Integrated Pest Management
In Schools

Contracting Guidelines for IPM Services
in Maryland Public Schools

University of Maryland,
College Park

Maryland Department
of Agriculture

MARYLAND
COOPERATIVE
EXTENSION
COUNCIL OF STATE COOPERATIVE EXTENSIONS
ERRATA SHEET
AND
IMPORTANT NOTICE CONCERNING
IPM TRAINING MANUALS AND INFORMATION SHEETS

BACKGROUND

Legislation was enacted in 1997 mandating that Maryland Public Schools (Grades K-12) develop and implement Integrated Pest Management (IPM) plans for managing pests in public schools. The legislation also mandated schools to develop and implement methods for providing notification to parents and or guardians, as well as, school staff of pesticide use in school buildings. In 1999, this legislation was expanded to require public schools to develop and implement IPM plans and notification of pesticide use on school grounds.

In an effort to assist schools in the initial development and implementation of IPM plans and notification and posting formats, the Maryland Department of Agriculture (MDA) produced several manuals and contracted with the University of Maryland to write four additional manuals. These documents were intended for use by the schools for information and guidance. The documents were never intended to supplant the IPM and notification law and regulations but rather to facilitate implementation of the law. However, there are statements in these documents that incorrectly state the requirements of the law. The Department does not have the funds to republish the manuals and therefore has disseminated this errata sheet to all public school systems in Maryland to ensure that all schools are complying with the law.

Please note that the IPM in School manuals contain additional statements or information other than the examples listed below that do not uniformly incorporate and provide detail of the statutory mandate of Maryland’s IPM and notification of pesticide use in public school buildings or on school grounds law and regulations. Therefore, if you are reading these manuals for training/guidance purposes or when performing pest control services, make sure you adhere to the definition of Integrated Pest Management found in Maryland’s Integrated Pest Management and Notification of Pesticide Use in a Public School Building or on School Grounds law and regulations. For more information or questions, please contact the Maryland Department of Agriculture’s Pesticide Regulation Section at 410-841-5710

ERRATA SHEET

PLEASE NOTE AND BE AWARE OF THE FOLLOWING:

1. The IPM in Schools manuals produced by MDA and the University of Maryland contain statements that incorrectly state that IPM is an alternative to pesticide application. An example of such a statement can be found in the Preface of the Integrated Pest Management in Schools: IPM Training Manual, where it states “Integrated Pest Management (IPM) is an alternative to pesticide use.” This statement is incorrect. IPM is not an alternative in Maryland’s Public Schools (Grades K-12); it is the required method of pest control under Maryland’s IPM- in-Schools law and regulations.”
2. The IPM in Schools manuals produced by MDA and the University of Maryland contain statements that fail to uniformly affirm the statutory mandate that pesticides be used only when “nontoxic options are unreasonable or have been exhausted.” Examples of statements that fail to affirm the statutory mandate can be found 1) on page 6 of the manual entitled *Guidelines for Integrated Pest Management in Schools*, where it states “Pesticides are a component of an IPM program…” 2) on App. A, page 7 on the manual entitled *Contracting Guidelines for IPM Services in Maryland Public Schools* where it states “A broad definition of IPM is a pest control program that… incorporates different methods of pest control such as…and pesticides, when warranted…” and 3) in same manual on p. 17 where it states that “Pesticides play a limited, but important role in and IPM program.” These statements do not reflect the statutory mandate that pesticides may be used only when nontoxic options are unreasonable or have been exhausted. In fact implementing an IPM program with a proper focus on pest prevention may result in a pest management program that does not include the use of any pesticides.

3. The IPM in Schools manuals produced by MDA and the University of Maryland contain some language that fails to provide the correct notice requirements mandated by the IPM-in-Schools law and regulations. An example of such a statement can be found on page 8 of the manuals entitled *Guideline for Integrated Pest Management (IPM) in Schools*, which states “A voluntary registry of individuals with medical problems or conditions who could be adversely affected by exposure to pesticides shall be maintained at the school health or administrative offices, as well as by the contact person.” Prior notification is not a voluntary option for schools, nor is it limited to individuals with medical problems or conditions. Both the law and regulations regarding IPM and Notification in public schools buildings and on school grounds mandate notification to all parents, guardians and school staff for elementary schools. Middle and High schools may choose to either notify all parents, guardians and staff members or establish a list of parents, guardians and staff members who wish to be notified of pesticide use. The law requires that all parents, guardians and staff be informed of the notification list so they can opt-in.

4. The IPM in Schools manuals produced by MDA and the University of Maryland contain confusing statements regarding a school’s legal obligations. An example of such a statement can be found on page 4 of the manual entitled *Contracting Guidelines for IPM Services in Maryland Public Schools*. The statement reads “In addition, the Governor’s Pesticide Advisory Council has issued the following policy statement regarding IPM in schools…” This statement references a Council that no longer exists and a policy that is not in law or regulation.

2/24/2010
Page 3, second paragraph (IPM definition) Change "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 use of one or more pest control methods, including sanitation, structural repair, nonchemical methods, and pesticides, when nontoxic options are unreasonable or have been exhausted, in order to minimize the use of pesticides and minimize the risk to human health and the environment associated with pesticide applications."

To read "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 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."

Appendix G, Model Pesticide Notices #1 - General Notice for Parents or Guardians, #2 - Individual Notice for Parent of Guardian, and #3 – General Notice for School Employees. Two of these notices referenced a Minnesota state law requiring schools to inform parents, guardians, and school employees if certain pesticides were applied on school property. While these Notices were provided only as examples only they are to be replaced with following two documents, 1) Sample Request Form for Parents, Guardians and Staff to be Notified Prior to Pesticide Applications Made in Secondary School Buildings or Grounds; 2) Sample Notice for Parents, Guardians and Staff of a Pesticide Application to School Grounds.
Integrated Pest Management in Schools:
Contracting Guidelines for IPM Services in
Maryland Public Schools

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K. Request for Proposal for Integrated Pest Management Program Services: Carroll County Public Schools

1 Portions of the IPM in Schools manual were obtained from the National SchoolIPM World Wide Web site at www.ifas.ufl.edu/schoolipm/ (After November, 2001, the web address changes to www.schoolipm.ifas.ufl.edu)

2 Reprinted with permission from the Queen Anne's County Board of Education, Centreville, Maryland.

3 Reprinted with permission from Carroll County Public Schools, Westminster, Maryland.
Preface

This reference booklet provides guidelines for school personnel involved with developing and awarding Integrated Pest Management (IPM) contracts for school facilities, including structures and landscapes. This information can be used by school districts to develop an IPM program for either in-house pest control programs or contracted services. You will find details on the main components needed in an IPM contract and the reasons why they are important to the overall contract. Descriptions, definitions, and sample language for each component are included, as well as examples of forms and reference documents pertaining to several components of the contract. In some cases MDA regulations are provided and must be followed when developing IPM programs. In other cases, language and examples are only suggestions and not mandatory requirements. These materials can be copied or revised to suit the needs and resources of your school district. These guidelines were developed from several sources and should be used in conjunction with current Maryland Department of Agriculture (MDA) Regulations (Appendix A) governing IPM programs in public schools.
Introduction to IPM in Schools

Why use IPM? Pesticides are applied in and around schools to manage pest problems, such as cockroaches, rodents, ants, bees, pests of landscape plants, and weeds. A traditional method of controlling pests was to apply pesticides as a general preventative treatment, whether pests were present or not. The practice of routinely using pesticides in areas where children learn, eat, and play has raised public concerns and questions as to whether this is the best approach for controlling pests in schools. At the same time, schools are responsible for controlling insects and rodents that may pose health risks and damage buildings and goods. Integrated Pest Management (IPM) offers a solution to these concerns. IPM has been used effectively in sensitive areas where control of pests is needed and the general application of pesticides is undesirable, such as office buildings, museums, hospitals, research facilities, home landscapes, and schools. IPM prevents unacceptable levels of pest activity by economical means with the least possible hazard to people, property, and the environment. It considers pest, sociological, and environmental information and use if 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 if pesticides and minimize the risk to human health and the environment associated with pesticide applications.

Managing pests through an IPM program requires a basic understanding of pest biology and behavior to select effective methods of control. The most basic aspect of any pest control program is to understand what a pest is. A pest is any living organism (animal, plant, or microorganism) that interferes with or threatens human, animal or plant health, property, or the environment. Pests have basic needs for air, food, moisture, warmth, and harborage. Buildings and landscapes are commonly constructed and maintained in ways that provide pests with access and create environments that encourage pests to stay and multiply. In addition, people occupying these buildings engage in activities, such as food preparation and eating, that attract and support pest populations.

Many individuals are under the false assumption that IPM represents a nonchemical approach to pest management. In fact, IPM programs integrate both nonchemical and chemically based methods of pest control. In the long run, this integrated approach is more effective and less risky for school occupants than traditional pest management approaches that rely only on the use of chemicals. IPM employs a combination of tactics that include structural modifications, sanitation, inspections and monitoring, use of traps, and the judicious use of pesticides when necessary. Long-term control of pests is achieved by using the best available technical information about the pest and its interactions with its surroundings.
Contract Development and the Bidding Process

School districts solicit pest contractors by disseminating a Request for Proposals (RFP), often in the spring and through outlets, such as the Maryland Department of Agriculture, the State of Maryland's Contractor Weekly, school district offices (which keep mailing lists of interested parties), and public announcements in newspapers. The MDA regulations (15.05.02 Regulations Pertaining to Integrated Pest Management and Notification of Pesticide Use in a Public School Building or on School Grounds) governing IPM in public schools require that each County Board of Education shall have an IPM system that meets the following minimum requirements:

1. Adopt an IPM policy.
2. Establish a policy in pest management roles and responsibilities of decision makers, including the name, address and telephone number of the contact person.
3. Develop procedures for conducting the pest control program, including pest management objectives.
4. Develop procedures for regular inspection and monitoring activities to determine the presence and distribution of pests.
5. Establish standards to determine the severity of pest infestation and need for corrective action.
6. Require record keeping to document pest sightings, pest control procedures, and any communications to students and staff members regarding IPM or pesticide use.
7. Develop pest management strategies, including sanitation, structural repair, nonchemical methods and pesticide application, when non-toxic options are unreasonable or have been exhausted.
8. Provide education and training of staff members, students, and parents or guardians in IPM procedures.
9. Require an annual evaluation of IPM strategies and program quality assurance.
10. Establish 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.

These requirements should be specified in the RFP. Contractors respond to the RFP by submitting a fully developed proposal addressing these requirements. Proposals are evaluated by the school districts based on these requirements and others factors such as mandatory qualifications, technical expertise and the ability to perform the IPM services necessary.
In 1999, pesticide legislation (SB 149 Public Schools-Integrated Pest Management) expanded on earlier laws requiring notification and posting when pesticides are used indoors (see Appendix A). The 1999 legislation requires MDA to develop uniform standards and criteria for implementing IPM for school grounds by March 15, 2001. Each county Board of Education shall develop and implement an IPM system for school buildings and property, which must be implemented on or before the beginning of the 2001-2002 school year. State legislation also requires student and staff notification of pesticide applications made on all school buildings and property by the 2000-2001 school year.

**General Contract Components and Sample language**

A. Background. The background section provides the Contractor with general information about the school district and the expectations of school administration and community members with regards to an Integrated Pest Management (IPM) program. This section should inform prospective contractors as to the nature of the workplaces they will be servicing, the goals of the program, the expectations of the clients, and any unique aspects of working with the school district.

Background-Structural Sample. The basis of the (Name School) school district IPM services is the regular monitoring for the presence of pests inside and around the structures of school buildings and, when necessary, to implement appropriate control measures. The goal of the IPM program is to provide effective, long-term pest control, while minimizing the use of pesticides. The Contractor must exhibit awareness and sensitivity to the fact that the school environment cannot be compromised through deliberate or inadvertent contamination by pesticides. Scheduled, routine pesticide treatments in and around any area of the school are prohibited. Pesticides should be applied only when nonchemical methods have been exhausted or are unreasonable and only in areas of known infestation. It is essential to the success of the IPM program that the Contractor provides proactive services that identify housekeeping and structural design deficiencies that contribute to pest problems. All IPM services and activities shall be planned and performed with the needs of the schoolchildren and staff as the foremost priority.

Background-Grounds Sample. The basis of the (Name School) school district IPM services is the regular monitoring for the presence of pests in the landscape, turf and surrounding grounds of the school building and, when necessary, to implement appropriate control measures. The goal of the IPM program is to provide effective, long-term pest control, while minimizing the use of pesticides. The Contractor must exhibit awareness and sensitivity to the fact that the school environment cannot be compromised through deliberate or inadvertent contamination by pesticides. Scheduled, routine pesticide treatments in any
area of the school are prohibited. Pesticides should be applied only when nonchemical methods have been exhausted or are unreasonable, and only in areas of known infestation. It is essential to the success of the IPM program that the Contractor provides proactive services that identify landscape design deficiencies, plant maintenance practices, and plant choices that contribute to pest problems. All IPM services and activities shall be planned and performed with the needs of the school children and staff as the foremost priority.

B. Description of Service. The Description of Service section outlines the type of labor and equipment that the Contractor is responsible for providing under the contract. A provision requiring the Contractor to submit evidence of technical expertise when performing urban IPM services also can be included here. This section should inform the Contractor what is expected of service personnel and any special staffing requirements and experience. Personnel performing IPM services need a working knowledge of pests commonly found in structural and landscape environments, the ability to evaluate pest control in the context of the school environment, and the ability to make proper decisions as to whether control actions are warranted. If control actions are needed, the Contractor should have experience with the methods of control that are appropriate for specific pest problems.

Description of Service-Structural Sample.
The Contractor shall furnish all labor and materials for the development and implementation of a comprehensive IPM program in designated schools and facilities. The Contractor shall demonstrate an understanding of the concept of the IPM method of pest control. Control practices in an IPM program are not based on the routine application of pesticides, but on monitoring and inspecting for pests, modifying structures, improving sanitation, and changing personnel practices that can contribute to pest problems. Pest control is achieved in an IPM program by making accurate decisions as to when control measures are needed and the type of control measures to be used.

The Contractor also shall provide evidence, in the proposal, of an understanding of the principles and practices governing sanitation in food service areas, in addition to other areas of the school, and the impact of pests and pest management methods on the ongoing activities of a food service facility. At a minimum, the IPM program shall consist of the development and implementation of regularly scheduled pest management services; routine and special meetings among pest management personnel and school staff; routine and specially scheduled training; and written reports describing program status and recommendations for the corrective actions that need to be implemented by the school, the Contractor, or the school board. In addition, the Contractor must meet all IPM program regulations of the MDA (see Appendix A).

Description of Service-Grounds Sample.
The Contractor shall furnish all labor and materials for the development and implementation of a comprehensive IPM program in designated schools and facilities. The Contractor shall demonstrate an understanding of the concept of the IPM method of pest control. Control practices in an IPM program are not based on the routine application of pesticides, but on monitoring and inspecting for pests, modifying landscapes and plant selection, and changing landscape and plant maintenance practices that can contribute to pest
problems. Pain control is achieved in an IPM program by making accurate decisions as to when control measures are needed and the type of control measures to be used.

At a minimum, the IPM program shall consist of the development and implementation of regularly scheduled pest management services; routine and special meetings among pest management personnel and school staff; routine and specially scheduled training; and written reports describing program status and recommendations for the corrective actions that need to be implemented by the school, the Contractor, or the school board. In addition, the contractor must meet all IPM program regulations of the MDA (see Appendix A).

C. Contact Person (CP) and School Liaison. The CP is the primary communication link between the school district and the Contractor for all pest management-related issues, both routine and emergency. At each individual school, a liaison needs to be designated to provide assistance to pest management personnel with performing their duties (i.e., access to closed rooms, scheduling special treatment, and forwarding written IPM recommendations, etc.). Communication must be maintained at two levels: (1) between the school district (CP), individual schools (liaison), and the Contractor, and (2) between the individual schools (liaison) and the Contractor. The CP will have a working knowledge of the IPM program on a district-wide basis and coordinate the IPM services into day-to-day operations at each school. At the district level, the CP will be in charge of all pest management activities.

CP and Liaison—Structural Sample. To provide the degree of oversight and consistency of services necessary for a successful IPM program, the school districts shall designate an IPM Contact Person (CP) for the school district and an IPM liaison for each individual school. These people should have the interest and capability to address all pest management issues, regardless of the pest involved or the area affected. The CP should participate in all decisions that may directly or indirectly affect pest management. A list of personnel designated as school liaisons should be provided to the Contractor by the school district. The Contractor's pest management technician should meet with the school liaison, upon initiation of the contract, and prior to performing pest management services. The Contractor and school liaison will:

1. Identify and discuss specific problem areas in the facility;
2. Facilitate access to all management areas on school property;
3. Identify and discuss building features or personnel practices that might contribute to pest infestations;
4. Discuss effectiveness of previous control efforts; and
5. Notify pest management personnel of any new restrictions or special safety precautions.

CP and Liaison—Grounds Sample. To provide the degree of oversight and consistency of services necessary for a successful IPM program, the school districts shall designate an IPM Contact Person (CP) for the school district and an IPM liaison for each individual school. These people should have the interest and capability to address all pest management issues, regardless of the pest involved or the
area affected. The CP should participate in all decisions that may directly or indirectly affect pest management. A list of personnel designated as school liaison should be provided to the Contractor by the school district. The Contractor's pest management technician should meet with the school liaison, upon initiation of the contract, and prior to performing pest management services. The Contractor and school liaison will:

1. Identify and discuss specific problem areas in the landscape and turf areas;
2. Facilitate access to all management areas on school property;
3. Identify and discuss landscape features or maintenance practices that might contribute to pest infestations;
4. Discuss effectiveness of previous control efforts; and
5. Notify pest management personnel of any new restrictions or special safety precautions.

D. Routine Services. This section specifies the type of pests and routine services covered by the contract. Special pest problems that may not be covered by the contract are explained in the next section, Section E. Additional, Special, and Emergency Services. Generally, treatment for wood-destroying insects, such as termites, carpenter ants, or wood-boring beetles is not included in the Routine Services, but is covered under Additional Services. However, recommendations and guidance for minimizing the potential for infestation by wood-destroying insects, such as correcting improper grading around buildings, moving wood away from buildings, and trimming tree branches away from roofs, should be part of Routine IPM Services.

Routine Services—Structural Sample. Routine IPM Services shall include the control of all pests in and around school buildings such as, but not limited to, cockroaches, ants, fleas, stinging insects and nests accessible from the ground or from windows, tars and mice, flies, fruit flies, silverfish, stored products pests; and incidental invaders, such as crickets, earwigs, mites, centipedes, ground beetles, clover mites, birds, bats, and squirrels. Preventive recommendations for control of these and other pests, including wood-destroying insects like termites, carpenter ants, and wood-boring beetles are also included as Routine IPM Services. Treatment for the wood-destroying insects mentioned above is considered an Additional Service (see Section E. Additional, Special, and Emergency Services below).

Routine Services—Grounds Sample. Routine IPM Services shall include the control of all landscape and turf pests such as, but not limited to, defoliating insects, sucking insects and mites, wood-boring insects, leaf-mining insects, gall-forming insects and mites, root-feeding insects, diseases of ornamental landscape plants and turf grass, weeds, and vertebrate pests including voles, moles, other rodents, birds, and deer. Preventive recommendations for control of these pests are included as Routine IPM Services.

E. Additional, Special, and Emergency Services. This section explains the requirements and provisions to be met by the Contractor for emergency, special, or additional services that fall outside the realm of Routine Services. Additional charges may be levied for these services.
Additional Services-Structural Sample.
The school district reserves the right to negotiate with the Contractor for the purchase of related pest control services not specifically covered, such as subterranean and structural control of termites and other wood-boring insects, bird control, and to add or delete buildings or parts of buildings to or from the contract.

Additional Services-Grounds Sample.
The school district reserves the right to negotiate with the Contractor for the purchase of related pest control services not specifically covered, such as pruning, tree removal, and other plant maintenance practices, and to add or delete grounds or fields to or from the contract.

Special Service Request and Emergency Services-Structural and Grounds Sample.
Routine IPM services shall consist of performing all components of an IPM program, as described in the Contractor's Pest Management Plan and Service Schedule (see Section F: Pest Management Plan and Service Schedule below) for each school management area during the period of this contract.

Requests for corrective action, special services, or emergency service shall be placed with the Contractor. The Contractor shall respond to a request for emergency services on the day of the request. In addition, the Contractor shall respond to special service requests within one (1) working day after receipt of request. If the special service or emergency service request entails the application of pesticides, applications will take place in the minimum time allowable by law. All emergency and special services should be recorded in the school IPM logbook. In the event that such services cannot be completed within the required time frames, the Contractor shall immediately notify the CP and indicate an anticipated completion date. The Contractor shall describe, in the proposal, his/her capability to meet this requirement (e.g., radio-dispatched service, names of office personnel handling the account, availability of technical and on-site personnel assigned to this program).

E. Pest Management Plan and Service Schedule. After award of the contract and prior to beginning services, the Contractor shall survey each management area included in the program. This is necessary for several reasons. First, it enables the Contractor's personnel to meet with the CP and school building liaisons to familiarize themselves with the school facilities. Second, it enables the Contractor to identify and prepare for any special or unique service needs or restrictions associated with each management area. Third, from this survey, the Contractor will prepare two (2) written documents: the Pest Management Plan and a Service Schedule. These two documents should be reviewed and approved by school personnel. The Pest Management Plan structures the program specifically to each management area, helps prevent programs from "drifting away" from their original intent, and creates a historical document that should be reviewed and modified, as needed, during the course of the contract. The Service Schedule shall detail how often and when inspections will be made.

Pest Management Plan and Service Schedule-Structural Sample. The Contractor shall survey all management areas covered under this contract and develop a written Pest Management Plan. This plan shall provide detailed information on areas of pest infestation; structural, housekeeping, mainte-
nance, and design deficiencies that contribute to pest infestation; and recommendations for correcting those conditions. This plan should include a detailed description of the monitoring program that will be used to identify infested areas. It may include the use of traps, visual inspections, and staff interviews. Other appropriate IPM activities, including decision making, intervention tactics and strategies, and evaluation methodologies should be included. A school system-approved pesticide list with labels and Material Safety Data Sheets (MSDS) should be included in the management plan. The Contractor also shall submit a written Service Schedule to the CP and other school personnel for approval. This schedule will be structured so that the entire school building, trash room, exterior, and support areas of the building are monitored routinely. The frequency of service visits for each management unit should be specified. This document should be included with the IPM service records of each school and revisited as necessary.

