONTACT Person.**

GROUNDS DEPARTMENT STAFF Responsibilities:

Each school is to have at least one qualified Grounds department contact trained in IPM procedures in which methods are integrated into Ground maintenance procedures and used to keep pests from causing economic, health-related, or aesthetic injury through the utilization of site or pest inspections, pest population monitoring, evaluating the need for control, and the use of one or more pest control methods, including sanitation, structural repair, nonchemical methods, and, when nontoxic options are unreasonable or have been exhausted, pesticides, in order to minimize the use of pesticides; and minimize the risk to human health and the environment associated with pesticide applications. Typically, this is usually a staff member of the District's Grounds Department who is assigned to that school. The District encourages the Grounds Department to train all Grounds Department staff in IPM procedures the requirements of the **IPM SYSTEM**.

Any person applying pesticide in a school building or on school grounds must be trained and knowledgeable in the principles and practices of IPM, be educated on the **IPM Plan** procedures, and must be properly licensed or registered as a certified pesticide applicator with the Maryland Department of Agriculture. **Note that ONLY Maryland Department of Agriculture Certified Pest Control Applicators [Per MDA Regulations 15.05.01 - The**

Pesticide Applicator's Law] may apply pesticides and ONLY after receiving approval and instruction from the IPM CONTACT Person.

Applicators must follow all local ordinances, state regulations, federal law, and EPA Product Label instructions and precautions. Each EPA Product Label states "*It is a violation of Federal law to use this product in a manner inconsistent with its labeling*" so, applicators must fully comply the EPA Product Label, the District's **IPM Policy**, **IPM Regulations** and **IPM Plan**. This applies to both District employees and contracted Pest Control Operator [PCO] applicators.

CONTRACT SERVICE PROVIDER [CSP] Responsibilities:

Any person applying pesticide in a school building or on school grounds must be trained and knowledgeable in the principles and practices of IPM, be educated on the **IPM Plan** procedures, and must be properly licensed or registered as a certified pesticide applicator with the Maryland Department of Agriculture. **Note that ONLY Maryland Department of Agriculture Certified Pest Control Applicators [Per MDA Regulations 15.05.01 - The Pesticide Applicator's Law] may apply pesticides and ONLY after receiving approval and instruction from the IPM CONTACT Person.**

In addition to adhering to any CONTRACT requirements, the CONTRACT SERVICE PROVIDER [CSP] applicators must follow all local ordinances, state regulations, federal law, and EPA Product Label instructions and precautions. Each EPA Product Label states "*It is a violation of Federal law to use this product in a manner inconsistent with its labeling*" so, applicators must fully comply the EPA Product Label, the District's **IPM Policy**, **IPM Regulations** and **IPM Plan**. This applies to both District employees and contracted Pest Control Operator [PCO] under contract with the District or School for pest control.

Inspection Guidelines for CONTRACT SERVICE PROVIDER [CSP]: The following areas will be inspected at the monthly maintenance service for each school;

EXTERIOR AREAS:

- inspect for evidence of pest activity, harborage areas, proper disposal of trash, good drainage, maintenance of exterior building perimeter
- any deficiencies/recommendations to be included on monthly service report

BUILDING INTERIOR:

- inspect areas on interior of building including cafeteria, offices, food storage, kitchen, food prep areas, common areas, restrooms, vending areas
- any deficiencies/recommendations to be included on monthly service report

Should an infestation of any pest be found at any location, recommendations will be made to the District's **IPM Contact Person** regarding treatment or prevention of future problems. If recommendations include application of pesticides, time will be scheduled, with the District's **IPM Contact Person's** following the **IPM SYSTEM** compliance review and approval of the pesticide selected for use to address the pest problem. Should a school or District report a pest issue, CONTRACT SERVICE PROVIDER [CSP] will inspect the area(s) of reported problems, and make recommendations to correct the situation to the **IPM Contact Person**. Only the **IPM Contact Person** can decide what pest control action will be taken.

Required Components of a Maryland School IPM Plan

PEST MANAGEMENT PROCEDURES AND OBJECTIVES

[15.05.02.03(B)(3)]

"B. (3) Have procedures for conducting the pest control program, including pest management objectives;"

MODEL IPM PLAN – PEST MANAGEMENT PROCEDURES AND OBJECTIVES

PROGRAM OBJECTIVES:

Manage pests that may occur on school sites to prevent interference with the learning environment of the students. Eliminate potential injury to students, staff and other occupants. Preserve the integrity of the school building or structures. Ensure that the method used to control the pest does not become a barrier to students and staff accessing and using the building or the grounds or cause harm to students or staff, or cause any damage to the school, the grounds, or the environment.

The pest control procedures used must ensure the least possible risk and hazard to students, staff, property, and the environment (including Indoor Air Quality, drinking/ground water, etc.) with consideration to employing the most economical means possible to control the pest. IPM objectives are to reduce human exposure to hazardous pesticides, reducing environmental pollution and contamination, suppressing pests that exceed establish thresholds and reducing pest damage.

PEST MANAGEMENT PROCEDURES:

Pests are populations of living organisms (insects, animals, plants, or microorganisms) that may interfere with the use of the school site for human purposes. 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. The IPM System relies on the coordinated use of pest and environmental information to identify the best available pest management methods to prevent unacceptable levels of pest damage while ensuring the choice of control does not expose students, staff, property, and/or the environment to hazardous materials that impact public health or compromise the environment, both indoors and outdoors.

Long term control of pests is achieved by using information about biology and habits of the pest and its interaction with its surroundings. Proper installation of plants, appropriate watering regimes, and choosing plant species that are suited to specific sites and usage, are some of the most effective measures for achieving long term pest control for school landscapes and grounds. Employing exclusion practices (i.e. door sweeps, screens, sealing cracks and crevasses, addressing water incursion, etc.) are the best method for ensuring that pests do not enter the school building thereby reducing or eliminating the need for chemical means of pest control. Good custodial and sanitation practices are vital to ensuring pests do not have access to food, water or shelter.

The **IPM SYSTEM** procedures consist of various components which may not be conducted in any particular order, but are overlapping in nature when used as intended and become institutionalized. They are a combination of practices which will help achieve **IPM SYSTEM** goals for a long-term pest control program. The main elements of the **IPM PLAN** can be described as follows.

1. Notices will be sent out at the beginning of each school year informing parents/guardians and staff of the existence of the **IPM SYSTEM** and describing what it is. Notices will also be posted and distributed adhering to the **IPM PLAN** notification requirements whenever a pesticide is used.

2. Periodic inspections (*at least monthly*) will be made to monitor pest conditions both in the building and on the grounds.
3. Along with the inspections and monitoring elements, there will be open communication between the building occupants, the school administration, the **IPM CONTACT Person** and the contract service provider (if services are contracted out).
4. An **IPM SYSTEM LOG** notebook will be maintained to document dates, problems, descriptions of pest issues and how the issue was resolve. It will also be used to document pertinent information such as EPA Product Labels and SDS Information for products used.
5. Basic pest-prevention strategies will be undertaken as the fundamental concept of **the IPM SYSTEM**. Such preventive measures include sanitation and structural repair and using physical and mechanical controls such as exclusion practices, screens, door sweeps, and traps, etc.
6. The **IPM SYSTEM** will undergo an annual review to assure that the expectations of the programs intent are being met. This review will allow evaluation of how the program is working and to determine if any changes are necessary, and then take steps to implement any necessary changes.

Required Components of a Maryland School IPM Plan

INSPECTION AND MONITORING ACTIVITIES

[15.05.02.03(B)(4)]

*"B. (4) Have **procedures** for regular **inspection and monitoring** activities to determine the presence and distribution of pests;"*

MODEL IPM PLAN – INSPECTION AND MONITORING ACTIVITIES

The **IPM Plan** includes and documents procedures for regular inspection and monitoring activities to determine the presence and distribution of pests. Records must be created and maintained for inspections and monitoring activities. Inspection and Monitoring procedures are documented in this section of the IPM Plan. As outlined in the RECORD KEEPING [15.05.02.03(B)(6)] section of the **IPM Plan**, each school will keep these records in the school's **IPM SYSTEM LOG** notebook – which is to be stored a publicly accessible area at each school.

Refer to **Table of Contents** section for the **FORMS and CHECKLISTS** for required **IPM Plan** documentation for INSPECTION AND MONITORING activities.

The inspection and monitoring procedures are included in this section ensure the **IPM Plan** is integrated and institutionalized so that the methods can be used to keep pests from causing economic, health-related, or aesthetic injury through the utilization of site or pest inspections, pest population monitoring, evaluating the need for control, and the use of one or more pest control methods, including sanitation, structural repair, nonchemical methods, and, when nontoxic options are unreasonable or have been exhausted, pesticides, in order to minimize the use of pesticides and minimize the risk to human health and the environment associated with pesticide applications.

IPM Plan procedures will determine when to control pests and identify conditions contributing to pest problems through the use of monitoring and thorough inspections conducted at regular intervals. Problem areas will be identified where alternative pest control technologies can be incorporated, such as exclusion techniques. Routine pesticide applications are not allowed under Maryland Law nor by this **IPM Plan**.

The necessity for pest control, if warranted, will be based on information obtained from inspections and monitoring. These actions will be based on action threshold levels that will be established based on the site and the pest (refer to STANDARDS FOR THRESHOLD AND CORRECTIVE ACTIONS [15.05.02.03(B)(7)] section of the **IPM Plan**).

Within school grounds, these decisions are based on key pests; key plants, and key locations found within the landscape. Action thresholds for school grounds should be based on pest management objectives that have been established to satisfy the needs associated with the usage of specific sites.

When pest control procedures are warranted in and around school buildings, one or more pest control methods including sanitation, custodial, maintenance, structural repair, cultural practices, mechanical control, biological, and other non-chemical methods must be exhausted prior to any consideration of a chemical means [i.e. pesticides] of pest control.

PROCEDURES FOR INSPECTIONS AND MONITORING:

The inspection of the school, including the grounds, is a vital part of the **IPM SYSTEM**. Through these inspections pests can be identified and evaluations can be performed to determine if any further action is needed. Routine inspection and accurate identification of pests are vital steps in the **IPM SYSTEM** to ensure that control methods will be effective. Once the pest has been identified and the source of its activity pinpointed, habitat modifications – primarily, exclusion, repair, and sanitation efforts – may greatly reduce the prevalence of the pest.

Monitoring includes inspecting areas for pest evidence, entry points, food, water, and harborage sites, and estimating pest population levels. The information gained through monitoring is evaluated to determine whether the action threshold has been exceeded and what can be done in the way of prevention.

The three basic components of pest inspections are:

1. walk-through visual inspections of all areas of the building including the outside building perimeter and the grounds,
2. use of monitoring traps, and
3. information from school personnel, including review of the **IPM SYSTEM LOG** notebook.

VISUAL INSPECTIONS:

The school-based observer (e.g. administrator, facilities, custodial, grounds personnel as well as students and staff) should be educated on how to record any issues they encounter (in the school or on the school grounds) in the **IPM SYSTEM LOG** notebook.

In addition, any contracted Pest Control Operator [PCO] engaged by the school or the District will conduct the periodic inspections at each school – as determined by the contract or the **IPM Contact Person**. The PCO will be familiar with the **IPM SYSTEM** and how **IPM PLAN** is implemented at each school. The inspections will be conducted in accordance with the approved contract, with any requirements documented in the **IPM SYSTEM** and **IPM PLAN**. Special attention will be paid to those areas which are more prone to pests including:

1. cafeterias and snack rooms
2. food storage areas
3. staff lounges
4. family and consumer science rooms
5. loading docks.
6. side walks
7. driveways
8. around buildings
9. dumpster storage areas
10. athletic fields

The following guidelines will be followed when conducting the periodic visual inspections;

1. A bright flashlight will be used as necessary during inspections to insure all areas will be seen.
2. Other evidence of pests will be noted also. This may include any
 - droppings
 - gnawing and/or tracks (*from rodents*)
 - damage (*such as beetle exit holes*)
 - shed insect skins
3. Window sills will be inspected
4. Underneath and behind furniture will be inspected
5. Potential moisture problems will be inspected

6. Damaged screens, doors and walls which could allow pest entry will be inspected
7. Sanitation problems will be indicated
8. School grounds will be inspected for signs of pest activity.

MONITORING TRAPS:

Sticky traps are glue-covered traps which are generally used to trap cockroaches, but can also be used to monitor all kinds of crawling insects. Sticky traps will be used as a monitoring device in highly susceptible areas or other areas which have had reports of pest sightings. The information gained from the numbers of pests found will be used to determine if our action threshold has been met and what, if any, further action will be undertaken. Procedures for using sticky traps;

1. The traps will be placed where school children are not likely to find them and will not be placed in the open.
2. Traps will also be located so as not to be affected by routine cleaning procedures.
3. Traps may be placed in the following locations:
 - Inside cabinets
 - In drawers
 - Under sinks and stoves
 - Under or behind furniture
 - Near water or heat sources (but not directly on)
 - On window ledges
 - On food storage shelves

Required Components of a Maryland School IPM Plan

STANDARDS (ACTION)

[15.05.02.03(B)(5)]

*"(5) Have **standards** to determine the:
(a) Severity of pest infestation; and
(b) Need for **corrective action**;"*

MODEL IPM PLAN - THRESHOLD AND CORRECTIVE ACTION STANDARDS

The **IPM Plan's** standards and thresholds, which determine the severity of pest infestation and the need for corrective action, are documented in this section. Treatments are not made without first monitoring the situation and evaluating whether a pest is likely to be a problem.

Corrective actions must be integrated through the utilization of site or pest inspections, pest population monitoring, evaluating the need for control, and the use of one or more pest control methods, including sanitation, structural repair, nonchemical methods, and, when nontoxic options are unreasonable or have been exhausted, pesticides, in order to minimize the use of pesticides and minimize the risk to human health and the environment associated with pesticide applications.

An action threshold is the level at which action is initiated. The action threshold is determined by the **IPM Contact Person** with input from the contracted Pest Control Operator [PCO], school administrator, custodial or grounds department staff. This is a case by case decision and may vary depending on each situation. Decisions are based upon the information obtained through inspection, identifying the pest and monitoring.

IPM practitioners shall depend on current, comprehensive information on the pest and its environment and the best available pest control methods. By applying IPM principles, unacceptable levels of pest activity and damage will be prevented by the most economical means while minimizing the risk to human health and the environment associated with pesticide applications. The decision to use pesticides will be made after consideration of alternatives or other available options have been exhausted or are deemed unreasonable.

THRESHOLDS:

An action threshold is the level at which pest control action is initiated. The action threshold is set by the **IPM Contact Person** with input from the **Contract Service Provider** and the building occupants. The presence of some pests does not, in itself, necessarily require action. The final determination will be made by the **IPM Contact Person** and will be based upon the information obtained through inspection, identifying and monitoring.

In schools, there are three injury levels used to determine when to implement pest management strategies:

1. **Medical Injury Levels** are used whenever a pest can cause illness to humans either directly or indirectly. Rodent-transmitted diseases would be one example.
2. **Economic Injury Levels** determine the level of damage to a structure or plant. Once damage has reached a level that is severe enough to cause or is expected to cause economic loss, control should be implemented. An example would be a termite infestation that requires replacement of some structure.
3. **Aesthetic Injury Levels**, on the other hand, are the levels at which a pest becomes a nuisance for whatever reason. Perhaps this is the level at which an aphid population drops enough honeydew onto a picnic table

beneath a shade tree to disturb the people using the table. Aesthetic injury levels are subjective, that is, what is tolerated by one person may not be tolerated by another. Aesthetics pest control cannot be prioritized over student safety and well-being.

All IPM programs, regardless of the situation, share the same components.

- Monitoring pest populations and other relevant factors.
- Accurate identification of pests.
- Determination of the injury thresholds that warrant corrective action.
- Identifying and employing non-chemical means of pest control.
- Only after all non-chemical means have been exhausted, timing treatments to insure the most effective control of the pest problem with the least interference to the students and staff's use of the school and its campus and cannot become a barrier to students accessing the school.
- Employing spot-treatment for pests when non-chemical means have been exhausted.
- Exhausting all non-chemical pest control measures first.
- Evaluating the effectiveness of treatments.
- Education of all people involved with the pest problem

CORRECTIVE ACTIONS:

IPM is a Decision-Making Process and should take the following questions into consideration before determining if corrective action is needed.

