

Safety & Health Management System Assessment

Chugach Electric Association



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Report Date: June 2009

Executive Summary

Chugach Electric Association (Chugach) commissioned Beacon Occupational Health and Safety Services to perform an assessment of the safety management system. The assessment compares existing efforts with recognized good practices for managing the safety efforts of the organization. The assessment is not an inspection or compliance audit.

An effective Safety Management System addresses the identification and elimination, isolation, and protection against workplace hazards. This appraisal follows established OSHA guidelines for assessing Safety Management Systems. In this report, "Safety" refers to the prevention of loss to people, property, process, or the environment.

Beacon reviewed documentation including the Corporate Safety Policy Manual, safety handbook, and other policies and procedures addressing safety as well as nine years of employee injury and illness history. This was done in order to identify trends and to evaluate the incident reporting and investigation process. Beacon followed the OSHA VPP guidelines while performing this assessment.

Beacon next interviewed top management and board members, line management, and employees utilizing separate, standardized questionnaires for each group. Responses are confidential and were summarized for inclusion in this report. The responses provide an indication of the perception of the individual's roles and responsibilities for safety within the organization and of the organizational support for safety.

Lastly, Beacon performed a physical survey of most of the permanent work locations and representative work sites. Physical conditions were reviewed and employees were asked questions regarding their safety protection, responsibilities, knowledge, and company involvement. Observations of substandard conditions and practices as well as exemplary conditions and practices made during the surveys are included in this report.

Safety regarding the critical systems at Chugach is being handled well. There appear to be good engineering design processes in place. Work involving interaction with the generation, transmission, and distribution systems has not resulted in any significant injuries over the past nine years. Injuries at Chugach have been primarily due to unsafe behaviors of employees (either conscious or unconscious). In order to reduce unsafe behaviors, safe behaviors should be identified and reinforced. Employees should be held accountable for safe behaviors and supervisors should be held accountable for encouraging safe behaviors and disciplining unsafe behaviors.

Conclusions from the analysis of 9 years of incident data:

The total incident rate has been trending down slightly since 2001 and is currently at about 15 incidents per 100 workers. The National Safety Council Average OSHA Total Recordable Incidence Rate for Utilities in 2007 (the most current data) is 4.0 compared with Chugach's Total Recordable Incidence Rate of 8.02 for 2007; more than double. Chugach's workers compensation experience modification factor has been greater than the average for similar organizations over the past six years but is 20% better than the average for the current policy period. This factor takes into account the number and cost of workers compensation claims filed over a three year period lagging one year. One explanation for the difference in the rates is that there have been a significant number of relatively minor injuries that have turned into OSHA Recordable Incidents. This amounts to a high frequency and low severity situation.

Historically at Chugach, a knee injury on average will require 20+ days away from work and 10+ restricted days once release to work. Lower Back injuries on average require 45+ days away from work and 7 days restricted duty. Case management is an important process in getting employees returned to work sooner. This will lower costs related to lost productivity and related soft costs. Having an Early Return to Work policy also supports the rehabilitation of injured individuals into the work place and then getting them released back to full duty.

Falls and Slip/Falls have been the highest frequency of incident. Strains and struck against/by were the next most frequent injury causes. These three causes are responsible for over 70% of the injury producing incidents over the last nine years. These causes should be targeted for injury prevention initiatives.

79.5% of injuries occurred to employees 40 – 58 years of age at the time of injury. However, 68% of the current work force falls into this age group. 56% of injuries occurred to employees 47 – 57 years of age at the time of injury. 51% of the current work force falls into the 47 – 57 year age group. There is a correlation between age and injury experience. Workplace wellness and pre job stretching efforts could reduce the frequency of soft tissue injuries, especially in a senior work force like Chugach's.

Chugach requests that all injury or incidents are reported within 24 hours. The current average is 5 days after the incident has occurred. Only 60% of all reporting is completed within the first 24 hours. 4% of all reporting takes longer than 30 days. Late reporting makes effective injury case management much more difficult.

