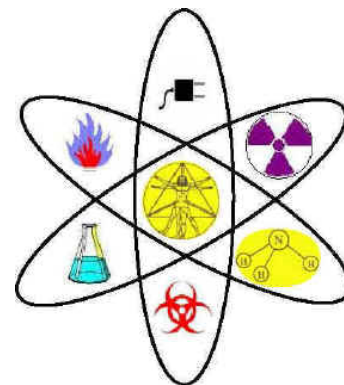


ENVIRONMENTAL HEALTH & SAFETY ANNUAL REPORT 2009



INTRODUCTION

Mission

The Environmental, Health and Safety Department is responsible for facilitating University safety by implementing programs that serve the students, employees and clients within the state. Effective fulfillment of our responsibility is made possible through the significant efforts of many individuals as well as our partnerships with various constituents of the campus community and regulatory agencies. EH&S provides leadership in environmental stewardship and regulatory compliance assistance to the NMSU system.

EH&S fulfills its mission to make NMSU a safe environment by implementing high quality/timely health and safety services in eight major areas.

1. Education, Training & Protective Equipment
2. Hazardous Waste & Materials Management
3. Health & Safety Inspection/Facility Audits/Activity & Work Reviews
4. Regulatory Compliance
5. Accident & Exposure Investigations
6. Exposure Prevention/Indoor Air Quality
7. Radiation Licensing & Permitting
8. Safety Standard & Procedures

Vision

Our vision at NMSU is to be recognized as a premier university. NMSU will not be recognized as such, unless the University demonstrates a strong commitment to protecting the health and safety of employees, students and the public as well as protecting the environment. Our goals are to have a workplace free of injuries and hazardous exposures, to prevent or minimize any adverse impact to the environment, to provide services of the highest quality to the NMSU system and to be recognized as leaders in the areas of environmental protection, health and safety.

Department Values

Staff will practice their profession by following recognized scientific principles and management practices, factually informing affected parties of their findings in an honest, straightforward manner, exhibiting the highest level of integrity, honesty and empathy, while never compromising the public's welfare. Staff will strive to be involved in continual education and professional development, to provide superior customer service in all areas, to perform service only in the areas of their competence and maintain information as confidential when appropriate.

Overview of 2009

- 19% annual increase in number of safety classes
- 12% annual increase in personnel trained (3323) in safety through formal classes
- Doubling of safety classes and training deliveries since 2004 and 2002
- 9% yearly increase in surveillance activities for loss control
- 20% increase in detailed lab and general room inspections
- Directed \$100,000 of BRR to correction of safety deficiencies
- 10% increase in number of work orders to affect repair of safety deficiencies
- 40% decrease in the number of injury and illness cases with lost or restricted work days in 2008 and that remained stable in 2009
- Continued safety support to remote campuses and Ag. Science Centers to include inspections and training
- Supported 44 asbestos abatement projects and developed NMSU Asbestos Management Program
- Achieved I&G budget support for EH&S so that \$120,000 recovery from other departments was not necessary for statewide safety and Air Permit compliance
- Picked up, researched, processed, and shipped 87,000 pounds of waste in 2009 compared to 72,000 pounds averaged over the previous five years. This included 3,800 different waste items compared to 2,700 items averaged over the previous five years.
- Lead the detailed application process for the five year renewal of NMSU's Title V Air Permit
- Assisted in the design and start of renovation operations to construct an Environmental Management Facility to consolidate all NMSU hazardous waste (chemical, radiological, universal, biological) into one building with engineering safety controls.
- Developed on-line Bloodborne Pathogen training to promote annual training compliance
- Moved radioactive sources and decommissioned Gardner Hall for renovation
- Passed NM Environment Department Radiation Protection inspection with no findings
- Increased driver license validation frequency for employees driving NMSU vehicles has doubled the number of reviews and permits issued each year
- Implemented revised policies for emergency preparedness including Continuity of Operations Planning and designation of Essential Personnel in essential departments
- In response to H1N1 novel virus, the Communicable Disease Preparedness Committee provided leadership and readiness for NMSU's response to the pandemic

Overall the department continued to provide most services at an acceptable level in most program areas. However, as new university space is added to the list of EH&S responsibilities, new demands are created and new resources are not being programmed into the budget. There remains a critical need to increase funding levels when new space or new responsibilities are added.

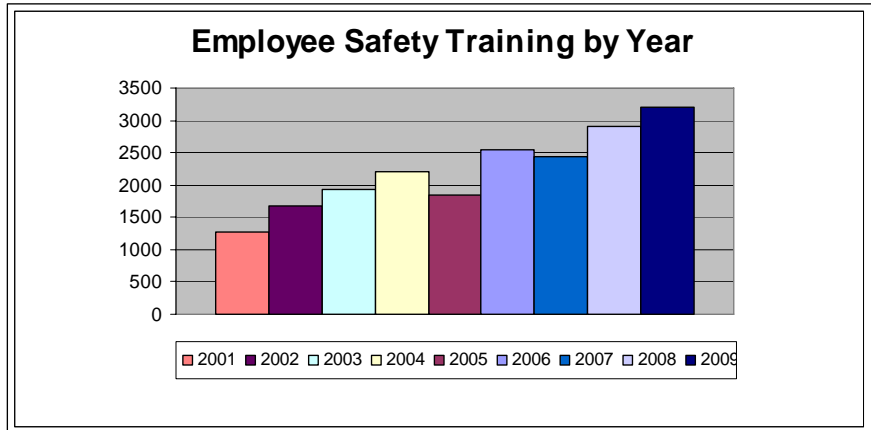
FACULTY RESEARCH SUPPORT

The NMSU SCORE (Support of Continuous Research Excellence) Program conducted a formal [Research Environment Study](#) of researchers (n=266) on the Las Cruces campus, September 2007. Of the respondents, 70% were tenure-track faculty (representing one-third of the total NMSU tenure track faculty) and 19% were research scientist or professional research staff. Most of the respondents had long experience (54% with nine years or more) at NMSU. One repeated theme which emerged from the quantitative survey responses was satisfaction with Environmental Health & Safety support but frustration with other NMSU research support systems. *Across all colleges, the Environmental Safety practices were deemed good or excellent by 57% and fair by 32% with only 11% rating poor or terrible.* These ratings relate to one's experience with the efficiency of NMSU EH&S systems and processes and whether EH&S procedures are judged to meet the organization's needs without impeding research work. On the other hand, Accounting, Purchasing and Hiring processes were clearly judged as problem areas with poor / terrible scores from 71%, 62% and 68% of respondents for each area respectively. These data indicate that survey participants were distinguishing among categories and not merely complaining about all research support systems.

