

Borite Termite & Pest Treatments Corporation's PESP Strategy

Describe your Organization's Five-Year Goals Related to Pesticide Risk Reduction

Borite Termite & Pest Treatments Corporation is committed to providing clients with effective pest management solutions. We will always look for means other than pesticide applications as the first defense in our pest control strategy. We believe integrated pest management (IPM) is a process that utilizes regular monitoring to determine treatment strategies. It employs physical, mechanical, cultural, chemical, biological, and educational programs to keep pest populations low enough to prevent unacceptable damage or annoyance. Chemicals should not necessarily be the first choice for solving a pest problem, but when required, target-specific, low-impact chemicals and application methods should be employed. Pesticide applications are made only when and where monitoring has indicated that the pest will cause unacceptable damage or annoyance. The IPM program must, as a result be environmentally, socially, and economically friendly to meet current public expectations.

What do you envision doing (broadly) to try to resolve your major issues?

Reduced impact services means providing effective pest control while decreasing the exposure of customers and the environment to pesticides through the least toxic alternatives and integrated pest management principles. We continually look for both improved application methods and improved products offering the lowest toxicity for our clients.

What we feel are the major pest/pesticide issues facing your industry?

We are firmly committed to our strategic approach, in five years we see ourselves treating for pests as a prescription method much like a doctor prescribes medication based on current symptoms. On reoccurring services it would be more like taking vitamins, only small dosages would be used to maintain specific levels of control. Our current service and objectives are steadily working toward this goal.

Most of our clients are well educated and have done due diligence filtering through both good and bad information to formulate intelligent questions prior to selecting our company and service.

On the downside we still have people that we speak with over the phone or during on site consultations that either want, "everything sprayed" or the other extreme that want "non-toxic" treatments and still ask what we spray. Others base their decision solely the lowest

price and not on the benefits of a company that uses integrated pest management (IPM) or Reduced Impact Services (RIS).

Based on questions like these, I see public understanding and education as a huge hurdle. The dissemination of accurate, truthful information regarding pesticides and their effects must overcome inaccurate, dishonest information that abounds and is often sensationalized on both the internet, in the print media and by radical organizations and special interest groups that do not base what they preach on sound scientific factual information.

Both the Pest Control Operators of California and the National Pest Management Association have available, truthful, accurate information on the benefits of hiring a pest management professional. We feel there is a need for our government to help state and national trade associations do more outreach to citizens through both the internet and media outlets.

What we envision doing to try to resolve these issues. Through our state trade association we are working towards meeting with our legislators to educate them individually on the benefits of professional pest control services and the public service we provide limiting unwanted pest population that contaminate our food, our homes and cause disease transmission.

Whether practical, problem-solving activities are available to resolve these issues that will be accepted by key stakeholders?

Public education of the benefits of using professional pest control services on a city, county, state and federal government level would be the first best course of action we know of.

What might EPA be able to do or facilitate to help resolve these issues?

Any direction by the EPA that could be given the all levels of government regarding the dissemination of scientifically factual information and links from government web sites to professional state and national pest control trade association web sites would be a benefit. How you will determine whether or not you have been successful in achieving your intended results.

We will determine the success of our results by:

- an increase in our current client base which demonstrates public desire for IPM and RIS;
- the continuing reduction of pesticides;
- an increase in the use of foam and caulking; and
- an increase in client cooperation in reducing conducive conditions around their property.

Are there objective, economically-feasible measures of success that you can utilize to evaluate the success of your efforts.

Objectively we will measure our success by virtue of sustained profitability and growth following our strategic plan.

Progress on 2007 Activities

Activity 1 - Treatment Protocol Initial Service

Prior to the service, all accounts will be inspected for pest activity, identification and harborage both inside and out. Our objective was to inspect for pest activity, identification and harborage on the interior and exterior of a structure prior to any treatment. Protocols were also set in place for both interior and exterior treatments for the initial service. One of the most beneficial requirements was vacuuming prior to all interior treatments, which proved to reduce the initial pest problems substantially and gain immediate control in many instances.

Our target rate for interior crack and crevice concentrated product application amounts was 1.75 ounces; we were well below that amount at an average of 0.75 ounces per interior application. Boron dust application goals were 4-6 ounces per structure; we averaged 5 ounces per structure. Exterior applications were targeted at 1 ounce per 1000 sq. ft. of first floor living area. Our results were an average of 0.8 ounces per 1000 sq. ft.

Activity 2 - Treatment Protocol For Quarterly Services

The goal was to establish quarterly treatment protocols for the exterior service. Exterior inspections of the structure prior to treatment and spider web removal allowed technicians to determine necessary treatments and to note any deficiencies. Deficiencies noted were items such as leaking hose bib, excessive watering of landscape, needed pruning of plants next to the structure and material stored near the structure. Treatment with a backpack sprayer versus a truck mounted spray rig was a complete success. Where granular applications or baits were substituted for liquid applications in areas of dense foliage or mulch when pest pressure required treatment, results were equally as effective as liquid treatments. We implemented the use of bulb dusters to apply many of the granular applications whereby reducing the amount of product even further and providing an even greater target specific application.