The Pest Management Plan and Service Schedule must be approved by the school district before implementation of the program. This specifically includes approval for any proposed pesticide usage. Any subsequent changes to the Plan and Schedule and/or additions to the approved pesticide list must be requested in writing and receive the concurrence of the school district.

Pest Management Plan and Service Schedule—Grounds Sample. The Contractor shall survey all management areas covered under this contract and develop a written Pest Management Plan. This plan shall provide detailed information on areas of pest infestation; landscape design, plant selection deficiencies, and plant maintenance practices that contribute to pest infestation; and recommendations for correcting those conditions. This plan should include a detailed description of the monitoring program that will be used to identify pest infestations in landscape and turf areas. It may include the use of traps, visual inspections, degree-day accumulations and other environmental indicators, and staff interviews. Other appropriate IPM activities, including decision making, intervention tactics and strategies, and evaluation methodologies should be included. A school system-approved pesticide list with labels and Material Safety Data Sheets (MSDS) should be included in the management plan. The Contractor also shall submit a written Service Schedule to the CP and other school personnel for approval. This schedule will be structured so that the entire school grounds, landscapes, and turf areas are surveyed routinely. The frequency of service visits for each management unit should be specified. This document should be included with the IPM service records of each school and revised as necessary.

The Pest Management Plan and Service Schedule must be approved by the school district before implementation of the program. This specifically includes approval for any proposed pesticide usage. Any subsequent changes to the Plan and Schedule and/or additions to the approved pesticide list must be requested in writing and receive the concurrence of the school district.

G. Structural and Procedural Recommendations. It is the Contractor's responsibility to provide structural and procedural recommendations to the CP, school liaison, and the school district. The purpose of these recommendations is to reduce available...
food, water, harborage, and access for pests in and around buildings and to reduce favorable conditions for pests of landscapes and turf. It is essential to the success of the IPM program that the Contractor provides proactive services that identify landscape maintenance, housekeeping and structural deficiencies that contribute to pest problems, and, in some situations, correct structural deficiencies by caulking or exclusion. Contractors provide recommendations that may include repairs to a leaky faucet, cleaning soiled or cluttered loading docks or dumpsters, installing sweeps on doors, emptying trash cans in classrooms or cafeterias more frequently, replacing pest-prone plants with resistant plans, and modifying fertilization and irrigation schedules. These recommendations should be forwarded to the appropriate person(s) by the CP. Appendix F provides an example of checklists that identify the sanitation, structural, and plant maintenance concerns.

Structural and Procedural Recommendations—Structural Sample.
Structural deficiencies and poor housekeeping practices that may contribute to pest infestations shall be reported, in writing, to the building liaison and the CP by the Contractor at the completion of each inspection.

Structural and Procedural Recommendations—Grounds Sample.
Landscape management practices that may contribute to pest infestations shall be reported, in writing, to the building liaison and the CP by the Contractor at the completion of each inspection.

H. Record Keeping. The requirements for keeping information and data on each inspection and pesticide application are outlined in this section. MDA regulations governing the IPM in schools program state that record keeping must document “pest sightings, pest control procedures, and any communications to students and staff members regarding integrated pest management or pesticide use.” Beyond this, record keeping may entail observations of sanitation, structural deficiencies, landscape design and maintenance problems, and personnel practices that contribute to pest problems and other written pest management observations. All records should be kept in a logbook in a designated location within each building and a copy of the records should be sent to the CP in a timely way. This logbook, provided by the Contractor, will contain all information pertinent to the IPM program, including all information required by the MDA, such as reports, service/treatment records, communications, pesticide labels, Material Safety Data Sheets (MSDS), and emergency contact numbers. Ideally, the information in the logbook should be sufficient to answer any questions or concerns of the CP, school administrators, or community members. (See Appendix B.)

Record Keeping—Structural Sample. The Contractor shall provide and maintain a complete and accurate pest management logbook. The logbook shall permit efficient evaluation and management of the program, accurate information retrieval, and adherence to record keeping required by statute. Each facility shall have its own logbook that will be updated during each service by the pest management technician. The logbook shall be kept in a designated location at the facility and a copy sent to the CP following each service visit. Clear and concise records shall reflect the common names of pests monitored at the school.
Record Keeping-Grounds Sample. The Contractor shall provide and maintain a complete and accurate pest management logbook. The logbook shall permit efficient evaluation and management of the program, accurate information retrieval, and adhere to record keeping required by statute. The turf areas, landscaping, and athletic fields associated with each facility shall have a grounds logbook for each facility that will be updated during each service visit by the pest management technician. The logbook shall be kept in a designated location at the facility and a copy sent to the CP following each service visit. Clear and concise records shall reflect the common names of pests monitored at the school (according to the Maryland Pesticide Law and Regulations, no codes for pests or pesticides shall be permitted), as well as turf and landscaping maintenance deficiencies, problem plans, nonpesticidal and pesticidal control measures applied, immediate and long-term recommendations regarding pest management, communications with students and staff, Material Safety Data Sheets (MSDS), and labels for all products that may be applied at the facility. A section of the logbook shall be allocated for facility personnel to report pest sightings and other information that shall be reviewed by the Contractor during regular service visits. The Contractor shall provide, in the proposal, an example of the logbook format with a detailed explanation of how it will be used, the structure of the book, and information that has to be recorded in the logbook.

I. Contractor Licensing. Each pest control firm offering to provide IPM services in the State of Maryland must comply with state and local licensing laws and regulations applicable to commercial pest control companies. In general, licensing requirements establish both minimal financial and technical requirements to perform commercial pest control operations. Each licensed company must be insured and have employed as a full-time member a certified pesticide applicator. The regulations promulgated by the MDI establish administrative, procedural, and technical requirements to which each licensed firm must comply (See Appendix C). Although not required by law, certification of training from professional and educational organizations such as the IPM Institute, Abbott associations, National Pest Control Association, or University of Maryland IPM Short Course are important and will be considered when evaluating proposals. Documentation for certifications or training courses should be included with the proposal.

Contractor Licensing-Structural Sample. Each Contractor submitting a proposal for
consideration by the school district shall have and maintain, during the life of the contract, a Pesticide Business License issued by the MDA. A copy of the current valid license shall be submitted with the Contractor's proposal and no consideration will be given to proposals that lack evidence of licensing. The Contractor must be licensed, at a minimum, in Category VII A: Industrial, Institutional, Structural and Health Related Pest Control, with the subcategories of General Pest Control and Rodent Control. Failure to maintain the Pesticide Business License with all necessary pest control categories shall be sufficient grounds for immediate termination of the contract. It shall be the Contractor's responsibility to immediately notify the CP of any change in status.

Contractor Licensing-Grounds Sample.

Each Contractor submitting a proposal for consideration by the school district shall have and maintain, during the life of the contract, a Pesticide Business License issued by the MDA. A copy of the current valid license shall be submitted with the Contractor's proposal and no consideration will be given to proposals that lack evidence of licensing. The Contractor must be licensed, at a minimum, in Category VII A: Ornamental or Turf Pest Control, with the subcategories of Ornamental Plants and Shade Trees—Exterior, Turf and Lawn Pest Control, and in Category VII E: Industrial, Institutional, Structural, and Health Related Pest Control, with the subcategory of Industrial Weed Control. Failure to maintain the Pesticide Business License with all necessary pest control categories shall be sufficient grounds for immediate termination of the contract. It shall be the Contractor's responsibility to immediately notify the CP of any change in status.

J. Personnel. This is a very important part of the contract document. It specifies the type of personnel who will provide IPM services and their qualifications. There are two levels of personnel employed by the licensed pesticide businesses who can perform pest control services: (1) the certified pest control applicator, and (2) the registered employee. Certification as a Pest Control Applicator is achieved through education or experience, as well as written examinations. These examinations, administered by the MDA, verify a minimum level of technical expertise in areas such as pesticide regulations, pest identification and biology, pesticide safety, pesticide label comprehension, and other good practices in urban pest management. Each person performing commercial pest control operations must be trained and registered with the MDA and carry appropriate identification. Registered Employees work under the direct supervision of Certified Applicators, although some Registered Employees are also certified. Regrading does not reflect technical achievement and should not be confused with certification. Certified Applicators are preferred over Registered Employees to provide IPM services in schools, because of their technical expertise. In addition, provisions for ensuring continuity of services should be stated in the proposal. It is important that the same people, who are familiar with the IPM program and are known in the school, perform the regular services. This enhances both efficiency of services and safety.

Personnel-Structural Sample. The Contractor shall provide, under this contract, only qualified pest management personnel with adequate and verifiable experience with implementing IPM programs. All on-site personnel
must understand current pest management practices and be able to make decisions and field diagnoses regarding the use of IPM practices and techniques. The proposal shall present a plan or method for assuring continuity of pest management personnel assigned to this contract, and knowledge and sensitivity to the needs of the schools. The Contractor should understand that quality assurance and daily pest management services are two activities that are separate and distinct from one another, and require sufficient time and manpower.

The Contractor shall designate a Program Technical Supervisor (PTS), who shall have primary responsibility for the conduct of this pest management contract, ensure that all required reports are submitted to the CP on time, and be available for routine and emergency consultation. The following minimum requirements regarding this individual’s experience and training shall be provided in the proposal:

1. Resume, including current home address.
2. Current certification in Maryland as a Pest Control Applicator in Category VII (Industrial, Institutional, Structural, and Health Related Pest Control) with a minimum of subcategories to include: General Pest Control, Termite Control, Bird Control, and Rodent Control; or Pest Control Consultant (with examination in Industrial Institutional, Structural, and Health Related Pest Control), with a minimum of subcategories to include: General Pest Control, Termite Control, Bird Control, and Rodent Control.

The PTS shall provide on-site supervision to assure safety, carry out coordination and continuity of program services, and fulfill special requests from the CP. The responsibilities of the on-site supervisor will be carried out by the PTS, not the pest management technician.

On-site pest management services shall be provided by a pest management technician certified by the MDA in Category VII: General Pest Control and Rodent Control.

Personnel-Grounds Sample. The Contractor shall provide, under this contract, only qualified pest management personnel with adequate and verifiable experience in the conduct of IPM programs. All on-site personnel must understand current pest management practices and be able to make decisions and field diagnoses regarding the use of IPM practices and techniques. The proposal shall present a plan or method for assuring continuity of pest management personnel assigned to this contract, and knowledge and sensitivity to the needs of the schools. The Contractor should understand that quality assurance and daily pest management services are two activities that are separate and distinct from one another, and require sufficient time and manpower.

The Contractor shall designate a Program Technical Supervisor (PTS), who shall have primary responsibility for the conduct of this pest management contract, ensure that all required reports are submitted to the CP on time, and be available for routine and emergency consultation. The following minimum requirements regarding this individual’s experience and training shall be provided in the proposal:

1. Resume, including current home address.
2. Current certification in Maryland as a Pest
Control Applicator in Category III: Ornamental or Turf Pest Control, with a minimum of subcategories III AC: Ornamental Plants and Shade Trees-Exterior and Turf and Lawn Pest Control; and in Category VII E: Industrial, Institutional, Structural, and Health Related Pest Control, with subcategory Industrial Weed Control. Certification as a Pest Control Consultant also is acceptable, with examination in Ornamental or Turf, and a minimum of subcategories to include: Ornamental Plants and Shade Trees-Exterior and Turf and Lawn Pest Control.

The PFS shall provide on-site supervision to assure safety, carry out coordination and continuity of program services, and fulfill special requests from the CP. The responsibilities of the on-site supervisor will be carried out by the PFS, not the pest management technician. On-site pest management services shall be provided by a pest management technician certified by the MDA in Category III: Ornamental or Turf Pest Control, with a minimum of subcategories III AC: Ornamental Plants and Shade Trees-Exterior and Turf and Lawn Pest Control; and in Category VII E: Industrial, Institutional, Structural, and Health Related Pest Control, with the subcategory Industrial Weed Control.

K. Manner and Time to Conduct Services. Specific notes that the Contractor can perform services, as well as any unique requirements for working in each school building, should be explicated in this section. Generally, IPM services can be performed during normal working hours, because pesticide treatments are not routinely performed. This section should list the time and days the buildings are accessible for service, any special safety precautions to be used by the Contractor, and the proper identification to be used by all contracted personnel.

Time to Conduct Services: Structural and Grounds Samples. Routine services should be performed during the late afternoon hours, Monday through Friday, excluding holidays, except as specifically approved by the CP. Pesticides shall not be applied while foods are being prepared, served, or put away, or when the school building is open for business. The Contractor shall observe all safety precautions throughout the performance of this contract. Certain areas within some facilities may require special instructions for persons entering the area. Any restrictions associated with special areas will be explained to the Contractor and the CP by the school building liaison. These restrictions shall be adhered to and incorporated into the Contractor’s Pest Management Plan and Service Schedule for the school building.

All contracted personnel shall wear an identification card in a clearly visible manner during the performance of their duties. Vehicles used by the Contractor or the contractor’s personnel shall be identified in accordance with state regulations. The Contractor must park in designated areas in close proximity to each school building. At a minimum, the Contractor shall provide his/her personnel with clean uniforms to be worn while performing their duties. Additional personal protective equipment required for the safe performance of work shall be determined and provided by the Contractor.
Pest Control

A. Nonchemical Control Methods. This section explains the requirements and provisions for the use of nonchemical pest control methods, such as sanitation, replacing pest-prone plants with resistant plants, modifying fertilization and irrigation schedules, and using biological, mechanical and cultural controls. In the right situation, nonchemical pest control can be a very effective, long-lasting, and cost-effective method of controlling and preventing pests in sensitive or restricted environments. These control strategies are the preferred methods of pest control in schools for several reasons. First, nonchemical methods may provide long-term control of pests through exclusion, structural repairs, modification, or changing personnel practices. Although more time-consuming initially, they may negate the need to repeat control procedures or even implement treatment methods, as well as prevent future pest problems. They are generally safer and less hazardous than chemical methods, which is particularly important in a school environment. However, the use of nonchemical pest control methods is an emerging area in urban pest-management that may be limited in its availability and application to pest problems. The school district is aware that nonchemical control methods may not always be practical or feasible, because of the scope or location of the pest problem, cost, interruption of routine school activities, and aesthetic issues regarding the building (i.e., landscaping and building design characteristics, etc.).

Nonchemical Control Methods-
Structural Sample. Caulking and sealing pest harborage and pathways is the preferred method for preventing or controlling an infestation and shall be part of the routine IPM services. The Contractor shall make limited applications of approved sealants and other exclusion materials under sinks, as well as around cabinets, pipe chases, windows and doors, exterior areas, etc., in lieu of or to augment other pest management methods. The Contractor shall make recommendations to the CP for any large-scale application (i.e., whole room, exterior of building, etc.) of sealants and other exclusion materials. In addition, the use of vacuum cleaners, mechanical traps, insect light trapping devices, and glue-boards used for rodent management should be fully integrated into the day-to-day operations of the program. The Contractor must be proactive at identifying and, in some cases, correcting known or suspected problem areas that provide food, water, harborage, and access for pests in and around the school building.

Snap traps, trapping devices, and glueboards used for rodent management or monitoring activities must be intensively maintained. The Contractor shall discard rodents killed or trapped within 24 hours. Trapping should not be performed during periods when maintenance will be delayed by holidays, weekends, etc. Traps shall be placed out of general view and away from any access by children or staff for safety and aesthetic purposes, and located where they will not be affected by routine cleaning procedures. The Contractor shall describe in the proposal their organization's approach to meeting these requirements.

Nonchemical Control Methods-Grounds Sample. Nonchemical management of weeds may include the repair of cracks and crevices in sidewalks, playgrounds, and parking lots to reduce germinating seeds. Weeds in planted beds may be managed through the use of
mulching or mechanical removal such as hoeing or hand picking. In some cases, biological control agents may be released to help control weeds. Nonchemical control of weeds in lawns and playing fields may include alterations of turfgrass variety, or changes in mowing heights or in fertilization and irrigation regimes.

Nonchemical management of insect and disease pests of landscape plants may include the removal of pest-prone plants and replacement with pest resistant ones, the addition of plants to the landscape that encourage the activities of beneficial insects or discourage the activities of pests, the physical removal of pests by pruning or hand picking, the use of barriers to prevent colonization of plants, the use of various traps to capture pests or disrupt activities such as mating, the release of biological control agents, and the alteration of practices such as fertilization, irrigation, mulching, and pruning to discourage pest activity.

B. Pesticide Control Methods. This section discusses the provisions under which pesticides can be used in the program. Pesticide use plays a limited, but important, role in an IPM program. The decision to use pesticides is based on information obtained from inspections, monitoring, and use of action thresholds. The critical concept here is that pesticides are applied according to need and not according to schedule. Preventive treatments, broadcast sprays or baseboard treatments, and treatments upon request from school personnel for unknown or unverified pest problems are generally prohibited. If chemicals are needed, "reduced risk" pesticides and formulations, such as boric acid, silica gels, and diatomaceous earth should be considered whenever possible.

Pesticide Control Methods - Structural Sample. Pesticide applications shall be made only to areas of known pest infestation or activity, and where nonchemical control measures, such as traps, caulking, sealing, cleaning, habitat modification, physical, mechanical, and biological control have been exhausted or are unreasonable. Application of pesticides shall not occur until a full inspection has been completed. If chemicals are needed, "reduced risk" pesticides and formulations, such as boric acid, silica gels, and diatomaceous earth should be considered whenever possible.

Pesticide applications that may impact the operations or occupants of a school building shall be permitted only during hours when the school building is closed and after all notification procedures have been met. (See Appendix A for a summary of regulations pertaining to IPM notification.) A contingency plan for performing pesticide application in the school building should be part of the Pest Management Plan and Service Schedule. This should include a list of pests, pesticide products, formulations, application methods, timing of application, and other relevant information that may be needed in specific situations and school buildings. The following shall be used as thresholds for the initiation of control actions in the school building:

1. An average of two cockroaches per trap within an area during each service interval
2. One mouse or rat dropping per room.
3. One rat burrow or runway in outside areas of the school building.
4. Any stinging insect nest within reach from the ground.
5. Reoccurring problems with other pests, e.g., flies, spiders, or stored product pests, that cannot be resolved using nonchemical techniques.

The Contractor shall minimize the use of and potential exposure to pesticides wherever possible. For example:

1. Use nonchemical control methods and materials.

2. Use crack and crevice or bait application of pesticides in pest harborage areas.

3. Integrate control methods (i.e., structural repairs, trapping, sanitation, etc.).

4. Pesticide space sprays (including fogs and ultra-low volume applications) will be restricted to unique situations for which no alternative measures are practical or effective. Because notification must be sent home one week prior to spraying, the Contractor must confer with the CP to develop a specific plan.

5. Routine preventive spray treatments are prohibited. The broadcast or barrier treatment of an interior or exterior area with a pesticide must be specifically requested by the Contractor and approved by the CP, prior to performing the treatment. Preventive treatments are acceptable only on a case-by-case basis. The Contractor must provide detailed plans, list the rationale for the treatment, and the methods of application if preventive treatment is warranted for a specific school building or landscape area. Preventive treatments are subject to review by the CP and can be eliminated at any time.

**Pesticide Control Methods-Grounds Sample.** Pesticide applications shall be made only to areas of known pest infestation or activity, and where nonchemical control measures, such as plant selection, habitat modification, physical, mechanical, and biological control have been exhausted or are unreasonable. Application of pesticides shall not occur a full inspection has been completed. If chemicals are needed, "reduced risk" pesticides and formulations, such as boric acid, silica gel diatomaceous earth should be considered whenever possible.

Pesticide applications that may impact the operations or occupants of a school building shall be permitted only during hours when the school building is closed and after all notification procedures have been met. (See Appendix A for a summary of regulation pertaining to IPM notification.) A contingency plan for performing pesticide application: school grounds should be part of the Pest Management Plan and Service Schedule. This should include a list of pests, pesticide products, formulations, application methods, timing of application, and other relevant information that may be needed in specific situations and landscape areas.

Thresholds for pests of landscape plants are generally lacking. However, several studies indicate that insect and mite pests cause noticeable aesthetic injury to plants when approximately 10 percent of the plant is affected. Treatments should be considered when 10 percent of a plant's foliage is removed or discolored, or if the pest has the potential to kill the plant, as is the case with some boring and scale insects. 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. Insect dis-
ease, and weed pests of turfgrass in playing fields should be controlled when the associated loss of turfgrass poses a threat of injury to children engaged in sports activities. Insect, disease, and weed pests of school lawns should be controlled only when the damage caused by these pests is intolerable.

The Contractor shall minimize the use of and potential exposure to pesticides wherever possible. For example:

1. Use nonchemical control methods and materials.
2. Use spot treatments of pesticides. Treat only heavily infested plants.
3. Integrate control methods (i.e., plant selection, timing of watering, mechanical weed control, etc.).
4. Use pesticide application techniques, such as soil injections, rather than foliar applications, when possible.
5. Routine preventive spray treatments are prohibited. Cover or barrier treatment of grounds with a pesticide must be specifically requested by the Contractor and approved by the CP prior to performing the treatment. Preventive treatments are acceptable only on a case-by-case basis. The Contractor must provide detailed plans, list the rationale for the treatment, and the methods of application if preventive treatment is warranted for a specific school building or landscape area. Preventive treatments are subject to review by the CP and can be eliminated at any time.

Program Reporting, Evaluation, and Training

A. Reporting. Service reports and annual reports are an important communication tool, as well as a permanent record, for a successful IPM program. Reports keep the school district, the CP, school liaisons, and other individuals informed. They also provide an ongoing record that facilitates evaluation of the school’s IPM program. (See Appendices D, E, and F)

Reporting-Structural Sample. The Contractor’s Program Technical Supervisor shall, at a minimum, provide annual written reports to the school district and attend regular meetings with the CP, school administration, school liaisons, and other concerned individuals. These reports and meetings will address all pest management activities provided by the Contractor for each school building and evaluation of the IPM program’s progress. These reports should identify school building conditions or personnel practices that require correction by the school district in order to promote the program’s overall effectiveness. In addition, the Contractor shall provide monthly service reports to the CP within fifteen days following the end of each month. The service reports shall include, but not be limited to, the following:

1. Facilities serviced.
2. Man-hours for each school building for Routine Services.
3. Location, man-hours, and work description of Special, Emergency, and Additional Services.
4. Results of monitoring and inspections, including accepted common names of pests, numbers of each pest, and the location in the school building.

