# **Your HUD Pest** Control Contract: Are you getting anything for your money?

Dini M. Miller, Ph.D

Department of Entomology

Virginia Tech

Blacksburg, VA





## The Only Way!

 The only way that you can secure good pest management service in a low-bid contract system is if you specify every detail of what is to be done in your units (number of technicians servicing your communities each month, specific monitoring techniques, products to use, how much product to apply based on monitoring numbers, visits per year, specific records) and you review all records carefully.

### **Most important points!**

- 1. Know what your contract says.
  - a) Is your contractor/technician certified in your state?
  - b) Is you IPM language meaningful?
  - c) Does the contract provide product details? Are they correct? Are they rotating products?
  - d) Does it say guarantee or warrantee?
- 2. Know what your contract language means
  - a) How often is each unit being serviced
  - b) What kind of heat systems is being use? Temperature records?
  - c) Meaningless statements that sound good
- 3. Know how to calculate the cost per door of your contract

### **Most important points!**

- 4. Understand how your per/door cost converts into per minute cost for your pest control technician
  - Does you bidding pest company have the manpower to cover your buildings adequately?
  - How many technicians are they sending to do the work?
  - How many units is each technician having to enter per day? Is it humanly possible? Is anyone watching?
  - How do they decide which units need attention (list?)?
  - What kind of records are you being given regarding infestation levels? Do they make sense?
- 5. Do you have fewer pests after treatment than you did before? You must review the records, and provide oversight or you may be throwing OUR money away!

#### Worked in Virginia Housing Since about 2001









# This particular community had been under the same contractor (2008-2013)





# But even with treatment the populations have been there for a long time...





Hinges on cabinet doors under the sink covered in years of cockroach poop.









What is all the brown stuff?

## 24 hour trap catch





## Sanitation at the Site

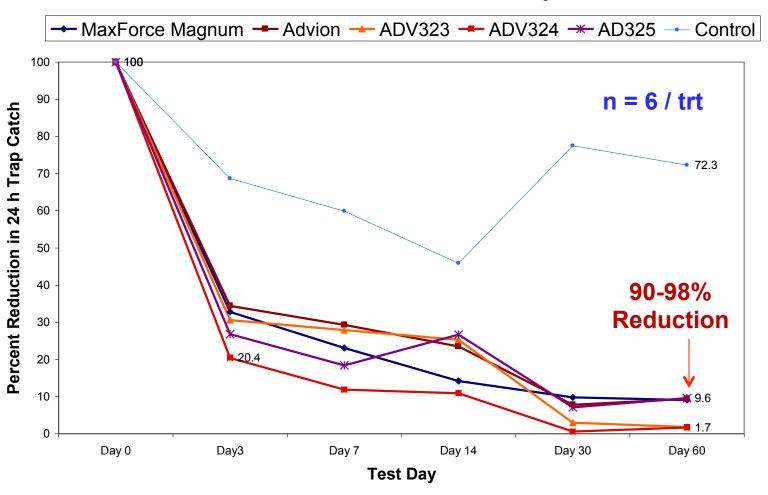






#### Yes, Sanitation is Low, But...

#### **German Cockroach Bait Efficacy**



# No Whining That it is the Resident's Fault!

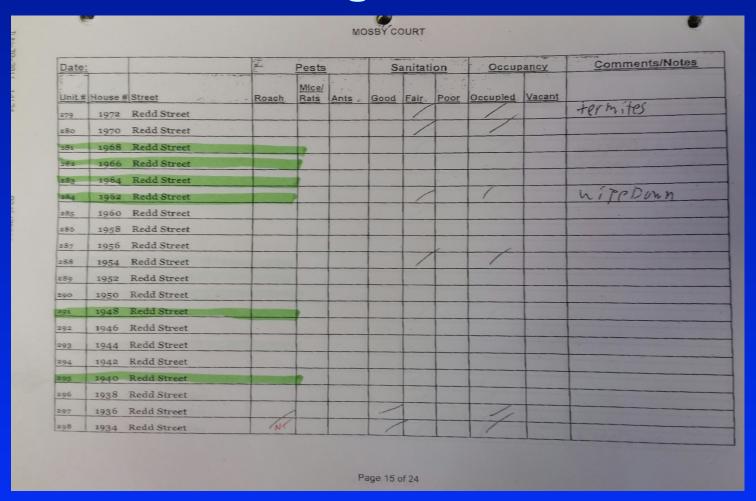


## So why so many cockroaches?

- A community pays \$2,478 (\$9,912/year)
- for quarterly treatment (458 units) Quarterly treatment (5 days in one week; 9:00am-4:00pm)
  - 1 technician only
  - \$6.00 per door
  - 92 per day
  - 12 units every hour
- On report for manager only our research group found that only 2 of the 36 most infested units were listed as having cockroaches at all.
- April: Average 24 hour trap catch per selected unit was 200
- July: After quarterly treatment, average trap catch per selected unit was 436