Repeat injuries are a chronic condition. When an individual has been injured once at Chugach, they are twice as likely to get injured again compared to an individual who has never experienced a work related injury.

- 61% of incidents come from 30% of the *employee with work related injury or illness* population
- 28% of all OSHA recordable injuries come from 4% or 15 employees.

This scenario is difficult to manage. Case management and return to work programs ensure that the employee receives appropriate medical treatment and that the medical provider understands the physical requirements of the employee's job. This will reduce the likelihood that injuries will become OSHA recordable. Light duty tasks that are part of the employee's normal job can be done in many cases and allow an injured employee to return to work immediately after receiving treatment. Incident investigation and correction of root causes works to prevent the same root cause injury from occurring again.

Chugach currently supplements worker's compensation benefits. Income received off the job by employees can be perceived as greater than their normal wage as worker's compensation benefits are non-taxable. This policy does little to dissuade employees from staying off work after an injury. A review of the Workers Compensation case management process would be beneficial.

Existing Efforts and Opportunities for Improvement

1. Existing Efforts – Safety Management System

- Chugach values safety and recognizes the need to continually strive for improvement. Safety is identified by employees and management as an organizational value.

- Managers are evaluated for safety performance annually using incidence rates and training compliance metrics.

Opportunities for Improvement

- In order to more effectively control the hazards faced, the safety management system should direct safety activities, monitor the effectiveness and communicate safety goals & objectives and progress toward those goals and objectives. At this time, Safety needs to receive increased attention so that Chugach is more proactive in the management of causal factors of incidents.
- Current accountability for safety objectives should be augmented with the inclusion of leading indicator goals. For example: objectives for individual departments currently include incident rates (reactive measure or lagging indicator). The current personal scorecards should be expanded to include leading indicators such as number of inspections completed, percent of safety action items resolved (follow up %), percent of incidents reported in a timely manner, percent of tasks with current job safety analyses, percent of workers trained to regulatory and company requirements, and number of management safety observations. **(Action Plan Item #1)**

2. Existing Efforts – Board Policy 123 & Operating Policy 017

- The Board Policy 123 - Safety Policy Statement affirms Chugach’s commitment to maintaining a safe work environment, implementing a safety culture, complying with applicable codes, standards, and regulations, educating the public on the hazards of electric power, and requiring employees to abide by all applicable safety rules and programs. This is a fairly comprehensive policy. It was approved and implemented about six years ago.
- The Operating Policy 017 - Loss Control Management outlines more specific goals around safety. It further states commitment to safety and identifies the key responsibilities of the CEO for safety in the organization.

Opportunities for Improvement

- The Board Policy 123 and Operating Policy 017 should be reviewed and updated annually, signed by the current Board of Directors and distributed throughout the organization. This will help in reinforcing Chugach’s commitment to Safety and establishing direction for the safety effort. **(Action Plan Item #7)**

3. Existing Efforts – Employee Fitness For Duty

- Employees are selected through the Union dispatch process. This process doesn’t involve any physical criteria.

Opportunities for Improvement

- Develop physical capacities requirements for all positions
- Require a pre-placement physical examination and “Fitness for Duty” physical capacities evaluation be done for all new employees. **(Action Plan Item #4)**
- Implement a pre-job stretching program.

4. **Existing Efforts** – Management Support for Safety

- Support is provided by management for safety. There are adequate resources provided and time allowed for safety.

Opportunities for Improvement

- Management can improve the level of visible support for safety by increasing their presence in the work place and making regular visits to work sites as well as by attending safety training and safety meetings. Production, quality and safety are all enhanced by management presence in the field. **(Action Plan Item #14)**

5. **Existing Efforts** – Incident Reporting & Investigations

- Incident reporting is required and investigations are done on incidents with high loss potential. This is an important part of the safety effort.