5. Written evaluation of sanitation conditions, structural deficiencies, repairs needed, repairs completed, and immediate and long-term program goals for either resolving pest problems or improving the IPM program within each school building and management area.

6. Identification and listing of pesticides used by common/generic name (no codes), concentration and quantity of finished spray used, and other pest management techniques used for each school building and management area.

**Reporting—Grounds Sample.** The Contractor's Program Technical Supervisor shall, at a minimum, provide annual written reports to the school district and attend regular meetings with the CIP, school administration, school liaisons, and other concerned individuals. These reports and meetings will address all pest management activities provided by the Contractor for each facility's grounds and evaluation of the IPM program's progress. These reports should identify landscape conditions or personnel practices that require correction by the school district in order to promote the program's overall effectiveness. In addition, the Contractor shall provide monthly service reports to the CIP within fifteen days following the end of each month. The service reports shall include, but not be limited to, the following:

1. Landscape and turf area serviced.
2. Man-hours for each facility's grounds for Routine Services.
3. Location, man-hours, and work description of Special, Emergency, and Additional Services.

4. Results of monitoring and inspections, including accepted common names of pests, numbers of each pest, and the location of each facility's grounds.

5. Written evaluation of turf conditions, landscape problems, specific plant infestation, and immediate and long-term program goals for either resolving pest problems or improving the IPM program for each facility's grounds.

6. Identification and listing of pesticides used by common/generic name (no codes), concentration and quantity of finished spray used, and other pest management techniques used for each school building and management area.

**B. Evaluation.** This section outlines the need to evaluate the IPM program by both the Contractor and the school district to identify any program deficiencies, and to institute necessary changes to correct these deficiencies. Technical oversight provides an objective, ongoing evaluation of program activities and effectiveness. Whether provided by the school district, Contractor personnel, or by urban pest management consultants, oversight and review is critical to maintaining an effective IPM program. Individual school districts may conduct their own evaluation of the IPM program at regular intervals and on a continuing basis. This is what most government agencies do. Many other organizations hire a person just to conduct their evaluation. Specific recommendations for reporting by the Contractor to the school district should be noted here.

**Evaluation—Structural Sample.** Monthly service reports and annual reports will be used by the CIP and the Contractor to develop tangible results for evaluating the overall IPM effort in school facilities. The Contractor's
Program Technical Supervisor shall meet as needed with the CP to discuss the status of the pest management program and review program activities and reports, or resolve ongoing or special problems. If the school district hires an outside evaluator, the contractor may be required to meet with this person or provide information.

Evaluation-Grounds Sample. Monthly service reports during the growing season and annual reports will be used by the CP and the Contractor to develop a tangible measure for evaluating the overall IPM effort on the facility’s grounds. The Contractor’s Program Technical Supervisor shall meet as needed with the CP to discuss the status of the pest management program and review program activities and reports, or resolve ongoing or special problems. If the school district hires an outside evaluator, the contractor may be required to meet with this person or provide information.

C. Training. This section should specify what training of school personnel, community members, or other is expected of the Contractor. The Contractor also should describe in-house training provided to their personnel. The type of training, frequency, and necessary training materials and equipment should be described.

Training-Structural and Grounds Sample. The Contractor shall include, in the proposal, a detailed description of the in-service training programs provided to their personnel, including pertinent documentation and records. In addition, the Contractor should be able to provide training or develop a plan to use outside expertise to provide training on all aspects of IPM program design and implementation to a wide array of school-associated personnel, including school administrators, maintenance and housekeeping staff, the CP and school liaisons, and community members.

Additional Considerations

A. Notification. At the beginning of the school year, the State of Maryland requires school districts to provide students with an explanation of the school district’s IPM system, a list of common names of any pesticides or bait stations that may be used in the school building, and the address and telephone number of contact person. In addition, the school district must notify parents of any pesticide applications during the school year. This section details what information is needed from the Contractor before the school year begins and time frames in which the contractor must notify the CP concerning pesticide applications. (See Appendix A for a summary of regulations for notification, Appendix G for sample notices, and Appendix H for a special pesticide use request form.)

Notification-Structural Sample. The Contractor shall provide the CP and school liaisons with a list of pesticides and bait stations that may be used in school before the school year begins. Product labels and Material Safety Data Sheets for all pesticides shall be provided to the CP and made available in the school IPM program logbook for review by school liaisons, parents, and other interested parties.

The Contractor shall notify the CP and school building liaisons in advance of all pesticide
applications to ensure that all provisions of the State's and school district's advance notification policies are met. Although each school district is ultimately responsible for student notification of pesticide use and for sending notification home with students, the Contractor will be responsible for satisfying all legal requirements for posting. The Contractor will notify the CP upon completion of pesticide applications made in and around school buildings.

**Notification-Grounds Sample.** The Contractor shall provide the CP and school liaisons with a list of pesticides and bait stations that may be used on school grounds before the school year begins. Product labels and Material Safety Data Sheets for all pesticides shall be provided to the CP and made available in the school IPM program logbook for review by school liaisons, parents, and other interested parties.

The Contractor shall notify the CP and school building liaisons in advance of all pesticide applications to ensure that all provisions of the State's and school district's advance notification policies are met. Although each school district is ultimately responsible for student notification of pesticide use and for sending notification home with students, the Contractor will be responsible for satisfying all legal requirements for posting. The Contractor will notify the CP upon completion of pesticide applications made to school grounds.

**B. Inspections.** Any requirements for inspections of school buildings by school personnel should be described here.

**Inspections-Structural and Grounds Sample.** Throughout the duration of this contract, school facilities (or grounds) will be inspected periodically by school district personnel to determine the effectiveness of the IPM program and Contractor compliance with the contract. Inspection results will be documented in writing and submitted to the Contractor. The Contractor shall initiate actions promptly to correct all deficiencies found.

It shall be the Contractor's responsibility to furnish an adequate supply of materials necessary for school personnel to inspect the interior of all Jenotan bait stations. These materials may include Allen wrenches to loosen and tighten fasteners, keys to open locks, or replacement self-locking plastic ties. Implements to cut plastic ties are not included under this provision.

**C. Purchase of Ancillary Services/Equipment.** Any specific equipment required by the school district that needs to be purchased by the Contractor should be specified here. Any services beyond additional, special, or emergency services not described earlier should also be specified here.

**Purchase of Ancillary Services/Equipment-Sample.** The Contractor may need to purchase additional equipment or provide additional services to ensure that the IPM program is fully implemented. The school district has the right to negotiate the purchase of ancillary equipment and services with the Contractor and adjust the contract accordingly.
Criteria for Evaluating an IPM Contract

Traditionally, the award of pest control contracts has been based on the lowest bid. Because of the technical nature of IPM, this procurement procedure normally does not work with contracting for IPM programs. IPM is more than just the application of the pesticide. IPM services often involve several different activities and the use of sophisticated technical expertise, decision making, and program evaluation. To ensure that the Contractor is qualified to perform the services and that the bid is awarded in a manner that will achieve the desired result, as specified in the RFP, a set of evaluation criteria should be established. The following is a sample guideline that can be used for evaluating technical proposals and awarding an IPM contract. The weight of each technical component and the overall weight of the criteria in relation to the cost of the services must be determined by the school district when developing the contract specifications.

Sample

A. Mandatory Qualification Criteria

- The Contractor needs to provide all of the information as was set forth in the RFP.
- As a separate part of the technical proposal, the Contractor must address and demonstrate how the outlined mandatory requirements will be met. Failure to meet the mandatory requirements will be grounds to exclude applicants from further consideration.

B. Technical Evaluation Criteria

- The technical portion of the Contractor's proposal is the most important consideration when making the award. Therefore, the proposal should be as complete and specific as possible.
- The merits of each proposal will be evaluated carefully in terms of the requirements and in relation to the criteria established. The evaluation will take into consideration the technical and administrative capabilities of the Contractor, in relation to the work to be done.
- Contractors who merely propose to provide a service will not be eligible for award. The proposal must include a comprehensive plan for meeting the needs of the school system by addressing each of the requirements of the RFP, and explaining the proposed technical IPM approaches to be used.
- Proposals submitted in response to the RFP will be technically evaluated in accordance with the following factors. The maximum score is 100 points.

Scoring the Technical Portion

1. Understanding the Objectives of the Project 60 Points

The Contractor shall furnish a plan of operation including, at a minimum, a proposed Scope of Work demonstrating the Contractor’s understanding of integrated pest management. This Scope of Work shall provide an explanation of technical approaches and a detailed outline of
the proposed program for executing the require-
mements of the Scope of Work, as well as achieving
the objectives of the project. This should
include, but is not limited to, the following:

a. Overall plan of operation and how on-site
coordination of this contract will be accom-
plished. The plan must reflect the ability of the
Contractor to meet the service scheduling
requirements of the individual facilities.

b. Detailed procedures for accomplishing the
identification and inspection of infested zones,
monitoring frequency, methods (i.e., use and
placement of traps or environmental monitor-
ing, or indicators), and recording of findings.

c. Detailed explanation of nonchemical control
methods to be used.

d. Detailed explanation of other methods of
control, including pesticides likely to be used
at application method.

e. Detailed explanation of safety practices (i.e.,
security of chemicals, protective clothing,
equipment used, special precautions/proce-
dures pertinent to school and food service
facilities, etc.).

f. Methods of evaluating and supervising the
services to be provided and for maintaining
quality control of services performed.

g. A description of the proposed record keep-
ing system (provide sample forms, etc.).

h. Mechanisms for accomplishing emergency
and special service requirements.

i. Methods for interacting with the various
facility liaisons and assuring school personnel
practices that may impede or can enhance the
program.

j. Description and documentation of training
provided to personnel assigned to work on
this program.

2. Background, Experience, and
Qualifications of the Provider 20 points

In addition to presenting the company’s back-
ground, experience, and qualifications, the
provider should include a list of reference
contracts and discuss their similarities with this
proposed contract. Also, a list of previous or
current contracts with other public agencies
should be included. A copy of the company’s
current Maryland Department of Agriculture
Pesticide Business License should be submitted
with the proposal. Failure to provide a valid
Pesticide Business License will result in no
further consideration of a provider. In addi-
tion, copies showing documentation of any
IPM certification and training should be pro-
voked.

3. Personnel Assigned for Direct Work on
This Project 20 points

Information is required that will show specific
qualifications and experience with similar IPM
programs. Resumes shall be provided that sub-
stantiate each individual’s qualifications. Special
mention shall be made of the contract super-
visor, the Program Technical Supervisor, and
all on-site technical personnel. The approxi-
mate percentage of each individual’s time that
will be spent on this contract should be noted.
Resumes or CVs are required that reflect edu-
cation, background, experience, other training,
and specific scientific or technical accomplish-
ments. Current Maryland Pest Control
Applicator Certificates shall be provided in the
proposal for all personnel assigned to this con-
tract. The Contractor shall explain how they
will ensure continuity of personnel on this contract (i.e., assign specific personnel to service of one or more facilities, etc.).

C. Selection for Award

Contractors should be aware that the school districts will perform a "best buy analysis" and the selection for award will be made to the provider whose proposal is most advantageous to the school district. The technical factors listed above and the total proposed cost will be taken into consideration.

Conclusion

A successful integrated pest management (IPM) program is dependent upon good documentation and communication. All records need to be thorough and complete to properly identify and assess pest problems. As a result, it is important to address and outline clearly the responsibilities of the Contractor for fulfilling the contract. Open communication among the school district administration, Contact Person (CP), school building liaison, and pest control personnel and management of the Contractor is imperative. Ongoing communication and training between the pest control technician and the individual building liaisons also is essential.

A cooperative effort among the various operational departments within the school district, such as maintenance, grounds, warehouse, safety, and insurance, and food service must be established and maintained to ensure that pest problems are identified and corrected in a timely manner. Minor changes in day-to-day activities are often all that is required when starting an IPM program. Although budget and personnel constraints are always a concern for school districts, the preventive nature of IPM strategies often makes the initial investments cost-effective. IPM strategies that cannot be implemented immediately because of budget constraints should be considered in the school district's long-term plans.

To further assist school personnel with the development and writing of a contract for structural and ground IPM services, two sample contracts and a sample RFP have been included in the appendices. (See Appendices I, J, K.)
Action Threshold (Action Level). The number of pests or level of pest damage that triggers a control action. For an explanation of action thresholds see Maryland Department of Agriculture, Action Thresholds and School IPM Programs. Pesticide Regulation Section, Annapolis, MD. 10 pp.

Active Ingredient. The chemical or chemicals in a pesticide responsible for killing or repelling a pest. Active ingredients are listed as part of the Ingredient Statement on all pesticide labels.

Anti-microbial Pesticide. A pesticide used for control of microbial pests, including viruses, bacteria, algae and protozoa, or for the purpose of disinfecting or sanitizing. Anti-microbials do not include fungicides used on plants.

Bait. A food or other substance used to attract a pest to a pesticide or trap.

Biological Control. Control of pests using predators, parasites, and disease-causing organisms. Biological controls may be naturally occurring or introduced.

Botanical Pesticide. A pesticide produced from plant-based chemicals. Examples include nicotine, pyrethrins, and rotenone.

Brand Name. The name or designation of a specific pesticide product or device made by a manufacturer or formulator.

Broadcast. A pesticide application method of applying a pesticide over an entire area.

Certified Applicator. An individual who demonstrates a higher level of competence of pesticide use by meeting criteria established by the Maryland Department of Agriculture (MDA). A certified applicator must pass examinations administered by MDA.

Chemical Control. The use of a pesticide to reduce pest populations or activity.

Chemical Name. The scientific name of the active ingredient(s) found in a formulated product. The chemical name is derived from the chemical structure of the active ingredient.

Common Name. A name given to a pesticide active ingredient by a recognized committee on pesticide nomenclature. Many pesticides are known by a number of trade or brand names, but the active ingredient has only one recognized common name.

Crack and Crevice Treatment. A pesticide application method in which small quantities of pesticides are placed precisely into cracks, crevices, and other small openings where pests hide.

Cultural Control. A pest control method that involves changing human habits and practices such as sanitation, work practices, and garbage pickups schedules. This also includes altering landscape design, installation, and maintenance of grounds to reduce pest activity and damage.

Degree-day Accumulations. Degree-days are the number of degrees above a threshold or base temperature that occur in a 24-hour period. Degree-day accumulations are the sum of these degree-days over a period of several days.

Environmental Protection Agency (EPA). The federal agency responsible for ensuring the protection of humans and the environment from the potential adverse effects of pesticides.

EPA Registration Number. A number assigned to a pesticide product when the
product is registered for use by the EPA. The number must appear on all labels for a particular product.

Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA). The federal law and its amendments that regulate pesticide registration and use.

Formulation. The pesticide product as purchased, containing a mixture of one or more active ingredients, carriers (inert ingredients), and other additives that make it easy to store, dilute, and apply.

Harborage. The hiding places or protected areas where pests live, such as cracks and crevices.

Inert Ingredients. Materials in a pesticide formulation that do not have anti-pest activity.

Ingredient Statement. The part of a pesticide label that provides the name and amount of each active ingredient and the total amount of inert ingredients in the formulation.

Integrated Pest Management (IPM). The Maryland Department of Agriculture has defined IPM 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 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."

Insect Growth Regulator (IGR). A pesticide that mimics insect hormones, responsible for controlling molting and development of some insects systems. This disrupts the insect's ability to develop from the immature form to an adult.

Key Location. A site in a landscape or structure where pests occur more frequently or cause greater amounts of damage that requires intervention.

Key Pest. An insect, mite, disease, nematode, or weed that frequently results in unacceptable damage and typically requires a control action. Key pests vary among geographic regions. Key pest status is dependent on action thresholds set for the pest and the status may differ among specific sites on school grounds and buildings. For example, cutworm may be a key pest on high-visibility athletic fields, but not on adjacent lawn areas. Routine or regularly scheduled pesticide applications may mask key pests.

Key Plant. A plant that frequently experiences unacceptable plant damage and typically requires treatment. Key plants vary among geographic regions. Improper site selection, plant selection, installation, and maintenance can result in a plant becoming a key plant by increasing its susceptibility to pests.

Label. The written material attached to or on all pesticide containers that provides the instructions users must legally follow.

Least Hazardous Materials. A control strategy that uses materials, practices and methods, including the use of chemicals, in a manner that causes the least exposure or harm to humans and the environment. The "least hazardous materials" strategy considers the pest control method, toxicity of the product, and exposure to
occupants. For example, the use of a nonvolatile material formulation and/or application method is considered a “least hazardous materials” strategy, as opposed to a broadcast application and/or use of a volatile material.

**Least-impact Pest Control Options.** Pest control actions that have very low mammalian toxicity, or ready-to-use, nonvolatile formulations of baits in tamper-resistant bait stations placed in areas inaccessible to children and staff. Nonchemical pest control options, such as cultural, mechanical, or physical controls, are considered least-impact options.

**Maryland Department of Agriculture (MDA).** The state agency responsible for administering the statutes contained in the Maryland Pesticide Applicators Law and Regulations. MDA is responsible for regulating the sale, use, and storage of pesticides.

**Mechanical Control.** The removal of pests by vacuuming, hand picking, pruning, crushing, dislodging by water or air, or disruption of pest activity and movement by impediments.

**Monitoring.** A systematic pest inspection conducted at regular intervals to determine the types of pests, their numbers, the amount of damage caused by pests, entry points, access to food, water, and harborage sites, and the effectiveness of treatment methods. Beneficial organisms are also observed during monitoring.

**Nonchemical Controls.** Pest control measures that do not use pesticides or other chemicals. Nonchemical controls include biological, physical, mechanical, and cultural tactics and strategies.

**Nontarget.** Any site or organism other than the site or pest toward which control measures are directed.

**Pathogen.** A living microorganism, usually a bacterium, fungus, mycoplasma or virus, that can cause disease when a host is present under the right environmental conditions.

**Pest.** Any living organism (animal, plant, or microorganism) that interferes with or threatens human, animal or plant health, property or the environment. A pest in one environment may be beneficial in another. For example, many plants that are considered weeds when found in lawns can be essential to the restoration of natural landscapes after a disturbance such as flood, fire, or human intervention.

**Pesticide.** A substance used to control, prevent, destroy, repel, or mitigate any pest.

**Pest-proofing.** A nonchemical, physical control measure to prevent the entry or movement of pests into or out of a structure or area. Pest-proofing might include sealing and caulking of crevices and holes, or installing screens and door sweeps.

**Pesticide Applicator Law and Regulations.** The Maryland statutes that outline the requirements concerning how pesticides are sold, used, stored, and disposed.

**Pesticide Business License.** The license issued by the Maryland Department of Agriculture that is required of any business offering pest control services or applying general or restricted-use pesticides for hire, or as part of a service or contract agreement.

**Physical Control.** Habitat alteration or changes in physical structure to reduce pest populations or their activity. Physical controls address problems such as caulking holes and cracks, sealing doors and windows, reducing moisture, or improving ventilation.
Quality Control. An inspection and review of the pest control program to evaluate success and identify shortcomings of the program.

Reduced-impact Pest Control Options. Pest control options with low mammalian toxicity, formulations that do not present an obvious physical hazard, and with active ingredients that are not known to cause cancer or disrupt human hormones.

Re-entry Period. The time that must elapse from the completion of a pesticide application until the students and staff may re-enter the building.

Registered Pesticides. Pesticide products that have been registered by the Environmental Protection Agency (EPA) for the uses listed on the label.

Residual Pesticide. A pesticide that continues to remain effective on a treated surface or area for an extended time period following application.

Routine Pesticide Application. A prescheduled pesticide application performed as a preventive measure without confirmation of pest presence or levels of infestation.

Sanitation. Measures that promote cleanliness and pest-free surroundings. Indoors pest control sanitation involves removing pest food sources and physically altering potential access and harborage sites. Outdoors removal of plants or plant parts that serve as harborage or a source of inoculum for pests.

Scouting (see also Monitoring). Planned, routine monitoring of a crop, ornamental planting, landscape, or structure for the purpose of detecting pests, pest damage, or conditions conductive to pests or pest damage. Beneficial insects and their activities are also observed.

Space Spray. A pesticide that is applied as a fine spray or mist to a confined area, usually used to kill flying or crawling insects.

Spot Treatment. A pesticide application restricted to specific areas or plants. For indoor pests areas do not exceed 2 feet. Spot treatments are applied where pests are likely to occur, such as portions of floors or walls, or the base or underside of equipment. In landscapes and on grounds spot treatments include individual plants, parts of plants, sections of turfgrass, but never entire landscapes.

Tamper-resistant Bait Station. A container for toxic bait that is used for rodent and insect control. Tamper-resistant bait stations provide the least risk to children, pets, and other animals. As defined by the Environmental Protection Agency (EPA), the bait stations must be durable, lockable, have warning labels, and be anchored to keep them in place.

Threshold (see also Action Threshold). The level of pest density based on number of pests observed, trapped, counted, etc.) that requires some action. Pest thresholds in urban pest management may be site-specific. For example, different numbers of cockroaches may be tolerated in different sites (such as the kitchen vs. garbage rooms). In some situations pests cannot be tolerated and the threshold may be set at zero.

Toxicity. The ability of a pesticide to cause harmful, acute, delayed, or allergic effects.

Void Treatment. A pesticide application method in which a spray or dust is injected or blown into the empty spaces inside walls, false ceilings, or other enclosed areas.
References and Further Information


Maryland Department of Agriculture. Fact sheet. Maryland Department of Agriculture, Annapolis, MD

Integrated Pest Management: What Is It? 1995,
Informative Requirements for Pesticide Applications to Public School Grounds, 2000.


Public School IPM and Notification Requirements. 1998.