4000 units at \$6/door Total \$96,000/year

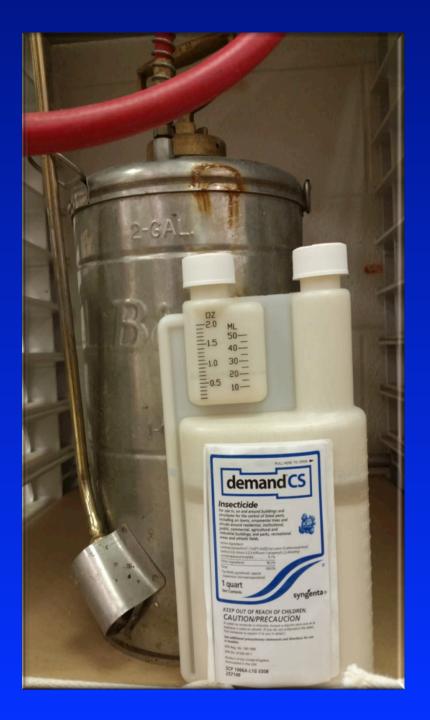
## Quarterly Record Provided to Management



Note the "roach column. If you were a different technician that the one who worked last quarter, how would you decide where to spend your time? How long might that go on?

# Integrated Pest Management (IPM) in HUD Contracts

 Quote from a 2009 contract: "Pesticides: HA requires an integrated pest management approach to pest control and environmentally friendly pest control methods which are not toxic to humans. The use of Micro Encapsulated Pesticides is allowed when necessary. Wetable (sic) Powder Pesticides may be used only in cases when immediate results must be met."



## Is this IPM?

- Lot 2 General Extermination Service: Treatment must treat all nests and breeding areas...
  - The treatment program may be a spraying program using approved sprays applied to all required areas or fogging. The Contractor shall exercise extreme care during the application of spay. The Contractor is to insure that spray is not applied to tenant's personal property including personal belongings, such as tables, nightstands, dressers and other furniture.
  - Other treatment methods may also include boric acid, bait and repellants, etc.
    - "Pests" shall include: Roaches (all species), silverfish, moths, ants (all types), ticks, mice, rats, fleas, water bugs, spiders, and any other arthropod pests, bedbugs and termites.

# IPM is a Series of Steps (specific to each pest, foundation is monitoring)

#### German cockroaches

- Inspection and monitoring with sticky traps. Provide monitoring report.
- Based on trap catch- amount of bait (resistant to sprays) applied in each unit is decided and so is frequency of application
- Bait rotation products are identified
- IGR added at 3 mo intervals
- Continued monitoring and bait amount adjusted based on trap catch

#### Bed Bugs

- Inspection (certified human or canine) and monitoring with pitfall traps. Provide inspection report.
- Based on bed bug infestation level, level of clutter and square footage, appropriate treatment (whole home heat or chemical treatment will be decided)
- Vacuuming
- Post treatment activities and bed bug prevention techniques including...on going monitoring and reporting.

# IPM as Whole Home Heat Treatment Contract Language (note monitoring)

aeration, and take down.

Post Treatment Activities: At a minimum, the Contractor shall provide the following:

- (1) Inspection for live bed bugs
- (2) Post treatment monitoring device installation of bed moats and/or interceptors)
- (3) Vacuum of bed bugs and proper cleanup and disposal of all material to assist with getting allergens out of the environment.
- (4) Present a printed copy of the wireless monitoring report to the management office after heat treatment (Sample report appears as Attachment M)
- (5) Placement of diatomaceous earth (DE) around the interior perimeter of the unit (under baseboards, in wall voids, in drop ceilings, behind faceplates and other locations as necessary, using a power duster.

