

## INDEPENDENT CASE STUDY REPORT



International Environmental Technologies P/L

3rd January 2003

Mr Ray Connell  
Pest Free Australia  
Portside Cres  
WICKHAM NSW

Dear Ray,

Please find attached the format and proposal submitted to Coles Myer on the Pest Free System. I have included the test result from 4 stores only as all stores resulted to the same end.

Subsequently results through all areas of all installations ended up the same. Activity ceased and has not returned. Only one store at Nerang had the units removed for a period of 8 weeks and re-infestation occurred within 3 weeks. Each store has a variation attached to the evaluation. Some stores were fitted with more sticky pads depending on the reported problem and some stores had only a few pads installed though activity report was high. The overall results to be determined included in actual cost to the store for the program proposed by IET. (These costs are not disclosed for obvious reasons.)

As you are aware we encountered a huge amount of scepticism and reluctance to believe such a simple system would actually work, however with the assistance of the Health Departments Officers, Design Engineering Staff and State Managers of the supermarkets, prominent business people and a variety of householders we were able to conduct a range of tests to evaluate the effectiveness.

Due to the nature of major supermarkets having rodent issues and the sensitivity of this subject the names of personnel involved within the Organisation are limited in this report however I have included the titles of the people involved and only the State Health Managers name. The information in this report is considered privileged and confidential and is not to be used for any other purpose other than to establish the facts of the testing undertaken with the Coles Myer Group.

## COLES MYER LIMITED

DETERMINATION OF RODEN INFESTATION IN COLES & BILO SUPERMARKETS

Having initially provided the Pest Free Plug in system to a few stores in NSW for the eradication of Rodents, Alan Young (State Maintenance and Store Development Manager) from the NSW State office addressed a forum of managers as the success of the system in the problem stores.

The results were significant enough to warrant a closer evaluation of the system in other States as all States were experiencing similar problems.

Following discussion with Health Department Officers for the Coles Myer Group in Victoria we submitted information including the University Testing carried out by the University of New England along with the operation manual supplied by the manufacture.

The validity of the report was questioned by store Engineering Departments due the fact that controlled environment testing at the University was not indicative of actual environmental factors within a large supermarket.

### The main issues raised were as follow:

1. Supermarket buildings are large and vary in design thus creating a myriad of different possible alternative infestation criteria.
2. Location of building will differ from indoor shopping centre locations to free standing bush surrounded areas.
3. Some buildings are single storey low set and others are 2 storey of 3 storey stores.

Each store had a variety of issues in different areas of the store and though these issues were causing losses of food product, some stores were losing more than others because

the rodents were consuming a variety of product. EG Bakery, breakfast cereals, Bird Seed or Fruit and Veg.

It was determined that from the information published by the manufacturer and the information provided by IET each store could be treated the same way therefore evaluation of the Pest Free would enable the Health department managers and Store design and development team to ascertain its viability in the system.

It was also determined that the current unsuccessful forms of eradication by qualified Pest Contractors would cease on commencement of the Pest Free System Trial.

A field study commenced in November 2000 for a 2-year period utilising the Pest Free at 5 separate locations throughout, NSW, QLD, VIC. The reason for this is to determine the effectiveness on a variety of species in different climates and Architectural Design differences from State to State.

The Organisation utilised for the testing were Coles Supermarkets, Bi-Lo Supermarkets, Small Business owners and Domestic Premises in all states listed.

#### The Guide Lines of the Testing were as follow:

1. Conventional methods of vermin eradication by Pest Control Companies has been in place for at least 3 years and not succeeded to eliminate or control the vermin.
2. A value of loss of product within the business needed to be determined as a value in \$Dollars.
3. A value of expenditure on conventional methods could be determined to compare the cost of installing Pest Free.
4. A method of re-evaluation was to be implemented at each test site.
5. Each location was to be different in building design.
6. Each locations was to be surrounded by different environment influences, eg (in shopping complexes, free standing, split level, multi storey, near water and in or near bushland.
7. Each location needed to be of various ages. Eg 3 years old, 5 years old, 10 years old etc.
8. Each locating had to differ in their electrical configurations.
9. Each location would cease other forms of conventional eradication programs for the duration of the testing.

NOTE: it was determined that a quantitative method of evaluation was necessary therefore Sticky Pads were installed in all locations by the contract Pest Company with no installation of additional NOTE: it was determined that a quantitative method of evaluation was necessary therefore Sticky Pads were installed in all locations by the contract Pest Company with no installation of additional pesticides, bait stations or poisons.

## RODENT ERADICATION TESTING REPORT:

COLES AND BI-LO SUPERMARKETS

### CURRENT SITUATION:

- Pest Contractors have had contracts in place to eradicate all vermin from stores for several years.
- Rodent and vermin activity reduced but not eliminated.
- Reported problems recurring monthly, Reports of bad odours in stock and some areas on the store selling area.
- Losses due to rodent infestation impaction on store budgets.
- Visual sightings by staff and customers.

### METHOD OF ERADICATION PROPOSED

Pest Free Plug In.

