

# THE CLARKE TECHNICAL CENTER



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# OBJECTIVE

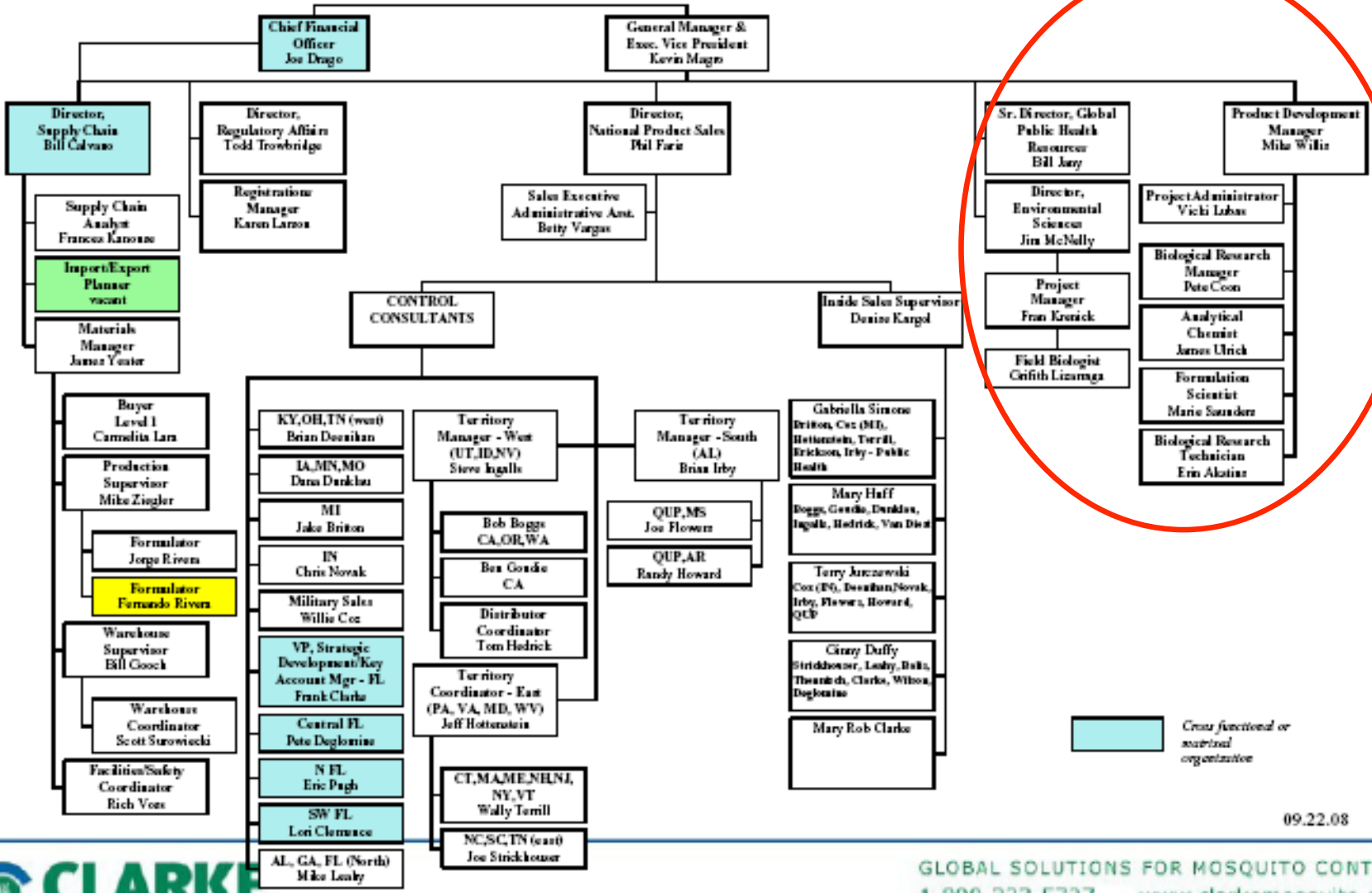
- Overview of the Technical Center
- Convey a sense of our responsibilities
- Keep you awake

# CLARKE MOSQUITO CONTROL





# Clarke Mosquito Control CMCP Domestic



Cross functional or non-traditional organization

09.22.08



GLOBAL SOLUTIONS FOR MOSQUITO CONTROL  
1-800-323-5727 www.clarkemosquito.com

# TECHNICAL CENTER

## ➤ Departments

- New Product Development

- CEMM – Surveillance Labs

- Environmental Science

# NEW PRODUCT DEVELOPMENT DEPARTMENT

➤ Largest footprint

■ Development and ....

■ Commercialization of new products

# Clarke New Products & Equipment



# COST OF REGISTRATION

- \$20 – 40 MILLION
- Small size of mosquito industry makes it cost prohibitive for most companies to take an active from bench to market
- Clarke is consistently investing in the future of mosquito control



# Key Partnerships

- Universities
- Military
  - DWFP
- Members of industry.
  - Agriculture. Utilize data generated by ag on potential actives

# FORMULATIONS LAB



# FORMULATIONS LAB

- Formulations are developed for new active ingredients to control mosquitoes in different environments
- Existing formulations of mosquito control products are improved for better performance, to reduce costs, and to meet EPA requirements
- Physical characteristics of formulations are evaluated
- Samples of formulations are prepared for biological and toxicology testing

# FORMULATIONS LAB



# PILOT ROOM

- Formulation preparations are scaled up to evaluate manufacturing processes
- Larger samples of formulations are prepared to support testing programs
- Equipment is evaluated for use in commercial production

# PILOT ROOM



# ANALYTICAL LAB



# ANALYTICAL LAB

- Quality control testing is performed for manufacturing on all CMCP products before releasing for sale
- Analytical testing support for formulation development
- Analytical methods developed for product testing



# ANALYTICAL LAB



# BIOASSAY LAB INSECTARY



# BIOASSAY LAB

- Various mosquito species are reared to support biological testing
- Biological testing methods are developed to evaluate new products
- Biological assays are conducted to confirm product performance

# BIOASSAY LAB



# BIOASSAY LAB



# BIOASSAY LAB



# FIELD STATION

## Nicaragua



# FIELD STATION - IL





# FIELD STATION - FL



# CEMM - ID LAB



# ID LAB

- Larval samples are collected from standing water sites and identified
- Samples collected from traps – NJ, ABC, Gravid - are identified to species
- Mosquito counts are immediately provided to customers and salesmen

# VECTOR TESTING LAB

- Mosquitoes from Gravid and ABC traps are tested once per week.
- The VecTest or RAMP is performed on mosquito samples to test for virus presence.
- Results are confirmed through PCR testing at an independent lab (Michigan State)

# VECTOR TESTING LAB



# ENVIRONMENTAL SCIENCE



# ENVIRONMENTAL SCIENCE



# ENVIRONMENTAL SCIENCE

- Product testing support for EPA registration and re-registration of Clarke pesticide products.
- Technical support to salesmen and customers in the use of Clarke Products.
- Characterization and Calibration of aerial and ground spray equipment for customers.
- Surveillance and quality assurance during emergency spray operations.



# ENVIRONMENTAL SCIENCE



# CLARKE TECHNICAL CENTER

- Science behind our products, service, and personnel.
- Clarke's commitment to our industry
- Vicki Lubas 847-352-0701

GO PHILS!