CENTRALIZED SAFETY TRAINING

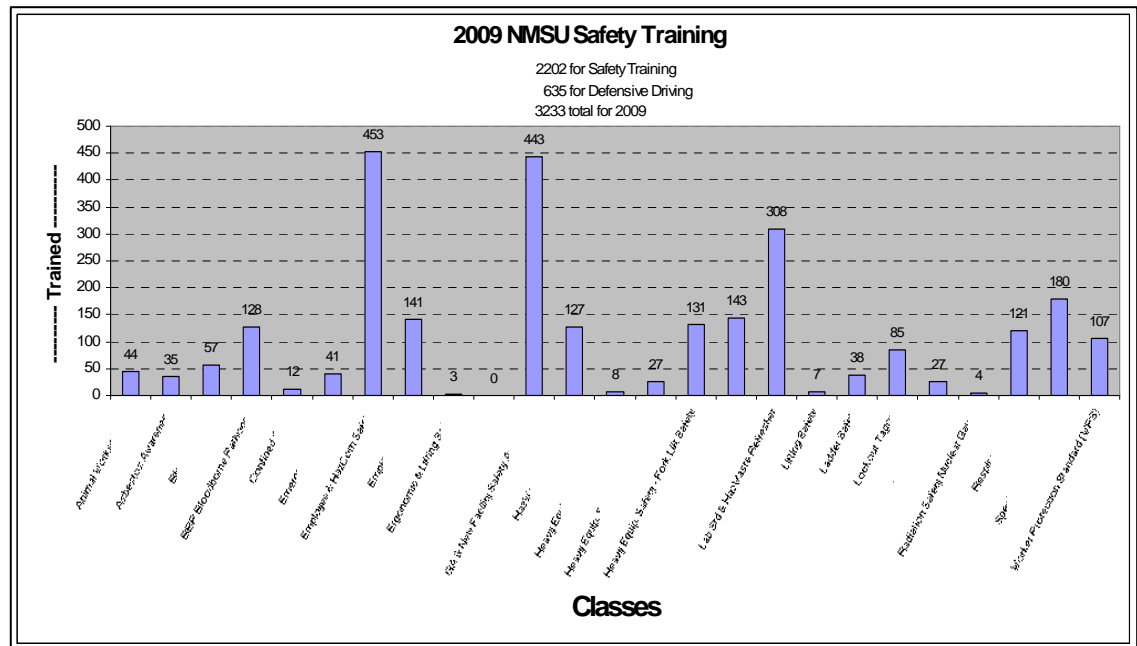
In 2009 EH&S provided 248 safety classes, a 19% annual increase and 100% increase in classes since 2004. These classes cover over 27 different safety topics for compliance with regulations, NMSU policy and State Risk Management's Loss Prevention and Control Rule.

Overall, a total of 3323 employees attended safety training including defensive driving, a 12% yearly increase and nearly 100% increase since 2002. Training includes 17 different routinely offered safety courses plus special sessions such as Ag. Worker Protection Training, Lab Standard Refresher and Graduate Assistant orientation and other special requests.



The 2009 Safety Training chart (below) shows the participation in the various classes. We have developed strong partnerships with Academic, Science and Research Dept though our safety training program. This is evidenced in repeated requests for EH&S staff to present special sessions on current safety issues which help departments comply with OSHA's annual lab refresher training requirement. 98% of the training was provided by EH&S, although we arranged for 4 classes (98 trainees) on special topics.

EH&S staff traveled throughout the state to provide safety training to all Agricultural Science Centers, NMSU Alamogordo, NMSU Carlsbad and Carlsbad Environmental Management and Research Center.



Over the last five years attendance at safety training has dramatically increased for most NMSU campus staff and in the Academics, Faculty, Post-Docs and Graduate Assistants especially in the Sciences and Research departments. However a lack of emphasize and lowered attendance for Facility Service employees has been noted in employee conversations for required introductory safety and in attendance records for annual refresher classes. This trend has continued over the last two year, despite weekly reminders to supervisors of upcoming classes and in correspondence to upper management noting the problem and attempting to help by providing extra classes.

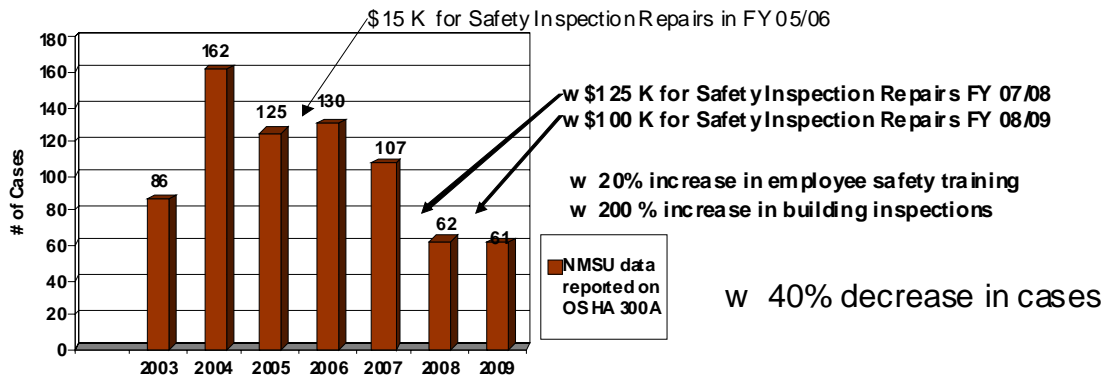
Training Goal:

- Continue improving safety training at remote locations through increased visits and web interface.
- Attempt to improve Facility Service safety training compliance by adapting UNM model in which management support/endorse safety and supervisor participates in safety training.

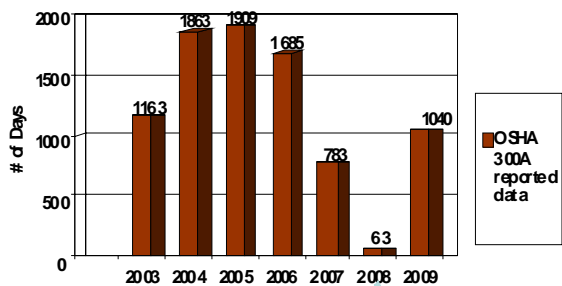
EMPLOYEE INJURY & ILLNESS LOSS CONTROL

There was a 40% decrease in the number of injury and illness cases with lost or restricted work days in 2008 and that remained stable in 2009. This decrease in the more severe cases (lost time or restricted duty) correlates with several new initiatives including: increased funding in building safety repairs and safety upgrades, increased participation in safety training, increased building safety inspections and a new FTE workers compensation coordinator. This positive change in injury cases correlates with a 20% increase in safety training each year and a 500% increase in funded facility safety repairs. EH&S focused new training for high risk injury areas including heavy equipment operations, agricultural worker protection, animal and laboratory safety.

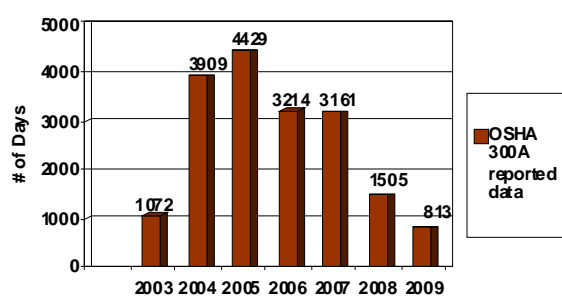
OSHA Recordable Worker Comp Cases – with lost or restricted time



Total Number of Days Away from Work (Lost Days)



Total Number of Days of Modified Duty (Work Restriction)



New FTE worker comp coordinator

NMSU Workers Comp Claims - actual cost

Calendar Year	# Claims Filed Per Risk Man *	WC Amount Paid during first year claims were opened *
2006	304	\$389,959
2007	249	\$449,731
2008	202	\$215,719
2009	196	\$375,011