1. ***Is treatment necessary?*** The mere presence of a pest doesn't necessarily warrant treatment. Sometimes a fairly large population of pests can be tolerated while other times the presence of a single pest is intolerable. In addition, the determination of treatment will vary among individuals.
2. ***Where should the treatment take place?*** Pest control must consider the whole system to determine the best place to solve the problem. Corrective actions or treatments should be made where the actions will have the greatest effect. It is necessary to identify the pest so as to completely understand the biology and behavior of the pest at hand and thus select the most appropriate action.
3. ***When should action be taken?*** Timing is very important. There are optimum times in both insect and disease life cycles when they are most susceptible to control. Again, it is very important to understand the biology and behavior of your pest.
4. ***Which strategies should be used?*** IPM uses a multi-tactic approach. Because biological systems are complex, management strategies must also integrate several strategies.

Rarely will a single tactic solve the problem for long. Implementing an IPM program means taking a "whole system" or ecosystem approach to solve a pest problem. Both the living and non-living components must be considered when determining which approach to take. Each component has an impact on every other component. This **IPM PLAN** will help you look at the specific pest problems you are likely to encounter using a system approach. It will also help you develop an integrated management plan to deal with the problem.

There are four control strategies that can be used in integrated pest management;

1. **Cultural** control for school grounds includes using fertilization, irrigation, site selection, plant selection and/or sanitation, as well as aerating and overseeding turf areas, are all ways to prevent pest problems in the first place. Mow strips under fence lines and around the school building and other structures help to keep both pests and plant growth away and reduce the need for corrective actions.
2. **Physical** control is another preventative strategy. For buildings exclusion practices ensure that pests are not able to enter the school building. These include screens, door sweeps, sealing cracks and crevices and implementing other physical barriers. Additionally, temperature and humidity modification, traps, physical repellents should be considered. For grounds control, mechanical or hand removal of weeds, caulking of hardscape (eg. Sidewalks, curbs, parking lots, etc.) cracks will minimize issues.
3. **Biological control** uses beneficial organisms (insects, bacteria, etc.) to control pests. The control should seek to conserve naturally occurring beneficial insects by providing them with food and shelter.
4. **Chemical control** is used only after all other control strategies have been attempted and exhausted. Always use chemicals in an environmentally responsible manner and in accordance with the EPA Product Label in order to protect public health and the school environment. Do not use broad-spectrum pesticides that will inadvertently damage non-target plants or kill the beneficial insects, such as bees.

WEED THRESHOLDS: The management of weeds on school grounds is an important component of an IPM program in order to reduce or eliminate additional pest harborage and breeding sites. Weed control may involve the use of pesticides if nontoxic options are unreasonable or have been exhausted. Controls should be initiated against weeds in sidewalks, play areas, parking areas, and driveways when they pose a threat to safe pedestrian traffic or create serious structural damage to these surfaces.

PLANT INSECT THRESHOLDS: When approximately 10 percent of the plant is affected (removed, damaged, or discolored), or if the pest has the potential to kill the plant (such as is the case with some boring and scale insects) action should be considered – including removing the plant from the school campus, rather than using a pesticide. Removing the damaged sections of the plant is another option.

Required Components of a Maryland School IPM Plan

RECORDS KEEPING

[15.05.02.03(B)(6)]

“(6) Require each school:

(a) To make records documenting:

(i) Pest sightings;

(ii) Pest control procedures; and

(iii) Any communications to students and staff members regarding integrated pest management or pesticide use; and

(b) To maintain these records for 2 years and make these records immediately available, on request, to the Department”

MODEL IPM MODEL - RECORD KEEPING

Each school within the District is required to make on-site records documenting pest sightings, pest control procedures, pest control actions taken and any communications to students and staff members regarding integrated pest management or pesticide use. All records are public and will be made promptly available to students, staff and the interested persons upon request. As outlined in this section of the **IPM Plan**, each school will keep these records in the school's **IPM SYSTEM LOG** notebook – which is to be stored a publicly accessible area at each school.

Records of pesticide use are maintained at each facility or school. Duplicate copies will be maintained by and are also available from the District's Facilities Department. Records must be current and accurate if **IPM System** is to work. In addition, pest surveillance data sheets that record the number of pests or other indicators of pest populations shall be maintained to verify the need for treatments.

Records of pesticide use [15.05.01.12] must be provided to the school by the licensee, permittee, or certified applicator at the time of the pesticide application [including work order, EPA Product Label (PL) and SDS Information] and will be maintained for a minimum of 2 years. Records must be current and accurate. Following any pesticide application, the EPA Product Label and SDS information will be immediately provided upon request.

In addition, pest surveillance data sheets that record the number of pests or other indicators of pest populations are to be maintained to verify the need for corrective action or treatments. Pest control procedures, including cultural practices utilized on school grounds, will be tracked. Documentation of communications to students and staff regarding IPM and pesticide use will be maintained by the School and the Contact Person. All records will be made promptly available to students, staff and the public upon request.

IPM SYSTEM LOG notebook will be maintained in each school or facility in a publicly accessible areas. It should be housed in a 3-ring binder (with a Table of Contents and indexed with tabs for each section) to facilitate tracking and documentation that all required actions are followed. The **IPM SYSTEM LOG** Book contains the following information:

1. Integrated Pest Management Plan
2. Observation Log
3. Inspection reports including observations, monitoring techniques and all actions taken
 - Buildings
 - Grounds
4. Maintenance Work Orders
5. Pesticide Authorization Record – for each application
6. Notification Reports
 - Copy of Annual Notification

- Copy of notification for each application of a pesticide – both posting and memos
- 7. EPA Product Labels
- 8. Safety Data Sheets (SDS)
- 9. Education/Training - Records and Documents
- 10. Contacts for information and decision makers
- 11. Copy of Pest Control Service Agreements – if outside contractors are used
- 12. Maps of the School and Campus

Required Components of a Maryland School IPM Plan

PESTICIDE MANAGEMENT STRATEGIES (IPM) [15.05.02.03(B)(7)]

*"(7) Have **pest management strategies**, including sanitation, structural repair, physical, cultural, and biological control, nonchemical methods and pesticide application, when nontoxic options are unreasonable or have been exhausted;*

MODEL IPM PLAN - PEST MANAGEMENT STRATEGIES (IPM)

This section documents for each school within the District the required pest management strategies. Strategies include methods that are integrated or institutionalized at the School and throughout the District to keep pests from causing economic, health-related, or aesthetic injury through the utilization of site or pest inspections, pest population monitoring, evaluating the need for control, and the use of one or more pest control methods, including sanitation, structural repair, physical, cultural, and biological control, nonchemical methods, and, when nontoxic options are unreasonable or have been exhausted, pesticides, in order to minimize the use of pesticides; and minimize the risk to human health and the environment associated with pesticide applications.

The IPM Plan includes any proposed pest management strategies including exclusion, prevention, maintenance, custodial and repair solutions prior to considering any chemical means of pest control. Pests will be managed to:

- Maximize the quality of the educational environment for students, staff, and the public by providing a safe and health learning environment ensuring that the control method chosen does not become a barrier to accessing the school or the school grounds.
- Reduce or eliminate any potential human health hazards or environmental threat from either the pest or the choice of pest control selected.
- Prevent loss or damage to school structures or property and prevent a reoccurrence of the problem.
- Prevent pests from spreading into the community, or areas beyond the site.

IPM strategies will be used to determine when to control pests and whether to use mechanical, physical, chemical, cultural, and/or biological means. IPM practitioners depend on current, comprehensive information on the pest and its environment and the best available pest control methods. Applying IPM principles prevents unacceptable levels of pest activity and damage to occur by combining the most economical means of control with the least possible hazard to people, property, and the environment.

The decision to use a pesticide will be based on a review of all other available options and a determination that these options are not acceptable or are not feasible. Cost or staffing considerations alone will not be adequate justification for use of chemical control agents. Selection of non-chemical pest management methods will be implemented whenever possible to provide the desired control and must be exhausted prior to the use of any pesticide. It is the practice of the District to utilize IPM principles to manage pest populations adequately. The full range of alternatives, including no action, will be considered. PEST MANAGEMENT STRATEGIES include:

1. Assigning Roles and Responsibilities
2. Defining Pest Management Objectives and Procedures
3. Performing Inspection / Monitoring
4. Defining Standard for Action Thresholds and Control Methods
5. Record Keeping
6. Employing IPM based pest management strategies
7. Education and Training
8. Annual Program Evaluation for Quality Assurance
9. Transparency via Notification

PEST MANAGEMENT STRATEGIES BY AREA of CONCERN:

Pest-prevention measures can be incorporated into existing structures and on school grounds. Such preventive measures are intended to reduce or eliminate the need for pesticide applications. These include sanitation and structural repair and employing physical and mechanical controls such as screens and traps. The District will endeavor to follow these policies by enforcing and adhering to practices below.

SANITATION INDOORS:

- Clean all areas of the school regularly.
- Pay special attention to cleaning areas where food is eaten, stored, served, cooked or disposed.
- Keep areas with pets clean. Store all pet food in pest resistant containers.
- Keep areas around sinks and toilets dry.
- Clean up spills as they happen. Possibly make spill clean up the responsibility of the group that makes them.
- Focus cleaning efforts on areas that have more pest problems.
- Remove trash more frequently in problem areas.
- Empty any trash receptacles that have food or food-related items in them at least daily.
- Maintain school interiors to reduce the areas where pests can hide and to reduce food and water sources.

SANITATION OUTDOORS:

- Clean areas around dumpsters and outdoor trash receptacles at least once a week.
- In (at least) the late summer and early fall try to keep trash receptacles away from areas where children play outdoors because trash receptacles attract wasps, other insects, and rodents.
- Keep grass and brush along the sides of the school well-trimmed. A two-foot vegetation free barrier of stone or dirt around the school is ideal (also known as a "mow-strip")
- Pick up outdoor trash regularly. Too much clutter can interfere with plant and grass growth and food and drink containers will attract wasps and other insects.

MAINTENANCE/PEST EXCLUSION:

- Screen windows that will be opened or keep them closed.
- Caulk or fill all holes and cracks in the walls, around pipes, etc.
- Fix leaky or "sweaty" piping to reduce water supplied to pests.
- Use pest-resistant food storage containers for pet or human food. These containers will be plastic or glass containers with a tight seal that can be closed easily.
- Make sure all doors that lead outdoors are self-closing, or if they will be kept open, have another self-closing screen door present.
- Doors should be tight fitting with weather-stripping and door sweeps to keep out crawling pests.

OUTDOOR ANIMALS:

- Use pest resistant, self-closing trash receptacles and dumpsters. Keep them closed and remove garbage before it keeps the trash receptacle or dumpster open.
- Do not allow high grass or shrub areas to border athletic fields and other turf areas.

MONITORING:

- Monitor for pests routinely. Incorporate monitoring into other activities such as cleaning.
- Look for pests or evidence of pests (droppings, chew marks or other damage).

- Routinely check these key areas:
 - Food storage and preparation areas.
 - Garbage storage areas
 - Areas around water pipes.
- Place sticky traps in key areas (useful for insects as well as rodents)

ENTRYWAYS: These include doorways, overhead doors, windows, holes in exterior walls, openings around pipes, electrical fixtures, or ducts:

- Keep doors shut when not in use.
- Place weather stripping on doors.
- Caulk and seal openings in walls.
- Install or repair screens.
- Install air curtains.
- Keep vegetation, shrubs, and wood mulch at least 1 foot away from all structures.

EDUCATIONAL SPACES: These include offices, classrooms, laboratories, administrative offices, auditoriums, gymnasiums and hallways:

- Allow food and beverages only in designated areas.
- If indoor plants are present, keep them healthy. When small insect infestations appear, remove them manually.
- Keep areas as dry as possible by removing standing water and water damaged or wet materials.
- In the science lab or classroom with a pet, store animal foods in tightly sealed containers and regularly clean cages. In all areas, remove dust and debits.
- Routinely clean lockers and desks.
- Frequently vacuum carpeted areas.
- To avoid the spread of head lice, discourage students from exchanging hats or caps at school. Combing a person's hair with a "lice comb" or "nit comb" upon arrival at school (in the Health Room) will remove any nits (eggs) or lice and prevent the spread of lice into the school.

FOOD PREPARATION AND SERVICE AREAS: These include dining room, main kitchen, teachers' lounge, home economics kitchen, snack area, vending machines, and food storage rooms:

- Store food and waste in containers that are inaccessible to pests. Containers must have tight lids and be made of plastic, glass, or metal. Waste should be removed at the end of each day.
- Place screens on vents, windows, and floor drains to prevent cockroaches and other pests from using unscreened ducts or vents as pathways.
- Create inhospitable living conditions for pests by reducing availability of food and water - remove food debris, sweep up all crumbs, fix dripping faucets and leaks, and dry out wet areas.
- Improve cleaning practices, including promptly cleaning food preparation equipment after use and removing grease accumulation from vents, ovens, and stoves.
- Use caulk or paint to seal cracks and crevices.
- Capture rodents by using mechanical or glue traps. (Traps will be placed in areas that are inaccessible to children. Mechanical traps including glue boards, used in rodent control will be checked daily. Dispose of killed or trapped rodents within 24 hours.)

ROOMS AND AREAS WITH EXTENSIVE PLUMBING: These include bathrooms, rooms with sinks, locker rooms, dishwasher rooms, home economics classrooms, science laboratories, swimming pools, and greenhouses:

- Promptly repair leaks and correct other plumbing problems to deny pests access to water.
- Routinely clean floor drains, strainers and grates. Seal pipe chases.
- Keep areas dry. Avoid conditions that allow formation of condensation. Areas that never dry out are conducive to molds and fungi. Increasing ventilation may be necessary.
- Store paper products or cardboard boxes away from moist areas and direct contact with the floor or walls. This practice also allows for ease in inspection.

MAINTENANCE AREAS: These include boiler room, HVAC room or area, mechanical room, custodial/janitorial/housekeeping areas, and pipe chases:

- After use, promptly clean mops and mop buckets; dry mop buckets and hang mops vertically on rack above floor drain.
- Allow eating only in designated eating areas.
- Clean trash cans regularly, use plastic liners in trash cans, and use secure lids.
- Keep areas clean and as dry as possible and remove debris promptly.

EXTERIOR AREAS: These include flower/garden beds, playgrounds, parking lots, loading docks, ditches, refuse/recycling dumpsters, etc.

- Pickup food wrappers and drink containers to remove food sources.
- Check plants for pest activity.
- Caulk cracks and crevices permitting pest access to interior of buildings.
- Mulch garden, flower, and tree beds to keep weeds down.
- Manually or mechanically pull weeds from playgrounds, garden, flower, and tree beds, etc.
- Mechanical “weed-wack” weeds/grasses from sidewalks, parking lot cracks, exterior of buildings, etc.

GROUNDS: These include turf areas, lawns, athletic fields, environmental areas, ditches, etc.

- Pickup food wrappers and drink containers to remove food sources.
- Check plants for pest activity.
- Caulk cracks and crevices that permit weed seeds to grow on/around hardscapes.
- Manually or mechanically pull weeds. Mechanical “weed-wack” weeds/grasses from sidewalks, parking lot cracks, exterior of buildings, ditches, environmental areas, turf/lawn/athletic field edges, etc.
- Maintain healthy turf by selecting a mixture of turf types best adapted for the area.
- Raise mowing height for turf to enhance its competition with weeds, adjust cutting height of mower, depending on the grass type; sharpen mower blades; and vary mowing patterns to help reduce soil compaction.
- Provide good drainage and periodically inspect turf for evidence of pests or diseases.
- Allow grass clippings to remain in the turf.
- Have soil tested to determine PH and fertilizer requirements.
- Time fertilizer applications appropriately, because excessive fertilizer can cause additional problems, including weed and disease outbreaks.
- Apply lime if necessary – depending on soil’s PH level.
- Use aeration to place soil on top of thatch so that microbes from the soil can decompose thatch.
- Seed over existing turf in fall and early spring.