#### **IPM for German Cockroaches**

(extremely infested community)

- Phase I- Monitor all units for German cockroaches using Lo-Line sticky traps to assess the population
- Rank as high (>500), medium (100-500), light based (1-100) on trap count
- Phase II-Treat top 25%
  with 30 g of bait (specify
  bait product) every 2
  weeks for 3 months
- Then monitor and re-rank

- Move on to medium units and apply 15-30g of bait every two weeks for 3 months
- Monitor and re-rank
- Move on to light units (7-15g) every two weeks
- Phase III- After a year, monitor all units again and re-rank to determine if units can be moved to quarterly treatment in January

#### **Costs of German cockroach IPM?**

- 30-33g tube of bait-\$6.00
- Time/labor- \$1:00/ min
  - Getting in the door
  - Monitoring
  - Baiting



- Lo-line style sticky traps- \$1.00/trap and
  - 3 traps/unit
  - Most important that all is done carefully at the beginning of the contract so you know which units need your time and which do not.
  - Or the technician is blind for the rest of the contract.

# Costs: How Fast Can You Get in the Door?







## Time Spent (1.00/Min)

Baiting	Getting In	Putting out monitors	Bait	Grams/ Minute
Day 1	Range (12 sec - 2 min 18 sec)  Average 49 sec  \$1.00	Range (36 sec - 1 min 17 sec) Average 52 sec \$1.00	Applied 1 tube per unit  2 people 15 g per person \$6.00/tube	Range per unit (5-15 min) 8.4 min per 15 g or 1.8 g/min Total 16 min \$16.00

Labor Cost is about \$18.00/unit; Bait cost \$6.00 unit

### **Contract Costs Clean-Out**

- Trapping 4000 units 4 times/year at \$1.00/trap and 3 traps per unit = \$48,000 in traps alone.
- Trapping for Clean-out (4000) = \$12,000.
- Post treatment trapping (Top 25%) =\$6000
- Say top 25% of the units require 3 tubes of bait for clean-out alone (IPM) =\$18,000 in bait

- Labor \$18 per unit/per bait tube (3 tubes) for the 25% most infested units =\$54,000
- Conservative estimate of your cost for clean-out of the top 25% of Richmond housing is...
- \$90,000 for the first 3
  months of the contract
  (does not include time
  counting traps)

#### PHASE I - INTENSIVE SERVICE PROGRAM

The objectives of the Intensive Service Program is to eliminate the existing roach conditions and to implement preventive procedures using a combination of IPM strategies and tools. These services will include at least the following:

All critical areas will receive a thorough inspection for roach activity and the appropriate procedures will be implemented to eliminate the conditions found. Critical areas are defined as those areas: 1) currently experiencing a problem, 2) where pest problems have been routinely noted in the past and 3) where pest problems are most likely to occur in the future.

Set up the proper monitoring to detect insect activity 'round the clock'.

All public areas, to include community buildings and shop will receive a thorough inspection for pest activity and the appropriate procedures will be implemented to eliminate any pest conditions found.

A detailed service schedule will be prepared to indicate the specific services to be performed during each visit.

#### PHASE II- MONTHLY INTEGRATED PEST MANAGEMENT PROGRAM

ubsequent to the satisfactory completion of all Intensive Service work, Company will ommence with its Regularly Scheduled Monthly IPM Program. The features of this ogram are listed below:

Provide a thorough flashlight inspection/survey of all scheduled areas within the facility or its sub-components as established in the Service Schedule. This inspection will include checking of the cockroach monitors and potential pest harborages with special flushing materials. Any pest activity will be eliminated immediately.

On each service, the technician will reapply Maxforce Gel bait material where required, check Maxforce Gel bait stations for evidence of feeding, and otherwise adjust placement strategies to assure optimum, ongoing results.

Only MaxForce forever?

The service technician will provide recommendations for correcting structural deficiencies, sanitation deficiencies, storage practices, and otherwise respond to any concerns or special service requests within the scope of the agreement. Services will be rendered two (2) times per month on the rotation schedule.

Perform preventive insecticide applications to all areas in accordance with the Service Schedule. For What? With what?

Perform preventive inspections and where necessary reapply Maxforce Gel bait material where required, check bait stations for evidence of feeding, and adjust placement strategies to assure optimum, on-going results to a specified number of units in accordance with the Service Schedule. This schedule will provide inspections to all units at least once every four (4) months.

Complete a service voucher to verify services performed and pesticide usage information on each visit and place in Pest Elimination Log Book.

## Things that sound good but...

#### SERVICE SCHEDULE

#### Intensive Service

490 apartments in 88 buildings at multiple locations...... Inspect, treat and log

- problem units on first complete cycle.