* reported by State RM

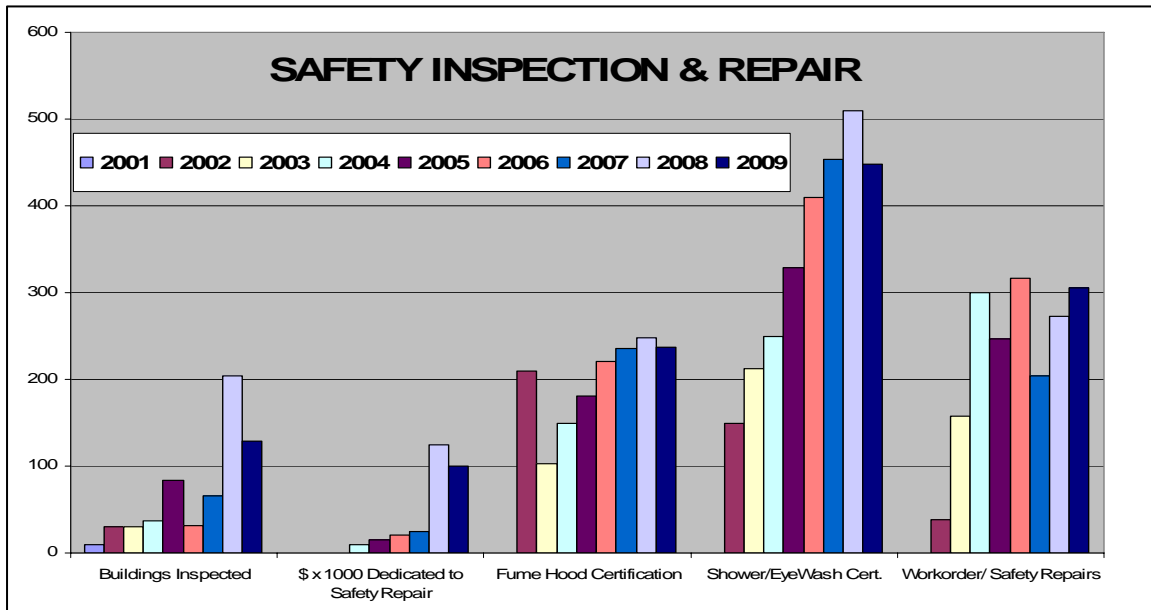
Ignoring the anomaly in 2008, there was a 33% decrease in lost days compared to previous four year average. The anomaly in 2008 was attributed to new FTE tracking data. The actual cost of worker’s compensation claims is higher than last year but less than the previous five years with the highest peak in 2005. The worker compensation insurance premiums are based on experience. Although new premiums are not yet available, last year 54% (\$2.2M) of the total risk management premium (\$4.1M) was based on workers compensation claims, so it is

important to maintain this constructive decrease in injury rate.

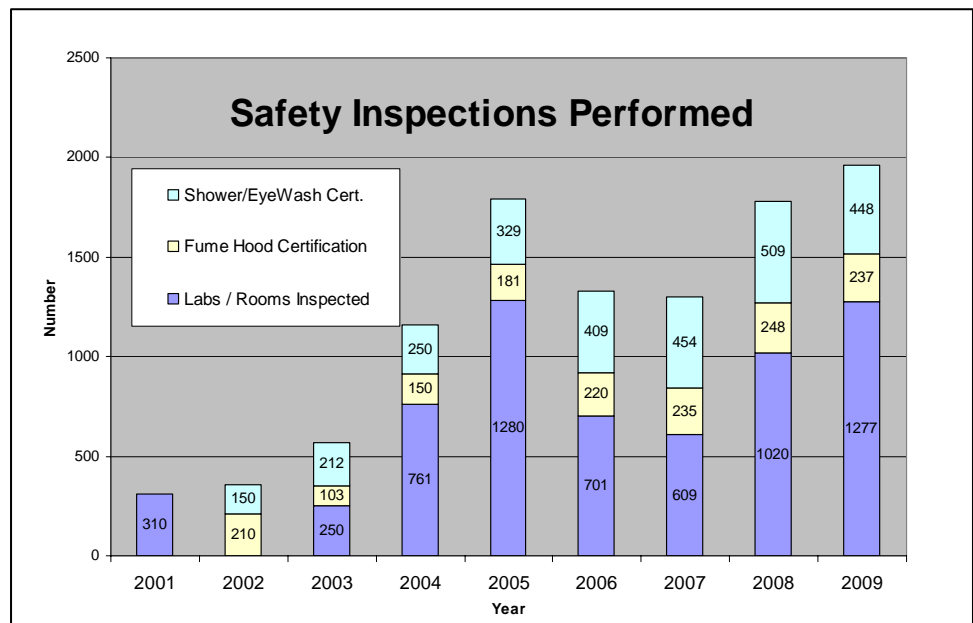
Loss Control Goal: Maintain low injury rate through training, inspections and timely facility repairs to improve workplace safety.

INSPECTIONS & SAFETY SERVICES

To minimize and reduce personnel losses from work related injury and illness EH&S provides NMSU with an aggressive, proactive loss control program. This is multi-approach safety surveillance of workers and workplace as well as after the fact injury investigation to prevent similar incidents. For 2009 the safety surveillance comprised of facility inspections; equipment certifications; activity and work site reviews; and incident/complaint responses increased by 9% over 2008.



In 2009 EH&S completed 1962 inspections, workplace checks, and investigations of campus buildings, public areas, shops, classrooms and research facilities, as well as remote farm facilities. As part of the inspection process EH&S invested nearly \$100,000 of BRR funding via 305 work orders and provided details to correct safety deficiencies, concerns and dangerous conditions at I&G facilities and other NMSU areas, respectively.

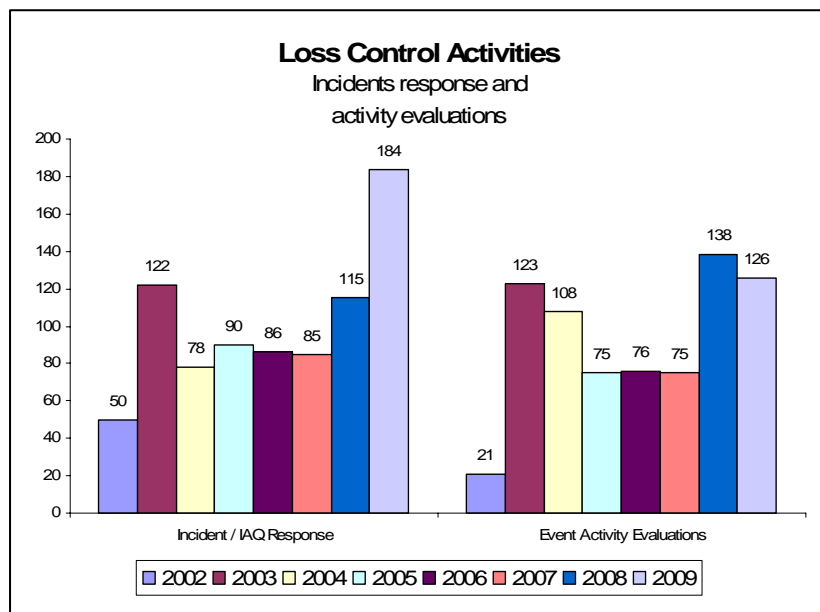


The number of room and detailed lab inspections completed in 2009 increased by approximately 20%

from last year. EH&S also completed 685 certification inspections on laboratory safety equipment, e.g. eyewashes, emergency showers and exhaust hoods as required by OSHA.

