Internal Investigation into Health Physics Management Practices
Page 17
February 9, 1996
POEF-150-96-0088

John Bowdle (Interviewed February 1, 1996, @ 1400 hours, and again February 8, 1996, @ 1000 hours)

We initially spoke with John Bowdle to confirm the integrity of the Health Physics database. John stated that the database was not equipped with a modem, and that only Chris Kelley, Steve Lummer, and Linda Smith had access to the single password that serviced the database account. The possibility existed, of course, that the password had been shared with other Health Physics personnel, possibly including Mike Smith himself. To preclude the possibility of compromise, I entered a unique password, known only to myself and to Security Section Manager Emery Smith, into the database, and shut down the system until the investigation was complete. This action was authorized by Sandra Fout, and is scheduled to be reactivated on Friday, February 9, 1996.

John Bowdle described the Health Physics database as being "corrupt." It was unreliable due to such acts as the previously mentioned bar code scanning of a defective, unassigned TLD card (affixed to the wall of the dosimetry laboratory) to replace the bar code scanning of an unreadable TLD. Although John had worked on the system on a number of occasions, its validity remained in question.

Chris Kelley (Interviewed February 1, 1996; @ 1500 hours, February 2, 1996, @ 0830 hours, and February 13, 1996 @ 1215 hours)

Chris Kelley became employed on site on February 17, 1992. I was one of her original interviewers, and, from that interview forth, have observed her to be a very highly-strung, emotional individual.

At more than one point during the interview, Chris stated that this current situation has been extremely troubling for her; to the point that, on one occasion, she felt winter state. She had consoled herself with the thought that the same will be myself over."

Chris had difficulty with assigning dates to events during the course of this interview. As a result, some variance in dates may thus be apparent.

Chris became pregnant approximately February, 1993. One month later, she was removed from the field, and assigned to the X-1000 Air Laboratory. Upon the birth of her child, Chris was transferred to the dosimeter laboratory by Mike Smith. She received no instructions from Mike regarding this assignment beyond, "relax,

Internal Investigation into Health Physics Management Practices Page 18 February 9, 1996 POEF-150-96-0088

read a book, don't worry about it." When she asked for training to use the Health Physics database, Mike declined.

By Chris's account, Mike did not especially like the dosimetry laboratory. He viewed it as being "prehistoric," and was very rarely ever there. Due to this absence, laboratory employees did virtually as they wished.

Problems resulted from this policy of self-direction. A large backlog of TLDs had built up over time, which caused TLD cards (contained within the TLDs) to be "read" out-of-sequence. This compromised the integrity of the database, and caused problems in "reading" other TLDs. This problem was said to have been "remedied" by former Health Physics Technician Lorrie Graham who obtained readings by holding the TLD bar code scanner to TLD cards affixed to a wall of the laboratory. Attempts to reduce the backlog of TLDs also resulted in such practices as "short-cycling" (failure to verify the entry of TLD information). This practice can result in employee TLD information never being entered into the database at all. "Lorrie corrupted the database," stated Chris.

When confronted with these problems, Chris contacted her friend, Linda Smith, who worked on the second floor of the X-1000 Facility. Linda agreed that these practices were wrong, and, upon being assigned as Acting Supervisor of the laboratory during the Summer of 1994, removed the TLD cards from the wall. She also took other measures to restore the integrity of the database. Linda continued in that position until August, 1994, when Rick Dively was appointed laboratory supervisor.

On September 8, 1994, Mike approached Linda, and directed her to change a dosimetry reading received by Jeffery Walburn during 1990, 1993, and 1994 (Chris was nearby). Earlier that year, Jeffery had been working in the X-326 MAA, when an incident had occurred that caused him to complain of a burning in his lungs. At 26 millirem, the reading was inconsequential, but Mike wanted it altered to zero. Linda asked, "Why?" Mike replied, "This is for a court case. Zeros are easier to read." Linda complied with the directive, and prepared a "TLD Corrections" form detailing the change.

Sometime later, Chris and Linda checked the database, and found that Jeffery's dosimetry reading had been changed back to 26 millirem from zero. They were unable to determine who had affected the change.

Linda Smith had a pending lawsuit against the company, due to her not receiving a promotion. On November 22, 1994 (Chris believed

Internal Investigation into Health Physics Management Practices Page 19
February 9, 1996
POEF-150-96-0088

that date to be correct), the lawsuit required depositions to be taken from members of Health Physics supervision. Chris believed that Clyde Dulin, Mike Smith, and Gary Medukas gave depositions; there were others whose names Chris was unaware of.