Mitchell B. No date. Integrated Pest Management (IPM) for Building Managers. Massachusetts Department of Food and Agriculture, Pesticide Bureau, Boston, MA, 54 pp., www.mdagx.org


Addional Internet Resources

Bio-inteegal Research Center (BIRC), www.irc.org/iric

Integrated Pest Management. City and County of San Francisco, Department of the Environment. www.sfsf.co/iptm


IPM Institute of North America, Inc. www.ipminstitute.org

Maryland Cooperative Extension, University of Maryland. Pesticide Education and Assessment Program (PEAP). www.pesticide.umd.edu

Maryland Department of Agriculture. www.mda.state.md.us

Minnesota Department of Health. Model Pesticide Notices. www.health.state.mn.us

University of Florida, National School IPM Site: Integrated Pest Management in Schools. www.ipm.ifas.ufl.edu/~schoolipm/sdms_ipm.htm

U.S. Environmental Protection Agency. Office of Pesticide Programs. www.epa.gov/pesticides
Appendices
Synopsis of the Maryland Pesticide Applicators Law and Regulations

Pesticide Information Leaflet No. 35

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University of Maryland, College Park

and

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Pesticide Regulation Section
Maryland Department of Agriculture

September 2000

Purpose of the Law and Regulations

The Maryland Department of Agriculture (MDA) Pesticide Regulation Section is designated as the lead agency for enforcement and has the following responsibilities: regulating the use, sale, storage and disposal of pesticides; ensuring that pesticides are applied by competent individuals, establishing guidelines for the application of pesticides; and certifying pesticide applicators. This leaflet presents an abridged version of the regulations for quick reference of key requirements; it is not intended as a substitute for the actual regulations. For more detailed information, readers should obtain a copy of the Code of Maryland Regulations 15.05.01, Regulations Pertaining to the Pesticide Applicators Law, and/or Code of Maryland Regulations 15.05.02, Regulations Pertaining to Integrated Pest Management and Notification of Pesticide Use in a Public School Building or on School Grounds. Both publications are available from the Maryland Department of Agriculture, Pesticide Regulation Section, 50 Harry S. Truman Parkway, Annapolis, MD 21410.
General Regulations

* Pesticides must be used in strict accordance with label directions.

* Anti-siphon devices or backflow preventers are required on all pest control equipment to prevent the flow of a pesticide into a water system.

* Pesticide applicators must consider alternative pest control measures, such as mechanical, cultural and biological control.

* Precautions must be observed in the handling, use, storage and disposal of pesticides and their containers to prevent off-target movement and/or harm to humans, animals and the environment.

* Safety equipment indicated on the pesticide label must be provided for the protection of pesticide applicators.

* MDA must be notified immediately of any accident or spill involving a pesticide.

* If a pesticide concentrate is temporarily stored or transported in a service container, the container must have a securely attached label with the following information:
  - Common or chemical name of pesticide;
  - U.S. EPA Registration number;
  - Signal word (Danger, Warning or Caution);
  - Percent concentration.

* If a pesticide that does not require further dilution is stored or transported in a service container as an end-use dilution, its container (excluding application equipment) must have a securely attached label listing the following information:
  - Common or chemical name of the pesticide preceded by the words “Diluted” or “End-Use Concentrate”;
  - U.S. EPA Registration number;
  - Signal word (Danger, Warning or Caution);
  - Percent concentration.

* A copy of the pesticide label must be on hand at the time of pesticide applications.

* Each vehicle carrying pesticides or pest control devices must have the business name and business license number displayed on both sides of the vehicle.
It is a violation to apply a pesticide to the property of any person without the expressed permission of the property’s owner or other person with authority to exercise control, management, or possession of the property.

General Storage Requirements

- Storage areas must be locked and secured to prevent unauthorized entry.
- Pesticides should be stored in a separate building, or at a minimum physically separated by a barrier from food, feed and fertilizer.
- Each storage area must be posted with a warning sign.
- Pesticides must be stored in a dry, well ventilated area.
- Pesticide storage areas must be kept clean.
- All pesticide containers must be labeled and free of leaks and tears.
- Each storage area must have an appropriate fire extinguisher.
- There must be enough absorbent material available to handle a spill of the largest container in storage.
- Storage areas must be at least 50 feet from any water well, or have secondary containment.

Transport Requirements

- All pesticide containers and application equipment must be secured to prevent shifting or release of pesticides.
- Pesticides shall not be placed or carried in the same compartment as the driver, food, or feed, unless in a manner that provides adequate protection for safety and health of passengers.
- A pesticide container cannot be used for any purpose other than containing the original product unless the label states otherwise.

Pesticide Information for the Customer

- When a pesticide is applied, or at the time a customer enters into a contract for pest control, the licensee must provide the customer with the following written information:
  - Name of the licensee;
  - Maryland pesticide business license number.
Appendix A

- Licensee's telephone number;
- Maryland Poison Center telephone number;
- Common name of the active ingredient applied; and
- One of the following:

An original or legible copy of the current pesticide product label;
or
An original or a legible copy of that portion of the current pesticide product label or labeling that contains precautionary statements regarding hazards to humans or animals and environmental hazards, if any;
or
A document containing appropriate health, safety, or precautionary information taken from the pesticide label and approved by MDA before its distribution.

Pesticide Licensing and Certification Requirements

A pesticide business license is required of each business providing pest control service. The business license is obtained from MDA by: completing an application, designating a certified pest control applicator, providing proof of insurance, paying a $125 fee, and renewing annually on July 1.

A pest control consulting license is required of any business providing pest inspections or identification of pests, or making pesticide recommendations. The consulting license is obtained from MDA by: completing an application, designating a certified pest control consultant, paying a $125 fee, and renewing annually on January 1.

A public agency permit is required of any public agency (a unit of local, State or Federal government) whose employees apply pesticides. The permit is obtained from MDA by completing an application, designating a certified public agency applicator, and renewing annually on July 1.

Private applicator certification is required of any farmer, nurseryman, etc. who intends to use a restricted use pesticide on his or her own property for the purpose of producing an agricultural commodity. Private applicator certification is obtained from MDA by: passing an examination and paying a $7 fee. Certification must be renewed every 3 years by reexamination or by participating in an MDA approved training session within 12 months before expiration of the current certificate.

Commercial applicator certification for pest control applicators, pest control consultants, and public agency applicators is obtained from MDA by: completing an application, having 1 year experience or a degree in a science related field of study acceptable to MDA, passing an examination on core and category material, and paying a $65 base fee plus a $25 fee for each additional pest control category. Certification must be renewed each year on July 1, or by January 1 for consultants by participating in...
an MDA approved training session within the past year or by reexamination.

Pest Control Employees

Within 30 days of employment, all employees who perform pest control services must be registered with MDA by providing the employees name, social security number and a 1-inch photo, and by submitting verification of training.

Noncertified employees must complete a training program within 30 days of employment and before registration with MDA. The training program must include the following topics:

- Pesticide laws and regulations;
- Label comprehension;
- Safety and emergency procedures;
- Proper pesticide handling and storage;
- Environmental and health concerns;
- Integrated pest management principles;
- Pest identification and control recommendations; and
- Pesticide application techniques

An employee who has not successfully completed training in accordance with the aforementioned conditions may only apply pesticides if a certified applicator or registered employee is physically present at the time and place the pesticide is applied by the untrained employee.

Recordkeeping Requirements

Private applicators, commercial applicators, pest control consultants, and public agencies must keep records on all pesticides applied or recommended. Commercial applicators, pest control consultants, and public agencies must also keep records of all pest identifications made. The records must be held for 2 years to be available to MDA on request. The following must be recorded, when applicable:

- Name of applicator or consultant;
- Date of application, recommendation, or pest identification;
- Pest and type of plant, animal or structure;
- Acreage, numbers of plants or animals, or a description of or square footage of structures;
- Address of treated property;
- Name of owner or tenant of property;
- Common name and EPA registration number of pesticides used or recommended;
Appendix A

- Rate of concentration of pesticide used or recommended;
- Total amount of pesticide used;
- EPA registration number of the product;
- *Type of equipment used;
- *Time of day of application; and
- *Wind direction and estimated velocity, and weather conditions at the site when the pesticide was applied. (This information is not required if the application consists of baits in bait stations, or is made inside or within 3 feet of a structure.

(* Items marked with an asterisk are not required to be recorded by private applicators.)

Dealers who sell or distribute restricted use pesticides must maintain records on the sale or distribution of restricted use pesticides for 2 years and make them available to MDA on request. The following information must be recorded:

- Name of pesticide or pesticides sold or distributed, including formulation;
- Quantity sold or distributed;
- Date of sale or distribution;
- Name and address of purchaser or receiver; and
- Name and address of certified applicator, if different from above.

Violative Acts and Penalties

MDA may suspend, revoke or deny any license, certificate or permit for violating any provision of the Maryland Pesticide Applicators Law and Regulations, or the Federal Insecticide, Fungicide and Rodenticide Act (FIFRA). [Refer to section 15.05.01.10 (2) through 15.05.01.10 (14) of the Regulations for further violations.]

Any person violating any provision of the Pesticide Applicators Law or Regulations is guilty of a misdemeanor and, upon conviction, is subject to a fine up to $1,000 or imprisonment up to 60 days.

In lieu of or in addition to suspension of the license, permit, or certificate, the Secretary of Agriculture may impose a penalty of not more than $2,500 for a first violation and not more than $5,000 for each subsequent violation. The total penalties imposed on an individual for violations that result from the same set of facts and circumstances may not exceed $25,000.
Integrated Pest Management and Notification Requirements for Pesticide Applications to Public School Grounds

¥ Each county board of education must implement in its schools an Integrated Pest Management (IPM) system approved by MDA.

¥ Each school system must designate a contact person to answer questions about the pest management program and to maintain a file of pesticide product labels and Material Safety Data Sheets (MSDS).

¥ At the beginning of each school year, public schools must send a notice including information about pesticides used in schools and on school grounds to the parent or guardian of each student in primary and secondary schools.

¥ Schools must provide notification, at least 24 hours before a pesticide is applied, or within 24 hours after an emergency pesticide application is made, to

- All parents or guardians of elementary school students, and staff members employed by elementary schools; and to
- Parents or guardians of middle school or high school students, and staff members employed by these institutions, who have submitted a written request to receive notice of pesticide applications.

¥ The information to be provided to the above individuals includes

- Common name of the pesticide applied;
- Location, time, and date of application;
- Description of potential adverse effects listed on the Material Safety Data Sheet (MSDS) for the pesticide;
- A statement that EPA recommends that persons who are potentially more sensitive should avoid any unnecessary pesticide exposure; and
- Reason for emergency application (if applicable).

¥ For pesticide applications made on school grounds, the notice of planned date and time of application may specify that weather conditions or other extenuating circumstances may cause the actual date of application to be postponed to a later date or dates. If the actual date of application is more than 14 days later than the original planned date of the application, a new noticed must be issued.
Middle schools and high schools must provide in-school notification, by oral announcements or written notice, before a pesticide is applied in a school building or on school grounds. A sign or notice must be posted at the primary entrance to the school or in a central location, must remain for at least 48 hours after an application, and must include the following information:

- The statement, Caution - Pesticide Application;
- Common name of pesticide applied;
- Location and date of pesticide application;
- Contact person for additional information, including information of potential adverse effects.

When a pesticide application is made on school grounds, a sign must be posted at the time of the application at each primary access to the school property. If a spot or limited area pesticide application is made, a sign may be posted at the location where the pesticide application was made. The sign must remain posted for at least 48 hours following the application.
### Integrated Pest Management

**Pest Sighting Log**

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SUMMARY OF MARYLAND’S BUSINESS LICENSING AND APPLICATOR CERTIFICATION REQUIREMENTS

A pesticide is defined as any substance used to control, prevent, destroy, repel, or mitigate any pest. Pests include insects, weeds, plant diseases, nematodes, fungi, birds, rodents, snails, and slugs. Herbicides, insecticides, fungicides, miticides, growth regulators, desiccants, and rodenticides are a few of the materials categorized as pesticides. Under the Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA), administered by the United States Environmental Protection Agency (EPA), pesticides must be registered with EPA prior to their sale or distribution. As part of the registration process, pesticides are classified for either general use or restricted use. EPA bases this classification on the pesticide’s potential for harm, its formulation, method of use, and site of application. A pesticide that is not likely to harm humans or the environment when used according to label directions is classified as a general use pesticide. If there is reason to believe that a pesticide may harm humans or the environment, even when used according to label directions, it will be classified as a restricted use pesticide. Restricted use pesticides can only be applied by or under the direct supervision of certified pest control applicators.

The Maryland Department of Agriculture (MDA) is responsible for regulating the sale, use, storage, and disposal of pesticides and for enforcing the Maryland Pesticide Applicators Law. MDA is responsible for establishing guidelines and requirements for the application of pesticides, the certification of pesticide applicators and the licensing of businesses to ensure that pesticides are applied properly by competent individuals.

There are several different types of pesticide applicator certificates and licenses issued by MDA, including: private applicator certificates, pesticide business licenses, pest control applicator certificates, pest control consultant licenses, pest control consultant certificates, public agency permits, public agency applicator certificates, and “not-for-hire” business licenses and pesticide applicator certificates.

Businesses providing pest control services must have a Pest Business License and at least one individual certified as a Pest control Applicator. If a business provides technical advice they are required to have a Pest Control Consultant License and have at least one individual certified as a Pest Control Consultant. These requirements are discussed in further detail below. This information is a summary of the requirements and is not intended to replace the regulations. For specific information on Maryland’s licensing and certification requirements you will need to obtain a copy of the Code of Maryland Regulations 15.05.01, Regulations Pertaining to The Pesticide Applicators Law. The regulations are available from the Maryland Department of Agriculture, Pesticide Regulation Section, 50 Harry S. Truman Parkway, Annapolis, MD 21401, or by telephone at 410-841-5710.

COMMERCIAL PEST CONTROL

A pesticide business is any business that is offering pest control services or applying general or restricted use pesticides for hire as part of a service or contract agreement. Pest control means engaging in, or offering to engage in, recommending, advertising, soliciting the use of, supervising the use of, or using, a pesticide or device for the identification, control, eradication, mitigation, detection, inspection, or prevention of a pest in, on, or around any house, building, water, air, land, plant, structure, or animal. This includes lawn care companies using weed and feed, landscapers using Roundup, and firms providing structural pest control. A pesticide business license is required to provide these services.

Licensing - In order to obtain a pesticide business license, a firm must complete an application obtained from MDA, designate at least one person certified as a pest control applicator in the categories in which they are providing pest control services, pay a $125 annual business license fee, and provide proof of general liability insurance as follows:
Body injury - $100,000 each person and $200,000 each occurrence
Property Damage - $15,000 each occurrence and $30,000 annual aggregate provision.

An original copy of the current Certificate of Insurance must be kept on file with MDA. The licensing period runs from July 1 through June 30.

Certification - In order to become certified as a pest control applicator, an individual must have at least one year of practical pesticide application experience as a registered employee in the category, or categories, in which he/she wants to become certified. A degree in a biological field such as biology, botany, horticulture, entomology, agronomy, etc. may qualify in lieu of experience. The individual must pass examinations administered by MDA.

In order to qualify for the examinations, an applicant must submit an application for certification obtained from MDA at least one month prior to the exam. Experience or education documentation such as the Verification of Experience Forms or college transcripts must be attached. Upon approval of the application, MDA will supply the study material and provide notification of exam dates. MDA offers the commercial exams every other month in Annapolis, Salisbury and Frederick.

Exams are multiple-choice and closed book. Each applicant must pass the Core exam which covers basic pesticide information and laws and at least one specific category exam with a 70% or higher score. The insert provides a list of the pest control categories and subcategories established by regulations.

An individual may retake the exams as many times as is necessary. However, there is a $10 retest fee paid at the time of reexamination. Upon passing the exams, a $65 annual certification fee must be paid for the initial category, and a $25 fee for each additional category of certification. The fees are only assessed for a category. There are no additional fees for certification in multiple subcategories under one category.

Regulations prohibit an individual from maintaining certification for more than one place of business at a time. In addition, a certificate cannot be transferred to another person, and MDA must be notified immediately when a certified applicator is no longer employed by a licensee or permittee.

Recertification - Maryland requires all certified applicators (even out-of-state applicants who were certified based on reciprocity - refer to definition at the end) to attend recertification training each year in order to renew their certificate. If applicators are certified in multiple categories they must attend recertification for each category in which they are certified. The training does not have to be held in Maryland. In order for a meeting to qualify for recertification credit in Maryland, it must be submitted to MDA for approval as a recertification meeting. (Note: Before a meeting can be advertised for recertification training in Maryland it must be submitted to MDA at least 2 weeks prior to the meeting and be approved). If the meeting has not been submitted by the meeting sponsor for recertification credit in Maryland, a copy of the meeting agenda needs to be submitted to the applicator to MDA for approval. In order for an individual to become recertified, one must obtain the following credits on an annual basis: Categories I, III, VII, VIII, and IX must receive 8 credits; Categories II, V, and VI must receive 6 credits; Category X must attend recertification training that pertains to the area of their work. All other categories are determined on a case by case basis. (1 credit is equal to 1 hour of training.)

In order for a meeting to receive recertification credit it must cover new laws, regulations or policies along with new technology. Integrated Pest Management (IPM) principles and methodologies should be incorporated into the program along with a combination of the following topics: pesticide safety; environmental concerns; pest biology; control techniques; storage; and disposal. Sponsors of the recertification sessions must ensure that individuals needing recertification credit attend the appropriate sessions and submit documentation to MDA that each individual has satisfied the training requirements. Documentation includes each participant's name, social security number and certificate number. If the meeting was not submitted by the sponsor, documentation of attendance must be supplied to MDA by the applicator. Certificates of completion or similar documentation can be used.

Upon submission of proof of training, MDA will update the certified applicator's training records and a renewal form will be mailed to the applicator in April. If a certified applicator does not attend recertification training, or provide MDA with proof of attendance, the applicator must retest the certification exams by June 30 in order to renew the certificate.
NOTE: A business license or certificate is not considered valid until all the requirements are satisfied and MDA receives the appropriate fees and renewal forms.

PEST CONTROL CONSULTANT

A pest control consultant license and certificate are required if a person is engaged in the business of offering or supplying technical advice or supervision, inspecting for or identifying pests, or recommending the use of specific pesticides for the purpose of controlling pests. The requirements and procedures for obtaining and maintaining a pest control consultant license and certificate are the same as that for a pesticide business license and pest control applicator certificate, except for the following differences: (1) The licensing and certification period runs from January 1 through December 31 of each year; (2) There are no insurance requirements for maintaining a consultant license; (3) A pest control consultant will be certified in Category XII - Consulting; (4) The annual pest control consultant license fee is $125 and the pest control certificate fee is $65.

REGISTERED EMPLOYEE

Each pesticide licensee or permittee is responsible for ensuring that each employee involved in pest control sales and service completes a training program approved by MDA on pesticide use and safety. The purpose of the training is to instruct an individual in the principles of pest control and the proper use of pesticides to ensure he/she is competent to handle and apply pesticides in order to prevent harm to themselves, others, animals or the environment an employee must receive and complete the training within 90 days of obtaining a business license or permit, employment or changing of job duties that will involve pest control sales or service. The training, at a minimum, must consist of the following topics and concepts:

- Pesticide laws and regulations;
- Pesticide label comprehension;
- Safety and emergency procedures;
- Pest identification and control recommendations;
- Pesticide application techniques;
- Environmental and health concerns; and
- Integrated pest management principles.

Licenses and Permittees are required to maintain written documentation showing that each registered employee has completed the required training, including the date which the training was completed.

An employee who has not successfully completed the training requirements may not apply pesticides unless a certified applicator or a registered employee is physically present at the time and place the pesticide is applied. To register an employee, his/her name, social security number, driver’s license number, date of employment and the date that he/she completed the training must be submitted to MDA on an I.D. Card Request Form along with a one inch by one inch photograph with the employee’s name printed on the back of the photograph. Upon receipt of the I.D. card, a Registered Employee is required to carry the Maryland Department of Agriculture I.D. and display it to any individual requesting to see their I.D. card. A written notice from the licensee or permittee must be provided to MDA within thirty days of a Registered Employee’s termination or change in employment.
PEST CONTROL CATEGORIES

I - Agricultural
   A - Plant (e.g., field crops, fruit and vegetables). B - Animal (e.g., livestock and poultry).
   C - Grain Treatment (pest control on, in, or around stored grain).

II - Forest (e.g., site preparation, release work, insect control)

III - Ornamental & Turf
   A - Ornamental - Exterior (e.g., insect, disease, control on plants in the landscape, and weed control in plant beds and around ornamental plantings)
   a - Ornamental - Interior (e.g., insect or disease control on plants in interior landscapes).
   C - Turf (e.g., weed, insect or disease control to lawns)

IV - Seed Treatment (e.g., Seed protectants)

V - Aquatic (e.g., weed and fish control, includes tidal and wetland areas)

VI - Right-of-Way and Weed Control (e.g., treatment of roadsides, powerlines, railway rights or way, non-cropland, fencelines, structural perimeters, or similar areas.)

VII - Industrial, Institutional, Structural & Health Related
   A - General (e.g., cockroaches, fleas, crickets, etc.)
   B - Termite (e.g., termites and other wood destroying insects)
   C - Wildlife (birds, mammals, reptiles and other wildlife not covered by the rodent control category).
   D - Rodent
   E - Fumigation (e.g., fumigation of commodities, structures and grain)

VIII - Public Health - (Pest control in public health programs, for the management and control of pest having medical public health importance, such as mosquitoes)

IX - Regulatory (NOTE: Only issued to employees of a public agency responsible for enforcement of government mandated programs e.g., noxious weeds, gypsy moth)

X - Demonstration & Research (e.g., demonstration of pesticide use or application, experimental plots, etc.)

XI - Miscellaneous (Unique or specialty areas of pest control not applicable to other categories)
   A - Wood Treatment (e.g., treatment of telephone poles, building or construction materials).
   B - TBT (e.g., use of antifoulant paints containing tributyltin to treat aluminum boats).
   C - TBT Crab Pots (e.g., use of antifoulant paints containing tributyltin to treat crabpots).
   D - Sewer Root Control (e.g., treatment of tree roots in sewer lines).

XII - Consultants. (Pest identification, pesticide recommendations and technical advice on pest control procedures).