The annual inspections of Las Cruces campus's high hazard areas includes labs, shops, chemical storage areas, warehouse and plant operations, construction sites, mechanical rooms, machine use areas. The annual facility safety inspections are required by Worker's Compensation Administration and State Risk Management Loss Control Rule (effective 2008) and required by several OSHA regulations.

There were 184 responses to incidents primarily involving indoor air quality complaints and minor hazardous materials spills/incidents, a 38% increase with inclusion of mold and asbestos concerns. Event activity evaluations included 126 reviews of employee work activities, evaluation and authorization for non-routine campus events. The latter is done in conjunction with Campus Activities Office and Conferences Services.



Remote Area Inspections

All NMSU components and entities need safety services and the importance of routine safety inspections and training became a tragic reality just five years ago. The root cause of the worker fatality was determined to have a number of contributing factors, including need for routine safety training and workplace inspections. Steps were taken to provide training and inspection services to all 12 Ag Science Research Centers and farms; funding to support this effort was provided through an annual service contract with College of Agriculture.

As funding has been made available for past two years, EH&S staff provided significant support to remote campuses and all Agricultural Science Centers including on-site training and inspections. In 2009, experienced staff provided safety inspections of 11 ASC's and the facilities at Carlsbad, Grants, Alamogordo, and DACC campuses. The inspection reports for the Agricultural Science Centers include details on noted safety deficiencies with corrective actions and a summary prioritizing safety concerns for executive leadership.. Major deficiencies were immediately corrected or a closed while further response could be initiated.

Inspection Goals:

- Increase inspection budget as new square footage is added to the NMSU system
- Improve tracking and review of inspection reporting to ensure remote facilities receive report in timely fashion and that deficiencies are addressed
- Train additional inspector on NMSU facilities for future needs

ASBESTOS MANAGEMENT AND ABATEMENT

In 2009 EH&S continued asbestos management and abatement oversight, a responsible previously (until 2008) under Office of Facilities Services. As part of this new responsibility and in response to concerns about existing OFS work practices for cutting Transite pipe (brought to light by new Facility Services Assoc. VP), EH&S established a NMSU Asbestos Management Program. The program is to help ensure proper identification and management of asbestos containing materials in the older (pre-1981) NMSU buildings and in the automotive shops and classrooms. Asbestos abatement for minor building remodels and general maintenance is contracted out under EH&S project oversight and EH&S BRR funds for hazardous material disposal. As part of the new program development, training and handling requirements for the infrequent cutting of Transite pipe was provided to allow OFS to determine whether further Transite work would be handled in house or contracted.

EH&S has one dedicated employee and an alternate which are annually qualified as an asbestos inspectors. EH&S management responsibilities include providing immediate initial inspections, ensuring surveys and monitoring to assess potential environmental hazards and conducting Asbestos Awareness Training for campus personnel. EH&S continued in 2009 to provide NMSU departments with timely and professional response in regards to asbestos, mold and lead related issues. During the year EH&S completed 44 abatement projects, 13 of which required permitting through NESHAP. All asbestos abatement projects are performed and monitored by licensed contractors. Several mold assessments were also completed during this same period.

2009 Asbestos Abatements Projects
Total projects.....- 44
NESHAP filings13
Total duration70 days
Total volume 65.27 cu yds

In view of recent low attendance (8 persons in 2008, versus 100 persons in 2002), at the annual Asbestos training required for maintenance workers, EH&S increased the number of offered Asbestos training to four times a year (2 each time in English and Spanish) so 16 classes were offered in 2009. Supervisors were reminded several weeks in advance of the annual refresher training requirements. This training informs staff on potential locations and types of materials that may contain asbestos and the NMSU procedure for notification so that appropriate containment and abatement is performed by contractor prior to NMSU employee work in these areas. Specific maintenance involving class IV non-friable asbestos and those with documented negative exposure are allowed by trained NMSU employees. However, in 2009 only 5 classes were subscribed and 30 employees attended.

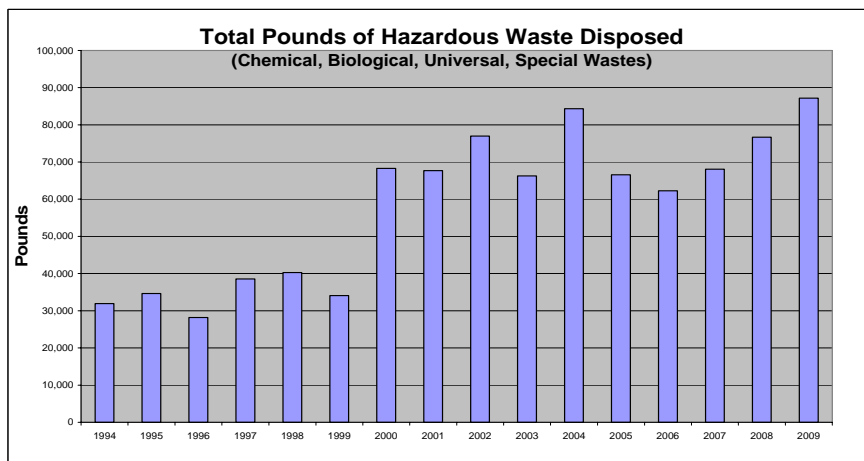
Asbestos Management Goals:

Implement the new Asbestos Management Program to include

- Surveying more building to determine location of asbestos
- Improving identification of known asbestos
- Keeping abreast of OFS activities to ensure all abatement work is handled by contractor
- Increase Asbestos Awareness refresher compliance rate by following the UNM model which has Facilities Service Management supporting safety classes and involves Supervisors in providing the required safety training

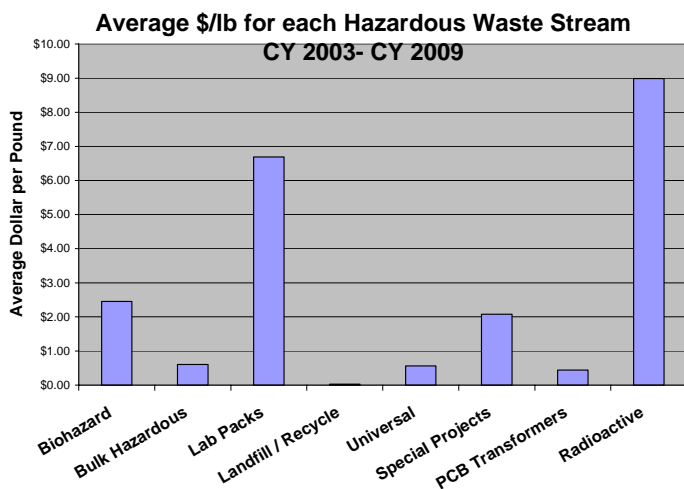
HAZARDOUS WASTE MANAGEMENT

The EH&S environmental compliance team picked up, researched, processed, and shipped 87,000 pounds of waste in 2009 compared to 72,000 pounds averaged over the previous five years. In addition, the team managed 3,800 different waste items compared to 2,700 items averaged over the previous five years. This year 560 of the items were new chemicals not previously picked up before for disposal on campus and thus required in depth analytical review of MSDSs/manufacturer's information to determine the safest, most cost effective disposal option. The new chemical items were then added to the "NMSU EH&S Chemical Dictionary." Entering new information into the chemical dictionary will ensure that whenever an item is picked up again in the future a simple legacy reference exists to show how to dispose of it.



There was a 14% increase in waste volume managed in 2009 compared to the previous year.

