

National Programme for the Elimination of Silicosis – South Africa Perspective

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Silicosis is a disabling, nonreversible and sometimes fatal lung disease caused by the inhalation of dust containing respirable crystalline silica, resulting in the formation of scar tissue in the lung, which reduce the lung's ability to extract oxygen from the air we breathe. Inhaled crystalline silica from occupational sources is classified as a group 1 human lung carcinogen (causing lung cancer). A frequent cause of death in people with silicosis is pulmonary tuberculosis (silico-tuberculosis). Respiratory insufficiencies due to massive fibrosis and emphysema as well as heart failure are other causes of death.

WHERE WE STARTED

The Advisory Council for Occupational Health and Safety (ACOHS) identified Silicosis as an occupational disease presenting a huge burden on the compensation fund. It then decided that Department of Labour (DOL) as a lead agent in Occupational Health and Safety (OHS) should develop a National Programme for the Elimination of Silicosis (NPES) in line with the Global Programme for the elimination of Silicosis that the International Labour Organization (ILO) is driving.

The National Working Group was established in 2003, made up of representatives from DOL (as chair), Department of Health, Minerals and Energy, Environmental Affairs, Compensation Commissioner, organized business, organized labour, Occupational Hygienists, Occupational Medicine Practitioners and a technical adviser. The NWG was mandated to draft and implement the NPES using the guidelines that were provided by the ILO.

OBJECTIVES OF THE NWG

Over and above the development and implementation of the NPES, the NWG had to ensure that there was adequate consultation with other social partners as well as interested and affected parties. This was important because without their buy in, the NWG would not succeed. The NWG realized that they could not carry out this function on their own and they had to establish Provincial Working Groups (PWGs), one per province under the chairpersonship of DOL and that was successfully done and today all the ten provinces as per DOL's demarcation has a fully functional PWG, which has been tasked to:

- Help the NWG implement the NPES;

- Evaluate the success of the NPES in its province;
- Report to the NWG on the progress made quarterly;
- Communicate any new development to the NWG with a view to include that development in the NPES, by so doing updating the NPES
- Liaise with the NWG on any matter they may deem necessary.

WHAT THE NWG DID WHILE DEVELOPING THE NPES

The first thing was to develop a work-plan that guided the activities of the NWG until the end of June 2004. According to that work-plan the NPES was to be developed together with other material such as brochures and posters which the NWG did develop.

The NWG also realized that since NPES will be a new concept to a lot of inspectors within DOL and as such it had to identify 20 inspectors with environmental health and /or chemistry background and they were sent for two weeks training at the University of Cape Town. They covered in that training wide ranging topics from occupational hygiene definition to the dust control in the industry. Visits were also organized to factories handling, manufacturing and producing silica as part of their experiential training. They were also given a take home tasks that they had to do which gave them a good exposure on what to expect later on when they start with silica related inspections

Once the NPES and the campaign materials were ready, inspectors trained and confident, the NWG organized the launch and on the 28th June 2004 the Minister of Labour, the honorable Minister Shepherd Membathisi Mphumzi Mdladlana launched it at Caesars Gauteng and more that 300 people from all

walks of life including trade union movements attended it, it was a huge success.

PROBLEMS THAT THE NWG FACED

1. The PWG ceased to be functional and there was no work done on the elimination of silicosis, some of the PWG went to the extend of ceasing to exist; therefore the NWG had to resuscitate those that were not functional. Those that had stopped to exist the NWG had to organize a re-launch of them. The NWG is happy to announce that today all of them are functional and they are busy doing work and conducting advocacy campaigns round silica exposure and silicosis.
2. According to the guideline from ILO the NWG needed to know the Magnitude of the problem, that is the extend to which silicosis is a problem in South Africa. There are a number of studies done on the issues of exposures to silica and silicosis such as the Thamaga study in Botswana as it is a labour sending area and the Libode study in the Eastern Cape and the NWG could only generalize based on those studies.

There was a need to then conduct a proper baseline study which will give the NWG an indication of what it is dealing with. It was felt at that time that the PWGs with the help of approximately 1050 Inspection and Enforcement Services (IES) inspectors will conduct the baseline using the checklist that the NWG had developed. The idea was that each PWG will conduct that study and compile its own Provincial Profile (PP) which will be send to the NWG so that it consolidates all of them and produce one Country Profile (CP).

That proved to be a tall order for the PWGs and as a result not a single one was able to produce the produce the PP thus forcing the NWG to re-strategize on how to get that studies done. The NWG is at this stage seeking the approval of the Director General to engage formal research institutions to conduct the baseline studies per province and as soon as permission has been granted the NWG will call for tenders.

3. The mining industry is running its own programme for the elimination of silicosis and some of their deliverables were imported over to the functions of the NWG and the feeling is that the D-dates for the delivery are very far and as a result delaying the NWG to deliver within a short space of time on those.

ACHIEVEMENTS OF THE NWG

A national workshop on the elimination of Silicosis was organized and held nearly on the anniversary of the launch of the NPES on the 22 July 2005 and a document entitled "Silica Exposure and its Effect on the Physiology of Workers" was released as part of the NPES.

Many other documents ranging from "Prevention of Silicosis, Measuring Dust Containing Free-quartz and Role of Approved Inspection Authorities (AIAs) in the Prevention of Silicosis" have been produced by the NWG and will be released systematically in conjunction with any major silicosis awareness campaign that the NWG will be running.

FUTURE PLANS OF THE NWG

DOL has bought about 35 Dust Monitoring Instruments which will be distributed to the provinces. The NWG will be organizing training based on the usage of those dust monitoring instruments as a follow-up training to those inspectors who attended the initial training on silica exposure and silicosis. There after that training will be taken to all the provincial offices of DOL to make sure that all IES inspectors are trained.

Currently the Occupational Exposure Limit (OEL) for silica is 0.4 mg/m^3 according to Table 1 of schedule 1 of the Hazardous Chemical Substances Regulations. The NWG realizes that unless that OEL is lowered to 0.1 mg/m^3 inline with international trends, the battle to eliminate silicosis will be lost. Therefore DOL established a Technical Committee (TC) No. 07 to review all the OELs and the NWG is working closely with the TC 07 in lowering the OEL for Silica to 0.1 mg/m^3 , the NWG hopes that that will be done by the end of this month.

As already alluded to in bullet point No.2 under the heading: "PROBLEMS THAT THE NWG FACED," the NWG still need to develop a CP which will reflect the state of the nation as far as exposure to silica is concerned. That work is very urgent and the NWG is going to do all it can to make sure that by the end of this financial year i.e. March 2006 there is a CP available. The NWG hopes that the DG will approve the engagement of research institutions to conduct such studies.

Finally like it was the case this year, the NWG is planning and organizing the next National Workshop on the Elimination of Silicosis which will be held next year in July 2006 and the emphasis will be on dust prevention, measurement and control. The idea is to help industry to see the need to prevent dust generation and to control it where necessary.