### INSTALLATION LOCATION WITHIN STORE.

Three months prior to installation each store submitted a cost of goods damaged by rodent activity.

- Nerang Qld \$3000 per month
- Robina Qld \$2700 per month
- Bi-Lo Forster NSW \$2800 per month
- Aire Qld \$1300 per month
- Altona Vic \$980 per month

## RESULTS

The results were consistent with the information provided by the manufacturer and from the technicians at IET P/L with all stores reporting significant results in the 1st month of installing the Pest Free.

### NERANG STORE

**Number of units**..... 2

**Circuits used** ..... 2

**Location of Units:**

1. Bakery
2. Deli Managers Office

**Evaluator:** Fresh Food Manager & State Health Manager

**Quantitative Method:** Catchmaster Sticky pads at rear exits & under fridges.

**No. of pads installed:** ..... 250/week

**No. of pads used:**..... 350

Nerang reported removal by sticky pads of 240 mice in the first 2 weeks and further 110 in the following 2 weeks. Within 4 months all activity was eliminated.

#### RE-EVALUATION

Units were turned off and removed in May 2000 for 8 weeks. Reports from Warehouse staff that rodents were seen after 3 week. Re-infestation and established regular activity reported 7 weeks.

Sightings were reported daily for the next 7 days. One reported sighting at the front of the store by a cashier occurred on the 5th day of the 7th week. The units were replaced by the State Health Manager (Paul Berry) and all reports of sightings and activity ceased within 5 days. Inspections were carried out monthly and all activity had disappeared. The units remain in the store and switched on.

### ROBINA STORE

**Number of units**..... 2

**Circuits used** ..... 2

**Location of Units:**

1. Vegetable Prep Room
2. Upstairs Office above Warehouse
3. Grocery Isle 4 (cereals)

**Evaluator:** Store Manager & State Health Manager

**Quantitative Method:** Catchmaster Sticky pads at rear exits only.

**No. of pads installed:** ..... 120

**No. of pads used:**..... 80

Robina reported 80 rodents removed in 3 weeks and activity in back if store was eliminated; however rodents had re-located into gondolas on shop floor and were highly active.

Grocery Isle 4 Additional Unit added after 3 weeks. Cable was wrapped around the frame of the gondolas and over the top along the full length and rodent populations moved within 4 days. A further 40 rodents were caught in sticky traps in the back of store. All activity ceased after 9 weeks.

#### RE-EVALUATION

Inspections of the stores at 6 monthly intervals showed no further activity was present in all previously active areas.

**BI-LO FORSTER STORE****Number of units**..... 4**Circuits used** ..... 3**Location of Units:**

1. Bakery
2. Fresh Produce
3. Warehouse (Back of House)
4. Isle 1 Pet Supplies

**Evaluator:** Fresh Food Manager & State Health Manager**Quantitative Method:** Catchmaster Sticky pads at rear exits only.**No. of pads installed:** ..... 20**No. of pads used:** ..... 12

Bi-Lo Forster proved to be a significant winner as it is located in heavily infested shopping centre near a Railway and a creek. Though all other retail outlets reported continual activity of rodents, Bi-Lo was clear of rodents in 7 weeks and re-contamination has not re-occurred.

**RE-EVALUATION**

Inspections of the stores at 6 monthly intervals showed no further activity was present in all previously active areas.

**ALTONA VICTORIA STORE****Number of units**..... 3**Circuits used** ..... 3**Location of Units:**

1. Bakery
2. Fresh Produce
3. Warehouse (Back of House)
4. Isle 1 Pet Supplies

**Evaluator:** Fresh Food Manager & State Health Manager**Quantitative Method:** Catchmaster Sticky pads at rear exits only.**No. of pads installed:** ..... 100**No. of pads used:** ..... 60

Altona Vic reported that rodent activity moved into front of shop areas and began damaging critical wiring providing power to the cash registers. An additional unit was installed after 12 weeks and rodent were removed using sticky pads in the vegetable section 25 meters away. A total of 60 vermin were caught in 4 days of installing the extra pest free unit.

**RE-EVALUATION**

Inspections of the stores at 6 monthly intervals showed no further activity was present in all previously active areas.

**CONCLUSION**

**A variety of dwellings and business were fitted with the Pest Free system and all problems were eradicated with the prescribed time frame indicated in your information manual.**

As a direct result of the above evaluation the Coles Myer Group has appointed the Strategic Development department to implement the system throughout all their current brands. As such the result of acquisition and purchases of your Pest Free units is in the hundreds now and we see a bright future for the supply of the Pest Free System in many more Organisations throughout Australia.

On a final note, our negotiations and trials with the Ugandan Government in Africa has resulted in the order of your system for the Stat Govt run companies. Being a third world country the basic hygiene requirements may now be assisted with the use of your system. I am sure from our initial negotiations we will see the Pest Free System throughout the African Continent within the next 5 years. Thankyou once again for your support and I look forward to meeting with you in the near future.

**Kind Regards****Ian Jones, Managing Director**