XIII - Aerial – Pesticide application by fixed-wing or rotary aircraft to any crop or land area.
IPM SERVICE REPORT

Service Address: ____________________________
Room/Site: ________________________________
IPM Technician: __________________________ Date/Time: ________
Map Code: ________

PESTS OBSERVED:
☐ Cockroaches  ☐ Rats  ☐ Mice  ☐ Stored product pests
☐ Flies  ☐ Ants  ☐ Other: __________________________

Sanitation Problems:

Structural Deficiencies:

Other Problems:

Recommendations:

ACTIONS TAKEN:
Nonchemical Control Actions:

Pesticides Applied:
### Pesticide Application Records

<table>
<thead>
<tr>
<th>Name of contractor</th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Time and date</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Customer name and address of property treated</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Name of application and target pest</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Size of area treated</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Common name of pesticide(s) listed</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>EPA Reg No. of pesticide(s) used</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Rate and concentration of pesticide(s)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total amount of pesticide(s)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Type of application equipment</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Wind speed and direction (if applicable)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Additional comments</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
SAMPLE MONITORING FORMS

You will find the following forms in Appendix E:

1) Roach Trap Monitoring
2) An example of how to fill out a Roach Trap Monitoring form
3) Landscape Monitoring
4) An example of how to fill out a Landscape Monitoring form
5) Plant Condition and Pest and Plant Damage Abundance Charts (for use with the Landscape Monitoring form)
6) Pest Control Trouble Call Log
7) Weed Monitoring Form for Turf

These forms can be used as they are, or they can be modified to fit your particular circumstances.
Roach Trap Monitoring

Building #: 

Room or Area: 
Name of person monitoring: 

<table>
<thead>
<tr>
<th>Trap#</th>
<th>Room# or Name</th>
<th>Date trap was</th>
<th>Trap Missing?</th>
<th>Location Description</th>
<th>Roaches</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Set</td>
<td>Read</td>
<td>Adults</td>
<td>Nymphs</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
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</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Total# of Traps

Average of Roaches/Trap

Total# of Roaches

(total of roaches divided by total # of traps)
Roach Trap Monitoring

Building # 3

<table>
<thead>
<tr>
<th>Room or Area</th>
<th>Cafeteria</th>
<th>Name of person monitoring</th>
<th>John Doe</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Trap#</th>
<th>Room# or Name</th>
<th>Date trap was</th>
<th>Trap</th>
<th>Location Description</th>
<th>Adults</th>
<th>Nymphs</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Kitchen</td>
<td>3/5</td>
<td>3/6</td>
<td>8E Drain under grate</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>2</td>
<td>Kitchen</td>
<td></td>
<td></td>
<td>S Sink under electric box</td>
<td>1</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>3</td>
<td>Dishroom</td>
<td></td>
<td>yes</td>
<td>S under conveyor belt</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>4</td>
<td>Dishroom</td>
<td></td>
<td></td>
<td>N under conveyor belt</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>5</td>
<td>Storage</td>
<td></td>
<td></td>
<td>left side of door</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>6</td>
<td>Dining</td>
<td></td>
<td></td>
<td>W serving counter</td>
<td>0</td>
<td>2</td>
<td>2</td>
</tr>
</tbody>
</table>

EXAMPLE

6 Total# of Traps
0.66 Average# of Roaches/Trap (total of roaches divided by total # of traps) 4 Total# of Roaches
<table>
<thead>
<tr>
<th>Date</th>
<th>Name of Person Monitoring</th>
<th>Describe location of appropriate category:</th>
<th>Name of Plant:</th>
<th>Condition of Plant</th>
<th>Name of Pest</th>
<th>Abundance of Pests</th>
<th>Plant Damage</th>
<th>Presence of Natural Enemies</th>
<th>Management Activities</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Ornamental beds</td>
<td>Sport turf</td>
<td>Poor</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Ornamental turf</td>
<td>Fair</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Paved Areas</td>
<td>Good</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Trees</td>
<td>Excellent</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Other</td>
<td>Fair</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*See accompanying charts for explanation*
# Landscape Monitoring

Name of Person Monitoring: John Doe
Date: 6/15

## Description of Appropriate Category:
- Ornamental beds
- Fence lines
- Sport turf
- Paved areas
- Ornamental turf
- Trees
- Playground
- Other

<table>
<thead>
<tr>
<th>Name of Plant</th>
<th>Condition* of Plant</th>
<th>Name of Pest</th>
<th>Abundance* of Pests Plant Damage</th>
<th>Presence of Natural Enemies</th>
<th>Management Activities</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>Blue Spruce</td>
<td>Good</td>
<td>Cooley Spruce Gall Aphid</td>
<td>Common</td>
<td>Common</td>
<td>None</td>
<td>Pruned 80% of galls out of tree</td>
</tr>
</tbody>
</table>

*See accompanying charts for explanation

---

**EXAMPLE**
### Plant Condition Chart

<table>
<thead>
<tr>
<th>PLANT CONDITION RATING</th>
<th>Leaf Color</th>
<th>Amount/Size of Growth</th>
<th>Damaged Plant Parts</th>
<th>Presence of Pest Problems</th>
</tr>
</thead>
<tbody>
<tr>
<td>EXCELLENT</td>
<td>Good</td>
<td>Adequate</td>
<td>None to few</td>
<td>No major pests</td>
</tr>
<tr>
<td>GOOD</td>
<td>Good</td>
<td>Light-to-medium</td>
<td>Few to common</td>
<td>A few major pests</td>
</tr>
<tr>
<td>FAIR</td>
<td>Poor</td>
<td>Much reduced</td>
<td>Common to abundant</td>
<td>Either major or minor pests occurring frequently</td>
</tr>
<tr>
<td>POOR</td>
<td>Poor</td>
<td>Severely reduced</td>
<td>Innumerous</td>
<td>Both major and minor pests occurring frequently</td>
</tr>
</tbody>
</table>

**Leaf Color:** Note that there are healthy plants that do not have bright green leaves. Leaves can be purple, yellow, or sometimes a mottled yellow and green (mottled). Good leaf color will not always be the same; it will depend on the kind of plant.

**Amount/Size of Growth:** This refers to the length of the new growth for the season as well as the number of new leaves, and the size of the leaves, flowers, or fruit.

**Damaged Plant Parts:** Look at the whole plant. Are there leaves with holes, spots, or discolorations? Are there wilted or dead leaves? Are there dead twigs or branches? Is the damage only on old leaves while new leaves look perfectly healthy?

**Presence of Pest Problems:** A major pest problem is one that has severely affected or injured the plant and requires management. A minor pest problem may or may not be affected or injured the plant and may or may not require management.

### Pest and Plant Damage Abundance Chart

<table>
<thead>
<tr>
<th>Abundance Rating</th>
<th>Indicators of Abundance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Few</td>
<td>Organisms or plant damage occasionally found, but only after much searching</td>
</tr>
<tr>
<td>Common</td>
<td>Organisms or plant damage easily found during visual searching</td>
</tr>
<tr>
<td>Abundant</td>
<td>Organisms or plant damage found in large numbers obvious without searching</td>
</tr>
<tr>
<td>Innumerous</td>
<td>Organisms or plant damage extremely numerous obvious without searching</td>
</tr>
</tbody>
</table>

These charts were adapted from Michigan State University, Pest Management Manual
# Pest Control Trouble Call Log

<table>
<thead>
<tr>
<th>Trouble Calls</th>
<th>Pest Management Response</th>
</tr>
</thead>
<tbody>
<tr>
<td>Date</td>
<td>Building</td>
</tr>
<tr>
<td>-----------------</td>
<td>--------------------</td>
</tr>
<tr>
<td></td>
<td></td>
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<tr>
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<td></td>
</tr>
</tbody>
</table>

*Pesticides, caulk, traps, etc.
Weed Monitoring Form for Turf

<table>
<thead>
<tr>
<th>Transaction A</th>
<th>Transaction B</th>
<th>Transaction C</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
<td>No</td>
<td>Bare</td>
</tr>
<tr>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
</tbody>
</table>

Average % weed growth

Average % bare area

Total the number of boxes marked "Yes" in each column. Multiply this number by 100 and divide by 60 (the total number of samples taken). The result is the average percentage of weeds growing in the turf area. Follow the same procedure to calculate percentage of bare area.

For information on how to use this form, see Chapter 10, Box 10-8.
## Integrated Pest Management-Cafeteria Inspection Checklist

<table>
<thead>
<tr>
<th>Building Exterior</th>
<th>Satisfactory</th>
<th>Un satisfactory</th>
<th>Comments for Facilities/Maintenance</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Garbage storage area</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. Garbage handling system</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3. Perimeter walls</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4. Perimeter windows/openings</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5. Roof areas</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6. Parking lot &amp; drainage areas</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>7. Weeds &amp; surrounding landscape</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>8. Rodent-proofing</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>9. Other</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Building Interior</th>
<th>Satisfactory</th>
<th>Un satisfactory</th>
<th>Comments for Facilities/Maintenance</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Walls</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. Floors</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3. Ceilings</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4. Floor drains</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5. Lighting</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6. Ventilation/ Air handling equip.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>7. Other</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Food Storage</th>
<th>Satisfactory</th>
<th>Un satisfactory</th>
<th>Comments for Facilities/Maintenance</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Dry food storage area</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. Damaged/spoiled dry food</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3. Empty container storage</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4. Refrigerated areas</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5. Overall sanitation</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6. Other</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
## Exterior Areas

<table>
<thead>
<tr>
<th>Item</th>
<th>YES</th>
<th>NO</th>
<th>N/A</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Evidence of pest activity</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. Pest harborage</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3. Adequate garbage handling</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4. Proper garbage container design</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5. Adequate pickup frequency</td>
<td></td>
<td></td>
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</tr>
<tr>
<td>6. Trash disposal: proper storage of waste paper</td>
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<tr>
<td>7. Pavement free of cracks: good drainage</td>
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<tr>
<td>8. Adequate weed control</td>
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<tr>
<td>9. Adequate perimeter rodent control including tamper-resistant bait station</td>
<td></td>
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<tr>
<td>10. Adequate perimeter rodent control including proper lighting</td>
<td></td>
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Other Comments:

## Building Exterior

<table>
<thead>
<tr>
<th>Item</th>
<th>YES</th>
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<tbody>
<tr>
<td>11. Adequate rodent-proofing</td>
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<td></td>
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<tr>
<td>12. Adequate insect-proofing</td>
<td></td>
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<tr>
<td>13. Bird exclusion measures</td>
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<tr>
<td>14. Sufficient cleanability</td>
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<tr>
<td>15. Elevator and dumb waiter pits: clean, good drainage</td>
<td></td>
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<tr>
<td>16. Floor drains: clean and open; traps filled</td>
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<td>17. Plumbing: no leaks or clogged drains</td>
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<td>18. Ventilation: screens and vents clean</td>
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<tr>
<td>19. Condensation: proper drainage; clean trip trays</td>
<td></td>
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<tr>
<td>20. Proper lighting: sodium vapor lamps or shielded incandescent bulbs at building entrances and loading docks provide safe visibility and facilitates cleaning</td>
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Other Comments:
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<table>
<thead>
<tr>
<th>EMPLOYEE LUNCH ROOMS AND PUBLIC DINING</th>
<th>YES</th>
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<tbody>
<tr>
<td>Tables, seats and under booths clean</td>
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<td></td>
<td></td>
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<tr>
<td>Trash containers clean</td>
<td></td>
<td></td>
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<td>Other Comments:</td>
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Reprinted with permission from the Queen Anne's County Board of Education, Centreville, MD.
SAMPLE REQUEST FORM FOR PARENTS, GUARDIANS AND STAFF TO BE NOTIFIED PRIOR TO PESTICIDE APPLICATIONS MADE IN SECONDARY SCHOOL BUILDINGS OR GROUNDS

PARENTS GUARDIANS AND STAFF REQUEST FOR PRIOR NOTIFICATION OF PESTICIDE APPLICATIONS MADE IN SECONDARY SCHOOL BUILDINGS OR GROUNDS

Integrated pest management procedures such as inspections and monitoring are used to determine when to control pests and to identify conditions contributing to pest problems. The necessity for pest control, if warranted, is evaluated and one or more pest control methods including sanitation, structural repair, and nonchemical methods are utilized. Problem areas are identified where alternative pest control technologies can be incorporated in order to eliminate routine pesticide applications. When it is determined that non-toxic options are unreasonable or have been exhausted, the use of pesticides may be warranted to control the pest problem.

The Maryland Department of Agriculture’s Regulations pertaining to Integrated Pest Management and Notification of Pesticide Use in a Public School Building or on School Grounds requires that secondary schools establish and maintain a list of those individuals that wish to be notified prior to a pesticide application in a school building or on school grounds. Each individual that requests to have their names placed on the list will be notified twenty-four hours prior to a pesticide application and within twenty-four hours following the application of a pesticide that is applied in an emergency situation. If unfavorable weather conditions or other extenuating circumstances arise that prevents an intended pesticide application from being made, schools have up to fourteen days from the original date to make the application without issuing a new notice. If the pesticide application cannot be made to the school grounds within fourteen days of the original application date a new notice will be issued prior to any pesticide application made to school grounds.

(School Name) will maintain the Notification List, referenced above, for the _______ school year and will provide notification of pesticide applications in school buildings or on school grounds as requested. If you wish to be placed on the “Notification List” please provide the following information requested below and return to the school by _______ (Date).

PARENT / GUARDIAN / STAFF MEMBER INFORMATION:
(Circle One Of The Above)

Name: ____________________________________________________________

Address: __________________________________________________________

Telephone: ___________________ Day: ___________________ Evening: ___________________

STUDENT INFORMATION:

Name: ____________________________________________________________

Address: __________________________________________________________

Does the student or staff member have any medical conditions that may be aggravated by the use of a pesticide?
Yes: ______ No: ______

Was this information listed on your student’s health card?
Yes: ______ No: ______

If you require further information regarding the notification procedures or the school system’s pest control program you can contact (insert name of Contact Person) at (____) - (Insert Telephone Number).
SAMPLE NOTICE FOR PARENTS, GUARDIANS AND STAFF
OF A PESTICIDE APPLICATION TO SCHOOL GROUNDS

NOTIFICATION TO PARENTS, GUARDIANS AND STAFF
OF A PESTICIDE APPLICATION TO SCHOOL GROUNDS

Integrated pest management procedures such as inspections and monitoring are used to determine
when to control pests and to identify conditions contributing to pest problems. The necessity for pest
control, if warranted, is evaluated and one or more pest control methods including sanitation, structural
repair, and nonchemical methods are utilized. Problem areas are identified where alternative pest control
technologies can be incorporated in order to eliminate routine pesticide applications. When it is
determined that nontoxic options are unreasonable or have been exhausted, the use of pesticides may be
warranted to control the current pest problem.

School: ____________________________________________________________

Common Name of Pesticide To Be Applied: _____________________________

Location(s) of the Pesticide Application: ______________________________

Planned Date and Time of Application:

If unfavorable weather conditions or other extenuating circumstances arise, the intended pesticide
application may have to be delayed or postponed to a later date(s). If the application can not be made
within 14 days of the original planned date a new notice will be issued.

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’.”

The following information regarding potential adverse effects was taken from the material safety data
sheet (MSDS) of the pesticide to be applied:

Should you wish to receive obtain additional information regarding this notice you can contact (Insert
name of contact person) at ( ) - (Insert telephone number).
SPECIAL PESTICIDE USE REQUEST

Date ___________________ Proposal Number ___________________

School Name ________________________________________________

School Address _____________________________________________

I. Pesticide/Application Proposed:

Trade Name ___________________ EPA Registration No. ____________

Common Name _________________ Manufacturer ___________________

Formulation __________________ Application Date (s) _______________

Application Rate ______________ No. of Applications _____________

Method(s) of Application __________________________________________

II. Pests:

List specific pests and reason for application:

B. Has a pest population reached the action threshold: ______ Yes ______ No

C. Type of monitoring used: ______ Visual ______ Monitoring Traps

______ Other (list below)

D. Activity or damage observed:

III. Treatment Site:

(Describe site, size or area, timing of application, etc.)
Integrated Pest Management Program
Contract Guide Specification
- 1999 Revision -

This Document is Intended for General Guidance Only
And Does Not Pertain to Any Actual Contract

1. GENERAL

A. Description of Program: This specification is part of a comprehensive Integrated Pest Management (IPM) program for the premises listed herein. IPM is a process for achieving long-term, environmentally sound pest suppression and prevention through the use of a wide variety of technological and management practices. Control strategies in an IPM program include:
   • Structural and procedural modifications to reduce food, water, harborage, and access used by pests.
   • Pesticide compounds, formulations, and application methods that present the lowest potential hazard to humans and the environment.
   • Non-pesticide technologies such as trapping and monitoring devices.
   • Coordination among all facilities management programs that have a bearing on the pest control effort.

B. Contractor Service Requirements: The Contractor shall furnish all supervision, labor, materials, and equipment necessary to accomplish the monitoring, trapping, pesticide application, and pest removal components of the IPM program. The Contractor shall also provide detailed, site-specific recommendations for structural and procedural modifications to aid in pest prevention.

2. PESTS INCLUDED AND EXCLUDED

A. The Contractor Shall Adequately Suppress the Following Pests:
   1. Indoor populations of rodents, insects, arachnids, and other arthropods.
   2. Outdoor populations of potentially indoor-infesting species that are within the property boundaries of the specified buildings.
   3. Nests of stinging insects within the property boundaries of the specified buildings.
   4. Individuals of all excluded pest populations that are incidental invaders inside the specified buildings, including winged termite swarmer emerging indoors.

B. Populations of the Following Pests are Excluded From This Contract:
1. Birds, bats, snakes, and all other vertebrates other than commercial rodents.

2. Termites and other wood-destroying organisms.

3. Mosquitoes.

4. Pests that primarily feed on outdoor vegetation.

3. INITIAL BUILDING INSPECTIONS

The Contractor shall complete a thorough, initial inspection of each building or site at least ten (10) working days prior to the starting date of the contract. The purpose of the initial inspections is for the Contractor to evaluate the pest control needs of all locations and to identify problem areas and any equipment, structural features, or management practices that are contributing to pest infestations. Access to building space shall be coordinated with the Contracting Officer’s Representative (COR). The COR will inform the Contractor of any restrictions or areas requiring special scheduling.

4. PEST CONTROL PLAN

The Contractor shall submit to the COR a Pest Control Plan at least five (5) working days prior to the starting date of the contract. Upon receipt of the Pest Control Plan, the COR will render a decision regarding its acceptability within two (2) working days. If aspects of the Pest Control Plan are incomplete or disapproved, the Contractor shall have two (2) working days to submit revisions. The Contractor shall be on-site to perform the initial service visit for each building within the first five (5) working days of the contract.

The Pest Control Plan shall consist of five parts as follows:

A. Proposed Materials and Equipment for Service: The Contractor shall provide current labels and Material Safety Data Sheets for all pesticides to be used, and brand names of pesticide application equipment, rodent bait boxes, insect and rodent trapping devices, pest monitoring devices, pest detection equipment, and any other pest control devices or equipment that may be used to provide service.

B. Proposed Methods for Monitoring and Detection: The Contractor shall describe methods and procedures to be used for identifying sites of pest harborage and access, and for making objective assessments of pest population levels throughout the term of the contract.

C. Service Schedule for Each Building or Site: The Contractor shall provide complete service schedules that include weekly or monthly frequency of Contractor visits, specific day(s) of the week of Contractor visits, and approximate duration of each visit.

D. Description of any Structural or Operational Changes That Would Facilitate the Pest Control Effort: The Contractor shall describe site-specific solutions for observed sources of pest food, water, harborage, and access.

E. Commercial Pesticide Applicator Certificates or Licenses: The Contractor shall provide photocopies of State-issued Commercial Pesticide Applicator Certificates or Licenses for
every Contractor employee who will be performing on-site service under this contract.

The Contractor shall be responsible for carrying out work according to the approved Pest Control Plan. The Contractor shall receive the concurrence of the COR prior to implementing any subsequent changes to the approved Pest Control Plan, including additional or replacement pesticides and on-site service personnel.

5. RECORD KEEPING

The Contractor shall be responsible for maintaining a pest control logbook or file for each building or site specified in this contract. These records shall be kept on-site and maintained on each visit by the Contractor. Each logbook or file shall contain at least the following items:

A. Pest Control Plan: A copy of the Contractor’s approved Pest Control Plan, including labels and MSDS sheets for all pesticides used in the building, brand names of all pest control devices and equipment used in the building, and the Contractor’s service schedule for the building.

B. GSA Forms 3638: Field Office copies of GSA Form 3638, Pest Control Work and Inspection Report, or an equivalent. These forms will be used to advise the Contractor of routine service requests and to document the performance of all work, including emergency work. Upon completion of a service visit to the building or site, the Contractor’s employee performing the service shall complete, sign, and date the Form 3638, and return it to the logbook or file on the same or succeeding day of the services rendered.

C. Contractor’s Service Report Forms: Customer copies of the Contractor’s Service Report Form, documenting all information on pesticide application required by statute in the jurisdiction where service is actually performed. These forms shall not be mandatory if all required information on pesticide application is included on the GSA Pest Control Work and Inspection Report.

6. MANNER AND TIME TO CONDUCT SERVICE

A. Time Frame of Service Visits: The Contractor shall perform routine pest control services that do not adversely affect tenant health or productivity during the regular hours of operation in buildings. When it is necessary to perform work outside of the regularly scheduled service time set forth in the Pest Control Plan, the Contractor shall notify the COR at least one (1) day in advance.

B. Safety and Health:

1. The Contractor shall observe all safety precautions throughout the performance of this contract. All 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.
2. The Contractor shall assume full responsibility and liability for compliance with all applicable regulations pertaining to the health and safety of personnel during the execution of work.

C. 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 COR. The Contractor shall adhere to these restrictions and incorporate them into the Pest Control Plan.

D. Uniforms and Protective Clothing: All Contractor personnel working in or around buildings specified in this contract shall wear distinctive uniform clothing. The Contractor shall determine the need for and provide any personal protective items required for the safe performance of work. Protective clothing, equipment, and devices shall, as a minimum, conform to U.S. Occupational Safety and Health Administration (OSHA) standards for the products being used.

E. Vehicles: Vehicles used by the Contractor shall be identified in accordance with state and local regulations.

7. SPECIAL REQUESTS AND EMERGENCY SERVICE

On occasion, the COR may request that the Contractor perform corrective, special, or emergency service(s) that are beyond routine service requests. The Contractor shall respond to these exceptional circumstances and complete the necessary work within three (3) hours after receipt of the request.

