

Case Study #1

Small Chemical Packaging Company

This small business case study company is involved with toner cartridge recycling and chemical packaging for high school labs and other customers. Production depends on the number of customer orders so; the total number of employees varies from 30 to 50 to meet demand. They utilize temporary workers, in addition to regular full-time employees, during busy times. Some of the temps stay for as little as one day, so making sure they have received the necessary safety training is an on-going issue.

Grant Work:

An initial gap analysis was completed and revealed several areas of the health & safety management system in need of improvement. The first area we worked on was training. Annual DOT training, forklift training, chemical awareness, and emergency evacuation drills were done; but employee training on hazard communication and proper use of personal protective equipment (PPE) were not documented. Basic safety rules are explained to employees in new hire informational materials, but no formal training is given to new hires. As with many small businesses, most instruction and training is done hands-on by a supervisor when employees are first assigned to a job. Each day, supervisors review the work orders and tell workers what specific PPE they need for each task. That's fine, but the training also needs to be documented and a system established to ensure that all employees are trained before beginning work. This is where they have most problems. A staffing agency provides temporary workers; some for as little as one day. How do they make sure every worker gets trained if they don't stay more than a few days? We discussed some ideas with the owners and they are currently working on a system ensure training of all employees. Most likely they will use an outline that covers each area of safety training for a supervisor to explain and for employees to sign off on. Training will still be done hands-on as they get trained on their job tasks, but it will include safety elements as well. For emergency action plans, we suggested that they walk the new employee through the evacuation process on their first day. The goal was to come up with simple ways to fulfill training requirements that don't require extra time or staff. Management expressed a need for inexpensive outside training that may be available for small businesses. They had previously tried to set up training through BOCES (an educational facility) but were unsuccessful. Cost of training continues to be a concern.

The majority of time spent on this company was related to industrial hygiene. During the three site inspections performed by RIT assistants, suspected issues with noise levels and ventilation were noted. No baseline exposure testing had been done. Ear plugs were available to employees, but use was not required by the company. One process, in particular, produced a lot of noise yet had never been monitored to determine employee's noise exposure levels. The company owners expressed an interest in noise testing, but didn't know how to go about getting it done. Fortunately, students in an RIT Executive Leader Industrial Hygiene class were able to use this workplace to do sampling as part of a class project. It turned out to be a mutually beneficial arrangement as students got a

chance to practice their technical skills in a real industrial setting, and the company only had to pay for the lab fees. The equipment, labor, and analysis of results were done for free by RIT students under adjunct professor Dan Newfang, CIH/CSP. Noise sampling, ventilation testing, and area dust samples were collected to determine employee exposure levels. A complete report and analysis of findings was presented to the company by the RIT class. It included a full site compliance inspection and suggestions for improving safety. Currently, the company is working on completing a noise map and marking areas where hearing protection will be required at all times. Management is also establishing a way to make sure employees are using hearing protection. This will likely be done through daily checks by first line supervisors and a system for enforcement is being created. A hearing conservation program was developed for the company and the adequacy of ear plugs checked.

Ventilation was also an issue as some of the custom made hoods were tested and found to be inadequate. Several of the fans were turned off while employees were working because they interfered with weight measurements. Suggestions were made to: reduce the size of the openings with Plexiglas panels to increase airflow, establish a preventative maintenance program, and install side shields to reduce interference with measurements.

RIT assistants also created a site specific written Respiratory Protection Program for the company. Respirators were found hanging at some work stations, but no employees had been fit tested or trained on proper use. Again the problem arose of how to train temporary workers. We advised management to make arrangements with the staffing agency to ensure their temporary workers will have been trained and fit tested by the temp agency. Then, all the company has to do is make sure the temp workers know when they need to wear their respirators in the workplace. All respirators were inspected and any loose fitting face pieces were replaced.

At the company's request, information was provided on emergency eyewash requirements including location, maintenance, and OSHA standards. We also gave them guidance on safety committees, and how to determine whether or not an incident is considered an OSHA recordable accident. Currently, the owners are working to create a company safety policy and goals to achieve. They have improved their training documentation and are continuing to address issues with temporary workers. There are also plans to resume monthly safety meetings.

Follow up:

After a follow up gap analysis and a visit with the owner of the company it was evident that this company is in very good shape. The company has taken to heart the training that we have provided them. The part of the training that has been used the most comes from module 6 of the training "Connecting the System and Functionality, the portion of safety committee. The owner of the company stated that the company is "much more aware, but more importantly we have a "structured, disciplined awareness" through our safety committee". The company now has a full blown safety committee. The committee meets on a monthly basis and through the safety committee the company is taking the employees on hazard recognition, re-delegating and the most important use of the safety

committee getting the employees more involved in safety matters. The goal of management through the use of the safety committees is to bring the employees to a point with ownership involvement and knowledge where the management can start to take a step aside and let the employees take a greater role in the safety process of the company.

The company presents some very good leading and lagging indicators, the safety committees give a great example of the leading indicators, the way they are being run, scheduled and the attitude toward them show a very positive track that can be followed, as a portion of the assistance phase a list of safety concerns was developed, majority of those issues have been addressed and taken care of, the issues that have not been addressed are scheduled for correction.

The lagging indicators also address a positive trend, as addressed in the above paragraph the list of issues have been addressed, showing a positive trend of preventative maintenance. Another positive lagging indicator is that the company has not had an incident since last August, looking back beyond that they have an average of 1 to 2 incidents per year and the company says there is not trend (which was addressed in the training)

As a whole this company has taken to the training that was provided. They were already eager to learn about safety and health management initially, the company has just grown their interest in providing a safe and health working environment; They have pursued several other consulting services and has performed research into issued that they discovered and were brought up to them.