Ar audit associated with the NVLAP external dosimetry authorization for the 8800 Series TLD Reader took place during May, 1995. To prepare for the audit, Mike Smith conducted performance-based training with her during April, 1995, covering the following topics:

### April 5, 1995

Model 8800 TLD Reader: Glow Curve Evaluation EDT01.02.05, PEC

### April 6, 1995

- External Dosimetry Program and Requirements EDT01.01.01, CLASSROOM
- Model 8800 TLD Reader: TLD Irradiations EDT01.02.02, PEC
- Calibrate Model 8800 TLD Reader EDT01.02.03, PEC

This training had been in the form of Performance Evaluation Checklists (PECs) and classroom instruction, with no "hands-on" instruction involved. When the auditor, Jan Cussimano, arrived, Mike Smith directed his employees to briefly introduce themselves, and "disappear". Both employees complied with the directive. Chris was later listed by the auditor as being "fully trained and qualified to process dosimeters." Chris had not given such information to the auditor, and, at that time, it would have been untrue, in her eyes, as she had not received any "hands-on" training.

Mike later said that he was amazed that his group had passed the audit. He then instructed Chris and Linda to file away all dosimetry records for the time period before July 1995, as "we're going to be accountable for July 1995 to the present."

Jeff Cunningham went on vacation toward the end of September 1995. Although he had told Mike Smith that all of his work was on line, Chris found that none of the TLD cards had been prepared for the issuance of the new badges on the NVLAP system change-out, scheduled for October 1, 1995. As of this time, neither Linda nor

Internal Investigation into Health Physics Management Practices
Page 20
February 9, 1996
POEF-150-96-0088

Chris had been trained on the TLD issuance process, so they consulted the TLD manuals for several days to prepare the cards. They worked overtime on Saturday, September 29, 1995, and on Sunday, September 30, 1995, preparing the cards. During that time, Mike Smith brought completed certificates of authorization to Linda and Chris for the NVLAP external dosimetry authorization for the 8800 Series TLD Reader. "Sign these," he said. Once they signed the certificates, Mike said, "Now you're legal." Neither employee felt that she had received the necessary training for the system, and training was not completed until the end of the year (Mike Smith stated that there was no procedural requirement for the certificates, and that he had only given them to Chris and Linda to get them "on line").

Mike Smith claimed large amounts of overtime. During Saturday, September 30, 1995, Mike had been working overtime with Linda and Kelley. Chris arrived late, and found Linda and Mike already there. They all departed together that afternoon. During the day, Mike departed plantsite to attend a class at the Chillicothe branch of Ohio University. He returned five hours later. During the following week, Chris was in Mike's office, when she observed his completed time sheet, reflecting 13 hours overtime for the previous Saturday. None of the time spent at the university had been deducted from the overtime claim (Ron Wetherell later verified that Mike's hourly claim for that day had been 13.5 hours overtime).

On Sunday, October 1, 1995, Linda and Chris were again working preparing the new TLD cards. They had been working 16 hours, when Shift Superintendent Marty Redden, B/59059, stopped by, and sent them home as being "unfit for duty." Later that day, Mike Smith and Jeff Cunningham were called in, and had to "spend the night" completing the job. It took until Thursday, October 4, 1995, however, until "everything wasn't chaos."

Although these incidents represented serious problems to Chris, she was also depressed by the treatment she received from Mike Smith as her supervisor. Mike was good friends with Jeff Cunningham, and allowed Jeff to work large amounts of unsupervised overtime. Chris stated that she had observed Jeff — on overtime — sitting in the X-1000 Facility, reading motorcycle magazines. In comparison, she rarely received overtime opportunities.

In frustration, Chris contacted Equal Employment Opportunity Associate Sally Cunningham, B/58612, to voice her reaction to these incidents. Nothing ever happened.

Recently, Chris heard rumors that she was to be reassigned to the field from the laboratory. Not wishing to return to the field, she

---

March 2 3 1

Internal Investigation into Health Physics Management Practices Page 21 February 9, 1996 POEF-150-96-0088

met with Ron Smith on Friday, January 26, 1996, regarding the rumor. In response, Ron assured her that she was to remain in the laboratory. On the following Monday, January 29, 1996, however, Kelley was assigned to the field by Mike Smith. Documentation verifying the reassignment was dated January 10, 1996. When confronted with the contradiction, Ron replied that, during their conversation of the previous Friday, Chris had expressed no preference in job assignments, and had thus been reassigned.