8. CONTRACTOR PERSONNEL

Throughout the term of this contract, all Contractor personnel providing on-site pest control service must maintain certification as Commercial Pesticide Applicators in the category of Industrial, Institutional, Structural, and Health Related Pest Control. Uncertified individuals working under the supervision of a Certified Applicator will not be permitted to provide service under this contract.

9. USE OF PESTICIDES

The Contractor shall be responsible for application of pesticides according to the label. All pesticides used by the Contractor must be registered with the U.S. Environmental Protection Agency (EPA), state and/or local jurisdiction. 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 Contractor shall adhere to the following rules for pesticide use:

A. Approved Products: The Contractor shall not apply any pesticide product that has not been included in the Pest Control Plan or approved in writing by the COR.
Appendix I

B. Pesticide Storage: The Contractor shall not store any pesticide product in the buildings specified in this contract.

C. Application by Need: Pesticide application shall be according to need and not by schedule. As a general rule, 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. Requests for preventive pesticide treatments in areas where surveillance indicates a potential insect or rodent infestation will be evaluated by the COR on a case-by-case basis. Written approval must be granted by the COR prior to any preventive pesticide application.

D. Minimization of Risk: When pesticide use is necessary, the Contractor shall employ the least hazardous material, most precise application technique, and minimum quantity of pesticide necessary to achieve control.

10. INSECT CONTROL

A. Emphasis on Non-Pesticide Methods: The Contractor shall use non-pesticide methods of control wherever possible. 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.

B. Application of Insecticides to Cracks and Crevices: As a general rule, the Contractor shall apply all insecticides as crack and crevice treatments only, defined in this contract as treatments in which the formulated insecticide is not visible to a bystander 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 nontoxic options are unreasonable or have been exhausted. The Contractor shall obtain approval of the COR 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 tenant personnel are present. The Contractor shall take all necessary precautions to ensure tenant and employee safety, and all necessary steps to ensure the containment of the pesticide to the site of application.

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.
11. 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 COR. The Contractor 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 Contractor shall obtain approval of the COR 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 Contractor 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 labelled on the inside with the Contractor’s business name and address, and dated by the Contractor’s technician at the time of installation and each servicing.

12. STRUCTURAL MODIFICATIONS AND RECOMMENDATIONS

Throughout the term of this contract, the Contractor shall be responsible for advising the COR about any structural, sanitary, or procedural modifications that would reduce pest food, water, harborage, or access. The Contractor shall be responsible for adequately suppressing all pests included in this contract regardless of whether or not the suggested modifications are implemented. The Contractor will not be held responsible for carrying out structural modifications as part of the pest control effort. However, minor applications of caulk and other sealing materials by the Contractor to eliminate pest harborage or access may be approved by the COR on a case by case basis. The Contractor shall obtain the approval of the COR prior to any application of sealing material or other structural modification.
13. PROGRAM EVALUATION

The COR will continually evaluate the progress of this contract in terms of effectiveness and safety, and will require such changes as are necessary. The Contractor shall take prompt action to correct all identified deficiencies.

14. QUALITY CONTROL PROGRAM

The Contractor shall establish a complete quality control program to assure the requirements of the contract are provided as specified. Within five (5) working days prior to the starting date of the contract, the Contractor shall submit a copy of his program to the Contracting Officer. The program shall include at least the following items:

A. Inspection System: The Contractor’s quality control inspection system shall cover all the services stated in this contract. The purpose of the system is to detect and correct deficiencies in the quality of services before the level of performance becomes unacceptable and/or the COR identifies the deficiencies.

B. Checklist: A quality control checklist shall be used in evaluating contract performance during regularly scheduled and unscheduled inspections. The checklist shall include every building or site serviced by the Contractor as well as every task required to be performed.

C. File: A quality control file shall contain a record of all inspections conducted by the Contractor and any corrective actions taken. The file shall be maintained throughout the term of the contract and made available to the COR upon request.

D. Inspectors: The Contractor shall state the name(s) of the individual(s) responsible for performing the quality control inspections.

Dr. Albert Greene
Chief, Building Services Branch
GSA, WPY-A-B
7th and D Streets, SW
Washington, D.C. 20407
e-mail: albert.greene@gsa.gov
Appendix J

Sample Contract
Integrated Pest Management (IPM) for School Grounds

Background

The basis of the [Name School] school district IPM services is the regular monitoring for the presence of pests in the landscape, turf and surrounding grounds of the school building and, when necessary, to implement appropriate control measures. The goal of the IPM program is to provide effective, long-term pest control, while minimizing the use of pesticides. The contractor must exhibit awareness and sensitivity to the fact that the school environment cannot be compromised through deliberate or inadvertent contamination by pesticides. Scheduled, routine pesticide treatments in any area of the school are prohibited. Pesticides shall only be applied when nontoxic options are found to be unreasonable or have been exhausted. It is essential to the success of the IPM program that the Contractor provides proactive services that identify landscape design deficiencies, plant maintenance practices and plant choices that contribute to pest problems. All IPM services and activities shall be planned and performed with the needs of the school children and staff as the foremost priority.

Description of Service

The Contractor shall furnish all labor and materials for the development and implementation of a comprehensive IPM program in designated schools and facilities. The Contractor shall demonstrate an understanding of the concept of the IPM method of pest control. Control practices in an IPM program are not based on the routine application of pesticides, but on monitoring and inspecting for pests, modifying landscapes and plant selection, and changing landscape and plant maintenance practices that can contribute to pest problems. Pest control is achieved in an IPM program by making accurate decisions as to when control measures are needed and the type of control measures to be used.

At a minimum, the IPM program shall consist of the development and implementation of regularly scheduled pest management services; routine and special meetings among pest management personnel and school staff; routine and specially scheduled training; and written reports describing program status and recommendations for the corrective actions that need to be implemented by the school, the Contractor, or the school board. In addition, the contractor must meet all IPM program regulations of the MDA.

Contact Person (CP) and Liaison

To provide the degree of oversight and consistency of services necessary for a successful IPM program, the school districts shall designate an IPM Contact Person (CP) for the school district and an IPM liaison for each individual school. These people should have the interest and capability to address all pest management issues, regardless of the pest involved or the area affected.
The CP should participate in all decisions that may directly or indirectly affect pest management. A list of personnel designated as school liaisons should be provided to the Contractor by the school district. The Contractor’s pest management technician should meet with the school liaison, upon initiation of the contract, and prior to performing pest management services. The Contractor and school liaison will:

- Identify and discuss specific problem areas in the landscape and turf areas.
- Facilitate access to all management areas on school property.
- Identify and discuss landscape features or maintenance practices that might contribute to pest infestations.
- Discuss effectiveness of previous control efforts.
- Notify pest management personnel of any new restrictions or special safety precautions.

**Routine Services**

Routine IPM Services shall include the control of all landscape and turf pests, such as, but not limited to, defoliating insects, sucking insects and mites, wood-boring insects, leaf-mining insects, gall-forming insects and mites, root-feeding insects, diseases of ornamental landscape plants and turf grass, weeds, and vertebrate pests including voles, moles, other rodents, birds, and deer. Preventive recommendations for control of these pests are included as Routine IPM Services.

**Additional Services**

The school district reserves the right to negotiate with the Contractor for the purchase of related pest control services not specifically covered, such as pruning, tree removal, and other plant maintenance practices, and to add or delete grounds or fields to or from the Contract.

**Special Service Request And Emergency Services**

The routine IPM services shall consist of performing all components of an IPM program, as described in the Contractor’s Pest Management Plan and Service Schedule (see Section F. Pest Management Plan and Service Schedule below) for each school management area during the period of this contract. Requests for corrective action, special services, or emergency service shall be placed with the CP. The Contractor shall respond to a request for emergency services on the day of the request. In addition, the Contractor shall respond to special service requests within one (1) working day after receipt of request. If the special service or emergency service request entails the application of pesticides, applications will take place in the minimum time allowable by law. All emergency and special services should be recorded in the school IPM log book. In the event that such services cannot be completed within the required time frames, the contractor shall immediately notify the CP and indicate an anticipated completion date. The Contractor shall describe, in the proposal, his/her capability to meet this requirement (e.g., radio dispatched service, names of office personnel handling the account, availability of technical and
on-site personnel assigned to this program, etc.).

Pest Management Plan and Service Schedule

The Contractor shall survey all management areas covered under this contract and develop a written Pest Management Plan. This plan shall provide detailed information on areas of pest infestation; landscape design, plant selection deficiencies, and plant maintenance practices that contribute to pest infestation; and recommendations for correcting those conditions. This plan should include a detailed description of the monitoring program that will be used to identify pest infestations in landscape and turf areas. It may include the use of traps, visual inspections, degree-day accumulations and other environmental indicators, and staff interviews. Other appropriate IPM activities, including decision-making, intervention tactics and strategies, and evaluation methodologies should be included. A school system approved pesticide list with labels and Material Safety Data Sheets (MSDS) sheets should be included in the management plan. The Contractor also shall submit a written Service Schedule to the CP and other school personnel for approval. This schedule will be structured so that the entire school grounds, landscapes, and turf areas are surveyed routinely. The frequency of service visits for each management unit should be specified. This document should be included with the IPM service records of each school and revised as necessary.

The Pest Management Plan and Service Schedule must be approved by the school district before implementation of the program. This specifically includes approval for any proposed pesticide usage. Any subsequent changes to the Plan and Schedule and/or additions to the approved pesticide list must be requested in writing and receive the concurrence of the school district.

Structural and Procedural Recommendations

Landscape management practices that may contribute to pest infestations shall be reported, in writing, to the building liaison and the CP by the Contractor at the completion of each inspection.

Record Keeping

The Contractor shall provide and maintain a complete and accurate pest management logbook. The logbook shall permit efficient evaluation and management of the program, accurate information retrieval, and adhere to record keeping required by statute. The turf areas, landscaping and athletic fields associated with each facility shall have its own logbook that will be updated during each service by the pest management technician. The logbook shall be kept in a designated location at the facility and a copy sent to the CP following each service visit. Clear and concise records shall reflect the common names of pests monitored at the school (according to the Maryland Pesticide Law and Regulations, no codes for pests or pesticides shall be permit-
Contractor Licensing

Each Contractor submitting a proposal for consideration by the school district shall have and maintain, during the life of the contract, a Pesticide Business License issued by the Maryland Department of Agriculture. A copy of the current valid license shall be submitted with the Contractor’s proposal and no consideration will be given to proposals that lack evidence of licensing. The Contractor must be licensed, at a minimum, in Category III AC: Ornamental or Turf Pest Control, with the Sub-Categories of Ornamental Plants and Shade Trees — Exterior, Turf and Lawn Pest Control, and in Category VII E: Industrial, Institutional, Structural, and Health Related Pest Control, with the Sub-Category of Industrial Weed Control. Failure to maintain the Pesticide Business License with all necessary pest control categories shall be sufficient grounds for immediate termination of the contract. It shall be that Contractor’s responsibility to immediately notify the CP of any change in status.

Personnel

The Contractor shall provide, under this contract, only qualified pest management personnel with adequate and verifiable experience in the conduct of IPM programs. All on-site personnel must understand current pest management practices and be able to make decisions and field diagnoses regarding the use of IPM practices and techniques. The proposal shall present a plan or method for assuring continuity of pest management personnel assigned to this contract, and knowledge and sensitivity to the needs of the schools. It should be understood by the Contractor that quality assurance and daily pest management services are two activities that are separate and distinct from one another, and require sufficient time and manpower.

The Contractor shall designate a Program Technical Supervisor (PTS), who shall have primary responsibility for the conduct of this pest management contract, ensure that all required reports are submitted to the CP on time, and be available for routine an emergency consultation. The following minimum requirements regarding this individual’s experience and training shall be provided in the proposal:

- Resume, including current home address.
- Current certification in Maryland as a Pest Control Applicator in Category III: Ornamental or Turf Pest Control, with a minimum of Sub-Categories III AC: Ornamental Plants and Shade Trees — Exterior and Turf and Lawn Pest Control; and in Category VII E: Industrial,
Institutional, Structural, and Health Related Pest Control, with Sub-Category Industrial Weed Control. Certification as a Pest Control Consultant also is acceptable, with examination in Ornamental or Turf, and a minimum of Sub-Categories to include: Ornamental Plants and Shade Trees — Exterior and Turf and Lawn Pest Control.

The PTS shall provide on-site supervision to assure safety, carry out coordination and continuity of program services, and fulfill special requests from the CP. The responsibilities of the on-site supervisor will be carried out by the PTS, not the pest management technician. On-site pest management services shall be provided by a pest management technician certified by the Maryland Department of Agriculture in Category III: Ornamental or Turf Pest Control, with a minimum of Sub-Categories III A.C: Ornamental Plants and Shade Trees — Exterior and Turf and Lawn Pest Control; and in Category VII E: Industrial, Institutional, Structural, and Health Related Pest Control, with the Sub-Category Industrial Weed Control.

Time to Conduct Services

Routine Services should be performed during the late afternoon hours, Monday through Friday, excluding holidays, except as specifically approved by the CP. Pesticides shall not be applied while foods are being prepared, served, or put away, or when the school building is open for business. The Contractor shall observe all safety precautions throughout the performance of this contract. Certain areas within some facilities may require special instructions for persons entering the area. Any restrictions associated with special areas will be explained to the Contractor and the CP by the school building liaison. These restrictions shall be adhered to and incorporated into the Contractor’s Pest Management Plan and Service Schedule for the school building.

All Contractor personnel shall wear an identification card in a clearly visible manner during the performance of their duties. Vehicles used by the Contractor shall be identified in accordance with state regulations. The Contractor must park in designated areas in close proximity to each school building. At a minimum, the Contractor shall provide his/her personnel with clean uniforms to be worn while performing their duties. Additional personal protective equipment required for the safe performance of work shall be determined and provided by the Contractor.

Pest Control

Nonchemical Control Methods

Nonchemical management of weeds may include the repair of cracks and crevices in sidewalks, playgrounds, and parking lots to reduce germinating seeds. Weeds in planted beds may be managed through the use of mulching or mechanical removal such as hoeing or hand picking. In some cases, biological control agents may be released to help control weeds. Nonchemical control of weeds in lawns and playing fields may include alterations of turfgrass variety, or changes in mowing heights, fertilization and irrigation regimes.
Nonchemical management of insect and disease pests of landscape plants may include the removal of pest-prone plants and replacement with pest resistant ones, the addition of plants to the landscape that encourage the activities of beneficial insects or discourage the activities of pests, the physical removal of pests by pruning or hand picking, the use of barriers to prevent colonization of plants, the use of various traps to capture pests or disrupt activities such as mating, the release of biological control agents, and the alteration of practices such as fertilization, irrigation, mulching, and pruning to discourage pest activity.

Pesticide Control Methods

Pesticide applications shall be made only to areas of known pest infestation or activity, and where nonchemical control measures, such as plant selection, habitat modification, physical, mechanical, and biological control were not successful or are not feasible. Application of pesticides shall not occur until a full inspection has been completed. If chemicals are needed, “reduced risk” pesticides and formulations should be considered, whenever possible, such as horticultural oils, soaps, or biocides.

Pesticide applications that may impact the operations or occupants of a school building shall be permitted only during hours when the school building is closed and after all notification procedures have been met. A contingency plan for performing pesticide applications on school grounds should be part of the Pest Management Plan and Service Schedule. This should include a list of pests, pesticide products, formulations, application methods, timing of application, and other relevant information that may be needed in specific situations and landscape areas.

Thresholds for pests of landscape plants are generally lacking. However, several studies indicate that insect and mite pests cause noticeable aesthetic injury to plants when approximately 10% of the plant is affected. Treatments should be considered when 10% of a plant’s foliage is removed or discolored, or if the pest has the potential to kill the plant, as is the case with some boring and scale insects. 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. Insect, disease, and weed pests of turfgrass in playing fields should be controlled when the associated loss of turfgrass poses a threat of injury to children engaged in sports activities. Insect, disease, and weed pests of school lawns should be controlled only when the damage caused by these pests is intolerable.

The Contractor shall minimize the use of and potential exposure to pesticides wherever possible. For example:

- Use nonchemical control methods and materials.
- Use spot treatments of pesticides. Treat only heavily infested plants.
- Integrate control methods (i.e., plant selection, timing of watering, mechanical weed control, etc.).
- Use pesticide application techniques, such as soil injections, rather than foliar applications, when possible.
- Routine preventive spray treatments are prohibited. Cover or barrier treatment of grounds with a pesticide must be specifically requested by the Contractor and approved by the CP prior to performing the treatment. Preventive treatments are acceptable only on a case-by-
case basis. The Contractor must provide detailed plans, list the rationale for the treatment, and the methods of application if preventive treatment is warranted for a specific school building or landscape area. Preventive treatments are subject to review by the CP and can be eliminated at any time.

Program Reporting, Evaluation and Training

Reporting

The Contractor's Program Technical Supervisor shall, at a minimum, provide annual written reports to the school district and attend regular meetings with the CP, school administration, school liaisons, and other concerned individuals. These reports and meetings will address all pest management activities provided by the Contractor for each facility's grounds and evaluation of the IPM program's progress. These reports should identify landscape conditions or personnel practices that require correction by the school district in order to promote the program's overall effectiveness. In addition, the Contractor shall provide monthly service reports to the CP within fifteen days following the end of each month. The service reports shall include, but not be limited to, the following:

- Landscape and turf areas serviced.
- Man-hours for each facility's grounds for Roxine Services.
- Location, man-hours, and work description of Special, Emergency, and Additional Services.
- Results of monitoring and inspections, including accepted common names of pests, numbers of each pest, and the location on each facility's grounds.
- Written evaluation of turf conditions, landscape problems, specific plant infestation, and immediate and long-term program goals for either resolving pest problems or improving the IPM program for each facility's grounds.
- Identification and listing of pesticides used by common/generic name (no codes), concentration and quantity of finished spray used, and other pest management techniques used for each school building and management area.

Evaluation

Monthly service reports during the growing season and annual reports will be used by the CP and the Contractor to develop a tangible means for evaluating the overall IPM effort on the facility's grounds. The Contractor's Program Technical Supervisor shall meet as needed with the CP to discuss the status of the pest management program and review program activities and reports, or resolve on-going or special problems. If the school district hires an outside evaluator, the contractor may be required to meet with this person or provide information.

Training

The Contractor shall include, in the proposal, a detailed description of the in-service training
programs provided to their personnel, including pertinent documentation and records. In addition, the Contractor shall be able to provide training or develop a plan to use outside expertise to provide training on all aspects of IPM program design and implementation to a wide array of school-associated personnel, including school administrators, maintenance and housekeeping staff, the CP and school liaisons, and community members.

Additional Considerations

Notification

The Contractor shall provide the CP and school liaisons with a list of pesticides and bait stations that may be used on school grounds before the school year begins. Product labels and Material Safety Data Sheets for all pesticides shall be provided to the CP and made available in the school IPM program logbook for review by school liaisons, parents, and other interested parties.

The Contractor shall notify the CP and school building liaisons in advance of all pesticide applications to ensure that all provisions of the State’s and school district’s advance notification policies are met. Although each school district is ultimately responsible for student notification of pesticide use and for sending notification home with students, the Contractor will be responsible for satisfying all legal requirements for posting. The Contractor will notify the CP upon completion of pesticide applications made to school grounds.

Inspections

Throughout the duration of this contract, school facilities [or grounds] will be inspected periodically by school district personnel to determine the effectiveness of the IPM program and Contractor compliance with the contract. Inspection results will be documented in writing and submitted to the Contractor. The Contractor shall initiate actions promptly to correct all deficiencies found.

It shall be the Contractor’s responsibility to furnish an adequate supply of materials necessary for school personnel to inspect the interior of all rodent bait stations. These materials may include Allen Wrenches to loosen and retighten fasteners, keys to open locks, or replacement self-locking plastic ties. Implements to cut plastic ties are not included under this provision.

Purchase of Ancillary Services/Equipment

The Contractor may need to purchase additional equipment or provide additional services to ensure that the IPM program is fully implemented. The school district has the right to negotiate the purchase of ancillary equipment and services with the Contractor and adjust the contract accordingly.
Criteria for Evaluating an IPM Contract

Traditionally, the award of pest control contracts has been based on the lowest bid. Because of the technical nature of IPM, this procurement procedure normally does not work with contracting for IPM programs. IPM is more than just the application of the pesticide. IPM services often involve several different activities and the use of sophisticated technical expertise, decision-making, and program evaluation. To ensure that the contractor is qualified to perform the services and that the bid is awarded in a manner that will achieve the desired results, as specified in the RFP, a set of evaluation criteria should be established. The following is a sample guideline that can be used for evaluating technical proposals and awarding an IPM contract. The weight of each technical component and the overall weight of the criteria in relation to the cost of the services must be determined by the school district when developing the contract specifications.

A. Mandatory Qualification Criteria

The Contractor needs to provide all of the information as was set forth in the RFP. As a separate part of the technical proposal, the Contractor must address and demonstrate how the outlined mandatory requirements will be met. Failure to meet the mandatory requirements will be grounds to exclude applicants from further consideration.

B. Technical Evaluation Criteria

The technical portion of the Contractor's proposal is the most important consideration when making the award. Therefore, the proposal should be as complete and specific as possible. The merits of each proposal will be evaluated carefully in terms of the requirements and in relation to the criteria established. The evaluation will take into consideration the technical and administrative capabilities of the Contractor, in relation to the work to be done. Contractors who merely propose to provide a service will not be eligible for award. The proposal must include a comprehensive plan for meeting the needs of the school system by addressing each of the requirements of the RFP, and explaining the proposed technical IPM approaches to be used. Proposals submitted in response to the RFP will be technically evaluated in accordance with the following factors. The maximum score is 100 points.

Scoring the Technical Portion

1. Understanding the Objectives of the Project 60 Points

The Contractor shall furnish a plan of operation including, at a minimum, a proposed Scope of Work demonstrating the Contractor's understanding of integrated pest management. This Scope of Work shall provide an explanation of technical approaches and a detailed outline of the proposed program for executing the requirements of the Scope of Work, as well as achieving the objectives of the project. This should include, but is not limited to, the following:

- Overall plan of operation and how on-site coordination of this contract will be accom-
plished. The plan must reflect the ability of the Contractor to meet the service scheduling requirements of the individual facilities.