Opportunities for Improvement

- Chugach would benefit from clearly identifying incident response, reporting, and investigation policy and procedures. The expectations should be clearly communicated and responsible parties held accountable.
- An injury case management procedure should be developed and implemented. This should outline supervisor responsibilities, job descriptions with physical capacities requirements, treatment utilizing OSHA's 14 points of first aid, and light duty return to work. **(Action Plan Item #2)**
- Effective incident response and reporting will allow Chugach to thoroughly analyze root causes for injuries and develop proactive measures to mitigate future incidents. All incidents should be reported and documented on an internal report form that captures all pertinent data. **(Action Plan Item #3)**
- A formal Incident Investigation Policy and Procedure should incorporate root cause analysis from which the organization can benefit (through incorporating changes from lessons learned). **(Action Plan Item #10)**

6. **Existing Efforts** – Corporate Safety Policy Manual

- Chugach has a Corporate Safety Policy Manual in place. It identifies the processes that Chugach uses to assist in identifying and controlling work place hazards. It contains programs and policies required by OSHA or otherwise necessary for the identification and management of workplace hazards.
- There is also a safety handbook in place that is a very useful reference covering the majority of situations faced by the employees in the field. This handbook has been distributed to all managers and employees.
- There are Safety roles and responsibilities for management, supervisors, and employees outlined in the Corporate Safety Policy Manual. It would be beneficial to provide additional training so that management, supervisor, and employee safety roles and responsibilities are clearly understood.

Opportunities for Improvement

- Complete the updates on the existing Corporate Safety Policy Manual and assure it is distributed to all locations and is readily accessible to employees. **(Action Plan Item #5)**
- The Corporate Safety Policy Manual should be reviewed annually and updated as necessary.
- The safety handbook is a valuable reference but many employees report not being familiar with the contents and not referring to it. Chugach should encourage the regular review of pertinent sections by individual work groups. **(Action Plan Item #6)**

7. Existing Efforts - Training

- Training is a priority at Chugach. A great deal of effort and support has gone into assuring that the required training is delivered to the employees.
- Management provides adequate resources to assure the training is provided.

Opportunities for Improvement

- Communication of required training, availability of training opportunities, and scheduling of training is not being done as effectively as possible.
- There is a training management software package at Chugach that is not being fully utilized. Activating the self service function of this system and educating the supervisors and employees on its use will be beneficial. This will require expanding PeopleSoft licenses to all supervisors and employees. **(Action Plan Item #9)**

8. Existing Efforts – Hazard Assessment

- An extensive hazard assessment for determining the appropriate personal protective equipment has been completed at Chugach. This has been done well and has helped Chugach provide the proper personal protective equipment to employees without any barriers. This program is functioning very well.
- There are specific “tail gate/board” meetings that occur for each job or task. Anticipated hazards and controls are reviewed with the work crew at this time.

Opportunities for Improvement

- Systematically analyzing jobs and tasks to identify hazards and methods of avoidance, elimination, and control will further benefit Chugach. This process is known as Job Safety Analysis or Job Hazard Analysis. It defines what skills and requirements are needed for each job. **(Action Plan Item #13)**
- Pre job tailgate meetings should be documented and utilize a written hazard assessment checklist to help assure the anticipated hazards are managed. **(Action Plan Item #8)**

9. Existing Efforts - Inspections

- Inspections of facilities are done at Chugach by the Safety Staff and the Safety committee at Beluga. The items identified as sub standard are written up and normally corrected.

- An Operations inspector checks portions of the system daily and identify and classify hazards or unsafe conditions. These are issued to the crews for remediation.

Opportunities for Improvement

- The inspection program should be expanded to include remote sites as well as major and headquarters facilities. This process should include a checklist that is applicable to the location and activities. Assign corrective actions for hazardous conditions identified to responsible parties and follow up to assure completion. **(Action Plan Item #12)**

10. Existing Efforts – Safety Meetings

- Safety Meetings are held on a regular basis in power supply and delivery. Adequate time and resources are provided for safety meetings. In Operations, as of June 15th, a copy of the minutes is posted on bulletin boards for all to read. At Beluga this is an ongoing process.
- Attendance is documented. This is an important aspect of the safety program and is being done well at Chugach.