Most of the additional waste workload resulted from large chemical clean outs (greater than 50 chemical items at one time) from 19 different departments/labs: Overall, all hazardous waste items were disposed of legally and without any significant environmental health or safety incidents. There was a 12% increase in the number of items handled in 2009 compared to the previous year.



Physically opening chemicals and pouring/mixing compatible chemicals into 55-gallon drums (Bulk Hazardous Waste) keeps the cost per pound for disposal low. Mixing chemicals is risky however, and requires keen attention to detail. In cumulative, the 3.75 FTE team spent 80 hours in restrictive, encapsulating protective suits and respirators while mixing chemicals on 31 different days outside in all weather conditions. Overall, no significant adverse reactions occurred during mixing activities.

HazMat Response and Testing Unknowns

The team also responded to twelve emergency response calls for hazmat spills/incidents; the most significant involving mercury, dichlorophenylborane, and an oil fire. Emergency response calls require an immediate response and are often labor/time intensive in terms of set up/clean up, demobilization/disposal, and documentation. The team also picked up and internally analyzed 55 unknown chemicals. Unknown chemicals are potentially highly hazardous because no content information is available on them. Each has to be carefully opened and a variety of wet chemistry tests performed to determine probable contents and then a final disposal path. By performing select unknown analysis internally, NMSU saved \$1,500 in contractor fees.

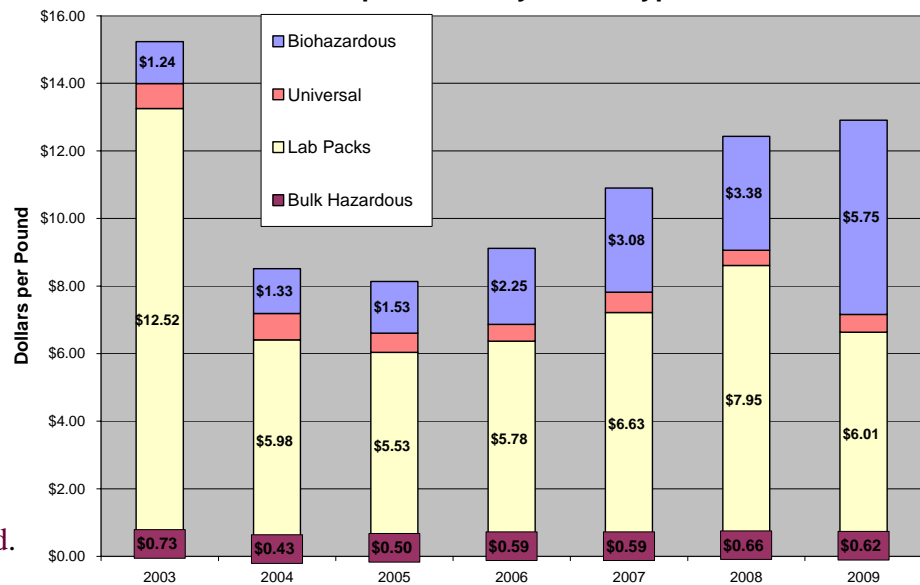
Cost Saving Measures

The team coordinates with nine different environmental services contractors: By using specialized contractors for different projects, we are often able to reduce disposal/regulatory costs by thousands of dollars. For example, by hiring a new contractor and recycling old refrigerants instead of disposing of them as hazardous waste NMSU was paid \$500 plus shipping expenses to obtain 700 pounds of our old refrigerants. This saved ~\$6,000, the price to dispose of the refrigerants as hazardous waste. However, coordinating with numerous contractors leads to additional problems with manifests, transportation, and billing. Five significant billing errors were identified totaling \$10,000 in wrong charges- and were successfully removed. Overall, NMSU's 87,000 pounds of hazardous waste was disposed of at a total cost of \$85,400. Chemical waste disposal costs managed by this team continue to be extremely low (about 10th percentile) as compared to 69 other research universities benchmarks reported by Campus Safety, Health & Environmental Management in 2008.

Another point of emphasis is the fact that since 2004, the average cost per pound for hazardous waste disposal has remained constant with one exception. The unit cost for biohazardous waste almost doubled this year and there are no alternate disposal vendors servicing the Las Cruces area. **The largest volume of waste is bulked or comingled resulting in the highest cost savings since the cost average is \$0.59 per pound.**

This is compared to lab packs which require less handling but the cost since 2004 has averaged \$6.30 per pound. Diligent contract negotiations in most waste streams has shown added value to keep costs contained.

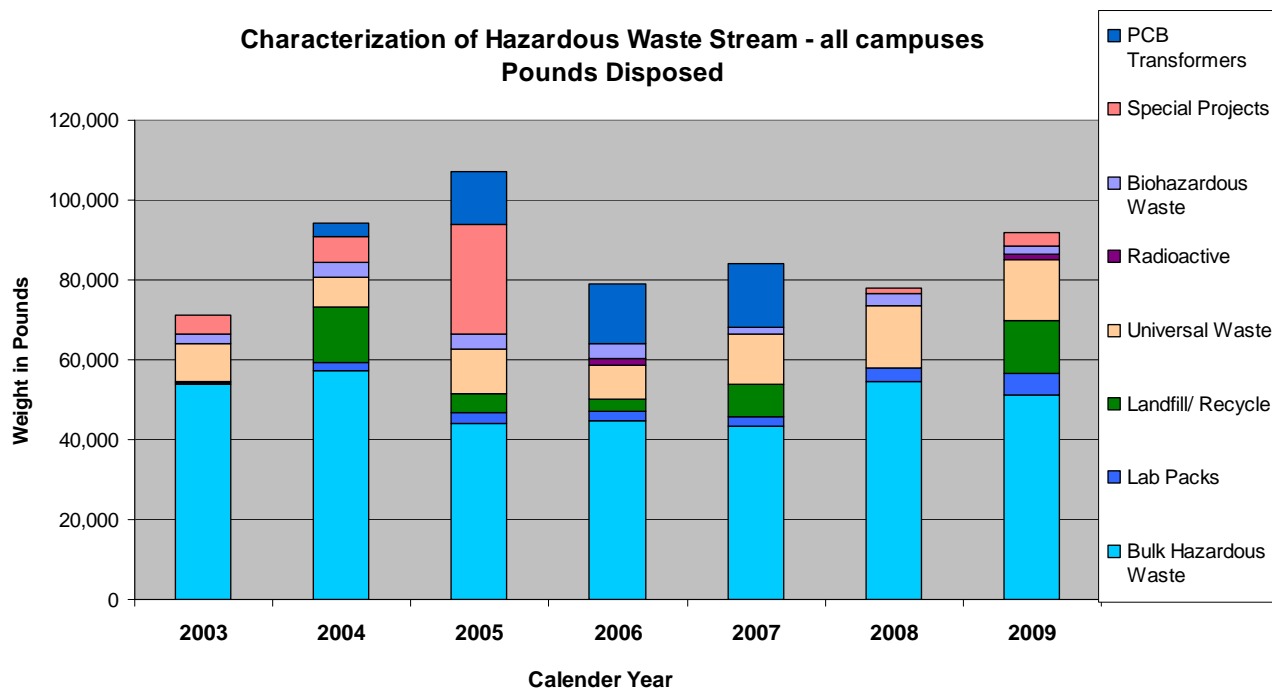
Cost per Pound by Waste Type



The team also aggressively tries to reduce the cost of empty containers, supplies, and equipment by obtaining multiple quotes from contractors and ordering in bulk. Overall in 2009, \$19,000 was spent on these items compared to \$23,000 in 2008.