• Detailed procedures for accomplishing the identification and inspection of infested zones, monitoring frequency, methods (i.e., use and placement of traps or environmental monitoring, or indicators), and recording of findings.
• Detailed explanation of nonchemical control methods to be used.
• Detailed explanation of other methods of control, including pesticides likely to be used as application methods.
• Detailed explanation of safety practices (i.e., security of chemicals, protective clothing, equipment used, special precautions/procedures pertinent to school and food service facilities, etc.).
• Methods of evaluating and supervising the services to be provided and for maintaining quality control of services performed.
• A description of the proposed record keeping system (provide sample forms, etc.).
• Mechanisms for accomplishing emergency and special service requirements.
• Methods for interacting with the various facility liaisons and assessing school personnel practices that may impede or can enhance the program.
• Description and documentation of training provided to personnel assigned to work on this program.

2. Background, Experience, and Qualifications of the Provider

In addition to presenting the company’s background, experience, and qualifications, the provider should include a list of reference contracts and discuss their similarities with this proposed contract. Also, a list of previous or current contracts with other public agencies should be included. A copy of the company’s current Maryland Department of Agriculture Pesticide Business License should be submitted with the proposal. Failure to provide a valid Pesticide Business License will result in no further consideration of a provider. In addition, copies showing documentation of any IPM certification and training should be provided.

3. Personnel Assigned for Direct Work on this Project

Information is required that will show specific qualifications and experience with similar IPM programs. Resumes shall be provided that substantiate each individual’s qualifications. Special mention shall be made of the contract supervisor, the Program Technical Supervisor, and all on-site technical personnel. The approximate percentage of each individual’s time that will be spent on this contract should be noted. Resumes or CVs are required that reflect education, background, experience, other training, and specific scientific or technical accomplishments. Current Maryland Pest Control Applicator Certificates shall be provided in the proposal for all personnel assigned to this contract. The Contractor shall explain how they will ensure continuity of personnel on this contract (i.e., assign specific personnel to service of one or more facilities, etc.).
C. Selection for Award

Contractors should be aware that the school districts will perform a "best buy analysis" and the selection for award will be made to the provider whose proposal is most advantageous to the school district. The technical factors listed above and the total proposed costs will be taken into consideration.
REQUEST FOR PROPOSAL
FOR
INTEGRATED PEST MANAGEMENT PROGRAM SERVICES
CARROLL COUNTY PUBLIC SCHOOLS

DEADLINE FOR RETURN OF PROPOSALS:
August 26, 1999 — 2:00 PM.

Pre-bid meeting to be held August 13, 1999, 9:00 AM
at
Carroll County Public Schools
Board Meeting Room 007
125 North Court Street
Westminster, MD 21157

Contents:
Proposal Development Details
Specifications
Carroll County Public Schools Administrative
Procedures for Integrated Pest Management
and Notification
Proposal Price Form
Bid Form Signature Sheet
Bidders Affidavit
School List
School Calendar
CCPS Map
CCPS Relocatable Classrooms
Instructions to Bidders

Name of Firm Submitting Bid
REQUEST FOR PROPOSAL (RFP)
FOR INTEGRATED PEST MANAGEMENT PROGRAM SERVICES
RFP 800-009N

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REQUEST FOR PROPOSAL (RFP) # 00-009N
FOR INTEGRATED PEST MANAGEMENT PROGRAM SERVICES

SECTION A - PROPOSAL DEVELOPMENT DETAILS

1. GENERAL INFORMATION

A. Introduction

It is the intent of this RFP to solicit sealed proposals from qualified sources to establish a contract for comprehensive Integrated Pest Management Program Services as detailed herein for all Carroll County Public Schools (CCPS) and all of their other facility buildings.

B. Procurement Administrator

Ray Nowicki, Buyer, will administer the solicitation process.

C. Contract Administrator

The Plant Operations Department will administer the contract after award.

D. Pre-Bid Meeting

A pre-bid meeting will be held on August 13, 1999, 9:00 AM in the Carroll County Public Schools Board Meeting Room #007 at which time the scope of the services will be reviewed and a representative school visit will be made available.

E. Questions and Inquiries

Questions and inquiries should be directed to the Purchasing Office, Carroll County Public Schools, 125 North Court Street, Westminster, Maryland 21157. Telephone #410-751-3060 or Fax Machine #410-751-3105.

F. Closing Date

Four (4) copies of the Proposal shall be submitted to or hand delivered to Carroll County Public Schools 125 North Court Street, Westminster, MD 21157 Attn: Purchasing Office not later than 2:00 p.m. on August 26, 1999. Proposals submitted after that time and date will be returned unopened. A Register of Proposals will be prepared publicly at the closing time. The Register of Proposals shall be open for inspection after award of contract.

G. Proposal Acceptance

The Proposal must remain valid for a period of not less than ninety days to allow for evaluation and award. The Board of Education of Carroll County reserves the right to accept or reject any or all Proposals, waive informalities and select the Proposal which will serve in its best interest.

H. Contract Period

The contract shall be for a period of one (1) year, September 10, 1999 to September 9, 2000, and all pricing must remain firm for the duration of the contract period. CCPS shall have the sole
option to extend the contract for three (3) additional one (1) year periods subject to acceptable performance and available funds.

I. Price Adjustments

1. Annual price adjustments based on the Bureau of Labor Statistics Consumer Price Index, CPI-W, Baltimore Region, for succeeding contract periods will be considered.

2. It shall be the contractor’s responsibility to notify CCPS of CPI-W price changes within forty-five (45) days of contract expiration. Without this notification, price increases will not be considered.

3. Adjustments will be calculated by comparing the current index with the previous year’s index so as to determine the change in index points. The point change will then be divided by the price index to obtain the percentage of change. The percentage of change will then be multiplied by .75 to obtain the adjustment to be applied to the current prices. For a three (3) year period, adjustments shall not exceed twelve percent (12%) of the first year contract prices and/or six percent (6%) per year.

J. School Calendar

The school calendar for the 1999-2000 school year, Attachment C, will acquaint bidders with the days schools have scheduled closings. It will be the successful bidder’s responsibility to become aware of non-scheduled closings due to inclement weather or other causes.

K. Locations

School facilities / locations to be serviced by this contract consist of permanent school buildings, as listed on Attachment A with square footage, relocatable portable classrooms as listed on Attachment E with square footage, and other facilities as listed on Attachment A. A school system map (Attachment B) is provided. Additional locations may be added or deleted at any time throughout the life of the contract. The Contractor shall be required to provide service to any additional locations subject to all conditions identified herein and subject to the Contractor price submitted in the Proposal Price Sheet.

L. Selection Process Schedule

The time line for submission and analysis of the RFP and subsequent award of contract is as follows:

- Proposals due by 2:00 P.M. - August 26, 1999
- Proposal evaluation by Selection Committee - August 27-31, 1999
- Notice of Contract Award - September 10, 1999

II. TECHNICAL PROPOSAL SPECIFICATIONS

Proposal submital shall address the Technical Proposal as outlined below. Four (4) copies of the proposal shall be prepared on 8 1/2” x 11” paper and bound. Unless specifically requested, extraneous presentation of materials is neither necessary nor desired. Proposal shall be concise and address the required information.

A. Mandatory Requirements
1. Bidders must demonstrate that they have had successful experience in providing Integrated Pest Management (IPM) Program Services and it is preferred that bidder have a minimum of two (2) years experience.

2. Bidders must submit with their proposal copies of all required State of Maryland Categories Pesticide Applicator Licensure as well as copies of licensure to control termites, birds, and wildlife. The successful contractor must maintain these licenses during the entire term of the contract. Also bidders must be certified by the Maryland Department of Agriculture and shall provide proof of certification with their bid.

3. Bidders must have an Entomologist and Biologist on staff or have access to the services of these professionals through a local, state or national organization.

B. Project Plan/Staffing

1. Project Plan: Provide a detailed narrative describing an Integrated Pest Management (IPM) service program to control pests as described herein and based on Carroll County Public Schools Administrative Procedures for Integrated Pest Management and Notification (Attachment D). The narrative should include:
   a) Control practices for long term pest suppression including surveillance, trapping, and pesticide application.
   b) An emergency response and call back plan.
   c) Procedure for obtaining the services of an Entomologist or Biologist. Indicate if these professionals are on your staff or if you subcontract for their services. If you subcontract for these services, include whether you have worked with these professionals in the past.
   d) Reports that will be utilized and reporting procedures.

2. Staffing Plan
   a) Provide a description of your staffing plan for the entire scope of work for this contract, inclusive of the number of persons, proposed duties and site assignment of personnel planned for appointment to this contract.
   b) Provide a listing of your current commercial service contracts, annual dollar value, and contract expiration for each job, and description of how you will handle the school system’s contract in light of your current workload.
   c) Provide a listing of Pest Management Technicians. Indicate the number of years of experience and the number of years with the bidder’s firm. Throughout the contract’s performance, all personnel providing on-site pest management services must meet state and local requirements in the jurisdiction(s) where service is actually performed, for training, registration, or certification as Commercial Pesticide Applicators in the category of Industrial, Institutional, Structural, Health Related Pest Control.

3. Experience on Similar or Relevant Projects/Firm References
   a) Experience: Provide the names of three (3) businesses/institutions that have, or have had, contracts with your firm of a similar size and scope as described herein. Include in this listing, the dollar volume for each work and the name of your principal on-site personnel assigned to this work. These contracts must be a twenty-four (24) hour,
seven (7) day a week operation. The school system reserves the right to verify this information if it so chooses. Include the following information for each project as follows:

1. Customer Owner's name, address contact name and telephone number.
3. The name of your firm's account representative for each contract location.
4. The dollar amount of the contract.
5. The term of the contract.
6. List the similarities to IPM Program Services at the Carroll County Public School System.

o) Firm References:
   1. The references of customers of previous similar work given above will be checked by the school system.
   2. It is imperative that contact names and phone numbers given for the projects listed be accurate. In addition, the school system reserves the right to check other sources available. References will be held in the strictest of confidence by the school system.

4. Key Personnel/References
   a) Include a brief resume for each Account Representative. The Account Representative is defined as the person who will be servicing the account and who will be the school system's prime contact.
   b) Within your description include the following:
      1. Education including all schools and applicable training. Include training dates and provide copies of certificates of training by the state or your firm.
      2. Employment history inclusive of dates employed.
      3. Experience with your firm on similar contracts, particularly those contracts your firm has referenced for "Experience", as well as any other applicable experience.
   c) It is imperative that accurate contact names and phone numbers be given. In addition, the school system reserves the right to check other sources available. References will be held in the strictest of confidence.

5. Profile of Company
   Include a brief profile of your company to include:
   a) Number of years in business
   b) Type of organization
   c) Name of principals
   d) Brief history of company
   e) Total number of employees
   f) Number of Pest Management Technicians
   g) Number of Office Personnel
   h) Bonding Company and Bonding dollar amount capabilities

6. Certificate of Insurance
a) Provide a sample insurance certificate to verify bidder’s ability to obtain the required insurance for this work. (See Section VII Contract Requirements, Paragraph U for Insurance Requirements.)

b) Insurance shall include Product Liability coverage.

III PRICE PROPOSAL REQUIREMENTS

1. Price is to be completed on the “Firm Proposal Sheet”. All Proposal pricing shall be exclusive of taxes, where applicable. A copy of Carroll County Public Schools’ Tax Exempt Certificate is available upon request.

2. Required Price Proposal Information:
   a) Price to conduct monthly inspection services and treatment services for all schools and facilities in accordance with the requirements of the “Specifications”.
   b) Hourly Rate of technicians for informational purposes.
   c) Historical Cost for treatment of termites and wildlife.

3. The offeror shall submit one monthly invoice for payment of all IPM Program Services to Department of Plant Operations at Carroll County Public Schools, 125 North Court Street, Westminster, Maryland 21157.

IV EVALUATION and SELECTION PROCESS

A. Selection Committee

Proposals received from offering firms by the closing deadline will be evaluated by the Selection Committee consisting of a minimum of three (3) CCPS staff.

B. General Evaluation

CCPS may make such investigations as are deemed necessary to determine the ability of a firm to provide the work as specified herein.

CCPS reserves the right to clarify information submitted in a Proposal to determine whether an error has been made or whether a waiver of formality, informality or technicality is appropriate. Firms shall furnish CCPS all such information and data necessary for CCPS to determine if the Proposal is responsible and responsive to CCPS’ requirements as stated herein.

CCPS Selection Committee will utilize information submitted to evaluate Proposals and determine an apparent low bidder. The firm determined to be the apparent low bidder may be invited to make an oral presentation so that CCPS may gather more definitive information on the firm’s work proposal and clarify any questions it may have on the firm’s Proposal. It is CCPS’ intent to award the contract to the firm which, based upon the criteria for evaluation, is the most responsive and the most qualified firm for the provision of the work.
V EVALUATION CRITERIA

CCPS will evaluate Proposals on the basis of the following criteria and percentage points assigned to each section:

A. Technical Proposal: 50%
   Under this section the CCPS evaluation team will evaluate the following:
   • Past performance/Experience
   • References
   • Project Plan
   • Staffing Plan
   • Any other factors that CCPS may deem appropriate.

B. Price Proposal 40%
   Under this section the CCPS evaluation team will evaluate the following:
   • Basic monthly costs
   • Supplemental costs
   • Any other factors that CCPS may deem appropriate.

C. Any other factors that CCPS may deem appropriate. 10%

VI AWARD OR REJECTION OF PROPOSAL

The contract will be awarded to the firm complying with all the provisions of this RFP and the stated criteria, subject to the availability of funding and provided it is in the best interest of Carroll County Public Schools to award the contract.

Carroll County Public Schools reserves the right to reject any and all proposals, at any time, whenever such is in their best interest. A firm’s Proposal may be rejected for one or more, but not limited to the following reasons:

A. Failure of the firm(s) to submit a Proposal within the time frames specified
B. Failure of the firm(s) to provide the required information
C. Failure of the firm(s) to respond to the request for clarification, presentation, or demonstration
D. Failure of the firm(s) to follow the prescribed RFP preparation, submission and response format instructions
E. Collusion among or between firms
F. Unbalanced Proposals, that is, Proposals in which the prices quoted for some work is out of proportion to those quoted for other work
G. Lack of responsibility on the part of the firm
H. Financially unstable firm
I. Failure of the firm to successfully negotiate a contract
J. Submission of a Proposal that does not meet CCPS’s requirements as outlined herein

CCPS reserves the right to reject any proposals if the evidence submitted by, or investigation of, such firm fails to satisfy CCPS that such firm is qualified to carry out the obligations of the contract here-in.
VII CONTRACT REQUIREMENTS

A. Start and Completion Dates

The contract shall commence on approximately September 10, 1999 and be fulfilled in accordance with the condition of the Contract Period - Section I, Paragraph H.

B. Non-Conflict of Interest Statement

It is unlawful for any officer, employee or agent of the Board of Education to participate personally in his/her official capacity through decision, approval, disapproval, recommendation, advice or investigation in any contract or other matter in which he/she, his/her spouse, parent, minor child, brother, or sister, has a financial interest or to which any firm, corporation, association, or other organization in which he/she has a financial interest or in which he/she is serving as an officer, director, trustee, partner, or employee, or any person or organization with whom he/she is negotiating or has any arrangement concerning prospective employment, is a party, unless such officer, employee, or agent has previously complied with the provisions of Maryland Annotated Code, Article 40A, SS1-101 et. seq. The successful bidder agrees that during the term of the Contract and for twenty-four (24) months following the exit conference, the successful bidder, its employees, agents and representatives, shall not, with or without compensation, on behalf of the successful bidder, or another person, entity, or corporation, take any action in connection or receive any benefit with any specific matter, finding or recommendation associated in any way with this project, except with the express written consent of the Board of Education of Carroll County.

C. Multi-Year Contracts

If funds are not appropriated or otherwise made available to support continuation in any fiscal year succeeding the first fiscal year, the Board of Education shall have the right to terminate this contract and the offeror is not entitled to recover any costs not incurred prior to termination.

D. Contingent Fee Prohibition

The offeror warrants that he/she has not employed or retained any person, partnership, corporation or other entities other than a bona fide employee or agent working for the offeror to solicit or secure this agreement and that he/she has not paid or agreed to pay any person, partnership, corporation or other entities other than a bona fide employee or agent any fee or any other consideration contingent on the making of this agreement.

E. Non-Assignment

The offeror shall not sell, transfer, or otherwise assign his/her obligations under this Contract or any portion thereof, or its rights, title or interest herein, without the prior written consent of the Contract Administrator.

F. Copyright

All materials, reports and data produced under this contract become the property of the Board of Education and may not be copyrighted by the offeror. Any reproductions or use of paid material must have the written approval of the Contract Administrator.

G. Non-Discrimination in Employment
The Board of Education actively subscribes to a policy of equal employment opportunity and will not discriminate against any employee or applicant because of race, sex, age, color, physical or mental handicap, marital status, religion, national origin or political affiliation. The offender shall not discriminate in any manner against any employee or applicant for employment because of race, sex, age, color, physical or mental handicap, marital status, religion, national origin or political affiliation.

H. Non-Hiring of Employees

No employees of the Board of Education of Carroll County shall be employed or encouraged to become employed by the offender.

I. Indemnification

The offender shall reimburse, indemnify and hold harmless the Board of Education of Carroll County for all loss resulting from the negligence of the offender in the performance of this contract, and for all loss to the Board of Education resulting from the non-performance thereof, except those losses otherwise specifically excluded by the Board of Education.

J. Termination for Default

When the offender has not performed or has unsatisfactorily performed the contract, payment shall be withheld at the discretion of the Board of Education. The Board of Education of Carroll County may, by written notice of default to the contractor, terminate the whole or any part of the contract in any one of the following circumstances:

1. If the contractor fails to make the delivery of supplies or equipment exactly as specified or perform the services within the time and manner specified therein or any extension there of, or;

2. If the contractor fails to perform any of the provisions of this contract, or fails to make progress as to endanger performance of this contract in accordance with its terms and in either of these two (2) circumstances does not cure such failure within a period of ten (10) calendar days (or such longer period as the Purchasing Officer may authorize in writing) after receipt of written notice from the Purchasing Officer specifying such time failure or;

3. If the contractor willfully attempts to make delivery of items other than items in the contract or perform the services other than specified as to quality, contents of pack, work processes or otherwise, without specified authorization in the form of a contract amendment, or;

4. If a determination is made by the Board of Education of Carroll County that the obtaining of the contract was influenced by an employee of the Carroll County Public School System having received a gratuity, or a promise therefore of any way or form.

In the event the Board of Education terminates this contract in whole or in part, the Board of Education may procure such items and in such manner as the Purchasing Officer may deem appropriate, supplies and services similar to those so terminated, and the contractor shall be liable to the Board of Education for any excess cost for such similar supplies or services provided that the contractor shall continue the performance of the contract to the extent not terminated.
If, after notice of termination of this contract under provisions of this clause, it is determined for any reason that the contractor was not in default under the provisions of this clause, or that the default was excusable under the provisions of this clause, the rights and obligations of the parties shall be the same as if the notice of termination had been issued pursuant to a Termination for Convenience.

K. Termination for Convenience

The performance of work under this contract may be terminated by the Board of Education in accordance with this clause in whole, or from time to time in part, whenever the Board of Education shall determine that such termination is in the best interest of the Board of Education. Written notice shall be given at least (30) days in advance. The Board of Education will pay for all labor and material in accordance with Bid Price up to the date of the termination. However, the contractor shall not be reimbursed for any anticipatory profits which have not been earned up to the date of the termination.

L. Anti-Bribery Affidavit

Vendors, contractors and consultants are required to be aware of Maryland State Finance and Procurement Code Ann. §13-405 which requires that any person convicted of bribery, attempted bribery, or conspiracy to bribe based upon acts committed after July 1, 1977, in the obtaining of a contract from the Board of any of its subdivisions, shall be subject to disqualification pursuant to Article 21, §34-405 from entering into a contract with the Board of Education or any county or other subdivision of the Board of Education for the supply of materials, supplies, equipment, or services by the person.

M. Disputes

Any controversy or claims arising out of or relating to this contract, or the breach thereof, shall be submitted to Vernon Smith, Assistant Superintendent of Administration for the Board of Education of Carroll County, and his decision shall be subject to Board of Education approval. Judgment upon the award rendered by the Board of Education may be entered in any court having jurisdiction thereof. Pending resolution of a claim, the offeror shall proceed diligently with the performance of the contract in accordance with the Engagement Officer’s decision.

N. Compliance with Civil Rights Act of 1964

The offeror proposing to provide materials, equipment, supplies, or services to the Board of Education under this proposal shall assure the Board that he shall conform to the provisions of Section 7A of Article 78A of the Annotated Code of Maryland, the Civil Rights Act of 1964, and Section 202 of the Executive Order 11246 of the President of the United States of America as amended by Executive Order 11375, as applicable.

O. Mandatory Disclosure

The offeror proposing to provide materials, equipment, supplies, or services to the Board of Education shall agree to comply with Maryland State Finance and Procurement Code Ann. §21-202 which requires that every business that enters into contracts, leases or other agreements with the Board of Education and receives the aggregate $100,000 or more during a calendar year shall, within thirty (30) days of the time when the $100,000 is reached, file with the Secretary of State a list containing the names and addresses of its resident agent, each of its officers, and any individual who is beneficial owner of five percent (5%) or more of the contracting business.
Appendix K

P. Registration

Pursuant to Maryland Corporations and Association Code Ann. SS7-201 et. seq., corporations not incorporated in the State shall be registered with the State Department of Assessments and Taxation, 301 West Preston Street, Baltimore, Maryland 21201. Before doing any interstate or foreign business in this State, a foreign corporation shall qualify with the Department of Assessments and Taxation.

Q. Compliance with EPA/MDE Regulations/Standards

Materials, supplies, equipment and/or services shall comply in all respects with applicable regulations/standards of Environmental Protection Agency (EPA) and Maryland Department of the Environment (MDE). The offeror shall be responsible for any citation(s) received for non-compliance with EPA/MDE regulations/standards relating to any failure of performance/non-performance of the on-site technicians and/or employees of the offeror for the project.

