



## Business Plan 2007 – Division of Environmental Health - Florida Department of Health

Mission: "Promote and Protect Health"

Vision: "Healthier Floridians"

**Goal: To prevent disease of environmental origin**

### ***Bureau of Radiation Control – Inspection Program and Bureau-wide Training and Quality Management***

#### **Trends and Conditions:**

##### **Inspection Program**

The field inspection staff provides comprehensive support to the emergency response, radioactive materials and the x-ray programs through five regional offices. Our Northern office is located in Jacksonville and the staff of seven provide services from Pensacola to Gainesville to Jacksonville. Our central office is located in Orlando and has a staff of ten providing services to the central area of the state. Last year we combined our Orlando and Lantana offices creating a team of folks with flexibility in their work assignments and opportunities for mentoring. During the past year this allowed senior staff and co-workers to accompany each other on inspections as well as incidents which not only enhanced their knowledge and skills but also led to a more cohesive work unit. With several vacancies already this year, staff from the central office has also volunteered to assist neighboring offices with their work assignments. This will reduce travel costs while keeping our work timely.

The Miami office with a staff of six provide services in Dade and Monroe Counties and five staff from the Ft. Myers office cover the southwestern area of the state. The office in Tampa, with a staff of six provide services for the seven western counties surrounding the Tampa area. We have experienced an increase in the commitment of our staff to provide technical information at the County Health Departments and with the Local Emergency Planning Councils (LEPC's) on emergency preparedness. This past year we had our Jacksonville manager and our Tampa manager participate with their LEPC's and CHD's on radiation exercises. Staff has also been required to provide technical assistance to the U.S. Customs officials, Homeland Security, Federal Bureau of Investigations, Food and Drug Administration and the Nuclear Regulatory Commission. Our staff continues to be the backbone for participation in four nuclear power plant training exercises held throughout the year, conducting over 14,000 x-ray and 700 radioactive material inspections and investigations, providing support to the technology program as well as responding to over 200 incidents each year. Staff has done an excellent job at balancing resources while maintaining their flexibility in an ever changing environment.

The pool of competent applicants for employment is small and there is tremendous competition from both the federal government and private industries to secure qualified staff. Competitive salaries need to be provided to assure the availability of staff; currently salaries are 25 to 30% lower than other state and federal governments and nearly 50% for private industries. The program has worked diligently to develop ways to "grow our own staff" by selecting individuals who have demonstrated the ability to learn in other modalities and provide training to these individuals. We also need to focus on retention. Though we lost one manager last year due to retirement, most of our inspection staff leave for better-paying job opportunities.

Inspection assignments continued to increase this past year (5%) and staff were challenged with a few vacancies as well as assisting new staff in their first year of training. We were fortunate to have several inspectors and managers participate on several of our teams (training team, x-ray inspection procedure team, radioactive materials training team and security inspection team) though towards the end of the year we pulled back on some of the team activities to give staff a chance to catch up on their inspection assignments and devote more time to training their new staff. We

Division Cost: \*

Division Positions: 40

County Program Cost: None

County Positions: None

\*The costs associated with these programs are paid from the fees received in the other programs.



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also were tasked this past year with implementing NRC increased controls for 60 of our high risk radioactive material licensees. One inspection manager and five inspectors attended an NRC sponsored training course designed to make them aware of these new security requirements. Upon completion of the training, they were then tasked with forming a team with the goal of designing a consistent approach to these sixty inspections. They then managed to complete all sixty inspections by December 31, 2006 which was six months ahead of the June 1, 2007 deadline.

Managers were assigned and completed the visits of their area CHD's. During the visits they provided an overview of our bureau and presented them with a CD, developed by our training and quality assurance section, as well as a radiation emergency response laminated business card. The CD contained our rules, some KI instructions for use in the event of a nuclear power plant incident and a list of our offices and contact information. The CD was well received so we have made some updates for next year's CHD visits and also developed a radiation emergency response magnet to distribute.