ORNAMENTAL SHRUBS and TREES:

- Pickup food wrappers and drink containers to remove food sources.
- Check plants for pest activity.
- Mulch garden, flower, and tree beds to keep weeds down.
- Manually pull weeds or mechanically “weed-wack” weeds from garden, flower, tree beds, etc.
- Apply fertilizer and nutrients to annuals and perennials during active growth and to shrubs and trees during dormant season or early in the growing season.
- If using fertilizer, use the correct one at the suitable time, water properly and reduce compaction.
- Prune branches to improve plants and prevent access by pests to structures.
- Select native plants when replacement plant materials are needed as they are more disease resistant.
- Correctly identify the pest in question. When in doubt, send several specimens to your local University Cooperative Extension Service. Once the pest is identified, recommendations can be made.
- Remove susceptible plants if a plant disease recurs and requires too many resources, such as time, energy, personnel, or money. Some ornamental plants, trees, and turf are so susceptible to plant diseases that efforts to keep them healthy may be useless.

PESTICIDE USE CONTROL METHODS - INTERIOR

Pesticide applications shall be made only to areas of known pest infestation or activity and where alternative control measures such as traps, caulking, sealing, cleaning, and disposal of insect food (or shelter) were not successful or have been exhausted. Application of pesticides shall not occur until each inspection has been completed. Pesticide applications which may impact the operations or occupants of a school building or its grounds shall be permitted only during hours when the school building is closed. A contingency plan for performing pesticide application in a school building will be part of the **IPM Plan** and any contracted service schedule. This should include a list of pesticide products, formulations, application methods, etc., that may be needed in a specific school building. The threshold levels for pests at which action will be taken will be the decision of the **IPM Contact Person** with input from the Contract Service Provider.

PESTICIDE USE CONTROL METHODS – GROUNDS:

Pesticide applications shall be made only to areas of known pest infestation or activity and where alternative control measures such as weeding, mulching, caulking (hardscapes), sealing, and cleaning of area (including cleaning away of any insect nests, etc.) were not successful or have been exhausted. Selected non-chemical pest management methods will be implemented first to provide the desired control. The choice of using pesticides will be based on a review of all other available options and only after non-chemical methods have been exhausted, in order to minimize the use of pesticides.

The threshold levels for pests at which action will be taken will be the decision of the **IPM Contact Person** with input from the Contract Service Provider. The following guidelines must be followed;

1. Use nonchemical control methods and materials must be used and exhausted prior to applying any pesticides.
2. Integrate control methods (i.e., plant selection, timing of watering, mechanical weed control, etc.).
3. Use spot treatments of pesticides. Treat only heavily infested plants.
4. Use pesticide application techniques, such as soil injections, rather than foliar applications, when possible.
5. Routine pesticide treatments are prohibited.
6. Pesticides applications shall be permitted only during hours when the school building is closed and after all notification procedures and **IPM SYSTEM** requirements have been met.

PESTICIDE USE CONTROL for INSECTS:

Controlling insects in air intake areas poses a particular challenge. To ensure pesticides are not picked up by the air intake and transmitted throughout the building, the applicator must take special precautions. The threshold levels for pests at which action will be taken will be the decision of the **IPM Contact Person** with input from the Contract Service Provider. The following guidelines must be followed:

1. Whenever possible reschedule the work so control measures can take place after school hours.
2. If application must be done, notify the office and isolate the area to ensure students and staff will not be exposed to the pest or the pesticide.
3. Close windows and doors and turn off air intake equipment in the application area.
4. MDA Certified Pesticide Applicator must apply pesticide according to EPA Product Label instructions, utilizing all recommended PPE. Use only the amount of pesticide necessary to control the hazard.
5. After confirming that all active pests have been controlled, remove the nest.
6. Do not restart the air-handling unit until the pesticide residue has dried and all odors have dissipated. Minimum one hour.
7. If this was an emergency application, immediately post EMERGENCY APPLICATION notification sign on front door of school and ensure that appropriate notifications are sent per IPM Plan requirements.
8. Complete the pesticide application record sheet and record information in the school's **IPM SYSTEM LOG** notebook.
9. School office staff must insure those listed below receive notification received notification prior to the application or if this was an emergency application, not more than 24 hours after the application.
 - All elementary students and staff notification is mandatory
 - Middle and High School students and staff who have requested notification and registered on the IPM Notification Registration List (for Middle and High Schools).

Required Components of a Maryland School IPM Plan

EDUCATION AND TRAINING

[15.05.02.03(B)(8)]

"(8) Provide education and training of staff members, students and parents or guardians in integrated pest management procedures;"

MODEL IPM PLAN - EDUCATION AND TRAINING

This section documents for each school within the District the required educational materials and outlines the procedures that the school will follow to provide annual education and training to staff members, students and parents or guardians in integrated pest management procedures, roles, and responsibilities, and how to access records available for public review.

Staff, students, pest managers, and the public will be educated annually about potential school pest problems and the **IPM System** including policies and the procedures to be used to achieve the desired pest management objectives and will be informed of their role in meeting these objectives.

The education and training of staff, parents/guardians and students is an important aspect of a working **IPM System**. Training can be conducted in any number of ways including informational letters at the beginning of each school year, newsletters, announcements, hand delivered letters, notice postings, etc. The Pest Control Manager is also available for any further information that is desired by parents or staff.

Additionally, the Contractor's Technical Program Supervisor shall annually attend a meeting with the **IPM Contact Person**, School Administration, and other stakeholders (or concerned individuals) to review the status of the program and address the pest management activities provided by the Contractor. The Contractor's Technical Program Supervisor/or Pest Control Manager may also be asked to attend a Board of Education meeting where they be available to address any concerns.

EDUCATION AND TRAINING OPPORTUNITIES:

Training for principals at regional county meetings

Training for teachers and classroom personnel at in-service meetings or staff development meetings

Training for custodians at in-service meetings

Training for grounds department at in-service meetings

Training for students and parents at the start of the school year

Training for Food and Nutrition Services Workers at in-service meetings

Training for Nurses at staff development meetings.

Training for administrative staff at staff development meetings.

Training for certified pesticide applicators via State of Maryland Department of Agriculture training

The following information is to be shared with teachers and instructional staff at the start of each school year:

EDUCATIONAL MATERIALS [TEACHERS] - SAFETY AND ENVIRONMENTAL PRACTICES FOR THE CLASSROOM

A goal of the IPM System is to ensure a safe school environment both indoors and outdoors. Most people understand the importance of a healthy outdoors environment but are unaware that the indoor environment can be critical, too. Failure to keep healthy indoor environments can have consequences including pest issues, compromise to indoor air quality (IAQ), greater potential for long and short-term health problems for children, teachers and staff; reduction in students' ability to learn; loss of production from teachers and staff; deterioration of buildings; and increased

maintenance costs. These factors can be controlled with awareness, practices that limit pollutants, efficient ventilation and policies that promote health. The following list describes a well-managed indoor environment – based on information found in the US Environmental Protection Agency's [EPA] **Tools for Schools Program** (<https://www.epa.gov/iaq-schools/iaq-tools-schools-resources>).

- A. When first entering a classroom, teachers should:
 - 1. Check for pests, odors, identify sources, and report them immediately.
 - 2. Check for droppings, stains in upholstered furniture, ceiling tiles and floor covering; determine if stains are wet or have changed from the last observation; report new droppings, new stains, wet stains or stains which have changed.
 - 3. Check room temperature and if excessive or uncomfortable, report immediately; do not change thermostat unless instructed to do so.
 - 4. Check room for evidence of a humidity problem. Be specific (eg curling paper, moldy books, damp walls, etc. or extreme static).
- B. Teachers should regularly follow these procedures:
 - 1. Check that books, boxes, furniture, etc. do not obstruct airflow.
 - 2. Make sure that exits are not blocked or obstructed.
 - 3. Food is not kept overnight, including lunch boxes, or trash bins
 - 4. Hold parties with food in the cafeteria to prevent soiled carpets.
 - 5. Store animal food in tight containers.
 - 6. Contact custodial staff when spills occur.
 - 7. Keep odors at a minimum; teachers should:
 - a) locate pets away from vents;
 - b) clean pet cages at least once per week;
 - c) use personal products that are unscented;
 - d) do NOT use plug-in air fresheners and aerosols;
 - e) furry pets should be prohibited.
 - 8. Use exhaust fans or fume hoods with activities generating pollutants.
 - 9. Pour one quart of water down sinks, water fountains and floor drains once per week if they are used infrequently to make sure the trap stays filled to block sewer/septic tank gases.
 - 10. Report light fixtures that are not intact and operating.
 - 11. Report broken windows and keep windows closed and/or locked.
 - 12. Know where fire extinguishers are located.
 - 13. Know where emergency breakers are located.
- C. Teachers should be aware of the risks to individuals of routinely used supplies (markers, glue, cleaning products etc.). When using these supplies ...
 - 1. identify students with known reactions to those products;
 - 2. only use products approved by the school system;
 - 3. label all supplies accurately;
 - 4. store supplies properly;
 - 5. substitute less hazardous supplies where possible;
 - 6. have a cleanup procedure developed and posted;
 - 7. follow recommended procedures for the disposal of supplies.
 - 8. Air fresheners or air 'cleaners' cannot be used in the school without the approval of the HCPSS Safety and Insurance Department.
 - 9. Do NOT use humidifiers.
- D. Educate students on...
 - 1. use and ventilation when handling supplies;
 - 2. restricting usage of scented personal products (eg. Perfume, nail polish, etc.).

Required Components of a Maryland School IPM Plan

ANNUAL EVALUATION

[15.05.02.03(A)(9)]

"(9) Require an annual evaluation of:

- (a) Integrated pest management strategies; and*
- (b) Program quality assurance; and"*

MODEL IPM PLAN - ANNUAL EVALUATION

This section of the **IPM Plan** documents the procedures the District is required perform to complete the annual evaluation of the IPM Strategies in order to ensure **IPM System** quality assurance. The annual evaluation includes a review of where, when, and why chemical means of pest control were used. Every effort should be made to determine if corrective actions can be taken in order to eliminate the need for chemical means of pest control when future occurrence of such a pest problem arise. The Annual Evaluation is to be provided to the Board of Education as well as the Department of Education Administration.

An annual review of the IPM system will be conducted to determine the effectiveness of the program and that program objectives have been achieved. This will include the review of inspection reports, sanitation reports, pesticide application records, and other records to establish current conditions, progress of the program against pest problems and conditions, effectiveness of action thresholds, and to identify problem areas in the **IPM System** that may need to be modified or changed.

Evaluation is a critical part of a both the structural and grounds management program and should include quantitative and qualitative assessments of pest population densities, densities of natural enemies, and the quality of the site after intervention takes place. Often, the evaluation of pest control efforts to school landscapes may be done during the next monitoring cycle, but in some situations special observations may be necessary to assess the success of the pest control tactic.

The IPM program will undergo periodic review by the Contractor along with the **IPM Contact Person** to assure that all expectations and requirements are being met. This review will allow the District to see how the **IPM System** is working on a day-to-day basis and to see if any changes are necessary.

Additionally, a more structured review will be undertaken annually by the **IPM Contact Person**, the District's Facilities Department along with the Contractor's Technical Program Supervisor to assess the **IPM System**'s effectiveness overall and make any adjustments as needed.

In general the ANNUAL EVALUATION will answer questions similar to:

1. Can IPM non-chemical methods be identified to address alternatives to pesticide used this year?
2. Are all pest populations below action thresholds?
3. Have all objectives been achieved?
4. Is the monitoring program adequate?
5. Should other actions be tried?
6. What problems have been identified?
7. Were notification procedures adequate?
8. Was the IPM SYSTEM Log properly maintained?
9. What changes are necessary?

Required Components of a Maryland School IPM Plan

NOTIFICATION PROCEDURES

[15.05.02.03(A)(10)]

"(10) Have procedures for notification of a parent or guardian of a student attending the school and of a staff member at the school before a pesticide is applied in a school building or on school grounds."

MODEL IPM PLAN – NOTIFICATION PROCEDURES

This section of the IPM Plan documents the procedures the District is required to use for notification of a parent or guardian of a student attending the school and of a staff member at the school before a pesticide is applied in a school building or on school grounds.

The District [or the Board of Education] will notify the school staff, students, parents, and guardians prior to pesticide applications made in school buildings or on school grounds in accordance with Maryland regulations. Notices will be posted in designated areas at school and sent home to parents and guardians of elementary school students and parents and guardians of middle and high school students who wish to be informed in advance of pesticide applications and are on the pesticide notification list.

Procedures and forms are included in this **IPM Plan** which show the procedure for distribution of an **Annual Notification Registration Form** for Middle School and High School students and staff [15.05.02.04(B)]. Procedures and Forms will also be included to provide to new students and staff entering the school system after the start of the academic year of the **BOE IPM Policy**, **BOE IPM System** and **IPM Plan**. Students and Staff should be informed of procedures for registration for notification at the start of the school year, however, applications for notification will be promptly processed and allowed at any time during the academic year.

The IPM Plan includes Samples for all required notifications and forms including:

1. Annual Notification [15.05.02.04(A)]
2. Annual Notification Registration Form Middle School and High School [15.05.02.04(B)]
3. New Student/Staff Initial Notification [15.05.02.04(A)(3)]
4. Structural Application Notification – Students/Staff [15.05.02.05]
5. Structural Application Notification – Posting [15.05.02.08(A)]
6. Bait Station Notification – Students/Staff [15.05.02.08]
7. Bait Station Notification – Posting [15.05.02.08(B)]
8. Grounds Application Notification – Students/Staff [15.05.02.05]
9. Grounds Application Notification – Posting [15.05.02.08(C)]
10. Grounds Application – Turf Flag – Posting [15.05.01.15(B–G)]
11. Space Spraying Application Notification – Students/Staff [15.05.02.07(B)]
12. Space Spraying Application Notification – Posting [15.05.02.07(C)]

NOTIFICATION – ANNUAL NOTICE (CALENDAR):

At the beginning of the school year, written information will be included in the school calendar that is distributed to all students and staff summarizing the District's **IPM SYSTEM**. Included in the notice will be an offer to middle and high school staff, students, and parents to be placed on the pesticide notification register for their school. Staff and parents are encouraged to submit a written request for notification each year on or before October 1st, however, requests for notification will be honored at any time that they are submitted.

NOTIFICATION - GENERAL REQUIREMENTS

Maryland Department of Agriculture regulations require Maryland school systems to provide information about their pest management program to parents, students, and staff. As part of these requirements school systems must notify those listed below 24 hours in advance anytime a pesticide is applied during the school year.

1. All elementary school parents, students, and staff.
2. Any middle and high school parents, students and staff who have requested notification through the **IPM Contact Person**.

NOTIFICATION GENERAL PROCEDURES:

Parents of middle and high school students are encouraged to submit a written request for notification to the **IPM Contact Person** on or before September 30th each year, however, requests for notification will be honored at any time that they are submitted.

No later than November 1st each year, Principals at middle and high schools will be provided with the list of the parents and staff members that have requested notification. If applications are made prior to November 1st, the universal notification will be used (i.e. all students and staff will be notified).

PESTICIDE APPLICATORS:

Any person applying pesticides on school grounds must be trained and knowledgeable in the principles and practices of the District's **IPM SYSTEM** and must be properly licensed or registered with the Maryland Department of Agriculture as a certified pesticide applicator. Applicators must follow federal and state regulations. The EPA Product Label must be fully enforced and all precautions adhered to. Applicators must comply with the District's **IPM POLICY**, **IPM SYSTEM** and **IPM PLAN**.

SELECTION OF PESTICIDES:

When pesticide use is necessary, the District's **IPM Contact Person** (a.k.a. IPM Coordinator) must ensure that all non-chemical means have been exhausted and must approve and ensure the pesticide is registered for school use with the MD Department of Agriculture. The District is required to select the least toxic and lowest risk pesticide available (e.g. pesticide products with the signal word of CAUTION).

STUDENT and STAFF NOTIFICATION PROCEDURES:

See Table of Contents "**TEMPLATES FOR NOTIFICATION and POSTING**" section for required notification and posting requirements for any pesticide application.