   Company will inspect every unit

   Company will pro-actively treat and place watchdog monitors in each unit.
- Each apartment will be rated accordingly to degree of infestation for follow up

Inspect and service all problem units (100 expected) on second cycle, log problem units.

Company will adjust treatments as needed to eliminate the existing roach problem Company will implement a four month rotation cycle of a cockroach growth regulator.

Inspect and service problem units on third cycle, log problem units

Company will adjust treatments as needed to eliminate the existing roach problem Company will implement a four month rotation cycle of a cockroach growth regulator.

#### Monthly Service

#### AREA 490 UNITS TOTAL

125 Monthly Rotation Units

25 Request Units (Maximum)

Bland Court/Davisville Community Building

Piper Square Community Building

Thomas Rolfe Court/Extension Community Building

Langston Park Community Building

HRHA Maintenance Building

#### FREQUENCY

One (1) times per month A 7 4 MO

One (1) times per month

One (1) time per month

#### \*\*Individual Unit Service Fee

Fee is for treating one (1) unit at the request of the HRHA.

\*\*PAGE 6 AMENDED 1/28/2010

#### 490/125 = 3.9

THERE ARE 3 SETS OF H MONTHS IN A

50 TREATING 1500 UNIT / YEAR

Each unit visited once very 4 months

## Guarantee Versus Warranty

The intent of this contract is to eliminate all pests listed from the 490 units of HRHA by the end of the Intensive Treatment period. If HRHA is not satisfied with the results, company will continue treatments to eliminate the pests at no additional charge. Service fees related to the performance of the Intensive work will not become payable until HRHA is satisfied that the pests have been eliminated.

 In talking to the Social Services manager at this facility many people are complaining about their German cockroach problems. The pests are not eliminated. But the HA is not acting on the warranty. Why?

### So what needs to be in your contract?

- Cockroaches and bed bugs are the major indoors pests.
- Must assess your current infestation levels.
- Must hire a state certified pest management company
- How often do you want someone in each unit per year (monthly, quarterly)
- Contract must contain IPM instructions for each pest based on infestation levels

#### German cockroaches

- Preventative treatments cockroaches not effective enough to apply.
- Must monitor for cockroaches overnight using Lo-Line sticky traps and monitoring counts must be provided to management immediately.
- Cockroach treatment products (baits, IGRs, borates), volumes, and rotation based on infestation levels in each unit.
- Monthly or quarterly monitoring.

### So what needs to be in your contract?

#### Bed Bugs

- Preventative treatment can only consist of applications of desiccant dusts in wall voids, behind face plates and in other locations that bed bugs can use to travel to adjacent units.
- Must monitor all units for bed bugs and records provided monthly (HA can monitor themselves).
- No heater treaters that are not certified in your state.
- Realistic review of resident preparation instructions.
  - (6 versus 6000 bed bugs)

- Treatment products (chemical), and methods (heat) to be based on infestation levels, levels of clutter, and the size (cubic footage) of each unit.
- Must specify acceptable heat systems and that sensor records be printed and provided to ensure all hard to heat items made it to lethal temperature.
- Must provide pre-treatment and post treatment records of bed bugs infestation levels. Are there fewer bed bugs after the treatment than there were before???
- Continue monitoring.....

### Costs!

- Writing very specific contract requirements allows pest management companies to evaluate their costs and come up with a reasonable bid, rather than just trying to bid lower than anyone else.
- You can fully expect your GHP lowest bid to be 3 to 4 times your current cost.
- Looks at the calculated cost per door and convert it into minutes.

- Consider: If you are currently paying for pest control and are not satisfied with the results, you are throwing money away.
- Are you paying so little that only one technician is being assigned to your account?
- Must he enter 25, 45, or 95 units a day?
- Is he only entering one unit 3 times a year?
- Do you even know?

## **Oversight!**

- Know what your contract says your company is supposed to be doing for you!
- If you have pest problems in your units, someone needs to oversee your pest management.
- Your technician should not be provided with keys and sent off to travel alone.
- Determine if your technician is doing the impossible (90 units in a day)

- You must review your records to determine if you have fewer pests after treatment than you did before.
  - Otherwise the bed bugs class action lawsuits will be at your door.
- No more blaming the resident! These pests can be controlled.
- If you do not believe pest control is part of your job, please seek other employment!!!!!

# **Questions?**