This year we provided all inspection staff an opportunity to work more efficiently by allowing them to take their assigned state vehicle home. The vehicle use policy still required them to make at least one visit to their area office each week to meet with their supervisor, collect and submit assignments, schedule appointments, check their e-mail, perform instrument checks, schedule vehicle maintenance and converse with their work unit. Telecommuting or the reduction in need for fixed facilities for the inspection staff will become a real possibility so policies, procedures and training will need to be in place. This will immediately enhance the day-to-day life for the inspector and will eventually reduce office costs as leases expire. This year our Pensacola inspector moved from a paid office location to his home and now is in an approved telecommuting situation. Over the next year we will continue to monitor his telecommuting situation and as procedures are developed and reviewed we will also continue to monitor the quality of inspections through peer review of inspection reports, management accompaniments and audits.

Each inspector and manager also carry with them a "grab and go kit" in their state vehicle. This kit contains radiation emergency response equipment, supplies and forms necessary to respond to all types of radiation incidents and allows a quicker response as staff are located throughout the state. This past year we were also fortunate to obtain a grant for new radiation detection equipment for each inspector as well as several for each program office. This new procedure and new equipment has increased our response capabilities as when staff receive a call in the field, they can immediately proceed to the response site and bypass stopping by the office to collect equipment. It has also helped increase staff moral as indicated through interviews and the results of the latest employee survey.

As the bureau moves towards "e commerce" and sufficient equipment is secured for each inspector, it is anticipated that more and more of the inspector's time will be spent in the field and not in the office. As we begin scanning our mass of program files, we anticipate moving towards a more electronic inspection process. An "Electronic Enhancement Team" has already been established with the goal of reviewing, deciding and securing the software needed to enter and submit our inspection data electronically and directly to the appropriate program. Even though each inspector has been issued a laptop for use in the field, these have proved to be very heavy and cumbersome and with the inspection software still in development, they are not much use to the inspector. Even accessing their e-mail has proved inconsistent due to connectivity problems which will need to be resolved to ensure the success of an electronic system. The majority of our inspection staff is inexperienced with computers and have difficulty using tools, such as SharePoint. Our training consultant will begin visits next year to each area office to provide one-on-one training in the department sponsored software applications. This year we provided three of our inspection staff with a wireless, network card to test connectivity



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and use in the field. Their feedback indicates that there are still software and security issues that will need to be addressed with IT staff through our Electronic Enhancement Team. During this transition phase to a paperless inspection process, we expect some hurdles as well as opportunities to come our way.

This year a “Manager’s Handbook” was developed in particular to assist the two new inspection managers, who were promoted from ESIII positions, in identifying the expectation and requirements of their job. The managers themselves have been an invaluable tool in expanding this handbook to cover training of new staff, evaluations, quality assurance activities and just the day to day work that we often do but don’t think to pass on to incoming staff. Even though we had a succession plan in place and both of these new managers were mentored for several months prior to their promotion, there were still many issues that came up and continue to arise. The handbook continues to be a working document with several revisions expected throughout the year.

#### **Training and Quality Management**

Our training and quality management section continues to make great strides in addressing the training and quality assurance needs of our staff. With an administrator, a training manager, a training consultant and an administrative assistant, this section works as a team with weekly meetings to ensure training projects are on target and future goals are established. In addition to training and quality assurance responsibilities staff from this section also serve as team facilitators on our bureau teams. They have all received training in facilitation of meetings and our training manager has started a Department of Emergency Management “Master Training Course” which involves a series of courses leading to certification.

This year our training consultant established a bureau training site on SharePoint where future training opportunities are listed as well as course reviews and training procedures and documents. He has also been expanding the site to improve communication with our area staff. The consultant also tracks all required training using the Trak-It database system and interacts frequently with staff to ensure all training is captured. He also is responsible for maintaining our qualification procedures as well as ensuring staff submit documentation in our qualification journals. This is also the first year our administrative assistant was provided a training budget and she has been tracking all training dollars spent as well as all requests for training, C676C’s, registration fees and travel reimbursement vouchers. She provides updates of our status to ensure we do not exceed our budget. Our staff was also successful in obtaining external funding which allowed most of our technical staff to attend an NRC sponsored “Root Cause” course as well as a Forensic Radiochemistry Course for our laboratory personnel. We will of course continue to pursue external funding opportunities for our staff in addition to continuing our in-house training activities. Our training section has also produced a master training plan for the bureau and implemented training submission and documentation procedures.