1. Schools must post a notice in a central location (i.e. entrances) in the building AND send a letter 24 hours prior to the application of any INDOOR or OUTDOOR pesticide. Space spraying applications require 7 days prior notification. Emergency applications required notification within 24 hours of the application. Notification is universal for elementary schools, however, middle and high school staff and students must register annually in order to be notified. Middle and High School staff and student must be provided with a copy of the "**Annual Notification Registration FORM**" during the "**Annual Notification Procedures**".
2. Outdoor applications also require posting of yellow turf flags [refer to **Table of Contents** section "**Grounds Application - Turf Flag – Posting [15.05.01.15(A—G)]**" at the time of the application at each primary access to the school campus. If only a spot or limited application is made, a turf flag may be posted at the location where the application was made. The yellow turf flags must remain posted for at least 48 hours following the application. All students and staff annual education must include instructions to **not enter an area where a yellow turf flag is posted for at least 48 hours** – this includes staying off of athletic fields for 48 hours after an application.

3. See "**TEMPLATES FOR NOTIFICATION and POSTING**" section for sample letters for each of the instances where notification or posting is required. These samples can be copied into a WORD document and customized to the application. Be sure to create a pdf file of the WORD document. Only distribute the pdf version of the file. Copies of all notifications and postings must be included in the **IPM SYSTEM LOG** notebook.
4. Notification Letters should be reproduced on school stationary for distribution by the school administrator (i.e. school principal). When preparing this letter, schools must also copy or attach the appropriate health hazard info for the specific chemical being applied.
5. Emergency pesticide applications are allowed. However, if a pesticide is applied as an emergency, the notice letter and posting must be done within 24 hours of the application with an explanation of the emergency. Indicate "**Emergency Application**" on the letter and copy or attach the appropriate health hazard data. Indoor applications for such insects as bees, yellow jackets, flies, flying ants, etc. are not necessarily considered emergencies. If a principal determines that an emergency application is warranted, they must follow the emergency notification procedure within 24 hours or the next school day. Only the **IPM Contact Person** can authorize a pesticide application.
6. Only Maryland Department of Agriculture certified pesticide applications who are registered parties such as IPM trained custodians, grounds crew, and/or contractors authorized by the **IPM Contact Person** are permitted to apply pesticides inside or outside a school. Only the **IPM Contact Person** can approve and authorize a pesticide application. Contact the **IPM Contact Person** for a list of current applicators at your school.
7. Schools must have EPA Product Labels and Safety Data Sheets (SDS) for all pesticide products approved for use under the District's **IPM SYSTEM** available (upon request) for public review. Pesticides not approved for use cannot be applied on school property. Again, only the **IPM Contact Person** can authorize a pesticide application. After a pesticide is used, copies of the EPA Product Label and SDS information are added to the **IPM SYSTEM LOG** notebook – available to the public.
8. Schools also encouraged to maintain a list of students or staff that have been identified as potentially or particularly sensitive (e.g. chemically sensitive, asthmatics, etc.). This list should be coordinated through health records maintained by the school health room. The Health Form should be modified to assist in collection of this data.
9. Particular attention should be made if a student or staff member is physician-certified and registered with the Maryland Department of Agriculture as a "Pesticide Sensitive Individual". The MDA Pesticide Sensitive Register is distributed annually to pesticide applicators. This information should be noted in records maintained by the District's Health Services. Pesticide applications made by the District cannot become a barrier to accessing the school by students including those that are physician-certified and registered with the Maryland Department of Agriculture as a "Pesticide Sensitive Individual".
10. The school Principal must make the appropriate notifications to parents, students, and staff as outlined in this **IPM Plan**.
11. The **IPM Contact Person** (a.k.a IPM Coordinator) will contact school administration the day before the scheduled application by phone or email to ensure the appropriate notifications were made. Only applications following the **NOTIFICATION PROCEDURES** will be allowed.

12. The pesticide applicator will check in with school office staff when they arrive on site to ensure and confirm that the school administration is aware a pesticide application is being done and that the applicator has arrived. No students can be present during a pesticide application.
13. The contract applicator will post **PESTICIDE APPLICATION CAUTION NOTICES** on the doors at the entrances to the school and in treated areas as outlined in this **IPM Plan**.
14. Application records must be completed and signed by the applicator and school office staff immediately upon completion of the application and stored in the **IPM SYSTEM LOG** notebook.
15. All applications must have prior approval of the **IPM Contact Person** and be recorded in the school site IPM SYSTEM LOG notebook.

Required Components of a Maryland School IPM Plan

ANNUAL NOTIFICATION PROCEDURES

[15.05.02.04(A)(1)]

"15.05.02.04 Information for Parent, Guardian, or Staff Member.

A. School Notice Requirement.

(1) At the beginning of each school year, each school shall include notice of the school's integrated pest management system in the school calendar or other universal notification."

MODEL IPM PLAN – ANNUAL NOTIFICATION PROCEDURES

This section of the IPM Plan documents the procedures that the District is required to utilize for notification of a parent or guardian of a student attending the school and of a staff member at the school before a pesticide is applied in a school building or on school grounds.

NOTIFICATION – ANNUAL NOTICE (CALENDAR):

At the beginning of the school year, written information will be included in the school calendar that is distributed to all students and staff summarizing the District's **IPM SYSTEM**. Included in the notice will be an offer to middle and high school staff, students, and parents to be placed on the pesticide notification register for their school. Staff and parents are encouraged to submit a written request for notification each year on or before October 1st, however, requests for notification will be honored at any time that they are submitted.

Procedures and forms are included in this **IPM Plan** which show the procedure for distribution of an **Annual Notification Registration Form** for Middle School and High School students and staff [15.05.02.04(B)]. Procedures and Forms will also be included to provide to new students and staff entering the school system after the start of the academic year of the **BOE IPM Policy**, **BOE IPM System** and **IPM Plan**. Students and Staff should be informed of procedures for registration for notification at the start of the school year, however, applications for notification will be promptly processed and allowed at any time during the academic year.

The **IPM Plan** includes procedures for notification and samples for all required notifications and forms including in the **"TEMPLATES for NOTIFICATION and POSTING"** section of the **IPM Plan**:

1. Annual Notification [15.05.02.04]
2. Annual Notification Registration Form Middle School and High School [15.05.02.04(B)]
3. New Student/Staff Initial Notification [15.05.02.04(A)(3)]

Required Components of a Maryland School IPM Plan

SCHOOL GROUNDS IPM PROCEDURES

[15.05.02]

"15.05.02.01 .01 Scope of Regulations.

This chapter sets forth the procedure for a county board of education to:

- A. Develop and implement **in its schools and on school grounds** an integrated pest management system; and"

MODEL IPM PLAN - SCHOOL GROUNDS IPM PROCEDURES

The section documents the IPM Procedures for maintaining school grounds under the **IPM SYSTEM**. The District encourages the Grounds Department to train all Grounds Department staff in IPM procedures the requirements of the **IPM SYSTEM**. Note that **ONLY Maryland Department of Agriculture Certified Pest Control Applicators [Per MDA Regulations 15.05.01 - The Pesticide Applicator's Law] may apply pesticides and ONLY after receiving approval and instruction from the IPM CONTACT Person**.

Refer to the **NOTIFICATION PROCEDURES** section in the **Table of Contents** prior to taking any corrective action involving the use of pesticides. Those sections include required procedures for notifying a parent or guardian of a student attending a public school, a student, or a school staff member before a pesticide is applied on school grounds during the school year

TURF GRASS MAINTENANCE – GENERAL:

A. Mowing

The turf needs to be mowed with sufficient frequency to adhere to the " 1/3 Rule" which states one-third or less of the leaf tissue is removed at any one mowing. Mowing height will vary depending on the field's intended use (type and frequency of sport) but in general will be within one to three inches. Clippings should not need to be collected if the one-third rule is followed. Keep mower blades sharp to provide a clean cut that allows the cut leaves to quickly recover, which will minimize disease and maintain stress tolerance. Keep mowers in good repair as leaking oil and grease can damage and even kill turf.

B. Irrigation

Irrigation should be supplied to replenish the amount of moisture lost from the turf on a weekly or daily basis. If information is unavailable, irrigate sufficiently to provide approximately one inch of water to the turf each week; rainfall amounts need to be considered in this calculation, so it is important to monitor weekly rainfall using a simple rainfall collection device. Irrigation systems in Level A athletic fields will often be permanent, in ground systems. Irrigate according to the soil permeability, do not try to supply all the weekly requirements with one irrigation if the soil cannot absorb all the water; instead, irrigate two or three times over one or more days to supply the necessary amount of water. The best time to irrigate is early morning (3 am or later); late afternoon or early evening irrigation can promote diseases, which may necessitate fungicide applications. Do not irrigate fields less than 24--48 hours before events unless a light application is required to prevent wilting.

C. Fertilization

Apply a minimum of four pounds of nitrogen per thousand square feet (4 lb. NIM) annually to low use fields with light to medium traffic. Higher use fields may require up to six or more lb. NIM annually; do not apply more than 1 lb. NIM at any one time. Fertilizers with an approximately 30-50% slowly available N are appropriate. Apply with a properly calibrated and functioning fertilizer spreader to obtain a uniform distribution. Irrigate with approximately 1/2-inch of water within 24 hours of fertilization unless rainfall occurs. Base phosphorus and potassium inputs on soil tests collected every two to three years. Otherwise, use a fertilizer which supplies at least a 2: 1 ratio of nitrogen to

potassium. Since phosphorus requirements are significantly less than nitrogen or potassium, little to no phosphorus is usually required unless indicated by a soil test. Other nutrients are rarely if ever limiting, although sand based root zones should be soil tested for P, K, Ca., Ma, Fe, Mn, Zn, Cu, B, Mo, and Cl at least once each year, and corrective applications made as needed. There is no reliable test for Nitrogen in turf as forms of nitrogen fluctuate constantly. We are currently using Par-ex 24-4-12 for the stadium fields and 46-0-0 for the Bermuda Fields.

D. Aerification

Aerification is used to aid drainage, alleviate compaction, and promote turf growth, particularly rooting, resulting in increased stress tolerance, improved nutrient uptake, and reduced weed invasion. Aerification can also manage thatch buildup, although this is rarely a concern on athletic fields and other high traffic areas. Aerification should be performed as needed to minimize compaction, up to two to three week intervals during the growing season, although one aerification in spring and/or autumn may be sufficient. Use hollow tines, which pull cores out of the field rather than solid tines or water injection systems. The cores can be left on the surface and will disintegrate within a few weeks, or they can be broken up using a drag mat. Cores can also be removed with sweepers, rakes or shovels, but the field will then need to be top dressed to replace the lost soil. The soil must be moist enough to allow good penetration of the tines but not so moist as to result in rutting or compaction from the machinery. Use at least 3" long tines and set the aerifier to penetrate to at least a 3-inch depth.

We shatter aerate annually in the fall with a Yeager twose or verti-drain. These processes can also be contracted out.

E. Topdressing

Athletic fields require topdressing to maintain a uniform surface and a crown that is imperative for surface drainage. Soil based fields rely almost solely on surface drainage. Topdressing consists of regular applications of soil or sand, ranging from 1/16-1/4-inch layers each time. Our Topdressing equipment is a Ty crop top dresser that holds 4 cu. Yards. We can top dress a stadium in less than two hours. Annual application of 90% silica sand which meets the USGA specification and 10% peat humus. The mixture is a homogeneous sterilized mixture.

Other topdressing source must:

- Be free from glass, rocks, or other debris.
- Match the soil type of the root zone, a requirement that is almost impossible for native soil fields.
- Be able to supply a consistent material (both size and type) for years to come, which further limits the types of acceptable topdressing. If a soil type is used which has finer particle sizes than the underlying soil root zone, a surface layer will be formed which prevents proper water infiltration, and root growth.

F. Overseeding

Thin areas in which the turf density provides less than 90-95% coverage should be overseeded as needed to maintain a weed-free, uniform surface to minimize injury resulting from ruts and compaction. Overseeding can be performed using either broadcast or slit seeding. Slit seed largely, or totally bare areas in two to three directions to provide sufficient seed; otherwise, a single pass is sufficient. Broadcast seeding can be performed a variety of ways. One of the best methods is to overseed concurrent with aerification. Spikers or vertical mowers may also be used to expose soil to aid seedling establishment. Once an area has been overseeded, apply topdressing to help ensure seed to soil contact to aid germination. An area may also be overseeded shortly before a game in which case the cleats from the athletes will help push the seed into the soil.

Recommended seed mixture contains 80% Tall fescue, 10 % Kentucky bluegrass, 10 % perennial ryegrass for overseeding. Kentucky bluegrass plants form rhizomes (underground lateral shoots) which are important for providing traction and allow the plant to fill in bare areas, while perennial ryegrass germinates quickly (3-5 days) and can provide

quick cover. Since ryegrass plants may not provide the most stable footing and are less winter tolerant than Kentucky bluegrass, ryegrass should not compose more than 15% of a Kentucky bluegrass/perennial ryegrass seed mixture. We utilize certified seed blends that is inspected and certified from the Department of Agriculture. We utilize seeds recommended from University of Maryland Memo #77.

Seeding rates will vary depending on the amount of area exposed and the seed mix used. Seeding rates range from approximately 2 lb. per thousand square feet when used as a maintenance overseeding to turf which has 95% or higher cover, to 2-3 lbs per thousand square feet when more than 25% of the soil is exposed in an area. For areas which have less than 80-90% turf cover, sodding may be a better option than overseeding. If the area is sodded, either use a sod grown on a soil which matches that of the root zone mix or use a washed sod to prevent soil layering which will cause water infiltration problems and result in poor rooting. Newly laid sod will require special "spot watering" one or more times daily for up to two weeks until roots start to grow into the field soil, at which time irrigation frequency can be decreased over the following two to six weeks until the roots are sufficiently deep to allow the same irrigation schedule to be followed as the rest of the field.

G. Pest Management

Proper turf management will greatly reduce the need for pesticides by providing dense, healthy turf that will crowd out weeds and tolerate moderate levels of disease, insect, or venebrate damage. In integrated pest management, pesticides are used only when pests damage the turf up to or past a predetennined threshold level despite proper conventional management techniques.

When pesticides are applied to turf, the area should be fenced in and marked with pesticide application flags [refer to **Grounds Application - Turf Flag – Posting [15.05.01.15(A—G)]**] and the re-entry interval listed on the product label has passed. If no reentry intervals are listed on the label, keep people off the turf for a minimum of 48 hours or longer, if required, for the herbicide to dry on the turf. Most pesticide applications dry on the turf within 60 minutes, so the 48-hour reentry interval actually provides a safety margin. Some granular pesticides also require a re-entry interval following application so the label must be read and understood in order to comply with the law. Granular pesticides, which are designed to be applied to the soil, may require an irrigation or rainfall event of greater than 1/4" water before the area may be entered.

H. Weed Management

Level A athletic fields have a threshold population of no more than 5% weeds. Note the type and location of the weeds in order to be able to use the appropriate control measures and time them appropriately. Weeds can be classified according to their life cycle. Annual weeds are those that complete their life cycle in one year and include crabgrass, common chickweed, and knotweed. Perennial weeds survive for two years or more and include dandelion, mouse-ear chickweed, and ground ivy. Weeds are also classified botanically: dicots include all broadleaf weeds, while monocots include all grasses and sedges. It is important to understand which type of weed you are dealing with since management options will vary.

A. Non-chemical Control

Non-chemical control of weeds includes good management practices and should be the first line of defense in any IPM program. Proper turf management including mowing and fertilization practices can reduce potential weed populations 70% or more. Biological controls relying on microbes are currently in development for a few weeds such as annual bluegrass (*Poa annua*).

B. Chemical Control

Herbicide selection should be based on several factors: ability to control the target weed(s), relative safety (both to the applicator and to the environment), formulation (ester forms are more effective than salt-based

amines during cool periods but can cause phytotoxicity and are more likely to drift during hot, dry periods), and cost.

If all non-chemical means have been exhausted and it is determined that herbicides can be applied, do so only when children are not present (e.g., after school, weekends). Only spray one time per target pest. Always read the EPA Product Label prior to applying any pesticide (ie. herbicide, insecticide, etc.). Labels are subject to change annually. Applications, which don't adhere to EPA Product Label requirements, are illegal under Federal Law and subject to prosecution.