Activity 3 - Monitoring Boards *Stick Traps*

Monitoring boards placed on the interior and garages proved helpful in identifying pest activity and providing information on what pests were active and where. Exterior

monitoring boards even in weather proof containers did not normally last the 90 days between service intervals. Most of the failure was due to gardeners using leaf blowers covering the boards with dirt, dust and other debris. Overall the interior monitors were a great success; however in 2007 we only used exterior monitors where there was a specific need. In 2008 we will continue as we did in 2007.

Activity 4 - Home Inspection Report

This activity involved submitting a home inspection report to the client when conducive conditions and structural deficiencies were found in or around the structure. With clients who did not take any action after the first written report was left, we found that sending digital photos along with a follow up letter prompted action in more cases than just a report alone.

One consistent structural problem we found were gaps around doors that were large enough to allow insects and in many cases rodent entry into structures. At the urging of clients who could not find anyone to install weather stripping around doors we started offering a commercial grade door seal system. This activity will continue into 2008 adding even more services involving structural modification such as copper mesh, four different types of foam sealant and five different types of caulking for both interior and exterior use.

Activity 5 - Quarterly Customer Newsletter

This activity involved providing a newsletter with pertinent information of upcoming pest activity, correcting conducive conditions, yard maintenance, landscape tips and pest facts. In 2007 we successfully added the news letters to our web site along with mailing them to clients that requested a printed copy. The majority of the client feedback was very positive and provided us with additional topics of interest to them. We will continue the newsletter in 2008.

Activity 6 - Conversion of Accounts to Quarterly Service

This activity was to have 98% of our clients on a quarterly service rather than monthly or every other month frequency. Our goal was surpassed; in addition our clients seem to prefer the flexibility of quarterly service, the reduced amounts of pesticides needed and helping our environment. Call backs due to reoccurring pest problems were well below the prior year at less than 0.25%. Although the amount of time to perform a service was increased over 2006, we still maintained a reduction in chemical quantities over the previous year. In 2007, we also began offering a semi-annual service to some clients who we felt qualified for this service frequency.

Activity 7 - Conversion Of All Lawn & Ornamental Accounts From Topical (Foliar) Applications To Deep Root Systemic Treatments

The objective of this activity was to convert all lawn and ornamental accounts from topical (foliar) applications to deep root systemic treatments.

This plan required some modification after being put into action. Treatment of shrubs and bushes had to be broken into four parts: pest insect infestation; fungus; disease; or nutritional deficiencies. The degree and extent of the particular problem had to be taken into account. For some pests the initial treatment required both topical and systemic treatment, as an example: whiteflies. In some cases simply trimming of affected foliage to allow new healthy growth was all that was required.

After pest populations are controlled, subsequent pesticide applications on allowable plants had been planned to be done by annual systemic deep root feeding. On occasion topical applications at a rate lower than that required for systemic deep root feeding were used.

In 2008, we will offer more flexible lawn and ornamental services that will be solely dependant of the situation and needs of each plant.

By preventing over watering, thinning out plants to allow air circulation and not watering foliage late in the day all help reduce pest infestations, fungus and disease from taking hold on many plants. Many clients were coached on proper watering techniques over the course of their service.

2008 Goals and Tactics

Goal 1 and Tactics

Interior Initial Service

1. Vacuum all room perimeters and ceiling corners in accessible areas.
2. Treatment of room exterior wall perimeters by crack and crevice application will only be used when there is a specific active insect infestation that cannot be controlled by other non-chemical methods.
3. Application of boron dust to outlets and switch plate cavities when deemed necessary for control of the pest infestation.
4. Apply boron dust under the corners of carpeted rooms when needed for control.
5. Apply boron dust to cavities under kitchen and bath base cabinets when needed for control.

6. Place monitoring boards (sticky traps) in cabinets, garage and other areas of frequent insect activity.
7. Sealing of openings, cracks, gaps or other spaces that would allow pest entry of breeding sites.

Exterior Initial Service

1. All webs will be removed from the structure up to 18 feet.
2. Holes or gaps around exterior plumbing, wiring or other structural deficiencies that would allow pest entry will be sealed that are within our scope of expertise.
3. Needed structural modifications; repairs; harborage area removal and conducive conditions will be noted on the service ticket and the service offered when it is within our scope of expertise.
4. Treatment application will be limited to 2½-gallon backpack sprayers unless there is an overwhelming need to use a tank application.
5. Granular applications of pesticide or baits (depending on the pest) will be substituted for liquid applications in areas with dense foliage or cellulose mulch. Bulb duster will be used where appropriate for granular application to both further reduce the amount of product required to control pest activity and more accurately target specific areas.

How does this activity reduce pesticide risk?