Opportunities for Improvement

- Documentation of the meetings should include: topic, presenter, other items discussed and written name & employee signature and should be kept indefinitely. Include this documentation in the records retention program. **(Action Plan Item #16)**

11. Existing Efforts – Safety Committees

- There are two employee Safety Committees at Chugach; one at Operations and one at Beluga.
- The Beluga committee is making great progress in the area of hazard identification and abatement. They are doing weekly inspections of the facilities in order to identify hazards. Hazards are corrected immediately or placed on an action item log for correction. Employee safety concerns are also addressed.
- The Operations safety committee's focus is on reported employee safety concerns and hazards, as well as, procedures identified in the Safety Handbook in order to prevent injuries and have a safe working environment during the performance of daily work activities in the field.

Opportunities for Improvement

- The role of the Safety Committees could be reviewed to determine if other divisions of the company could benefit from implementing local safety committees to identify and correct hazards and address employee safety concerns as is being done at Beluga. **(Action Plan Item #15)**

12. Existing Efforts – Near Miss/Hazard Recognition

- A Near miss/hazard recognition system is noted in the Operating Policy 017 – Loss Control Policy.

Opportunities for Improvement

- This should be developed and implemented as a function of the overall incident reporting process. **(Action Plan Item #11)**
- By identifying hazards and non loss producing incidents and correcting the root causes the potential for loss producing incidents will decrease.

At Chugach, employees believe that safety is an individual responsibility; organizational support and management of safety is essential to support this responsibility. Management is committed to safety. Demonstrating this commitment at every opportunity will reinforce the value Chugach places on safety. Clearly communicating the expectations for safety and the responsibility and accountability for safety with management and employees will also greatly reinforce the value Chugach places on safety. There should be transparency in safety activities; regular communication of safety activities and performance (especially incidents) is critical. A safety management system that is supported and promoted will result in continually improving safety performance.

Action Plan

1. Assign responsibilities and assure accountability for safety objectives. Expand personal scorecards to include leading indicators such as number of inspections completed, percent of safety action items resolved (follow up %), percent of incidents reported in a timely manner, percent of tasks with current job safety analyses, percent of workers trained to regulatory and company requirements, and number of management safety observations.
2. An injury case management procedure should be developed and implemented.
3. Require that incidents are reported within 5 hours. All incidents should be documented on an internal report form that captures all pertinent data.
4. Develop physical capacities requirements for all positions and require a pre-placement physical examination and "Fitness for Duty" physical capacities evaluation be done by all new employees.
5. Complete the updates on the existing Corporate Safety Policy Manual and assure it is distributed to all locations and is readily accessible to employees.
6. Encourage the regular review of pertinent sections of the safety handbook by individual work groups.
7. Reaffirm and distribute Board Policy 123 - Safety Policy Statement and Operating Policy 017 - Loss Control Management
8. Utilize a written hazard assessment checklist to document pre job tailgate meetings and help assure the anticipated hazards are managed.
9. Utilize the training management software package to allow for communication of required training, availability of training opportunities, and scheduling of training.
10. Implement a formal Incident Investigation Policy and Procedure incorporating root cause analysis.
11. Develop and implemented a hazard recognition /near miss reporting procedure.
12. Expand the inspection program to include remote sites. This process should include a checklist that is applicable to the location and activities. Assign corrective actions for hazardous conditions identified to responsible parties and follow up to assure completion.

13. Define and implement a Job Safety Analysis process to identify hazards and methods of avoidance, elimination, and control for each job task.
14. Quantify the improvement in the level of visible support for safety by increasing Management's presence in the work place, making regular visits to work sites, and by attending safety training and safety meetings.
15. Review the role of the Safety Committees to determine if other divisions of the company could benefit from implementing local safety committees.
16. Document safety meetings and include: topic, presenter, other items discussed and written name & employee signature. Keep indefinitely in the records retention program.