I. Disease Management

Dozens of diseases can affect turfgrass. Generally, appropriate fertility and irrigation will keep disease problems to a minimum. Plant a mix of species and include at least three cultivars of each species to take advantage of the different disease tolerances and resistances of each variety or species. Turf managers can determine based on weather conditions the likelihood of disease development.

J. Insect Management

Insect problems on athletic fields are rare but may occur periodically, usually white grubs. On level A fields broadcast application of insecticides may be warranted based on scouting reports which indicate sufficient pest activity exists (numeric thresholds have been established for some insect pests, particularly white grub species). Severe turf loss may occur if infestations are not treated. All non-chemical means of pest control must first be exhausted before a chemical means (pesticide) can be applied.

K. School Management Zones

In order to help develop planning strategies for integrated pest management, various school grounds areas are identified based on their function and requisite level of quality; e.g., athletic fields versus general lawns. These areas are further designated as a series of zones or levels: A, B, and C. Level A areas are high maintenance, high use areas where few if any weed and pest problems would be allowed. Levels B and C areas would require less management and tolerate more pests, and have lower aesthetic quality compared to Level A. Since athletic fields generally have the most amount of traffic and least tolerance for bare, compacted soil areas and pests (including weeds), the manual will start with these areas. Landscape areas are discussed next, followed by miscellaneous areas including playground cribs, fence lines, parking lots and sidewalks.

L. Designating School Turf Areas

There are three general areas on school grounds, athletic fields, turf/ landscape areas, and non-turf areas such as parking lots, fence-lines, and playground cribs. Each area has different levels of use. For example, high school playing fields have a higher level of maintenance than grade school general use playing fields. These areas have different acceptance for weed pressure, and different amounts of effort will be needed to produce these results.

TURF GRASS MAINTENANCE - ATHLETIC FIELDS:

The District has identified three levels of athletic fields for our **IPM SYSTEM**. Levels were chosen by certain criteria such as: the intended purpose, was the field subject to cause injury from the groups who participated on the field, and how much funding is available.

Cultural controls for athletic field maintenance are an ongoing operation. It takes a cumulative effort over a period of months and years to be successful. Developing a consistent maintenance schedule is critical for any program to be successful. Being persistent about completing assignments in a timely and efficient manner will enhance your chances of providing an acceptable field.

Weeds are almost always a problem on sports fields, a problem that is often accelerated by the fact that a heavily used field has a more open turf canopy due to the traffic on the turf. The weeds provide competition for the desirable turfgrass species, affect playability, and cause injuries to the players, particularly around the ankles and knees, because of no uniformity of footing for the athletes. In level A fields, mechanically removal of the weeds is recommended. If all non-chemical means of pest control have been exhausted, only then can chemical means be utilized. Utilizing culture controls reduces the competition from desirable turf.

The following are a break down of the three levels of Athletic Fields.

A. Level A Athletic Fields

These are prime athletic fields, high school stadiums and Bermuda playing fields. Level A athletic fields are typically reserved for games. These fields should have dense turf(> 90% cover), good drainage, and irrigation. The soil types are native soil. The field must provide a uniformly smooth surface and have an appropriate turf that will sustain a high level of traffic. Annual events on these fields should be limited. In our District, Grounds Services Managers have authority to cancel events in case of inclement weather to prevent major and costly repairs to these fields. A dedicated field manager with turf management education and/or experience with proper training is considered vital to allow proper decisions and implementation of management strategies on a day-to-day basis.

Primary cultural practices for Level A athletic fields include regular mowing, fertilization and irrigation. Secondary cultural practices include routine aeration, topdressing, and overseeding or sodding to replace worn areas. Use of chemicals to control or manage weed, disease, and insect pests is allowed only after all non-chemical means of pest control have been exhausted.

Level "A" IPM Action Points

Mowing

Mow with enough frequency to adhere to the "1/3 rule" which states that one third or less of the leaf tissue is removed at any one mowing. Mowing heights are 3 inches for stadium fields and 3/4-1 inch for Bermuda fields.

Irrigation

Irrigate sufficiently -to provide approximately one inch of water to the turf each week with rainfall amounts included. For example, if 1/4 inch of rain falls one week, supply 3/4 inch through irrigation.

Fertilization

Following review of soil tests to confirm need for fertilization, on the stadium fields: Apply a minimum of four pounds of nitrogen per thousand square feet annually to low use fields with light to medium traffic. Higher use fields may require six or more pounds of nitrogen per thousand square feet. Two applications, one in late November and one in late May are slow release nitrogen with I.B.D.U. On the Bermuda Fields: Apply 6-10 lbs of Nitrogen during the months of May and the end of August.

Topdressing

Topdressing consists of regular applications of soil and sand, ranging from 1/16 - 1/4 inch layers each time. Annual application of 90% silica sand which meets the USGA specification and 10% peat humus. The mixture is homogeneous sterilize mixture.

Overseeding/Sodding

Overseed thin areas in which the turf density provides less than 90-95% coverage as needed. Overseed a *minimum* of two times with mechanical overseeding and broadcast between games. Sod crease areas after the spring sport season. Sprig and plug bare areas on Bermuda fields at least once per year.

B. Level "B" Athletic Fields

Level B athletic fields include baseball, softball, and multipurpose fields at our high schools. These are often low to medium budget high school game fields. These fields have moderate to good turf (> 70% cover) with up to 30% of the surface covered by weeds but no more than 10% bare ground. The soil type is native soil. Surface drainage generally provides all the drainage; native soil and lack of tiling preclude internal drainage. The field must provide a uniformly smooth surface (no major ruts, rapid divot repair, etc.) and an appropriate turf, which will sustain a high level of traffic. No limits are placed on the number of events the turf will support, but good management practices should be used to prevent unnecessary damage (e.g., rotation of practice areas, proper mowing and fertilizing, etc.).

Primary cultural practices for Level B athletic fields include regular mowing and fertilization. Irrigation is used only for restoration or establishment. Secondary cultural practices include occasional aeration, topdressing, and overseeding or sodding to replace worn areas. Use of chemicals to control or manage weed and insect pests is allowed as part of an overall integrated pest management program.

Level "B" IPM Action Points**Mowing**

Mow the turf at 3-inch height at least once weekly. If possible, comply with the "1/3 rule".

Irrigation

Irrigation will only be used to restore damaged turf areas. Very seldom used. Recommended that District implement a program to start installing irrigation systems on baseball/softball fields at the high schools.

Fertilization

Following review of soil tests to confirm need for fertilization, apply a minimum of 2-3 pounds of nitrogen per thousand square feet annually to low use fields with light to medium traffic. Do not apply more than 1 lb. N/ at any one time.

Aerification.

Aerification is performed once in spring (May) and once in autumn (Oct.) when the grass is actively growing.

Topdressing

Topdressing should be concentrated in the center and other problem wear areas in the field.

Overseeding

Thin areas in which the turf density provides less than 70% coverage should be overseeded as needed. Apply Tall Fescue, Bluegrass, Perennial Rye Mix at a rate of 3-5 lbs per 1,000 sq.ft. once in the fall and once in the spring.

C. Level "C" Athletic Fields and other turf areas

Level C athletic fields include elementary fields, practice areas at middle schools, and general turf areas. These fields have poor to moderate turf with 50% or more of the surface covered by weeds. A fair portion of the fields may be bare ground but this should be kept to no more than 10% bare ground for safety reasons. The soil type is native soil. Surface drainage generally provides all the drainage; native soil and lack of tiling preclude internal drainage. The field should have a relatively smooth surface (no major ruts, rapid divot repair, etc.) for safety reasons. No limits are placed on the number of events the turf will support, but common sense should be used to prevent unnecessary damage (e.g., rotation of practice areas, regular mowing). Primary cultural practices for Level C athletic fields include regular mowing and fertilization. Irrigation is used only for restoration or establishment. Secondary cultural practices may,

but are not likely to, include overseeding or sodding to replace worn areas. Pesticides to control weeds, diseases or insects will not be used.

Level "C" IPM Action Points

Mowing

Mow the turf at 3-inch height at least at 7 to 10-day intervals. If possible, comply with the "1/3 rule".

Irrigation

Irrigation will only be used to restore damaged turf areas.

Fertilization

Following review of soil tests to confirm need for fertilization, fertilization rates one pound of nitrogen per 1000 square feet every three years.

Aerification

Core Aerated once every three years

Topdressing

Level C fields will not be top-dressed.

Overseeding

Level C fields generally will not be overseeded. Large, bare areas may need to be overseeded. Generally, the fields are overseeded 3-5 lbs per 1,000 sq ft. once every three years.

Ornamental Plants and Beds

A. General Information

Ornamental landscape areas are areas associated with the front entrance and other visible areas of the school building. This category includes trees, shrubs, ground covers, annual and perennial flowers and turf. It is important to properly identify all plants in these landscape areas and become familiar with their specific requirements. Common pest problems in these landscape areas are weeds, insects, diseases, and environmental stresses.

B. Plant Selection

In any landscape IPM program, it is important to maintain the balance of nature by preserving diversity and encouraging harmonious coexistence of plants in the landscape, i.e. group plants together that have similar requirements, select plants that are low maintenance, not prone to pest problems, and appropriate for the site. Plant selection and installation plans should take into consideration:

- University of MD recommendations
- soil type
- location on the site
- climate
- availability of water
- drainage
- light
- pest resistance
- spacing

C. Key Plants

Not all plants in the landscape will require the same level of care. Native plants should always be selected over non-natives. Key Plants are those plants that provide aesthetic or functional attributes to the landscape's value or are more likely to suffer from serious, annual problems that will dominate your control practices. These are the plants that will require more time and money to maintain and installation of key plants is discouraged. Key plants include birch, crabapples, dogwoods, euonymus, junipers, flowering plums, and any plant in the rose family.

D. Maintenance

Although the District recognizes the value of these landscape areas, due to staffing issues minimal time is available for intensive maintenance efforts in these planting areas. Basic maintenance will be completed as follows:

1. Pruning

Pruning will be done to remove dead, damaged, or diseased limbs as necessary during the dormant season. Pruning for form will be done annually.

2. Mulching

Trees, shrubs, and planting beds will be mulched annually to conserve water, moderate soil temperature, and to control weeds.

3. Weed Control

Control of weeds around trees and in planting beds through non-chemical means is the preferred method.

Miscellaneous Areas

These areas include non-turf areas such as playground cribs, fence-lines, sidewalks, and parking lots and other paved areas. Control of weeds in these areas is necessary for aesthetic reasons and to protect concrete and asphalt structures from associated damage. Mechanical removal of weeds in these areas is the preferred method.

A. Miscellaneous Area A

Miscellaneous area A includes playground cribs with a perimeter fall zone. Weed barriers (e.g., landscape fabrics) should be used to underlay mulch when the cribs are built. Weeds in these areas will be mechanically removed.

B. Miscellaneous Area B

Miscellaneous area B includes areas under fences, bleachers, and other structures. Turf may or may not be present or desired. In these areas mechanical means should be utilized. If the surface is blacktop, cracks should be sealed regularly. Proper sanitation (garbage removal, cutting grass, etc.) should be conducted to minimize weed, insect and rodent problems. If a fence is not needed and weeds are a problem, the fencing could be removed.

C. Miscellaneous Area C

Miscellaneous area C includes parking lots, blacktop play areas, and sidewalks. Weeds can cause crumbling of the blacktop and damage to concrete structures. Control of weeds in these areas through non-chemical means is in most cases impractical and not cost effective. Weeds in these areas should be controlled using mechanical means.

TEMPLATES for NOTIFICATION and POSTING

This section contains templates for all required notifications and postings. Copy desired sample into a new WORD document and edit where indicated or needed. Prior to distributing any notifications or posting documents, be sure to create a PDF file. Only the PDF file should be shared. Ensure that copies of any notifications or postings are added to the **IPM SYSTEM LOG** notebook. The following templates are included in this **IPM Plan**:

1. Annual Notification
2. Annual Notification Registration Form Middle School and High School
3. New Student/Staff Initial Notification
4. Structural Application Notification – Students/Staff
5. Structural Application Notification – Posting
6. Bait Station Notification – Students/Staff
7. Bait Station Notification – Posting
8. Grounds Application Notification – Students/Staff
9. Grounds Application Notification – Posting
10. Grounds Application – Turf Flag - Posting
11. Space Spraying Application Notification – Students/Staff
12. Space Spraying Application Notification – Posting

Annual Notification [15.05.02.04(A)]

[ENTER DISTRICT NAME HERE] PUBLIC SCHOOL SYSTEM

[ENTER ACADEMIC YEAR HERE e.g. "2025-2026"] ACADEMIC YEAR

INTEGRATED PEST MANAGEMENT SYSTEM [IPM] ANNUAL NOTIFICATION

The [enter District Name Here] County Board of Education [BOE] recognizes its duty and responsibility to develop, implement, and enforce an Integrated Pest Management [IPM] System in accordance with Annotated Code of Maryland, Agricultural Article, §5-208.1 Integrated Pest Management, Maryland Department of Agriculture [MDA] Regulations 15.05.02 and BOE's IPM in Schools Policy [BOE policy number here] [BOE policy name here].

The Integrated Pest Management (IPM) SYSTEM of the [enter District name here] is a proactive rather than a reactive approach to insect and rodent control in school facilities. The **IPM System** includes routine inspections and surveys of all school facilities to identify conditions conducive to pest invasion, to ensure early detection of pest presence, and to monitor infestation levels so that prompt pest control methods outlined in the District's **IPM Plan** can be employed. As a first step in pest control, the IPM approach employs a number of preventative strategies and alternatives to pesticide application, such as: building occupant and employee education, source reduction, inspection and identification of potential problem areas, sanitation, exclusion practices, and maintenance. Each approach is monitored and evaluated, and non-chemical actions are taken, when necessary to address the pest issue. Pesticides are used only as a last resort and only after all non-chemical options have been exhausted and the building occupants notified as outlined in the **IPM Plan**.

Maryland Law requires that elementary school staff and parents of all elementary school children be notified prior to any interior or exterior pesticide application without registering for notification. Middle and High School Staff and Parents of middle and/or high school students who wish to be notified prior to interior or exterior pesticide applications must request that they be placed on the school system's **Pesticide Notification Register**. To be added to the notification register, complete the attached **IPM SYSTEM Notification Registration FORM** and send the completed form which includes your name, address, and telephone number (and child/children's name(s) for parents) to:

[enter IPM CONTACT Person name here] [enter job title of IPM Contact person here]

Integrated Pest Management [IPM] Contact Person

[enter District Name here] County Board of Education

[enter IPM Contact Person's contact info including address, phone and email info here]

The following is a list of the pesticides and bait stations, by EPA Registration Number and common name, that may be used in school buildings or on school grounds during the school year:

[Enter EPA Registration Number and common name for each pesticide and bait station

approved for use under the district's IPM SYSTEM here]

Copies of Environmental Protection Agency Product Label [EPA PL] and Safety Data Sheets [SDS] and for each pesticide and bait station used on school property are maintained by the **IPM Contact Person**. These and all documents pertaining to the District's **IPM System** can be found in the **IPM SYSTEM LOG** notebook located in a publicly accessible area of each school. Persons wishing to review this information should contact the school or the **IPM Contact Person** to arrange an appointment. For additional information about the Integrated Pest Management Program, please contact the District's **IPM Contact Person** [enter IPM CONTACT Person name, phone number and email address here].

Annual Notification Registration Form Middle School and High School

[15.05.02.04(B)]

[ENTER DISTRICT NAME HERE] PUBLIC SCHOOL SYSTEM

[ENTER ACADEMIC YEAR HERE e.g. "2025-2026"] ACADEMIC YEAR

INTEGRATED PEST MANAGEMENT SYSTEM [IPM] ANNUAL

REGISTRATION for NOTIFICATION of PESTICIDE APPLICATION REQUEST FORM

The [enter District Name Here] County Board of Education [BOE] recognizes its duty and responsibility to develop, implement, and enforce an Integrated Pest Management [IPM] System in accordance with Annotated Code of Maryland, Agricultural Article, §5-208.1 Integrated Pest Management, Maryland Department of Agriculture [MDA] Regulations 15.05.02 and BOE's IPM in Schools Policy [BOE policy number here] [BOE policy name here].