Special waste projects include chemical removal from remote campuses/Ag Science Centers and main campus activities that are not routine. Overall, 3,500 pounds of special project hazardous waste was

disposed of at a total cost of \$15,000. The special disposal projects this year required close coordination with NMSU Carlsbad Community College, CEMRC, Gadsden DACC, Alamogordo, Grants, and LASYS Lab to remove their stockpiles of old chemicals dating back many years. Cost savings were found through negotiated special pricing (saved \$1,250) with the hazardous waste vendor and through return of useable compressed gas cylinder to manufacturer for reuse (\$600 saved in disposal fees).



Hazardous Waste Training

Formal education for faculty, staff, and students is an essential component of a successful waste management program. The team presented 53 formal, dynamic hazardous waste management briefings resulting in ~800 faculty, staff, and students learning proper waste management techniques. Training was offered through the Hazcom program, monthly three-hour hazardous waste management classes, and special refresher briefings in key departments. Written evaluations for the three-hour classes resulted in 94% “excellent” ratings- the highest available. Specific written remarks included: “Eye opening. I will change my ways at home & work to!” and “The stories help keep the course interesting and engaging.”

Hazardous Waste Reports & Inspections

Federally/State mandated reports completed and filed accurately and on time were: Tier II Chemical Inventory and Hazardous Waste Fees. The team also conducted 15 formal, in depth hazardous waste inspections at key labs/work areas throughout campus. These inspections help reinforce training, identify/solve unique waste disposal issues, prepare personnel for unannounced EPA/NMED inspections, and build positive work relationships between EH&S staff and outside departmental personnel. Also of note, Las Cruces City Wastewater Treatment Plant personnel conducted a formal, half-day inspection on campus of waste disposal operations focusing on the Chemistry Dept.- no significant negative findings were noted. A positive finding was EH&S’s waste training program, so much so that city personnel decided to attend our formal training classes and remarked, “Great class in the perspective of a pollution prevention inspector. Provides great info to staff.”

Hazardous Waste Goals:

- Maintain/improve our current chemical/biohazardous/universal waste pick up, research, processing, and shipping system to ensure we safely dispose of all NMSU hazardous waste in a legal and cost-effective manner.
- Educate generators on waste minimization to maintain or reduce hazardous waste volume, especially in regards to costly biohazardous waste generation/disposal.
- Continue to press the need for additional man power support as waste volumes and special projects continue to increase.

Hazardous Waste Concerns:

- As waste volumes/special projects increase, but man power remains the same, reduced services in other areas could lead to regulatory non-compliance primarily in paperwork requirements. As workload increases, staff are having to prioritize core functions based on direct risk to employee health/safety and air/water/land pollution prevention.

ENVIRONMENTAL MANAGEMENT FACILITY

EH&S continued to assist in the design and start of renovation operations to construct a new hazardous waste storage facility. The new facility will consolidate all NMSU hazardous waste (chemical, radiological, universal, biological) into one building for the first time. The facility will also enable the mixing of chemicals to be conducted indoors for the first time and thus out of inclement weather conditions by including a special chemical mixing room with custom built walk in fume hood. As with most major construction projects, numerous meetings, walk throughs, and special equipment research has been conducted to best ensure a safe and complete facility is fully operational by summer 2010.

TITLE V AIR PERMIT

On short notice, lead the detailed application process for the five year renewal of NMSU's Title V Air Permit for the first time. Closely coordinated with numerous groups- OFS Central Plant, OFS Paint Shop, OFS Engineering, OFS Administration, Agricultural Areas, DACC, Golf Course, and Trinity Consultants to ensure NMSU's 200+ page permit application was as accurate and complete as possible. Also included new language to try and streamline Central Plant Equipment Inspection Reports and remove equipment not owned by NMSU (for example General Dynamic Generators) from our inspection responsibility. Currently, the application is still under review by NMED.

The required eleven detailed air reports were completed and filed accurately and on time to NMED. These include the annual air report, two semi-annual air reports, air emissions inventory, turbine test protocol, turbine air emissions test results, air fees, generator location/operational log, new air SSM plan, turbine engine change-out notice, generator field citation response. These reports ensure we are documenting compliance with all environmental laws, collecting appropriate data, and identifying positive trends to build on or negative trends for correction to better protect health and the environment. The generator field citation response was the most complex and resulted after a full day inspection was conducted by the NMED Air Quality Bureau. NMED mandated increased monitoring requirements for campus generators in the future. These included now recording the hours of use for each of NMSU's 15 back up generators on a monthly basis thus better ensuring no generator is operated for over 500 hours in any rolling 12-month period of time. It is important to note that during the inspection no NMSU generator was found to have operated over 500 hours, but NMED still is requiring NMSU to increase generator inspection frequency. This is a good example of the strict environmental regulation interpretations EH&S often has to deal with.

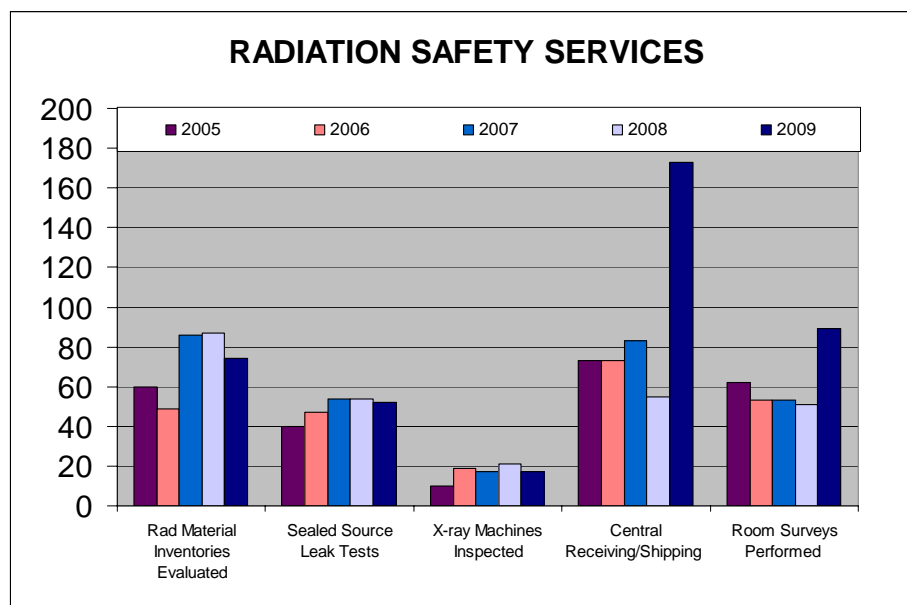
RADIATION SAFETY

The University holds two radioactive material (RAM) licenses and several x-ray certificates of registration (COR) issued by the New Mexico Environment Department Radiation Control Bureau. On main campus, use of radioactive materials is authorized under the terms and conditions of a Broad Scope Type AB Radioactive Materials License. A separate, facility-specific RAM license covers the Carlsbad Environmental Monitoring & Research Center (CEMRC). CEMRC is a small NMSU-owned research chemistry laboratory located near the Carlsbad Branch Campus. X-ray CORs are maintained for medical/dental x-ray machines located in the DACC Dental Clinic, Student Health Center and Athletics Department. Several analytical x-rays located in various departments on main campus and are covered under a blanket COR for main campus. A separate COR covers an x-ray diffraction machine located within the CEMRC facility.

