OCCUPATIONAL HEALTH AND SAFETY IN THE WINDPOWER INDUSTRY

SUMMARY OF THE ORIGINAL DOCUMENT
"VINDKRAFT & ARBETSMILJÖ"
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Background
This is a summary of the original document “Vindkraft och Arbetsmiljö”, which is a result from a project together with the Swedish Energy Agency, Stromsund Municipality and the Network for Wind Utilization. It was a project in which we tried to involve Windpower companies, the Swedish authorities, wind power academies and other organizations in order to get as broad a base of input as possible for creating this material. The work with the relevant authorities continues, and in some cases it is not completely finished which could be reflected in the documentation.

However, we have tried to summarize the most important skills and knowledge’s that a person should have while working in a wind power turbine. But it is important to remember that this documentation does not replace the individual company rules and routines. The material is a good foundation that could easily be supplemented and further developed depending on the forum used when presenting the material. In the material we describe various roles at site, the authorities’ work, risks, law & regulations, “Lessons learned” from the construction of Havsnäs Wind Farm is also included. The Global Wind Organization (GWO) rescue training program is also presented and we have also looked at how the individual worker can contribute to a healthier work environment with relativity small efforts.

The whole Swedish version of the documentation and forthcoming updates is presented on the Network for Wind Utilization’s homepage https://www.natverketforvindbruk.se/sv/Lokalt/Arbetsmiljo-sakerhet/Vindkraft-och-arbetsmiljo/. The document is free to download, and on the homepage you will also find a link to a movie that we recommend, which is also mentioned in the documentation. The movie is with English subtitles.

Summary of the documentation
The occupational health and safety work within the wind power industry is something that, in compliance with other businesses, should be consistent throughout the whole company, making sure that the employee feels secure and healthy at their work place. To be able to create this consistency, everyone in the company needs to have a role, not just a small group of people that for some reason feel a bigger responsibility in this matter. Even if the managing director or the leader of the company has an expanded legal responsibility to give the workers the possibility of good work environmental conditions by providing them with the right tools, education etc. it is also up to the individual to cooperate so that the health and safety process can function in a longer perspective.

The preventative systematic work environment process is something that should be integrated on a daily basis in order to be watchful on unhealthy conditions that could have a negative impact on the employees’ safety and/or health. Focus should be that the systematic health and safety process should lead to a good work environment that benefits all employees. In the end it is up to the employer to make sure that
everyone that works in the company is safe and may come home to their families and loved ones after the workday is over.

The systematic work environmental process could, for example be that the company establishes policies for; if and how to use company cars, company travel rules or what the company rules says about alcohol or drugs. All the new employees should be introduced properly when employed, and should have a thorough introduction to the company policies, safety rules and routines. But the systematic work environmental process could also be that the work management frequently carries out staff appraisals and safety inspections at the workplace.

It is important to have a routine for working with preventive actions for prohibiting accidents and near misses at the workplace. This could for example be that the company works actively with 5S, in other words, sort, set in order, shine, standardize and sustain, a method that is good for sustaining order and preventing accidents at the workplace. Another example could be that they apply the LOTO (lock out, tag out) method that for example, includes cutting the power and locking the switch with personal padlocks in order to prevent accidental startup of a system or machine, while maintenance or reparations are being performed.

Rules, routines and preventive actions and safety regulations should always be followed, and risk assessments should be carried out before a work task is performed that could result in a risk of health and/or safety for the individual worker or other people around him. The risk assessments are important to perform daily since the risk could vary depending on a variety of conditions, for example, the physical shape of the employee, tools, if there are new colleagues, if there is a risk of ice-throws or thunder etc.

The systematic health and safety process also includes the individual responsibility of the employee to keep healthy and strong to be able to perform well at work. This means that it is important for the employee to eat healthy, sleep and rest, keep his/her body in good shape, and have a good physical and mental health. But it also means that it is important for the employee to dress correctly, according to the weather and/or depending on the activity, and to always look around for potential risks and dangers both for him/her and other colleagues, while performing the task.

If a potential risk is noticed it is not just important to do something about it at once for preventing an accident, but also to report it according to the company’s policy. This can for example, include that the employee make a report in the accident- and near miss system called ENIA that is specially developed for the energy sector or any other equivalent database. From this system information can be derived about other near misses and accidents thus preventing possible future accidents or mishaps.

If a worst case scenario would happen and an accident is indeed a fact, it is very important to be well prepared for it. It is vital that preparations and exercises is realistic and accident scenarios have been trained for, together with concerned parties and that it is easy to access vital equipment, get the resources needed fast and
that there are functional routines, but it is also important that everyone working in or near a turbine has the right knowledge to perform CPR and rescue from heights.

Another vital issue is that the authorities, organizations, corporate management and the individuals on site are prepared and trained to act fast, make the necessary decisions, and perform helping and lifesaving actions regardless if the wind turbine is on land or at sea. Because when it comes down to someone’s life, we can’t afford to compromise.