Maryland Law requires that parents of all elementary school children be notified prior to any interior or exterior pesticide application without registering for notification. Staff member and parents of middle and/or high school students who wish to be notified prior to any interior or exterior pesticide applications must request that they be placed on the school system's **Pesticide Notification Register**. To be added to the notification register, complete this **IPM SYSTEM Notification Registration FORM** and send the completed form which includes your name, address, and telephone number as well as your child/children's name(s) to:

[enter IPM CONTACT Person name here] [enter job title of IPM Contact person here]

Integrated Pest Management [IPM] Contact Person

[enter District Name here] County Board of Education

[enter IPM Contact Person's contact info including address, phone and email info here]

Copies of Environmental Protection Agency Product Label [EPA PL] and Safety Data Sheets [SDS] and for each pesticide and bait station used on school property are maintained by the **IPM Contact Person**. These and all documents pertaining to the District's **IPM System** can be found in the **IPM SYSTEM LOG** notebook located in a publicly accessible area of each school. Persons wishing to review this information should contact the school or the **IPM Contact Person** to arrange an appointment. For additional information about the Integrated Pest Management Program, please contact the District's **IPM Contact Person** [enter IPM CONTACT Person name, phone number and email address here].

REQUEST for NOTIFICATION of PESTICIDE APPLICATIONS MADE TO MY SCHOOL

*I wish to be notified prior to any interior or exterior pesticide applications at my school. This is my request to be placed on the school system's **Pesticide Notification Register** for the _____ ACADEMIC YEAR.*

STAFF MEMBER REQUEST

LAST NAME: _____

PARENT REQUEST

FIRST NAME: _____

PARENT NAME (if applicable): _____

NAME OF SCHOOL: _____

TELEPHONE NUMBER: _____ EMAIL: _____

HOME ADDRESS: _____

SIGNATURE: _____ DATE: _____

New Student/ Staff Initial Notification [15.05.02.04(A)(3)]

[ENTER DISTRICT NAME HERE] PUBLIC SCHOOL SYSTEM
[ENTER ACADEMIC YEAR HERE e.g. "2025-2026"] ACADEMIC YEAR
INTEGRATED PEST MANAGEMENT SYSTEM [IPM] ANNUAL NOTIFICATION
For NEW STUDENTS and STAFF MEMBERS

The [enter District Name Here] County Board of Education [BOE] recognizes its duty and responsibility to develop, implement, and enforce an Integrated Pest Management [IPM] System in accordance with Annotated Code of Maryland, Agricultural Article, §5-208.1 Integrated Pest Management, Maryland Department of Agriculture [MDA] Regulations 15.05.02 and BOE's IPM in Schools Policy [BOE policy number here] [BOE policy name here].

The Integrated Pest Management (IPM) SYSTEM of the [enter District name here] is a proactive rather than a reactive approach to insect and rodent control in school facilities. The **IPM System** includes routine inspections and surveys of all school facilities to identify conditions conducive to pest invasion, to ensure early detection of pest presence, and to monitor infestation levels so that prompt pest control methods outlined in the District's **IPM Plan** can be employed.

As a first step in pest control, the IPM approach employs a number of preventative strategies and alternatives to pesticide application, such as: building occupant and employee education, source reduction, inspection and identification of potential problem areas, sanitation, exclusion practices, and maintenance. Each approach is monitored and evaluated, and non-chemical actions are taken, when necessary to address the pest issue. Pesticides are used only as a last resort and only after all non-chemical options have been exhausted and the building occupants notified as outlined in the **IPM Plan**.

Maryland Law requires that parents of all elementary school children be notified prior to any interior or exterior pesticide application without registering for notification. Parents of middle and/or high school students who wish to be notified prior to interior or exterior pesticide applications must request that they be placed on the school system's **Pesticide Notification Register**. To be added to the notification register, complete the attached **IPM SYSTEM Notification Registration FORM** and send the completed form which includes your name, address, and telephone number as well as your child/children's name(s) to:

[enter IPM CONTACT Person name here] [enter job title of IPM Contact person here]
Integrated Pest Management [IPM] Contact Person
[enter District Name here] County Board of Education
[enter IPM Contact Person's contact info including address, phone and email info here]

The following is a list of the pesticides and bait stations, by EPA Registration Number and common name, that may be used in school buildings or on school grounds during the school year:

[Enter EPA Registration Number and common name for each pesticide and bait station
approved for use under the district's IPM SYSTEM here]

Copies of Environmental Protection Agency Product Label [EPA PL] and Safety Data Sheets [SDS] and for each pesticide and bait station used on school property are maintained by the **IPM Contact Person**. These and all documents pertaining to the District's **IPM System** can be found in the **IPM SYSTEM LOG** notebook located in a publicly accessible area of each school. Persons wishing to review this information should contact the school or the **IPM Contact Person** to arrange an appointment. For additional information about the Integrated Pest Management Program, please contact the District's **IPM Contact Person** [enter IPM CONTACT Person name, phone number and email address here].

Structural Application Notification – Students/Staff [15.05.02.05]

Enter applicable type of application [either regular “pesticide” or “emergency” notification] in title. Prior to distribution, copy content of entire form to a WORD document, edit and complete form by filling in all areas as indicated, then produce a PDF of the completed form for distribution and filing.

[PESTICIDE or EMERGENCY] APPLICATION to the SCHOOL NOTIFICATION

To: The Parents of ALL STUDENTS, [*also enter “all Students” for MS and HS applications*], and all Staff
From: [*enter name here*], IPM Contact Person
Re: **Pesticide Application** [*enter name of School or Facility here*]
Date: [*enter date here*]

This memo is a notice that an emergency application of [*enter Pesticide Product name here*] was made in [*enter description of area here – e.g. “3 yellow jacket nests, two in exterior wall voids and one in the edging timbers around the playground area in the ground”*]. This was necessary because non-chemical means are ineffective against [*enter pest name here*], and they posed a risk of [*enter risk here*] to students and staff.

This treatment may [*enter any additional information about the treatment here*].

All precautions will be taken to ensure the safety of students and staff however, state law requires that the following statement be included: “The Office of Pesticide Programs of the United States Environmental Protection Agency has stated that: “Where possible, persons who potentially are more sensitive, such as pregnant women and infants (less than two-years old), should avoid any unnecessary pesticide exposure.”

A summary of the potential adverse effects of the pesticide applied is below. Copies of any Safety Data Sheet [SDS] and EPA Product Label [PL] for any pesticide being applied may be obtained by calling the school office. They will also be on file in the IPM SYSEM LOG notebook which is publicly available.

For additional information about this application please contact [*enter District IPM Contact’s name here*] at [*enter phone number here*], or [*enter email address here*].

Material to be used:

PRODUCT NAME: [*enter name here*]

COMMON NAME: [*enter list of chemicals/active ingredients here*]

EPA REGISTRATION NUMBER: [*enter EPA Registration number here*]

HEALTH HAZARD DATA: [*enter all potential health effects here*]

SCHOOL NAME: [*enter name of school here*]

DATE: [*enter date of application here*]

Structural Application Notification - Posting [15.05.02.08(A)]

Enter applicable type of application [either regular “pesticide” or “emergency” notification] in title. Prior to posting at front and main entrances, copy content of entire form to a WORD document, edit and complete form by filling in all areas as indicated, then produce a PDF of the completed form for posting and filing.

NOTICE of [*PESTICIDE or EMERGENCY PESTICIDE*] APPLICATION to the SCHOOL BUILDING

To: Visitors, Parents of ALL STUDENTS, [*also enter “all Students” for MS and HS applications*], and all Staff
From: [*enter name here*], IPM Contact Person
Re: **Pesticide Application** [*enter name of School or Facility here*]
DATE: [*enter date of application here*]

This memo is a notice that an [*pesticide or emergency pesticide application*] of [*enter Pesticide Product name here*] was made in [*enter description of area here – e.g. “3 yellow jacket nests, two in exterior wall voids and one in the edging timbers around the playground area in the ground”*]. This was necessary because non-chemical means were ineffective against [*enter pest name here*], and they posed a risk of [*enter risk here*] to students and staff.

This treatment may [*enter any additional information about the treatment here*].

All precautions will be taken to ensure the safety of students and staff however, state law requires that the following statement be included: “The Office of Pesticide Programs of the United States Environmental Protection Agency has stated that:

“Where possible, persons who potentially are more sensitive, such as pregnant women and infants (less than two-years old), should avoid any unnecessary pesticide exposure.”

A summary of the potential adverse effects of the pesticide applied is below. Copies of any Safety Data Sheet [SDS] and EPA Product Label [PL] for any pesticide being applied may be obtained by calling the school office. They will also be on file in the IPM SYSEM LOG notebook which is publicly available.

For additional information about this application please contact [*enter District IPM Contact’s name here*] at [*enter phone number here*], or [*enter email address here*].

Material to be used:

PRODUCT NAME: [*enter name here*]

COMMON NAME: [*enter list of chemicals/active ingredients here*]

EPA REGISTRATION NUMBER: [*enter EPA Registration number here*]

HEALTH HAZARD DATA: [*enter all potential health effects here*]

SCHOOL NAME: [*enter name of school here*]

BAIT STATION NOTIFICATION – STUDENTS/STAFF [15.05.02.08]

Enter applicable type of application [either regular “pesticide” or “emergency” notification] in title. Prior to posting at front and main entrances, copy content of entire form to a WORD document, edit and complete form by filling in all areas as indicated, then produce a PDF of the completed form for posting and filing.

NOTICE of PESTICIDE BAIT APPLICATION

To: Visitors, Parents of ALL STUDENTS, [also enter “all Students” for MS and HS applications], and all Staff
From: [enter name here], IPM Contact Person
Re: **Pesticide Application** [enter name of School or Facility here]
Date: [enter date here]

This memo is a notice that an emergency application of [enter Pesticide Product name here] was made in [enter description of area here – e.g. “3 yellow jacket nests, two in exterior wall voids and one in the edging timbers around the playground area in the ground”]. This was necessary because non-chemical means are ineffective against [enter pest name here], and they posed a risk of [enter risk here] to students and staff.

This treatment may [enter any additional information about the treatment here].

All precautions will be taken to ensure the safety of students and staff however, state law requires that the following statement be included: “The Office of Pesticide Programs of the United States Environmental Protection Agency has stated that: “Where possible, persons who potentially are more sensitive, such as pregnant women and infants (less than two-years old), should avoid any unnecessary pesticide exposure.”

A summary of the potential adverse effects of the pesticide applied is below. Copies of any Safety Data Sheet [SDS] and EPA Product Label [PL] for any pesticide being applied may be obtained by calling the school office. They will also be on file in the IPM SYSEM LOG notebook which is publicly available.

For additional information about this application please contact [enter District IPM Contact’s name here] at [enter phone number here], or [enter email address here].

Material to be used:

PRODUCT NAME: [enter name here]

COMMON NAME: [enter list of chemicals/active ingredients here]

EPA REGISTRATION NUMBER: [enter EPA Registration number here]

HEALTH HAZARD DATA: [enter all potential health effects here]

SCHOOL NAME: [enter name of school here]

DATE: [enter date of application here]

BAIT STATION NOTIFICATION – POSTING [15.05.02.08(B)]

Enter all requested information into this form. Prior to posting at front and main entrances, copy content of entire form to a WORD document, edit and complete form by filling in all areas as indicated, then produce a PDF of the completed form for posting and filing. Post this at the outside the room/area where the bait station was placed on the day of the placement.

NOTICE - BAIT STATION IN USE

CAUTION - PESTICIDE APPLICATION

Date of Placement: *[enter date of placement here]*

Location of Bait Station: *[enter location here]*

Common Name of Pesticide: *[enter name of pesticide]*

EPA Product Reg #: *[enter EPA Product Reg# here]*

Enter Active Ingredient here: *[enter active ingredient here]*

For additional information, including information on potential adverse health effects, contact:

*[enter name and contact information of
IPM CONTACT PERSON here]*

Grounds Application Notification - Students/Staff [15.05.02.05]

This form is used for any pesticide applications to school grounds including turf, beds, athletic fields, sidewalks, hardscapes and other outside areas. Prior to distribution, copy content of form to WORD, edit and complete form by filling in all areas as indicated, then produce a PDF of the completed form for distribution.

NOTICE of PESTICIDE APPLICATION to the SCHOOL GROUNDS

TO: Parents of ALL STUDENTS, [enter "ALL STUDENTS" for MS and HS applications], and all Staff

FROM: [enter name here], IPM Contact Person

RE: Pesticide Application [enter name of School or Facility here]

DATE: [enter date here of notice here]

This memo is to notify you that a pesticide application will be made to the grounds of the school. The application of [enter Pesticide Product name here] is scheduled to be applied in [enter description of area here – e.g. "3 yellow jacket nests, two in exterior wall voids and one in the edging timbers around the playground area in the ground"]. This was necessary because non-chemical means are ineffective against [enter pest name here], and they posed a risk of [enter risk here] to students and staff.

This treatment may [enter any additional information about the treatment here].

All precautions will be taken to ensure the safety of students and staff however, state law requires that the following statement be included: "The Office of Pesticide Programs of the United States Environmental Protection Agency has stated that: "Where possible, persons who potentially are more sensitive, such as pregnant women and infants (less than two-years old), should avoid any unnecessary pesticide exposure."

A summary of the potential adverse effects of the pesticide applied is below. Copies of any Safety Data Sheet [SDS] and EPA Product Label [PL] for any pesticide being applied may be obtained by calling the school office. They will also be on file in the **IPM SYSTEM LOG** notebook which is publicly available.

For additional information about this application please contact [enter District IPM Contact's name here] at [enter phone number here], or [enter email address here].

Material to be used:

PRODUCT NAME: [enter name here]

COMMON NAME: [enter list of chemicals/active ingredients here]

EPA REGISTRATION NUMBER: [enter EPA Registration number here]

HEALTH HAZARD DATA: [enter all potential health effects here]

SCHOOL NAME: [enter name of school here]

SCHEDULED DATE of APPLICATION: [enter date of application here]

Grounds Application Notification – Posting [15.05.02.08(C)]

This form is used for any pesticide applications to school grounds including turf, beds, athletic fields, sidewalks, hardscapes and other outside areas. Prior to distribution, copy content of form to WORD, edit and complete form by filling in all areas as indicated, then produce a PDF of the completed form for distribution. Post this at the entrances to the School Building the day of the application and at least immediately following the application.

NOTICE of PESTICIDE APPLICATION to the SCHOOL GROUNDS

To: Visitors, Parents of ALL STUDENTS, [also enter “all Students” for MS and HS applications], and all Staff
From: [enter name here], IPM Contact Person
Re: **Pesticide Application** [enter name of School or Facility here]
Date: [enter date here]

This memo is a notice that an emergency application of [enter Pesticide Product name here] was made in [enter description of area here – e.g. “3 yellow jacket nests, two in exterior wall voids and one in the edging timbers around the playground area in the ground”]. This was necessary because non-chemical means were ineffective against [enter pest name here], and they posed a risk of [enter risk here] to students and staff.

This treatment may [enter any additional information about the treatment here].

All precautions will be taken to ensure the safety of students and staff however, state law requires that the following statement be included: “The Office of Pesticide Programs of the United States Environmental Protection Agency has stated that:

“Where possible, persons who potentially are more sensitive, such as pregnant women and infants (less than two-years old), should avoid any unnecessary pesticide exposure.”

A summary of the potential adverse effects of the pesticide applied is below. Copies of any Safety Data Sheet [SDS] and EPA Product Label [PL] for any pesticide being applied may be obtained by calling the school office. They will also be on file in the IPM SYSEM LOG notebook which is publicly available.

For additional information about this application please contact [enter District IPM Contact’s name here] at [enter phone number here], or [enter email address here].

Material to be used:

PRODUCT NAME: [enter name here]

COMMON NAME: [enter list of chemicals/active ingredients here]

EPA REGISTRATION NUMBER: [enter EPA Registration number here]

HEALTH HAZARD DATA: [enter all potential health effects here]

SCHOOL NAME: [enter name of school here]

Grounds Application - Turf Flag – Posting [15.05.01.15(A–G)]**15.05.01.15 Posting of Sign**

"A. A licensee or permittee applying a pesticide to a lawn or to exterior landscape plants shall post, at the time of application, a sign which conforms to the requirements of this regulation..."