The NMSU Radiation Safety Committee is comprised of 7 faculty and staff with expertise in various areas related to the safe use of radioactive materials and radiation producing devices. The primary function of the committee is to establish radiation safety policies for the university community and provide broad administrative oversight of the NMSU radiation safety program. On the Las Cruces campus, the staff working in radiation safety program includes a Radiation Safety Officer (RSO) who also serves as the Director of EH&S, a full-time assistant RSO and a half-time technician. The assistant RSO for main campus also serves as the primary RSO on the CEMRC specific RAM license and X-Ray COR. In addition, the CEMRC facility has one on-site employee who, in addition to other duties, provides the day to day radiation safety support for that facility. The employee works closely with the CEMRC RSO located in EH&S Las Cruces campus.

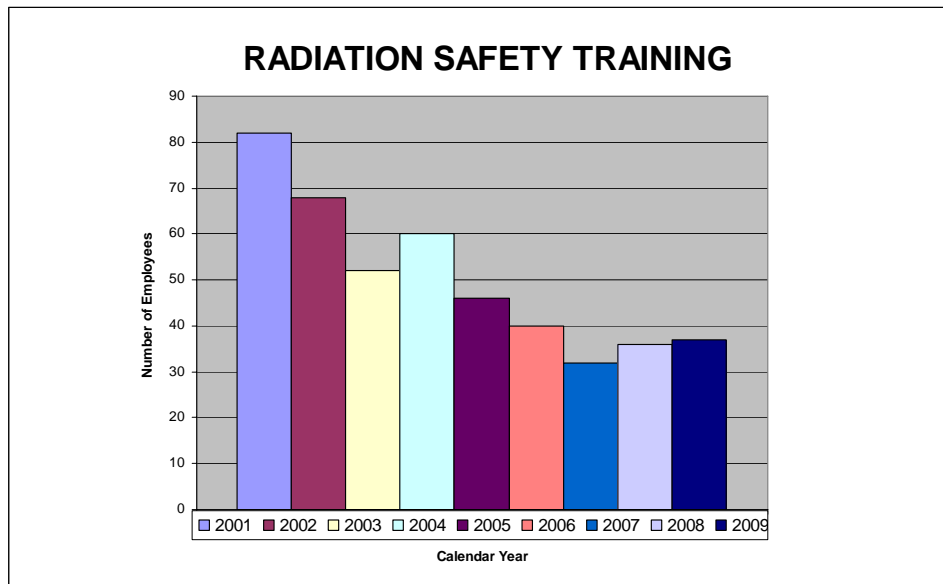
The day to day administrative and technical duties of running the program are performed by staff employed by NMSU EH&S. These responsibilities include, among other things, maintaining the RAM licenses and x-ray CORs, maintaining program legal records; serving as a liaison between the university and radiation regulatory agencies; providing an interface and point of contact between the NMSU RSC and NMSU faculty/staff using radioactive materials or devices; and identifying changes to federal and state radiation protection regulations that may affect the university. Other primary

responsibilities include providing user radiation safety training (monthly classes); maintaining a university-wide RAM inventory, ensuring semi-annual inventory review, management and disposal of radioactive waste along with annual inspections, semi-annual leak testing, central receiving and semi-annual contamination surveys (see graphs). In 2009, there was a significant increase in the number of radiation shipments and survey performed which is due to the addition of services performed at CEMRC.



performed which is due to the addition of services performed at CEMRC.

Radiation Safety training courses are offered by EH&S to provide specific safety training in the safe use of radioactive materials, x-ray devices and nuclear gauge uses. A new radiation safety refresher training requirement approved by the NMSU Radiation Safety Committee and included in the latest edition of the Radiation Safety Manual will likely result in a significant increase in the numbers of people taking radiation safety training over the next year.



On Las Cruces campus, approximately 900 lbs of radioactive waste was shipped off site January 2009 for \$8,000 which is \$8.88/lb compared to \$9.16/lb for 1880 lbs of radioactive waste shipped in 2006. Waste costs were minimized by incineration of dry lab waste, shipping exempt quantities for incineration and decaying waste which is processed on site and sent to landfill at no charge. In addition, in 2009 a total of 420 lbs of radioactive waste from the CEMRC facility was disposed of at a cost of \$8.44/lb. Radioactive waste has the highest cost per pound for disposal compared to all other hazardous waste streams generated by NMSU research and operations. However, the volume of radioactive waste has decreased because more of the waste is being decayed, surveyed to ensure no longer radioactive and disposed as regular landfill waste.

In 2009, there were two external audits performed by the NM Radiation Control Bureau (NMED) this year. One that covered NMSU X-Ray machines and the NMSU x-ray safety program at the Las Cruces campus and a second audit was conducted at CEMRC covering the radiation safety program and program compliance with the facility-specific radioactive materials license requirements and New Mexico radiation protection regulations. No deficiencies were noted in any of the inspection reports.

The broad-scope radioactive materials license for the Las Cruces campus issued by NMED was successfully renewed in 2009 with submission of an updated NMSU Radiation Safety Manual. Significant program changes were the addition of a new annual training requirement for all radiation users. In addition, 3 of the 4 NMED-issued X-Ray certificates of registration (COR) held by NMSU (main campus) were renewed in 2009.

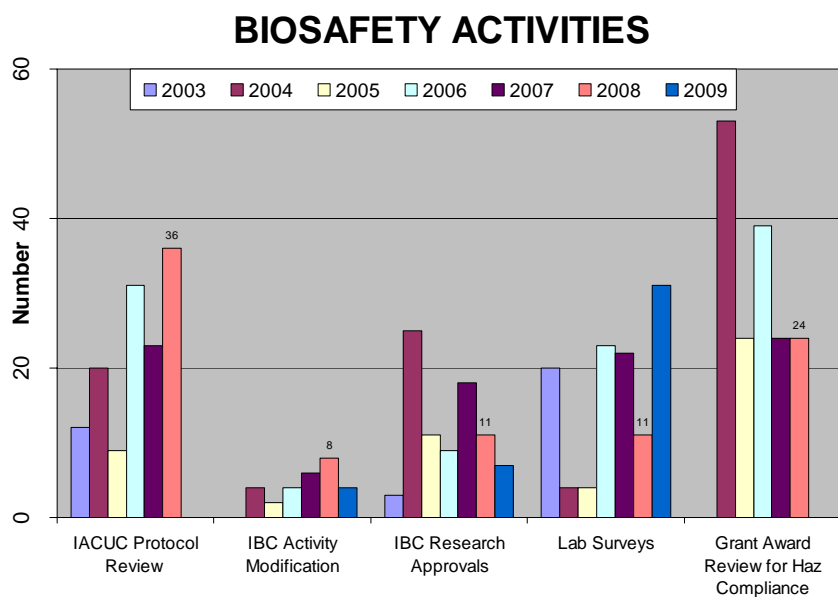
Radiation Safety Goals:

- Increase training participation through the new annual refresher training requirement
- Develop plan for new Laser Safety program and oversight
- Ship radioactive wastes for disposal

BIOSAFETY MANAGEMENT 2009

The Biological Safety program supports the EH&S mission by providing monthly trainings, and performing all administrative tasks related to program management including full support of the Institutional Biosafety Committee (IBC). Primary constituencies served are the College of Agricultural, Consumer and Environmental Sciences and the College of Arts and Sciences, including the grant funded BRIDGES program, the NM Innovative Biomedical Research (NM INBRE) program, and the Howard Hughes Medical Institute Scholars program. The biosafety officer consults on biosafety-related matters with academic and support departments – including the Biosafety Level 3 Laboratory Users Group, and providing training to faculty staff and students in Biosafety, Bloodborne Pathogens and Animal Worker Safety. The program provides a critical element in documenting the university's compliance with the NIH Office of Biotechnology Activities, CDC/Public Health Service, and United States Department of Agriculture (USDA) regulations and NMSU policy.