Improving the competency and efficiency of our staff continues to be a priority, especially in lieu of emerging radiation modalities and emergency preparedness. With all of our in-house expertise we have been using the team approach to write procedures, assess training needs, develop training modules, and outline a certification process. This year, with assistance from the Polk County staff, we were able to continue to provide our technical core basic health physics training “Applied Radiation Physics Module” to more than 30 of our technical staff as well as several international radiation program staff. With currently 90% of our technical staff trained, we are well on the way of meeting this goal as we schedule two of these



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courses for next year. We also completed and began implementation of our portable gauge inspection module and our nuclear medicine inspection module. These specific training modules provide our inspectors an overview of the use of portable gauges and the operation intricacies of a nuclear medicine department. Our training teams have also completed a portable gauge and medical use training module for the radioactive material evaluators using the inspection module as a guide. These two training modules cover 80% of our radioactive material assignments. Our next goal is to address other categories of licenses such as; industrial radiography, brachytherapy or transportation issues. Our x-ray inspection procedure team completed 90% of the x-ray inspection procedures and the x-ray program developed and implemented a "Fundamentals of X-ray Production" course which provided our new staff with an in-depth knowledge of x-ray production and acted as a good refresher for our senior staff. We expect to continue these as well as develop future in-house training courses. Of course we will continue to pursue training opportunities offered by the Nuclear Regulatory Commission (as budget allows), the Food and Drug Administration, the Federal Emergency Management Agency, state universities and numerous private industries that have been very accommodating to our training needs. This year we also continued the NIMS training for all staff and depending on their job requirements, additional upper level NIMS training was achieved. We also had several technical staff attend refresher training to keep their 40 hour Hazwopper certification current. In addition, several of our staff attended NRC sponsored radioactive materials training courses and will now serve on our training team as subject matter experts to help us develop specific training modules. We also formed a sub-team of the training team this year to address administrative support staff training needs. They plan to have their first meeting in April or May.

Our training modules have gained national and international recognition through the Conference of Radiation Control Program Directors (CRCPD). They have been distributed to other state radiation control programs as a model training program and have been showcased at national meetings and most recently at the DOH Quality Showcase meeting in Orlando in November.

#### **Short Term Objectives**

By July 1, 2007:

- Complete Applied Radiation Physics training for all current technical staff.
- As inspection office leases expire and are not renewed continue to implement a mobile office concept for inspection staff.
- Complete portable gauge inspection procedures to support inspectors in performing quality inspections 96% of the time.
- Continue the outreach objectives to county health departments, local emergency planning committees and stakeholder organizations.

#### **Long Term Objectives**

By January 1, 2008:

- Complete remaining "key" training modules to assure quality bureau products.
- Develop and implement an x-ray inspection program based on outcomes.
- Develop inspection training for additional staff to perform security inspections as mandated by the NRC.
- Implement a documentation process to demonstrate technical staff competencies through qualification programs.
- Develop a comprehensive auditing program to assure the quality of bureau products.



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- Develop procedures for alternative work methods as the bureau eliminates fixed facilities leases throughout the state.

By January 1, 2009:

- Develop procedures for electronic inspections.
- Develop a qualification/certification process for each technical position in the bureau.
- Develop and implement a training program for administrative support staff.

**Measure #1: *Inspect 100% of radiation machines and radioactive material licensees within calendar quarter assigned.***

Division Strategic Plan		Strategy (Program level)	Benchmark	Responsible Party	Target Date (up to 18 months)	Status (What is happening now)
BRC Mission	Protect the people and the environment from unnecessary radiation exposure	Inspect 98% of radioactive materials licensees within regulatory timeframes.	As stated in strategy.	Cindy Becker Area Managers	Ongoing	For this past fiscal year (05-06), 90% of licenses were inspected within the quarter assigned. All required 60 security inspections were completed six months ahead of deadline.
BRC Mission	Protect the people and the environment from unnecessary radiation exposure	Inspect 98% of assigned radiation machines within regulatory timeframes and consistently within the quality standards.	As stated in strategy.	Cindy Becker Area Managers	Ongoing	For this past fiscal year (05/06), 77% of radiation machines were inspected within the quarter assigned. With several inspector vacancies and the training of new hires, managers had to focus on priorities: emergency response, contract inspections and radioactive material inspections thereby falling behind on x-ray.
BRC Mission	Protect the people and the environment from	Inspect 100% of FDA assigned mammography facilities within the quarter assigned.	As stated in strategy.	Cindy Becker Area Managers	Ongoing	For the past fiscal year (05/06) 100% of inspections were completed within the quarter assigned.