B. The licensee or permittee who is required to post a sign under this regulation shall model it after that shown in Figure A..."

When any pesticide is applied to a lawn, exterior landscape plants or beds, athletic field, or other exterior school surface or area (e.g. hard surfaces like sidewalks, play grounds, fence line, etc.), the school is required to place the sign at each primary access to the school, with the front of the sign facing the access. If only a spot pesticide application is made, or only a small area of a large area receives a pesticide application, a sign may be posted at the location where the pesticide application was made, with the front of the sign facing the probable path of access to the area. When athletic fields are treated a sign is required to be posted at the entrance to the school property as well as the entrance to the athletic field.

The sign must remain in place for 48 hours following the pesticide application, after which time it can be removed by school staff. No one may remove, alter, or deface the sign or agree to conspire with another to remove, alter, or deface the sign within 48 hours of its posting. **Students and Staff must be educated on the meaning of the yellow turf flag sign and instructed to stay off the treated area for the 48 hours following the pesticide application.**

The school is required to post a **yellow turf flag** sign as shown in Figure A. The back of the sign must show the information as noted below, including the contact information for the pesticide applicator (school or certified applicator), the name of the pesticide applied along with the EPA Registration Number as noted in Figure B. The sign must be made of a sturdy, weather resistant material and measure 4" in height by 5" in width. It must be yellow with black bold-faced lettering and mounted on a flexible stake with sign mounted 12"-16" off the ground.

FRONT of YELLOW TURF FLAG**BACK of YELLOW TURF FLAG**

Figure B

DATE:
SCHOOL DISTRICT NAME:
CONTACT NAME:
CONTACT NUMBER:
EPA Reg #:
PRODUCT NAME:
AREA TREATED: (i.e. fence line, turf, etc.)

The posting of the **yellow turf flag** is in addition to the notification requirements for any "grounds" or exterior pesticide application. Grounds applications require notification to Students/Staff [15.05.02.05], Posting [15.05.02.08(C)] at school entrances as well as Turf Flag – Posting [15.05.01.15(B–G)]. Refer to Table of Contents for chapters covering required notification and posting.

Space Spraying Application Notification – Students/Staff [15.05.02.07(B)]

Each school that intends to use space spraying in a school building shall provide written notice to each parent or guardian and staff member at least 1 week before the application. The written notice shall be sent home with each student or provided to each staff member. The notice shall contain information about the pesticide to be used, the location of the space spraying and the planned date and time of the spraying. The following language: *"The Office of Pesticide Programs of the United States Environmental Protection Agency has stated: 'Where possible, persons who potentially are more sensitive, such as pregnant women and infants (less than 2 years old), should avoid any unnecessary pesticide exposure'*"; The notice must also include a brief description of potential adverse effects based upon safety data sheet of the pesticide to be applied; and the name and telephone number of the IPM Contact Person.

**PLANNED SPACE SPRAYING INSIDE SCHOOL BUILDING - REQUIRED 7 DAY PRIOR NOTIFICATION
TO ALL PARENTS, GUARDIANS AND STAFF**

Integrated pest management procedures such as inspections and monitoring are used to determine when and how to control pests and to identify conditions contributing to pest problems so that corrective actions can be taken. The necessity for pest control, if warranted, is evaluated and one or more pest control methods including sanitation, structural repair, and other non-chemical methods are utilized. Only after all non-chemical options have been exhausted can a pesticide be applied. It has been determined that a current pest problem warrants the use of a pesticide to be applied as a space spray in order to effectively control the pest problem. If you require further information about this notice please contact the school or the District's **IPM Contact Person** listed below.

NAME OF SCHOOL: _____

PHONE NUMBER OF SCHOOL: _____

PEST ISSUE IDENTIFIED: _____

COMMON NAME OF PESTICIDE TO BE APPLIED: _____

EPA REGISTRATION NUMBER OF PESTICIDE TO BE APPLIED: _____

EXACT LOCATION(S) OF THE PESTICIDE APPLICATION: _____

PLANNED DATE AND TIME OF APPLICATION: _____

Note: The Maryland Department of Agriculture's Regulations pertaining to Integrated Pest Management and Notification of Pesticide Use in Public Schools requires that the following information be provided as part of this notice: *"The Office of Pesticide Programs of the United States Environmental Protection Agency has stated: 'Where possible, persons who potentially are more sensitive, such as pregnant women and infants (less than two years old), should avoid any unnecessary pesticide exposure'.*"

[[enter health hazard information from EPA Product Label and SDS sheet here](#)]

The law requires health hazard data be provided in this notice. The attached information was excerpted from data extracted from the EPA Product Label – Health Hazards Section. More detailed information is available by consulting the complete EPA Product Label and the Safety Data Sheet (MSDS) on file at the school in the **IPM SYSTEM LOG** notebook or by contacting the IPM Contact Person:

[[enter name of IPM Contact Person](#)] [[enter telephone number](#)] [[enter email address](#)]

Space Spraying Application Notification - Posting [15.05.02.07(C)]

Each school that intends to use space spraying in a school building shall provide written notice to each parent or guardian and staff member at least 1 week before the application. The written notice shall be sent home with each student or provided to each staff member. The notice shall contain information about the pesticide to be used, the location of the space spraying and the planned date and time of the spraying. The following language: *"The Office of Pesticide Programs of the United States Environmental Protection Agency has stated: 'Where possible, persons who potentially are more sensitive, such as pregnant women and infants (less than 2 years old), should avoid any unnecessary pesticide exposure"*; The notice must also include a brief description of potential adverse effects based upon safety data sheet of the pesticide to be applied; and the name and telephone number of the IPM Contact Person.

NOTICE of PESTICIDE SPACE SPRAYING APPLICATION in the SCHOOL BUILDING

To: Visitors, Parents of ALL STUDENTS, [*also enter "all Students" for MS and HS applications*], and all Staff

From: [*enter name here*], IPM Contact Person

Re: **Pesticide Application** [*enter name of School or Facility here*]

Date: [*enter date here*]

This memo is a notice that an emergency application of [*enter Pesticide Product name here*] was made in [*enter description of area here – where the space spraying occurred*]. This was necessary because non-chemical means are ineffective against [*enter pest name here*], and it posed a risk of [*enter risk here*] to students and staff.

This treatment may [*enter any additional information about the treatment here*].

All precautions will be taken to ensure the safety of students and staff however, state law requires that the following statement be included: "The Office of Pesticide Programs of the United States Environmental Protection Agency has stated that: *"Where possible, persons who potentially are more sensitive, such as pregnant women and infants (less than two-years old), should avoid any unnecessary pesticide exposure."*"

A summary of the potential adverse effects of the pesticide applied is below. Copies of any Safety Data Sheet [SDS] and EPA Product Label [PL] for any pesticide being applied may be obtained by calling the school office. They will also be on file in the IPM SYSEM LOG notebook which is publicly available.

For additional information about this application please contact [*enter District IPM Contact's name here*] at [*enter phone number here*], or [*enter email address here*].

Material to be used:

PRODUCT NAME: [*enter name here*]

COMMON NAME: [*enter list of chemicals/active ingredients here*]

EPA REGISTRATION NUMBER: [*enter EPA Registration number here*]

HEALTH HAZARD DATA: [*enter all potential health effects here*]

SCHOOL NAME: [*enter name of school here*]

DISTRICT's IPM CONTACT Person: [*name and contact information here*]

FORMS and CHECKLISTS

This section contains the FORMS and CHECKLISTS for required documentation. Copy desired sample into a new WORD document and edit where indicated or needed. Prior to distributing or printing these documents, be sure to create a PDF file. Only the PDF file should be shared. Ensure that copies of any FORMS are added to the **IPM SYSTEM LOG** notebook. Share checklist as indicated. The following FORMS and CHECKLISTS are included in this **IPM Plan**:

FORMS:

1. IPM Inspection Report FORM – example
2. IPM Pest Control Work Order FORM - example

CHECKLIST:

1. Pest Exclusion Check List

IPM INSPECTION REPORT FORM – REQUIRED DOCUMENTATION**MONTHLY IPM SERVICE REPORT FORM**Submitted for month: Jan Feb Mar Apr May June July Aug Sep Oct Nov Dec (*circle month*)

Academic Year: _____

Date: ___/___/___

School/Facility: _____

Name of IPM trained person completing form: _____

Phone: _____ Email: _____

MONITORING ACTIONS: Rooms/Locations of monitoring ("sticky" or mouse) traps should be identified on a separate diagram and checked on at least a weekly basis. For all traps placed, mark a diagram AND indicate below all locations where traps are being monitored each month. A list of the most common locations are noted below.

Main Office Cafeteria Faculty lounge Restroom(s) Locker room(s)

Outdoors Kitchen Other: _____

Classrooms NO traps/monitors were placed this month

OBSERVATIONS:

cockroaches (number of roaches and type, (if known) observed on trap) _____

ants mice flies other(specify): _____

POTENTIAL SOURCES OF PEST PROBLEMS (as observed by IPM registered person - list all that apply)

1. Sanitation problems: _____ area not clean (e.g. crumbs, sticky residues, etc)

occupants not assisting in keeping area clean
(e.g. leave food out, beverages/water sources, dirty dishes present)

2. Repair/structural problems:

hole(s) in wall/floor(specify location) _____

leak(s)(specify location): _____

other: _____

NON-CHEMICAL ACTIONS TAKEN:

Area cleaned Caulk/exclusion method used IPM literature provided to occupants

Repair Work Ordered submitted to Maintenance Cluster-Enter WO number: _____

Before any pesticide can be used, the information on this page must be completed. If it is determined that chemical action is warranted, complete a **Pest Control Work Order Form**, attach this form and submit both pages to District's **IPM Contact Person** Custodial Services review. This information will be maintained and reviewed to determine **IPM SYSTEM** needs for training, alternative methods, etc.

PEST CONTROL WORK ORDER FORM – REQUIRED DOCUMENTAION**PEST CONTROL WORK ORDER FORM**

IMPORTANT: A completed copy of the IPM Service Report Form must be attached to this form

Approval to apply any pesticide must be obtained from the District's **IPM Contact Person**. Schools must complete **IPM SERVICE REPORT** prior to requesting any pesticide application. **IPM SERVICE REPORT** must be accompany the **PEST CONTROL WORK ORDER FORM**. All non-chemical means of pest control must be exhausted prior to submitting this form requesting a pesticide application. Submit both forms to the District's **IPM Contact Person** for review and authorization of pesticide use. If approved, pesticide application and required notification must take place in accordance with the **IPM SYSTEM** requirements.

Academic Year: _____

Date: ___/___/___

School/Facility: _____

Name of IPM trained person completing form: _____

Phone: _____ Email: _____

As documented on the attached **IPM Service Report** - a pest problem has been verified as follows: pest problem inside school building pest problem outside school building

The following non-chemical means of pest control were completed. All non-chemical means of pest control for this situation have been exhausted, therefore recommending chemical means of pest control.

Chemical means of pest control recommended base on the following;

 Monitored pest populations still exceed acceptable level(s) (note: acceptable thresholds will be determined on a case by case basis, depending weather, season, population affected, etc.) Pest identified poses immediate health or other hazards (e.g. stinging insects, poison ivy) Pest has/will cause imminent damage to structure, property, etc. (e.g. termites, insect pests in turf) Other (specify): _____**REVIEW, RECOMMENDATION and/or AUTHORIZATION by District IPM Contact Person REQUIRED**

Reviewed by: _____ Date: _____

Pesticide application by Maryland Department of Agriculture Certified Pest Control Applicator is:

 APPROVED NOT APPROVED COMMENTS: _____

Before any pesticide can be used, the **IPM Service Report Form** must be completed and attach to this form. Submit both pages to District's **IPM Contact Person** for review and recommendation. This information will be maintained and reviewed by Operations to determine **IPM SYSTEM** needs for training, alternative ,methods, etc.

PEST EXCLUSION CHECKLIST – EXTERIOR AND INTERIOR**PEST EXCLUSION CHECK LIST****EXTERIOR**

1. Seal holes or gaps in foundation wall voids using the appropriate sealant compound.....
2. Cover weep holes or insert hardware cloth to seal entry points in walls and still allow condensation egress.
3. Install quarter inch hardware cloth over louvered portion of air-conditioning units
4. Install all metal rodent proof door bottom guard, vinyl or brush style door seals.....
5. Seal void area between entrance way, patio or similar wall abutment.....
6. Seal openings around plumbing, electrical AC, water, telephone or cable lines as needed.....
7. Provide threshold below door to eliminate gap opening and prevent pest entry.....
8. Caulk, seal or otherwise close openings around door frames and moldings.....
9. Caulk, seal or otherwise close openings around window frames and sills.....
10. Seal gaps around electrical fixtures, outside lights, switch plates and receptacles.....
11. Eliminate gaps around dryer, stove gen air, crawl space and other vents.....
12. Provide and install window well covers to prevent rodents, leaves and other debris.....
13. Install crawl space vent opening. Provide E Z access cover and screen.....
14. Seal areas around roof soffits, ridge or gable
15. Provide and install chimney caps and vent caps as needed.....

INTERIOR

16. Provide and install screening on interior portions of vents to reduce gap openings.....
17. Provide and install quarter inch hardware cloth on interior portion of vents in crawl space.....
18. Seal radiator unit pipe penetrations through floors and wall with the appropriate sealants.....
19. Seal openings around water pipes as needed.....
20. Close cracks and crevices around sinks, counter tops, fixtures.....
21. Seal ceiling / floor wall juncture with the appropriate materials.....
22. Seal floor / baseboard juncture with the appropriate material.....

SCHOOL IPM RESOURCES

This section contains:

IPM CONTRACT Requirements in the form of a MODEL IPM CONTRACT

IPM Best Management Practices Resources

SCHOOL IPM CONTRACT Requirements

MODEL IPM CONTRACT

[SCHOOL DISTRICT/COUNTY NAME HERE]

INTEGRATED PEST MANAGEMENT CONTRACT SPECIFICATIONS

EFFECTIVE : _____

Structural Maryland Public School Integrated Pest Management System – MODEL IPM CONTRACT

*(developed for Maryland's IPM in Schools Law from a model authored
by Dr. Albert Greene, U.S. General Services Agency)*

Premises covered by this specification:

1. _____
2. _____
3. _____
4. _____
5. _____

(Attach additional list if necessary)

1. GENERAL

A. **Description of Program:** This specification is part of a comprehensive Integrated Pest Management (IPM) System for the Maryland Public School premises listed above. The Contract must adhere to Maryland Statute and Regulations as well as Board of Education Policy and Requirements for pest management in Maryland Public Schools.

The County Board of Education [BOE]'s Integrated Pest Management [IPM] System and any contracted pest management activities must be in accordance with Annotated Code of Maryland, Agricultural Article, §5-208.1 Integrated Pest Management, Maryland Department of Agriculture [MDA] Regulations 15.05.02 and BOE's IPM in Schools Policy [*BOE policy number here*] [*BOE policy name here*].

The Contractor will adhere to the statutory definition of IPM and manage pests based on the statutory definition of "Integrated pest management" as a managed pest control program in which

methods are integrated and used to keep pests from causing economic, health-related, or aesthetic injury through the utilization of site or pest inspections, pest population monitoring, evaluating the need for control, and the use of one or more pest control methods, including sanitation, structural repair, nonchemical methods, and, when nontoxic options are unreasonable or have been exhausted, pesticides, in order to:

- (a) Minimize the use of pesticides; and
- (b) Minimize the risk to human health and the environment associated with pesticide applications.

IPM is a process for achieving long-term, environmentally sound pest suppression and prevention with a goal of effective pest control without pesticides and only the use of least-toxic pesticides as a last resort after non-chemical means have been exhausted.

Control strategies in an IPM program include:

- Structural and procedural modifications to reduce food, water, harborage and access used by pests.
- Non-pesticide technologies such as trapping and monitoring devices.
- Coordination among all facilities management programs that have a bearing on the pest control effort.
- As a last resort, least-toxic pesticide compounds, formulations and application methods that present the lowest potential hazard to humans and the environment.

B. IPM Service Requirements: The Service Provider shall furnish all supervision, labor, materials, and equipment necessary to accomplish the monitoring, trapping, pesticide application, pest removal and pest prevention components of this IPM program. Any deviations from this program must be approved by the School District.