Linda Smith (Interviewed February 2, 1996, @ 0940 hours, and February 13, 1996, @ 1300 hours)

Linda had originally worked in the dosimetry laboratory with Tom Maggard during the early 1990s. When Tom retired during the Spring of 1993, Health Physics Technician Betsy Irwin and Lorrie Graham were assigned work with Linda.

Linda was directed by supervision to teach Lorrie the process of TLD reading and preparation. Lorrie had problems with Linda, and, to reconcile those problems, Linda was transferred to other duties; Lorrie remaining in the laboratory. During the Spring of 1994, however, Chris began to tell Linda of improper practices going on in the laboratory. The problems revolved about Lorrie's practice of "reading" TLD cards affixed to the dosimetry laboratory wall. Linda investigated, and found about 20 TLD cards affixed to the wall. She removed the badges, and advised Mike Smith of the problem. Nothing was ever done.

In addition, Lorrie was not recording the required calibrations to the TLD recording system; calibrations that might have to be performed several times per day. When these calibration fell drastically behind, Lorrie took an entire day writing calibration sheets to catch up. She also was not recording the badges that she was preparing.

During April, 1994, Linda was reassigned as line supervisor to the laboratory. Upon evaluating the laboratory technicians work practices, Linda instructed them of the requirements to operate the machinery (wearing gloves, etc.). Lorrie did not like those requirements, and, during the Spring of 1995, bid to a new job, leaving the laboratory.

Upon Lorrie's departure, the TLDs had a backlog of 18 days. Stacks of unresolved Investigation/Situation Reports -- approximately 200 -- were found, dating from 1992 and 1993. The TLD computer program was also badly corrupted.

Internal Investigation into Health Physics Management Practices Page 22 February 9, 1996 POEF-150-96-0088

Linda took a stack of the unresolved reports to Mike Smith for direction. "There goes my aneurism," Mike said. "I'll take care of them." Mike then placed them under his desk, where they remained for several months, until he directed Linda and Kelley to work on them.

To bring some order into dosimetry laboratory operations, Rick Dively was assigned to supervise the laboratory. "It was a nightmare," said Linda. "It really was." Rick developed specific job assignments for the laboratory employees, and instituted a program of log-keeping (this log-keeping was terminated by Mike Smith in September 1995). John Bowdle was brought in to assist in the rectification of the corrupted computer program. Linda found it difficult to seek assistance with these problems, due to Mike Smith's aversion to seeking outside assistance. His motto was, "keep our job in our lab. If we had problems, come to him, not to discuss it with Gary (Medukas) or Mark (Granus)."

On September 8, 1994, Linda was processing TLD cards in the X-1000 Dosimetry Laboratory, when Mike walked in (Chris was nearby). "Kiddo, I need you to do something," he said. "I need corrections sent in on this." Mike then handed her a sheet of paper. "It's for a court case. It's easier to explain zero than it is 26 (shallow)/26 (deep)." Mike went on to say that he had a meeting with Clyde Dulin and Gary Medukas, and they had jointly decided that the change was necessary (Neither Clyde nor Gary have any recollection of having attended such a meeting. Mike stated that if he had directed such a change, a meeting of this type would have been unnecessary). He had a list of TLD readings (for Guard Force Officer Jeffery Walburn) by date, and advised Linda of the dates -four in all -- on which he wanted readings changed (Mike was responsible for computing these changes). The first reading was to be changed from 23 shallow/26 deep to 26 shallow/26 deep, and the three subsequent readings were to be changed from 26 shallow/26 deep to 0 shallow/0 deep. These changes would have to be placed onto a correction sheet by Linda to enter them into the system. As Linda prepared the "TLD Corrections" form, Chris asked her what the issue was. "Chris," Linda said, "he asked me to do this for a court case." To document the incident, Linda photocopied the form, and retained the copy. She then -- as directed by Mike -- handcarried the sheet to the X-112 facility to have the information entered into the database. "Clyde Dulin was supposed to have called to make this a rush job, " Linda advised the clerk. "Yeah, I know, the clerk replied. When the job was completed, personnel from the X-112 Facility advised Linda by telephone. Linda then returned to the X-112 Facility, picked up the sheet, and a confirmatory print-out, and delivered them to Mike Smith.