Vacuuming with a commercial unit has proven to be an effective method for eliminating a substantial amount of existing pests without the use of any chemical. Crack and crevice applications offer the least amount of pesticide concentrate used inside a structure. We expect the rate of 0.75 ounces or less of (caution) category III toxicity products to be used when treatment is deemed necessary. Boron applications in targeted areas will be used when appropriate for control at an expected rate of 4 oz. or less per structure. Boron will allow lasting protection against the most common household crawling pests while maintaining a very low mammalian toxicity. Exterior applications will be based on the occupant's threshold of acceptable levels of pest activity. Guidelines for exterior applications of product concentrate will continue to be at an anticipated amount of 1 oz. or less per 1000 sq. feet of first floor area or minimum label rates. Products used will be caution label category III or IV. This service should achieve lasting protection against unwelcome pests while limiting: any potential of pesticide exposure to occupants; the total amount of pesticides required and the toxicity of the products used.

How will you measure the risk reduction gained from this activity?

Chemical use for each account is tracked with a total for all accounts and average per account.

Goal 2 and Tactics

Treatment Protocol For Exterior Maintenance

Although quarterly service is our most used service frequency, we do offer a variety of frequencies to customize our service to the clients' specific needs.

1. Inspection of the exterior perimeter of the structure and reporting of pest activity and conducive conditions including; harborage areas, gaps, cracks and other openings at the exterior of the structure and foliage that may cause an increase in pest populations.
2. Removal of webs from the exterior of the structure.
3. Exterior treatment with 2.5 gallon backpack sprayers to the bottom portion of the structure, eaves, adjacent soil and other areas of the property when warranted.
4. Granular applications or baits will be substituted for liquid applications in areas with dense foliage or cellulose mulch when pest pressure requires control.

Maintenance treatments do not include the interior of the structure unless there is reported pest activity.

How does this activity reduce pesticide risk?

Visual inspections of a structure and the surrounding areas can identify a variety of conducive conditions such as water from the sprinklers hitting the structure or over watering of the grass or flowerbeds. Trees and shrubbery in contact with the structure provide easy access by rodents and ants and provide harborage and food sources for a variety of other insects. Gaps around doors, plumbing, conduits and wiring allow pest and rodent entry. Any modification of the structure preventing pest entry or habitat modification, along with reduction of conducive conditions near the structure will reduce the necessity for and quantities needed of any pesticide. By examining the exterior prior to treatment the technician will be afforded the opportunity to observe pest presence and give them the information necessary to make an intelligent decision of what products to use, what areas to use then in and the amount required to achieve control.

How will you measure the risk reduction gained from this activity?

Measurement will be based on a comparison of the averages of chemical used on similar accounts. Explanations must be given on any account that required pesticide amounts greater than those averages. Examples: excessive watering; lack of watering; excessive vegetation; landscape modifications; plumbing or sewer leaks and structural gaps that can allow pest or rodent entry or storage that would contribute to pest populations.

Goal 3 and Tactics

Monitoring Boards (Stick Traps)

Monitoring boards placed on the interior of the structure and garages to provide information of:

- Type of pest activity
- Degree of pest activity
- Areas of pest activity

How will you measure the risk reduction gained from this activity?

This tool provides information to help make a more intelligent decision when a treatment is necessary of what products to use, where and what amount. An indirect measurement will be made based on past years product quantities versus current year.

Goal 4 and Tactics

Home Inspection Report

This activity involves submitting a home inspection report to the client when conducive conditions and structural deficiencies are found in or around the structure. Digital photographs will be taken and forwarded along with the report to provide visual documentation of items noted on the report. We offer structural modification with a variety of materials to seal or close off openings. These materials include:

- commercial grade door sweeps
- copper mesh
- hard ware cloth
- four different types of foam sealant
- five different types of caulking for both interior and exterior

Additional services offered include:

- repairing window screens
- replacing or repairing vent screens
- cleaning debris from rain gutters

How will you measure the risk reduction gained from this activity?

While we can only measure pesticide reduction indirectly, we know from experience that by eliminating conducive conditions and correcting structural deficiencies the amount of product used on a service is significantly less than those that do nothing.

Goal 5 and Tactics

Quarterly Customer Newsletter

We will continue to provide our newsletter to clients both on line (internet) and by mail on request. The newsletter provides pertinent information of upcoming pest activity, correcting conducive conditions, yard maintenance, landscape tips, pest facts and other helpful tips for their home and the environment.

Goal 6 and Tactics

Conversion Of Accounts To Quarterly Service

(All 2004-2007 accounts that could be converted were completed)

Our goal was achieved; in addition our clients seem to prefer the flexibility of quarterly service, the reduced amounts of pesticides needed and helping our environment. Call backs due to reoccurring pest problems were well below the prior year at less than 0.25%. Although the amount of time to perform a service was increased over 2006, we still maintained a reduction in chemical quantities over the previous year. In 2007 we also began offering a semi-annual service to some clients who we felt qualified for this service frequency. In 2008, forward we will continue to look at each client individually and recommend the service frequency that best fits their needs.

Goal 7 and Tactics

Lawn & Ornamental Accounts Topical (Foliar) Applications and Deep Root Systemic Treatments

In 2008 forward, we will offer more flexible lawn and ornamental services that will be solely dependant of the situation and needs of our client and their plants. By preventing over watering, thinning out plants to allow air circulation and not watering foliage late in the day, all help reduce pest infestations, fungus and disease from taking hold on many plants. Clients will be coached on proper watering techniques and care of their plants and lawn over the course of their service.