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	unnecessary radiation exposure					
Objective 2 and Bureau subgoal A	Use our data and work towards electronic submission of inspection reports	Reduce the time to perform inspections and increase the quality of inspections by converting current system to an electronic system.	As stated in strategy	Cindy Becker Electronic Enhancement Team	Ongoing	For the past fiscal year (05/06) we have been transitioning to a mobile inspection office. A partial telecommuting procedure was implemented for all inspection staff, laptops were distributed, and each inspector was provided a "grab and go kit" to keep in their car for rapid emergency response capabilities. Also, several inspectors are beta-testing connectivity and electronic transfer of inspection reports.

**Measure #2: Ensure 95% of staff receives adequate training.**

Division Strategic Plan	Strategy (Program level)	Benchmark	Responsible Party	Target Date (up to 18 months)	Status (What is happening now)	
Objective 3	Promote and support training and innovation through standardization of procedures	Implement and revise Standard Operating Procedures (SOPs) for all of the major categories of inspections.	As stated in strategy.	Cindy Becker Don Steiner Paul Vause	Ongoing	In development. Teams were established and 90% of x-ray inspection procedures have been written and are in use. Emergency response procedures were updated.
Objective 3	Promote and support training and innovation through standardization of procedures	Implement Training Qualification Program for all technical staff.	As stated in strategy.	Cindy Becker Debbie Gilley Mike Phillips Training Teams	Ongoing	Implementation began in April, 2004. Over 90% of current technical staff has received introductory training. Developed and implemented two core self-study modules for inspector and license evaluator use. Will continue to



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						implement and create training modules for use in Program.
Objective 1 and 4	Be the best communicators and educators by using the CRCPD and other national organizations to promote safe use of radiation and support community outreach by getting the best products to all state radiation control programs to ensure quality community service	Participate in the Conference of Radiation Control Program Directors and other national organizations to insure training needs of radiation control staff are identified and Florida's radiation control training program is consistent with other state programs.	Member of selective committees with a focus on training.	Cindy Becker Debbie Gilley	Ongoing	Cindy is chair of training committee and member of several other committees. Debbie is chair-elect of CRCPD and continues to chair several committees as well as serve as a member on several others. Debbie also is a member of NCRP and assists IAEA in developing radiation training and programs for other countries.

**Measure #3: Ensure that 100 % of all inspections are performed efficiently and effectively.**

Division Strategic Plan	Strategy (Program level)	Benchmark	Responsible Party	Target Date (up to 18 months)	Status (What is happening now)	
Objective 2 and 3	Promote and support training and innovation by supplying staff with needed skills and tools to	100% of inspection assignments free from errors that substantially change the inspection results or would require a repeat inspection.	As stated in strategy.	Cindy Becker Area Managers	Ongoing	This past fiscal year (05/06), review of our inspection reports indicated less than 1% have major errors. With updated inspection procedures, this year we will need to focus on developing a different type of review process and audit



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	enhance quality.					procedures which more specifically address quality measures.
Objective 1 and 4	Communicate and educate CHD’s and provide local support and outreach.	Visit all CHDs and brief on radiological issues.	As stated in strategy.	Cindy Becker Area Managers	Ongoing	Completed. Will be performed annually by our area inspection managers. This year we added a set of informational material (paper as well as electronic CD) to provide CHD staff a more comprehensive view of our program and allow them to contact ASAP, if needed.
		Audit 10% of all field assignments.	As stated in strategy.	Cindy Becker Area Managers	Yearly	All managers and inspectors were audited this year in addition to numerous accompaniments for training and mentoring. This year the training team began development of a revised audit procedure and form which we anticipate implementing next year.
Objective 3	Promote and support training and innovation through the development of a quality assurance and auditing process – be an innovator through customizing our program.	Develop a quality assurance and auditing process modeling the framework designed by Nuclear Regulatory Commission when they review state programs.	As stated in strategy	Debbie Gilley Mike Phillips	Ongoing	The Nuclear Regulatory Commission’s process is being reviewed and discussed; anticipate meetings during the year to discuss how we can mold their process to fit our program. In 2007 we will be audited by NRC using the IMPEP process which we hope to adapt to fit our needs.