Internal Investigation into Health Physics Management Practices Page 23
February 9, 1996
POEF-150-96-0088

Although Linda had been directed to change information on numerous occasions to reflect an estimated reading, she had never been directed to do so for a court case.

Later, when Linda took legal action to gain a promotion, Attorney Larry Zangrelli took depositions from Clyde Dulin, Mike Smith, and Ed Wagner. Under questioning, Clyde denied knowledge of the "bucket dose." Mike was shown the "TLD Corrections" form of September 8, 1994, and asked, "Did you ever require her to change a dose?" "To the best of my knowledge," replied Mike, "No." To prove that she had been so instructed, Linda subsequently checked the database for Jeffery Walburn's information. Upon checking, she observed that the dosage rates had been changed back to the previous readings. The change should have come through Linda, and it never had. Linda had no idea how it might have been changed.

Jeff Cunningham went on vacation during the latter part of September 1995. Prior to departing, he had advised Mike that his job duties, which included preparing TLD cards for the NVLAP system changeout scheduled for October 1, 1995, were up to date.

Later, when Linda and Chris (under Mike's direction) checked the status of the TLD cards, they found that they were short by about 1400 cards. In response, Mike directed them to "get on the machine (the NVLAP external dosimetry authorization for the 8800 Series TLD Reader) and start doing the annealing." Neither Linda nor Chris were trained on the reader, and neither had a password for the program. Mike then entered the system with his password, and instructed them how to load the machine. The bar code labeler wasn't working, so the labels had to be cut out by hand. Rob Litten was also helping them to work on the machine.

During the weekend of Saturday and Sunday, September 30 -- October 1, 1995, both Linda and Chris worked overtime to complete the new badge changeout. Mike Smith was also working overtime that day. They all arrived at 0200 hours. Between 0700 and 0730 hours, Mike departed plantsite to the Chillicothe branch of Ohio University to take a class. He returned between 1230 and 1300 hours. They all eventually departed plantsite together at approximately 1530 hours. During the following week, Linda observed Mike's time sheet, and noted that he had claimed "I think it was 17 1/2 hours," (Ron Wetherell later verified that Mike's hourly claim for that day had been 13.5 hours overtime).

Early the following week, Mike gave certificates of authorization to Linda and Chris to operate the reader. "Oh, gee, I'm certified to run the reader. After three days, now I'm certified." "Yeah," replied Mike, "you're now certified." In comparison, it had taken

Internal Investigation into Health Physics Management Practices Page 24
February 9, 1996
POEF-150-96-0088

Linda six months to become certified on the DOELAP machine. Linda did not receive the training for the NVLAP system until the end of the year.

Linda feels that the database is now as correct as it can be. Residual problems remain, however.

Rick Dively (Interviewed February 2, 1996, @ 1230 hours)

Dively stated that during August 1994, he was placed in charge of the dosimetry laboratory. "Mike was tied up getting the NVLAP certification," said Rick, so he (Rick) was directed to supervise the laboratory. The TLD database was set up to run on a particular sequence, and that sequence, due to the "massive amount of temporaries we were receiving," was not being adhered to. There were simply too many TLDs being utilized. The laboratory personnel were placed onto a work schedule, and assigned specific duties. Steve Lummer was assigned to complete the paperwork regarding the temporary TLDs, Linda Smith to "read" the TLD cards, with Chris Kelley backing Linda up. "Linda knew it (the system) from A to Z," said Dively.

Rick stated that he had heard that TLD badge bar codes had, at one time, been affixed to the wall of the dosimetry laboratory, and utilized for auxiliary bar code reading. It had never occurred during his term of supervision there, and he would not have tolerated such a practice. Rick added that, if such a practice had occurred, it could have caused inaccuracies in the TLD database.

John Bowdle was tasked to refine the computer program; "put patches in place to keep it (the system) running," said Rick. "That system was on its way out."

Rick stated that, at times, dosage rates on the TLD database had to be altered to reflect estimated dosage. Dosage disparities could be observed through an analysis of the glow curves on the TLD card. When a faulty glow curve was observed, documentation of the incident would be delivered to Mike Smith. Mike would review the documentation, determine an estimated dosage, and send the information to Linda Smith or Chris Kelley. Linda or Chris would then prepare correction sheets for submission to the X-112 Computer Facility. At the X-112 Facility, the actual changes to the TLD database would be affected. Such paperwork would be sent to the X-112 Facility on a quarterly basis, and primarily concerned temporary TLDs.