The biological safety program is staffed by one FTE responsible for administrative tasks, biosafety training, and participation in IBC and Institutional Animal Care and Use Committee (IACUC) support and oversight research at NMSU. The biosafety officer maintains records and communicates essential information in support of biomedical and agricultural laboratory-based research involving potentially pathogenic organisms, biological toxins, federal permits, and recombinant DNA.



Examples of records maintained include research protocols and applications, activity modification reports, laboratory surveys, and biological safety cabinet test reports. Other functions include ensuring compliance with annual bloodborne pathogen training and exposure control plan updates, submitting an annual report on the IBC to the National Institutes of Health.

The Biosafety Officer position was vacated Jan 2010 and a part time interim position was established to ensure continuity in research and critical biosafety protocol reviews, training and inspections.

Biosafety Level 3 Facility

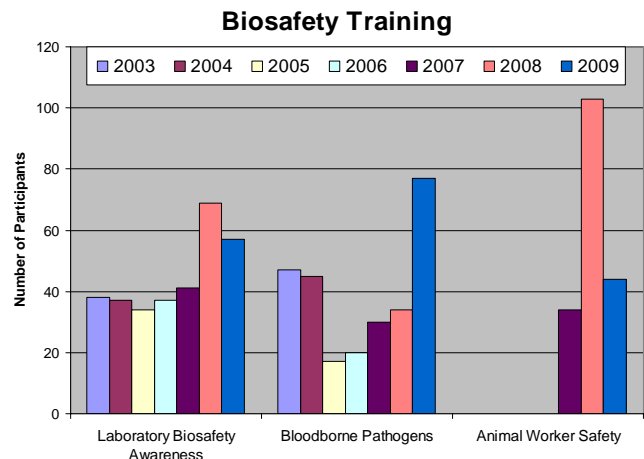
The BSL3 facility was certified two years ago and Biology faculty began using it for research project using Denge virus. Although there are still concerns with back up generator functioning, there are current grant requests for funds to increase the BSL3 capability for Molecular Biology research.

Biosafety Training

Personnel training requirements are based on the nature of the materials used in the respective teaching and research activities at NMSU. For example, persons working at the University Health Center, Police, Fire and Emergency Services based on their contact with patients or members of the public are

considered to have a routine potential for exposure to human blood, internal body fluids and “unfixed” tissue and therefore are required to attend annual training in bloodborne pathogen exposure control. Also included in this group are research personnel using human cell lines in a research laboratory and employees of the nursing and allied health programs. The number of individuals meeting this training requirement more than doubled this year. A new on-line BBP training was developed and released at the beginning of 2010, providing readily accessible training for NMSU system.

Persons working with potential plant or human pathogens at biosafety level 2 (BSL-2) are required to attend Laboratory Biosafety Awareness. Also, as of January 1, 2009 all personnel who work with vertebrate animals are required to enroll in the Occupational Health and Safety Program for animal workers which includes the Animal Worker Safety training. Over 181 participants have completed this new training. A streaming media link is now available for use at Agricultural Extension and Science Centers throughout the state. Completion of a health questionnaire, necessary immunizations and training are also required to work with animals at NMSU.



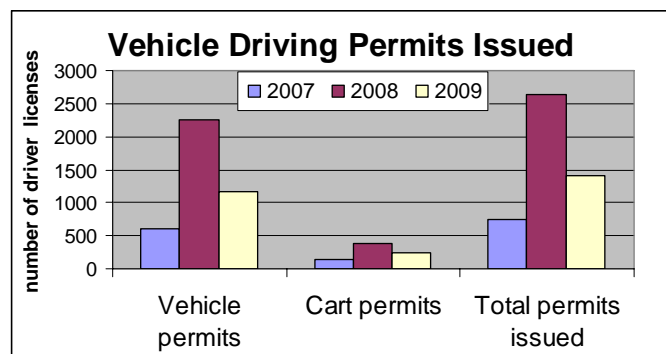
Each of these trainings fulfills the university’s obligation under 29 CFR 1910.1030, the OSHA Bloodborne Pathogen Standard, the CDC/NIH Public Health Service, and USDA regulations, respectively. Participant surveys indicate a high degree of satisfaction with the content and presentation.

Biosafety Goals:

- Improve compliance with OSHA Bloodborne Pathogen Standard throughout the NMSU system through new on-line training
- Continuity of core biosafety functions during interim Biosafety Manager position

PERIODIC DRIVER LICENSE VERIFICATION

In 2005, NMSU instituted a periodic driver license validation to review individuals authorized to drive university vehicles. Last year was the first three year renewal period and a total of 2251 vehicle driver’s licenses were validated in 2008 compared to 1173 validated in 2009. In addition, Utility Cart drivers now require a permit and license validation. In total, EH&S staff verified drivers licenses and issued 1407 new vehicle and utility cart permits this year. The total vehicle and cart permits issued in 2008 were almost 4 times that of previous years and this increase will be expected during the three year renewal period. As a result of these new permit requirements; the driver license validation frequency for employees driving NMSU vehicles has significantly increased compared to previous years.



EMERGENCY PREPAREDNESS

Since the events of 911, Environmental Health & Safety has coordinated Safety & Security Initiatives at the beginning of each Fall semester to keep awareness with departments and provide education of emergency planning for new employees and students. The events this year include:

- Distribution of written initiatives and annual update requirements for emergency planning
- Testing of Department Emergency Action Plans through unannounced fire drills
- Testing of the Emergency Notification tools & updating emergency contact lists
- Conducting tabletops with external regional participation and University units
- Special presentations on Continuity of Operations Planning (CoOP) and designation of Essential Personnel

During the summer of 2009, the Emergency Preparedness policy was revised to include required Continuity of Operations Planning (CoOP) and designation of Essential Personnel. This was especially timely with the H1N1 novel virus that crossed international borders during late spring 2009. The Communicable Disease Preparedness Committee provided leadership in the NMSU response to the expected pandemic. Special presentations on CoOP and NMSU's response to H1N1 preparedness were provided to the Colleges of Agriculture, Education, Arts & Sciences and the Administrative Council.

Other actions in the H1N1 response include:

- Intense coordination of NMSU CDPC advisory team and revision of Contagious Disease Response plan. Chair and support Communicable Disease Preparedness Committee.
- Establishment of hand sanitizers in large public venues.
- Public education and communication with students, academic departments and administration through community wide notices, meetings and presentations.
- Increase in personal protective equipment stocks and fit testing for respirator use in select areas including medical, fire, police and EH&S
- During the outbreak, community wide updates and weekly reporting to administration with numbers of influenza like illness
- Incorporation of education through academic programs becoming involved in vaccinations and surveys

Goal: Obtain support to fully implement Continuity of Operations Planning throughout the NMSU system and facilitate departmental planning and consolidation of information through use of electronic tools.