R. Compliance with OSHA/MOSHA Regulations/Standards

Materials, supplies, equipment and/or services shall comply in all respects with applicable regulations/standards of Occupational Safety and Health Act (OSHA) and Maryland Occupational Safety and Health Act (MOSHA). The offeror shall be responsible for any citation(s) received for non-compliance with OSHA/MOSHA regulations/standards relating to any failure of performance/non-performance of the on-site technicians and/or employees of the offeror for the project.

S. Patent Infringements

The offeror agrees to indemnify, protect and save harmless the Board of Education, its officers, agents and employees with respect to any claim, action, cost or judgment for patent infringement, arising out of purchase or use of materials, supplies, equipment or services covered by this contract.

T. Governance by Maryland State Law

The provisions of this contract shall be governed by the laws of the State of Maryland.

U. Insurance Requirements

1. The offeror shall purchase and maintain such insurance as will protect him, and the Board of Education from claims which may arise out of or result from the Contractor’s operations under the contract, whether such operations be by himself or by any subcontractor, lower tier contractor or by anyone directly or indirectly employed by any of them, or by anyone for whom acts any of them be liable.

2. Coverages Required

a. Worker’s Compensation

(1) State
(2) Employer’s Liability
(3) Benefits required by union labor contract - Statutory #300.000.00

b. Comprehensive General Liability (including Premises-Operations; Independent

...
Appendix K

Contractor’s Protective and Completed Operations; Board Form Property Damage;

(1) Bodily Injury:
   $1,000,000.00 - Each occurrence
   $1,000,000.00 - Aggregate, Products and Completed Operations

(2) Property Damage:
   $1,000,000.00 - Each occurrence
   $1,000,000.00 - Aggregate

(3) Products and Completed Operations Insurance shall be maintained for a minimum period of two (2) years after final payment, and contractor shall continue to provide evidence of such coverage to owner on an annual basis during the aforementioned period.

(4) Contractual Liability (Hold Harmless Coverage):
   [a] Bodily Injury
      $1,000,000.00 - Each occurrence
   [b] Property Damage
      $1,000,000.00 - Each occurrence
      $1,000,000.00 - Aggregate

(5) Personal injury, with employment exclusion deleted: $1,000,000.00.

(6) Comprehensive Automobile Liability (Owned, non-owned, hired)
   [a] Bodily Injury
      $ 500,000.00 - each person
      $2,000,000.00 - each occurrence
   [b] Property Damage
      $1,000,000.00 - each occurrence

3. Professional Liability/Miscellaneous Errors and Omission
   $1,000,000.00 per occurrence/claim

A certificate of insurance is required to be submitted to the Board of Education verifying that the contractor maintains Comprehensive General Liability and Comprehensive Automobile Liability as indicated above ten (10) days after award of bid or prior to commencement of work, whichever occurs first.

This requested certificate of insurance shall have the Board of Education named as an additional insured party for general liability, automobile, workers’ compensation, and professional liability.

V. Occupied Buildings

Work under this resultant contract will take place while schools are occupied by students and staff. Every precaution shall be exercised to protect people from injury and to minimize disruption of activity. As well, employees shall conduct themselves in a professional manner while on the Carroll County Public School System’s premises. Any employee found to disregard the nature of the school system’s surroundings shall be removed from the premises.
Appendix K

W. Instruction to the Bidder

The "Instruction to the Bidder" (green form) includes general conditions enclosed with all Board of Education bids. Any conflict or discrepancy between this form and otherwise indicated specifications and/or general conditions, the otherwise specified and/or general conditions shall prevail.

X. Tobacco Free and Alcohol/Drug Free Environment

The Carroll County Public School System maintains a tobacco, alcohol/drug free environment. The sale or use of tobacco, alcohol or drugs, in any form, or related product, is prohibited in school buildings at all times. Persons found violating this policy will be requested to remove the product and themselves from school premises.

SECTION B - SPECIFICATIONS

I. SCOPE

A. The work to be accomplished under the terms of any resulting contract shall consist of furnishing all labor, materials, supplies and equipment to perform a professional Integrated Pest Management (IPM) service program in accordance with established industry methods, and Carroll County Public Schools Administrative Procedures for Integrated Pest Management and Notification (Attachment "D"), all of which will comply with applicable Maryland State and County Health regulations in addition to the Federal Environmental Pesticides Control Act.

B. IPM is a planned program for long term pest suppression. The IPM program is based on surveillance and interpretation of data to estimate the pest population in any given area. This monitoring allows reliable decisions to be made as to when control measures are needed and what type of control measures to select. Control practices in and IPM program extend beyond the application of pesticides to include structural sanitation and procedural modifications that establish physical barriers to pests, and reduce the food, water, and harborage available to them.

C. The Contractor shall furnish the necessary labor, materials and equipment to implement the surveillance, trapping, and pesticide application aspects of the IPM program. The Contractor shall also generate detailed, site-specific recommendations for structural sanitation and procedural modifications required to achieve pest suppression.

II. PESTS INCLUDED AND EXCLUDED

A. The IPM program shall suppress indoor populations of: rats, mice, cockroaches, ants, flies, stinging insects and any other arthropod pests not specifically excluded from the contract. Populations of these pests that are located outside of the specified buildings, but within the property boundaries of the buildings, are included.

B. Populations or infestations of the following pests are excluded from the basic proposal: birds, bats, snakes, and all other vertebrates other than commensal rodents; termites and other wood-destroying organisms, mosquitoes, and pests located outside buildings that primarily feed on
outdoor vegetation, and a separate price proposal will be requested on an as needed basis. Individuals of all of the above pests that are incidental invaders inside buildings shall be controlled under the terms of the contract.

C. Pest management of populations excluded from the specifications may be performed on and as required basis.

III GENERAL PROGRAM REQUIREMENTS

The IPM program shall include the following for each location:

A. Initial Inspection

1. The Contractor shall conduct a thorough, initial inspection with the school system’s contract manager, or a designee, of each building within twenty (20) calendar days after the effective date of the contract. This inspection allows the Contractor to evaluate the pest control needs of the premises and discuss these needs with the Contract Administrator. The Contractor shall as a minimum, from each of the initial inspections, address and document the following points:
   a) Identification of problem areas in and around the buildings
   b) Identification of equipment, structural features or management practices that are contributing to pest infestations
   c) Discussion of the effectiveness of previous control efforts
   d) Facilitation of Contractor access to all necessary areas
   e) Recommendations for each of the above points

B. Submission of Plan

1. The Contractor shall develop a written Pest Management Plan (PMP) and Service Schedule, incorporating all locations, within ten (10) working days after the last initial site inspection. After development of each PMP and Service Schedule, the Contractor shall submit them to the Contract Administrator for approval prior to initiation. Following receipt of the Contractors PMP and Service Schedule, the Contract Administrator will render a decision within ten (10) working days regarding the acceptability. The Contractor shall be on site to implement the PMP and Service Schedule within five (5) working days following notice of approval. If the PMP is disapproved, the Contractor shall have three (3) working days to submit a revised plan and schedule.

2. The PMP and Service Schedule must address any structural sanitation or operational changes that would facilitate the pest management effort. Additionally, the PMP must identify the proposed methods for control, including the pesticides to be used by accepted common name (generic name); site-specific methods of application proposed for use in or around the building; and rationale for each type of use. Proposed trapping devices for insects and rodents should also be included. The PMP should describe in detail the Contractors means for monitoring pest populations in and around the building (see item C below).
Appendix K

3. Frequency of inspections and treatment by the Contractor shall depend on the specific pest control needs of each premise. At the minimum, the Contractor shall conduct inspections monthly to determine if treatment is required. The Contractor shall receive the concurrence of the Contract Administrator regarding any subsequent changes in the approved PMP and Service Schedule. Changes also include additions to the pesticide list.

C. Monitoring and Inspection

1. The PMP shall establish a monitoring and inspection program to identify infested zones and allow an objective assessment of pest population levels. The Contractor shall continue monitoring and inspecting throughout the duration of this contract.

D. Pesticide Treatment

1. The Contractor shall not apply any pesticide(s) that has not been included in the PMP or approved in writing by the Contract Administrator.

2. As a general rule, application of pesticides in any area inside or outside the premises - i.e. in any room, closet, hallway, stairwell, court, driveway, planting bed, and similar locations, shall not occur unless the Contractors inspections or monitoring indicate the presence of pests in that specific area, and all non-chemical actions have been exhausted or are unreasonable.

3. Preventive pesticide treatments of inside and outside areas where inspections indicate a potential insect or rodent infestation are acceptable only in extreme cases. The Contractor shall indicate areas for preventive pesticide treatment in the PMP for each building, and list the methods of application. Preventive pesticide treatments are subject to review and can be eliminated at any time by the Contract Administrator.

4. The application of needed and/or necessary pesticides shall be scheduled and performed as follows:
   a) Saturdays between the hours of 8:00 am - 3:30 pm with prior approval from the Contract Administrator.
   b) Weekdays between the hours of 2:30 pm - 10:30 pm.

E. Structural Modifications

1. Structural modifications for pest suppression will not be the responsibility of the Contractor. However, the Contractor shall be responsible for notifying the School Administration about structural modifications deemed necessary to eliminate pest harborage or prevent pest access.

F. Notification and Posting

1. Notification and posting of a pesticide application per COMAR 15.05.02.04 – 15.05.02.11 will be implemented by the school system. The Contractor shall prepare information for the notification letters and posting prior to distribution by the school or facility administrator.

G. Record Keeping

1. The Contractor shall be responsible for maintaining a complete and accurate pest manage-
ment log. The Contractor shall maintain a separate logbook for each building specified in this contract. Each logbook shall be kept on site and updated on each visit by the Contractor.

2. The logbook shall contain as a minimum, the following items:
   a) A copy of the PMP and Service Schedule for each building.
   b) A copy of the current label, EPA registration number, and Material Safety Data Sheet for each pesticide used in the building. MSDS information shall also be provided to the Plant Operations Dept., 4117 Hillcrest Ave, Hampstead, MD 21074.
   c) Pest observation log
   d) Inspection reports
   e) Notification reports
   f) Maintenance work orders

H. Other Pest Control Related Services

1. On occasion, it may be requested that the Contractor perform corrective action, special or extraordinary service(s), such as for Bird Control, Wildlife Control, Termite Control, etc., which are beyond routine needs or regular service requests and outside the scope of the approved IPM program. Upon such a request, the Contractor shall respond within one (1) working day after receipt of the request. Such service shall generally be at cost to Carroll County Public Schools. In the event that such services cannot be completed within their time frames, the Contractor shall immediately notify the Contract Administrator and indicate an anticipated completion date.

I. Professional Services

1. The services/consultation of an Entomologist or Biologist must be provided to the school system at no additional cost if the need arises.

J. Pesticide Products and Use

1. The Contractor shall be responsible for application of pesticides according to the label. All pesticides used by the Contractor must be registered with the EPA, State and/or local jurisdiction. Transport, handling, and use of all pesticides shall be in strict accordance with the manufacturers label instructions and all applicable Federal, State, and local laws and regulations.

2. The Contractor shall minimize the use of liquid pesticide applications wherever possible. For example:
   a) The use of crack and crevice application of pesticide to pest harborage areas rather than fan spraying exposed surfaces in the general vicinity of harborage areas.
   b) The use of containerized and other types of bait formulations for cockroaches, ants, and other pests, rather than sprays wherever appropriate.
   c) The use of traps for indoor fly control rather than sprays wherever appropriate.
   d) Pesticide space sprays (including fogs, mists, and ultra-low volume applications) will be restricted to unique situation when no alternative measures are practical.
3. The Contractor shall submit a written request for approval to the Contract Administrator at least eight (8) days prior to performance of any proposed space spray treatment. The Contract Administrator will render a decision regarding the treatment within twenty-four (24) hours. The Contractors request shall identify the target pest, time and specific place(s) of treatment, pesticide(s) to be used, method of applications, precautions to be taken to ensure tenant and employee safety, and steps to be taken to ensure the containment of the spray to the site of application. The Contractor shall NOT perform space spraying of pesticide without the written approval of the Contract Administrator. No space application of pesticide shall be made while tenant and personnel are present.

K. Rodent Control

1. Snap traps and other trapping devices (including glueboards) used in rodent control programs must be checked on a schedule agreed to by the Contract Administrator. Trapping shall not be performed during periods when maintenance will be delayed by holidays, weekends, etc. The Contractor shall place traps out of the general view and in protected areas so as not to be affected by routine cleaning and other operations.

2. All rodenticide, 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. Frequency of bait box servicing shall depend upon the level of rodent infestation. All bait boxes shall be labeled, and dated at the time of installation and each servicing. All bait boxes shall be maintained in accordance with EPS regulations, with an emphasis on the safety of non-target organisms. The Contractor shall adhere to the following four points:
   a) The lids of all bait boxes must be securely locked or fastened shut.
   b) Bait must always be placed in the baffle-protected feeding chamber of the box and never in the runway of the box.
   c) All bait boxes must be securely attached or anchored to the floor, ground, wall, or other surface, so that the box cannot be picked up or moved.
   d) All traps, trapping devices, and bait boxes shall be accounted for, and their location recorded in the building log book; all shall be removed and disposed of properly from the premises when control is achieved.

L. Check In/Check Out

1. Prior to servicing a building, the Contractor's representative shall report to the building's office to check in, review the logbook, and receive any new service requests generated since his last visit and facilitate entry to required areas. Upon completion of the servicing, the Contractor's representative shall have a designated school representative sign and date a service ticket, indicating the completion of the service. The Contractor shall forward a copy of this ticket to the Contract Administrator. No payment will be made for work unrecorded.

M. Waste Disposal

1. Non-hazardous solid waste products shall be removed from the work-site and placed in dumpsters located at the school. All non-hazardous liquid waste must be removed from school by the Contractor. All hazardous waste materials generated by the Contractor dur-
ing servicing shall be removed from the school and disposed of in accordance with all applicable Federal, State and County Laws and Regulations. For the purpose of this contract, any waste chemical suppressant will be considered the property of the Contractor. Under no circumstance is any hazardous material to be disposed of at any location in the school system. It shall be the responsibility of the Contractor to ensure the hazardous waste materials are properly packaged, labeled and transported in accordance with all applicable Federal, State and County Laws and Regulations. Cost of disposal are to be borne by the Contractor.

IV SUBCONTRACTING

A. The Carroll County Public School System will not permit subcontractors to perform IPM services under any resulting contract.

V DAMAGE

A. The Contractor shall avoid unnecessary pest controls, accumulated debris or undue interference with the convenience, sanitation or routine of the school system and shall prevent the loss of, or damage to the property of the school system and its employees. The Contractor shall repair any and all damage he may cause to the building or property to the full satisfaction of the school system’s Contract Administrator.

VI NON-PERFORMANCE

A. Payments will be withheld to the Contractor for work performed on any job assignment under the following conditions:

1. The employee does not have the necessary equipment, tools, supplies or materials as specified to perform the scheduled work.
2. The job assignment is not performed in accordance with contract requirements.
3. Damage to CCPS property.

VII RIGHTS OF INSPECTION AND TESTS

A. Throughout the term of this contract, the school system may conduct tests and/or inspections of the premises covered to determine the effectiveness of the IPM program and Contractor compliance with the contract. The Contract Administrator will document in writing the results of the inspection and provide the Contractor a copy. The Contractor shall promptly initiate actions to correct all deficiencies found. If deficiencies are not being satisfactorily corrected, the school system may, by written notice to the Contractor, terminate this contract. In such event, the school system may take over the work and prosecute it to completion, by contract or otherwise, and the Contractor and his/her sureties shall be liable to the Board of Education of Carroll County for any additional costs incurred.
VIII IDENTIFICATION

A. All Contractor personnel, working in or around buildings designated under this contract, shall wear distinctive uniform clothing and at all times, while on the school system's premises, display a visible photo-ID card. The Contractor shall determine and provide additional personal protective equipment required for the safe performance of work. Protective clothing, equipment, and devices shall, as a minimum, conform to Occupational Safety and Health Administration (OSHA) standards for the products being used. Vehicles used by the Contractor must be identified in accordance with State and local regulations.

IX TRAINING AND UPDATES

The Contractor shall conduct, upon request, educational seminars for school system staff and/or students and parents on IPM practices in order to promote understanding and assistance with the IPM program.
REQUEST FOR PROPOSAL (RFP)
FOR INTEGRATED PEST MANAGEMENT PROGRAM SERVICES
RFP #00-009N
Proposal Price Form

To Whom It May Concern:

I/We ________________________________
of ________________________________

The undersigned, having examined the RFP prepared by the Board of Education of Carroll County, including all its attachments - A,B,C,D,E, does hereby offer to furnish Integrated Pest Management Program Services for all of the Carroll County Public Schools, relocatable portable classrooms, and facility buildings in accordance with the RFP 00-009N, including addenda issued prior to date of receipt of Proposals which is/are acknowledged via signature below, for the following proposed price(s):

2.1 Basic Proposal - Cost for monthly inspection services and treatment services of identified pests - ants, flies, bees and stinging insects, mice, rats and cockroaches and any other arthropod pests not specified as being excluded from this contract.

37 Schools 3 Facilities and Relocatable Classrooms:

$__________/month x 12 months = $__________/year

2.2 Supplemental Prices

2.2.1 Technicians hourly rate for informational purposes. $__________

State your company’s indicative historical cost for treatment of termites and wildlife.

2.2.2 Termites, Standard Treatment $__________

2.2.2.1 Termites, Bat System $__________

2.2.2.2 Possums $__________

2.2.2.3 Ground Hogs $__________

2.2.2.4 Moles $__________

2.2.2.5 Chipmunks $__________

2.2.2.6 Skunks $__________
2.3 Submittal of Proposal

By submitting a Proposal, the undersigned also hereby agrees that from its review of the RFP and the attachment(s), the firm fully understands the intent and purpose of the documents and conditions of submitting a Proposal. Claims for additional compensation and/or extensions of time because of the firm’s failure to follow the foregoing procedure, and to familiarize itself with the contract documents and all conditions which might affect the work, will not be allowed.

2.4 Acceptance of Proposals

The undersigned agrees that this Proposal may be held by the Board of Education of Carroll County for a period not to exceed ninety (90) days from the date stated for opening of Proposals. If written notice of acceptance of this Proposal is mailed, telegraphed or delivered to the undersigned within the time noted above, after the date of the opening of Proposals, or at any time hereafter before this Proposal is withdrawn, the undersigned agrees that it will execute and deliver a contract in the form prescribed by the Board of Education of Carroll County in accordance with the Proposal as accepted. It is understood and agreed that the Board of Education of Carroll County reserves the right to award the contract in its best interests, to reject any and all Proposals, to waive any informalities in the Proposals, and to hold all Proposals for the period above noted.

2.5 Time for Completion of Work

The undersigned agrees, if awarded the contract, to commence work within five (5) consecutive calendar days after date of issuance of written notice to proceed and to complete the contract work within the time frame specified within the RFP.

2.6 Declaration of Interest

I/We, the undersigned firm, declare that the only person, firm, or corporation, or persons, firms or corporations, that has or have any interest in the Proposal, or in the contracts proposed to be taken, is or are the undersigned. The undersigned also certifies that this Proposal is made without previous understanding, agreement or connection with any person, firm, or corporation submitting a Proposal for this same project and is, in all respects, fair and without collusion or fraud.

2.7 Acknowledgment of Addenda

I/We acknowledge receipt of the following Addenda:

No. __________, Dated ____________

No. __________, Dated ____________

No. __________, Dated ____________

No. __________, Dated ____________


Appendix K
BID FORM
SIGNATURE SHEET

BIDDERS MUST SIGN PROPER SPACE BELOW TO VALIDATE BID:

I/We agree to furnish and deliver, in accordance with the accompanying specifications and conditions, for the prices listed, the items on the attached sheet(s).

Company
________________________________________

Authorized Representative (Print)
________________________________________

Address
________________________________________

Signature
________________________________________

Address
________________________________________

Title
________________________________________

Payment Terms
________________________________________

Telephone Number
________________________________________

Federal I.D. Number
________________________________________

Facsimile Number
________________________________________

Name of Vendor’s Contract Administrator
________________________________________

Telephone Number of Vendor’s Contract Administrator
________________________________________

PLEASE CHECK APPROPRIATE BOXES:

☐ Small Business  ☐ Woman Owned Business
☐ Minority Business  ☐ Approved Minority DOT #
☐ Individual Proprietorship  ☐ Partnership
☐ Corporation  ☐ Not-incorporated
BIDDER'S AFFIDAVIT

BIDDER MUST SIGN THIS DOCUMENT AND RETURN TO BOARD OF EDUCATION IN THE SAME SEALED ENVELOPE CONTAINING THE BID FORM AND OTHER PERTINENT BID INFORMATION.

I HEREBY CERTIFY THAT I am (Title) __________________________ and the duly authorized representative of the firm of __________________________ whose address is __________________________, and that I possess the legal authority to make these testimonies on behalf of myself and the firm for which I am acting.

NON-COLLUSION CERTIFICATION

Neither I, nor to the best of my knowledge, information and belief, the above firm, nor any of its other representatives, have represented that we have agreed, consented, connived, or ceded the means of reducing competition in the compilation of the bid or offer being submitted herewith, nor in any manner, directly, or indirectly, entered into any agreement, participated in any collusion to fix the bid price, price proposal of the bidder, or offer or herein, or any competitor, or otherwise taken any action in restraint of free competitive bidding in connection with the Contract for which the within bid or offer is submitted.

ANTI-BRIBERY AFFIDAVIT

Neither I, nor to the best of my knowledge, the above firm, nor any of its officers, directors, or partners, or any of its employees directly involved in obtaining contracts with the State of any county, bi-county, or multi-county agency, or subdivision of the State have been convicted of, or have pleaded nolo contendere to a charge of, or have during the course of an official investigation or other proceeding admitted in writing or under oath acts or omissions committed after July 1, 1977 which constitute bribery, attempted bribery, or conspiracy to bribe under the provisions of Article 27 of the Annotated Code of Maryland or under the laws of any state or federal government.

CIVIL RIGHTS COMPLIANCE

We fully comply with Title VI of the Civil Rights Act of 1964 (PL88-352).

In signing this document I represent that I have personal knowledge of all the matters and facts herein stated, and do solemnly declare and affirm under the penalties of perjury that the contents of this document are true and correct.

Date __________________________

Signature __________________________

Printed or Typed Name __________________________