2. PESTS INCLUDED

The Service Provider shall adequately suppress all pest species that have the potential to affect public health, impede operations or damage property, including but not limited to:

- Indoor populations and invading individuals of rodents, insects, arachnids, and other arthropods.
- Outdoor populations of potentially indoor-infesting species that are within the property boundaries of the specified buildings.
- Nests of stinging insects within the property boundaries of the specified buildings.
- Termites and other wood-destroying organisms.
- Birds, bats, small mammals, and all other vertebrates.

3. PEST CONTROL PERSONNEL

Throughout the term of this contract, all personnel providing on-site pest control service must maintain Maryland Department of Agriculture pesticide certification as commercial pesticide applicators in the appropriate categories for the facilities listed above. Uncertified individuals working under the supervision of a certified applicator will not be permitted to provide service under this contract. All pesticide applications must have PRIOR written approval from the District's IPM Contact Person (a.k.a IPM Coordinator).

4. SERVICE PROVIDER IPM PLAN

The Service Provider shall submit to the District an **IPM SERVICE PROVIDER PLAN** at least five (5) working days prior to the starting date of the contract. If aspects of the Service Plan are incomplete or disapproved by the District, the Contractor shall have two (2) working days to submit revisions. The Service Plan shall consist of three parts as follows:

- A. **EPA Product Labels and SDS Information:** The Service Provider shall provide current EPA Product Labels and Safety Data Sheets for all pesticides that will potentially be used in the pest control program. Only the least toxic and lowest risk products are allowed to be used in Maryland Public Schools by law.
- B. **Service Schedule(s):** The Service Provider shall provide a schedule of routine pest control inspections for each building serviced under this contract, including frequencies of inspections, areas at each facility to be given special attention (e.g., food storage, preparation and serving areas; washrooms; custodial closets; mechanical rooms; entryways) and specific day(s) of the week on which the inspections will be performed.
- C. **Commercial Pesticide Applicator Licenses and Certificates:** The Service Provider shall provide a photocopy of the Maryland Department of Agriculture Commercial Certified Pesticide Applicator License for every Contractor performing on-site pest control service under this contract, and a photocopy of the State-issued Commercial Pesticide Applicator Certificate for every pest management professional (PMP) performing on-site pest control service.

The Service Provider shall receive the written approval from the District prior to implementing any subsequent changes to the approved Service Provider IPM Plan, including additional or replacement pest control products. The Service Provider will review and update the Service Provider IPM Plan annually, including updating EPA Product Labels and SDS information ensuring that the only the least toxic and lowest risk product are used.

4. **RECORD KEEPING**

The Service Provider shall be responsible for maintaining any related documents in the IPM SYSTEM LOG notebook or a file for each building specified in this contract. These records shall be kept on-site and maintained on each visit by the PMP performing pest control service. Each IPM SYSTEM LOG notebook or file shall contain at least the following items:

- A. **IPM Plan:** A copy of the Service Provider's approved IPM Plan, including EPA Pesticide Labels and SDS sheets for all pesticides that will be potentially used in the building, service schedule for routine pest control inspections, and photocopies of the relevant Commercial Pesticide Applicator Licenses and Certificates.
- B. **Building Occupant Log Form:** These forms will be used to advise the Service Provider of routine service requests and pest sightings by building occupants.
- C. **Service Provider's Report Forms:** Customer copies of the Service Provider's signed and dated Service Report Form, documenting all information on services provided including pesticide applications required by State, local statute and the District's IPM SYSTEM. This form must also indicate any recommendations made by the Service Provider for additional action advisable by the customer, e.g., structural or plumbing repairs required to limit pest access to the building or to food and water resources; improvements in sanitation, etc. A copy of this form must also be provided to the District within one week of the service.
- D. **Service Provider Products and Devices:** All bait stations, snap traps and glue boards or other devices left behind by the Service Provider are to be dated, numbered and listed on the Service Provider Report Form and checked on each subsequent visit until removed. All such devices shall be removed when full, dirty and no longer effective, or no longer needed.

5. **MANNER AND TIME TO CONDUCT SERVICE**

- A. Time Frame of Service Visits: Frequent and complete communication between the Service Provider and the facility manager is critical for a successful outcome. Routine pest control services that do not adversely affect staff or patient health or productivity shall be performed during the regular building hours of operation. When it is necessary to perform work outside of the regularly scheduled service time set forth in the Service Provider IPM Plan, the Contractor shall notify the District and/or IPM Contact Person (a.k.a. IPM Coordinator) at least one day in advance.
- C. Safety and Health: All pest control work shall be in strict accordance with all applicable Federal, State, and local safety and health requirements. Where there is a conflict between applicable regulations, the most stringent will apply.
- D. Special Entrance: Certain areas within some buildings may require special instructions for persons entering them. Any restrictions associated with these special areas will be explained by the District. The Service Provider shall adhere to these restrictions and incorporate them into the Service Provider IPM Plan.
- E. Special Entrance: Certain areas within some buildings may require special instructions for persons entering them. Any restrictions associated with these special areas will be explained by the District. The Service Provider shall adhere to these restrictions and incorporate them into the Service Provider IPM Plan.
- F. Uniforms: All Service Provider representatives working in or around the buildings specified in this contract shall wear distinctive uniforms identifying the name of their employer.
- G. Vehicles: Vehicles used by the Service Provider shall be identified in accordance with State and local regulations.

6. SPECIAL REQUESTS AND EMERGENCY SERVICE

On occasion, the District may request that the Service Provider perform corrective, special or emergency service(s) that are beyond routine service requests such as removal of a stinging insect nest. The Service Provider shall respond to these exceptional circumstances and complete the necessary work within twenty-four (24) hours after receipt of the request.

7. INSECT CONTROL

- A. Emphasis on Non-Pesticide Methods: Non-pesticide methods of control shall be used wherever possible and exhausted prior to applying any pesticide. For example:
 1. Portable vacuums rather than pesticide sprays shall be the standard method for initial cleanouts of cockroach infestations, for swarming (winged) ants and termites, and for control of spiders in webs.
 2. Trapping devices rather than pesticide sprays shall be the standard method for indoor fly control.
- B. Application of Insecticides to Cracks and Crevices: As a general rule, all insecticides shall be applied as “crack and crevice” treatments only, defined in this contract as treatments in which the formulated insecticide is not visible to a bystander or accessible to children during or after the application process.

- C. **Application of Insecticides to Exposed Surfaces or as Space Sprays:** Application of insecticides to exposed surfaces or as space sprays (“fogging”) shall be restricted to exceptional circumstances where no alternative measures are practical. The Service Provider shall obtain approval of the District prior to any application of insecticide to an exposed surface or any space spray treatment. No surface application or space spray shall be made while staff, patients or visitors are present. The Service Provider shall take all necessary precautions to ensure staff, patient and visitor safety, and all necessary steps to ensure the containment of the pesticide to the site of application and adhere to all the requirements outlined in the District’s IPM SYSTEM.
- D. **Insecticide Bait Formulations:** Bait formulations shall be the standard pesticide technology for cockroach and ant control, with alternate formulations restricted to unique situations where baits are not practical.
- E. **Monitoring:** Sticky traps shall be used to guide and evaluate indoor insect control efforts wherever necessary.

8. **RODENT CONTROL**

- A. **Indoor Trapping:** As a general rule, rodent control inside buildings shall be accomplished with trapping devices only. All such devices shall be concealed out of the general view and in protected areas so as not to be affected by routine cleaning and other operations. Trapping devices shall be checked on a schedule approved by the District. The Service Provider shall be responsible for disposing of all trapped rodents and all rodent carcasses in an appropriate manner.
- B. **Use of Rodenticides:** In exceptional circumstances, when rodenticides are deemed essential for adequate rodent control inside buildings, the Service Provider shall obtain approval of the District prior to making any interior rodenticide treatment. All rodenticides, regardless of packaging, shall be placed either in locations not accessible to children, pets, wildlife and domestic animals, or in EPA-approved tamper-resistant bait boxes. As a general rule, rodenticide application outside buildings shall emphasize the direct treatment of rodent burrows wherever feasible.
- C. **Use of Bait Boxes:** All bait boxes shall be maintained in accordance with EPA regulations, with an emphasis on the safety of non-target organisms. The Service Provider shall adhere to the following five points:
 1. All bait boxes shall be placed out of the general view, in locations where they will not be disturbed by routine operations.
 2. The lids of all bait boxes shall be securely locked or fastened shut.
 3. All bait boxes shall be securely attached or anchored to floor, ground, wall, or other immovable surface, so that the box cannot be picked up or moved.
 4. Bait shall always be secured in the feeding chamber of the box and never placed in the runway or entryways of the box.
 5. All bait boxes shall be labeled on the inside with the Service Provider’s business name and address, and dated by the Service Provider at the time of installation and each servicing.

10. USE OF PESTICIDES

The Service Provider shall be responsible for application of pesticides according to the EPA Product Label, all applicable regulations and the District's IPM SYSTEM. All pesticides must be registered with the U.S. Environmental Protection Agency (EPA), State and/or local jurisdiction unless prior approval is given by the District. Transport, handling, and use of all pesticides shall be in strict accordance with the manufacturer's label instructions and all applicable Federal, state, and local laws and regulations.

The Service Provider shall adhere to the following rules for pesticide use:

- A. **Rentry Time, Posting and Notification:** Pesticides may not be applied where staff, students or visitors will be present within seven hours after the application. At least seventy-two hours prior to a pesticide application, the Service Provider shall post an 8 ½ x 11" pest control information sign both at the site of the application and near the facility reception area where it will be seen by visitors entering the facility. This posting shall include the date, time and location of the application, the product applied, potential adverse effects from the Safety Data Sheet (MSDS) and the EPA Product Label, and include the Service Provider name, address and telephone. Service Provider shall also provide this information to the District who will use this information to notify staff, students and parents/guardians are entitled to notification under Maryland Law and/or the District's IPM SYSTEM including those who specifically requested notification. Emergency applications, where pests pose an immediate threat to the health and safety of patients, visitors or employees, disinfectants, anti-microbials and self-contained or gel-type pesticide baits applied in inaccessible areas are must have postings immediately after the application, all required District IPM System notification and the 7-hour reentry requirement.
- B. **Approved Products:** No pesticide product shall be applied that has not been included in the Service Provider IPM Plan or approved in writing by the District.
- C. **Pesticide Storage:** The Service Provider shall not store any pesticide product in the buildings specified in this contract.
- D. **Application by Need:** Pesticide application shall be according to need and not by schedule. Application of pesticides in any inside or outside area shall not occur unless visual inspection or monitoring devices indicate the presence of pests in that specific area, and only after all non-chemical and non-toxic means have been exhausted and shown to be unsuccessful. Written approval must be granted by the District prior to any pesticide application.
- E. **Minimization of Risk:** When pesticide use is necessary, as a last resort the Service Provider shall employ the least hazardous and lowest risk material, most precise application technique and minimum quantity of pesticide necessary to achieve control.

END OF MODEL IPM CONTRACT

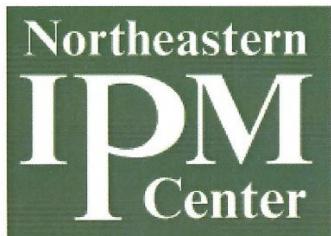
IPM Best Management Practices Resources

<https://www.northeastipm.org/schools/>

for Best Management Practices for School IPM

<https://www.northeastipm.org/working-groups/schools/>

for Northeast School IPM Working Group Resources



Best Management Practices for School IPM



www.northeastipm.org/schools

Icons from the Noun Project



The header image shows a large, multi-story brick school building with many windows. Overlaid on the left side is the Northeastern IPM Center logo, and on the right side is the text "Best Management Practices for School IPM". Below the building, there is descriptive text and icons.

Northeastern IPM Center

Best Management Practices for School IPM

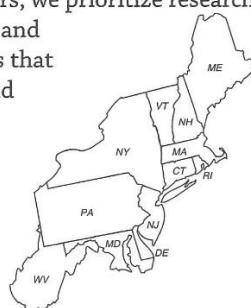
RESOURCES FOR: School Nurses, Administrators, Staff, Parents, Custodial and Building Maintenance, School Grounds and Athletic Fields, and Pest Management Contractors.



Offering hundreds of free online materials, we help you implement Integrated Pest Management on school property.

www.northeastipm.org/schools

The School IPM Working Group includes land-grant programs, government, private industry, and nonprofits from 11 northeastern states. By partnering with diverse stakeholders, we prioritize research, extension, and regulations that support and promote School IPM practices.



northeastipm.org/working-groups/schools

IPM SYSTEM CONTACTS – District and School Level

as of [enter Month Day Year]

Primary DISTRICT IPM CONTACT PERSON [*District's IPM Coordinator*]:

[enter name here]
[enter title here]
[enter mailing address here]
[enter email address here]
[enter work phone number here]
[enter cell phone number here]
[enter emergency phone number here]

Primary DISTRICT IPM CONTACT PERSON for School Administrators [*Principals/Vice-Principals*]

[enter name here]
[enter title here]
[enter mailing address here]
[enter email address here]
[enter work phone number here]
[enter cell phone number here]
[enter emergency phone number here]

Primary DISTRICT FACILITY DEPARTMENT CONTACT PERSON:

[enter name here]
[enter title here]
[enter mailing address here]
[enter email address here]
[enter work phone number here]
[enter cell phone number here]
[enter emergency phone number here]

Primary DISTRICT CUSTODIAL DEPARTMENT CONTACT PERSON:

[enter name here]
[enter title here]
[enter mailing address here]
[enter email address here]
[enter work phone number here]
[enter cell phone number here]
[enter emergency phone number here]

Primary DISTRICT GROUNDS DEPARTMENT CONTACT PERSON:

[enter name here]
[enter title here]
[enter mailing address here]
[enter email address here]
[enter work phone number here]
[enter cell phone number here]
[enter emergency phone number here]

Primary DISTRICT SAFETY, ENVIRONMENT & RISK MANAGEMENT DEPARTMENT CONTACT PERSON:

[enter name here]
[enter title here]
[enter mailing address here]
[enter email address here]
[enter work phone number here]
[enter cell phone number here]
[enter emergency phone number here]

Primary DISTRICT PEST CONTROL OPERATOR or CONTRACTOR CONTACT PERSON:

[enter name here]
[enter title here]
[enter mailing address here]
[enter email address here]
[enter work phone number here]
[enter cell phone number here]
[enter emergency phone number here]

Primary DISTRICT PUBLIC RELATIONS/COMMUNICATIONS DEPARTMENT CONTACT PERSON:

[enter name here]
[enter title here]
[enter mailing address here]
[enter email address here]
[enter work phone number here]
[enter cell phone number here]
[enter emergency phone number here]

Primary School Level Contact is the School's Principal, therefore include all of the district's schools in this section of the **IPM Plan** along with the contact information for their principals.

Primary [enter school #1 name here] **IPM CONTACT PERSON** [Principal/Vice-Principal]

[enter name here]
[enter title here]
[enter school's address here]
[enter email address here]
[enter work phone number here]
[enter cell phone number here]
[enter emergency phone number here]

Primary [enter school #2 name here] **IPM CONTACT PERSON** [Principal/Vice-Principal]

[enter name here]
[enter title here]
[enter school's address here]
[enter email address here]
[enter work phone number here]
[enter cell phone number here]
[enter emergency phone number here]

Primary [enter school #3 name here] **IPM CONTACT PERSON** [Principal/Vice-Principal]

[enter name here]
[enter title here]
[enter school's address here]
[enter email address here]
[enter work phone number here]
[enter cell phone number here]
[enter emergency phone number here]

Primary [enter school #4 name here] **IPM CONTACT PERSON** [Principal/Vice-Principal]

[enter name here]
[enter title here]
[enter school's address here]
[enter email address here]
[enter work phone number here]
[enter cell phone number here]
[enter emergency phone number here]

Primary [enter school #5 name here] **IPM CONTACT PERSON** [Principal/Vice-Principal]

[enter name here]
[enter title here]
[enter school's address here]
[enter email address here]
[enter work phone number here]
[enter cell phone number here]
[enter emergency phone number here]

[NOTE: continue entering Primary IPM CONTACT PERSON information for each school in the District here]