QUARTERLY
JOURNAL OF
OCCUPATIONAL
HEALTH &
SAFETY

OEHNI Times

By the Editor

VERDICT OF BHOPAL GAS TRAGEDY
AND PUBLIC ANGER

Thousands of innocent citizens in Bhopal died when the lethal MIC gas leaked on 2 December 1984. Residents are still suffering the ill effects after more than 25 years. Local police had filed criminal complaint in local court under relevant sections for culpable homicide. Accused appealed in Supreme Court to get the sections for culpable homicide removed. In this appeal the Supreme Court ruled in favor of the accused in 1996 and ordered the lower court to apply sections for negligence. Maximum sentence for negligence is 2 years. Organizations working for the victims opposed this there and then but were not allowed to make review petition. Those days India was not economically as strong as today and the rulers were worried about attracting foreign direct investment. It is possible that this might have worked for political decision to give leniency to the multi national involved. Accused did everything under their control and exploited every single legal avenue open to them to stretch the case. On 7th June 2010 CJM Mohan Tiwari passed the order in which accused were convicted. The company- UCIL-was fined Rs. 5 lakh while the 7 office bearers. including industrialist Keshub Mahindra were fined Rs. 1 lakh and simple imprisonment for 2 years under Sec.336, 337 and 338. They were freed immediately on bail. Activists and right thinking people world over got disappointed. In this case, it is useless to blame the CJM who delivered the judgment but the weak law has to be blamed. Following Bhopal gas leak, lot of discussions took place on work place hazards and legal provisions about it. As a result, Factory Act was amended in a big way in 1987. It is a matter of separate discussion how well these amendments are implemented. Prime Minister appointed GoM and the committee has submitted its recommendations which includes rise in compensation.



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Bhopal gas tragedy: Dow's double standards exposed

Here is something for legal eagles of the government of India to chew on: while Dow Chemical Company denies any responsibility for damages caused by Union Carbide in Bhopal, it has taken over all liability of Carbide for fighting out over 75,000 asbestos related law suits in the US. Dow/Carbide expects to incur liability costs of \$839 million in the coming years. They have already spent a whopping \$687 million in litigation costs, besides paying out \$1,480 million to an unspecified number of claimants till date. Carbide became a subsidiary of Dow through a merger in 2001.

These facts, gleaned from the mandatory annual filing (Form 10-k) for 2009 submitted by Dow to the Securities and Exchange Commission (SEC) of the US on February 19, 2010, clearly establish that Dow has taken over Union Carbide liabilities for bodily damages caused by the latter's commercial activities. In the case of Bhopal, Dow has consistently claimed that it had nothing to do with the massive gas leak disaster of December 3, 1984 in the pesticide plant run by Union Carbide.

In 1994, Union Carbide (USA) sold off its interest of 50.9% in Union Carbide (India) to Macleod Russel (India) which renamed it as Eveready Industries India. According to Dow,

its connection with UCIL doesn't exist because it took over the parent company only in 2001. But, according to N D Jaiprakash, one of the petitioners in the lawsuits on Bhopal, Union Carbide (USA) had already been declared an absconder in 1992 and it is named in the charge sheet filed by the Union government. "All criminal liability, as also liability for clean up of contamination caused by Carbide prior to disaster naturally passes to Dow," he explains.

In the US asbestosis cases, Dow is defending or settling the suits on behalf of Union Carbide as well as Carbide's subsidiary Amchem Products Limited, which Carbide took over in 1977. In India, Dow is distancing itself from Union Carbide (USA), which in turn is washing its hands off its own subsidiary Union Carbide India Limited.

According to the latest Form 10-k filing by Dow, there were 75,030 unresolved asbestosis related claims at the end of 2009, including 24,146 claims against both Union Carbide and Amchem. There are over 50,000 individual claimants. Dow/Carbide settled 9,131 claims in 2009.

Of the \$839 million estimated future liability reported in the 10-k filing, about 23% is for existing pending claims and 77% is for future claims. Asbestosis claims have arisen from thousands of people who were exposed to asbestos used by companies in the 1940s and 50s. Inhalation of asbestos fibres causes four

Opportunist elements have jumped the fray to get the share of publicity but there are very few who work consistently on the issue. Question here is what happened after Bhopal? How many factories leaked toxic gases and how many of them were convicted? Do we say that they all should have been tried under sections for culpable homicide? Should we differentiate between Indian accused and foreign accused? Last year IOC depot in Jaipur caught fire and now we hear that the top officers have been arrested and police has framed them under the charge of culpable homicide. It will be interesting, in light of Bhopal judgment, how this case progresses.

Questions that were discussed in 1984 like production of chemicals and its storage- what to be produced, how to be produced, how to store etc. are relevant even today. The chemicals manufactured in Bhopal plant are even today manufactured and the chemicals used as weapons of mass destruction are also said to be manufactured. But, these issues are not discussed.

Health and safety at work is an important issue for any society but we have not been able to extend legal cover even to all the workers in organized sector which is as small as 7% of total workforce. Workers in unorganised sectors will have to wait for such rights for quite long time, it seems. United Kingdom passed Manslaughter Corporate and Corporate Homicide Act to punish negligent employers. Other countries too have passed similar legislations. Citizens in UK have formed pressure group to see it implemented known as Families Against Corporate Killers (www. fack. org. uk). In USA too, there are citizen groups which keep up pressure to give justice to the accident victims. Accident victims have themselves themselves in may Asian countries like Hong Kong, Thailand, S.Korea and Taiwan which are members of Asian Network of Rights of Occupational Accident Victims (ANROAV). In India, too, off late some Associations have been formed but they are yet to strengthen themselves. OEHNI looks forward to do that. In Bhopal there are several committed groups which have kept the memories alive and continuously struggled for justice but these groups too have not gone beyond Bhopal to talk about Bhopal all over country.

Jaadish patel - PTRC

of categories compensable diseases: mesothelioma; lung cancer; certain other cancers (colon-rectal, throat, intestines and stomach); and non-malignant conditions like lung damage. Claimants are seeking compensation for a variety of causes including negligent failure to warn, strict liability, breach of express and implied warranty, negligent infliction of emotional distress, enhanced risk of disease, medical monitoring, and civil conspiracy. A Supreme Court appointed committee said in 1991 that by 2015, about 265,000 people would have suffered damage from asbestos.

The 10-k filing of Dow also states that it is seeking recovery of \$84 million from insurers for its asbestos liability, and \$448 million as costs of defence and resolution of law suits in courts.

The similarities between the Bhopal disaster and asbestosis cases in US are striking in that both have led to long term and severe bodily harm to people because of actions of the companies. But the attitude of Dow is strikingly different between US and India. In the US, Dow is responsible for what its subsidiaries (and their subsidiaries) did years ago. Hence, it is in the thick of litigation and forced to pay affected persons because of immense pressure from public opinion and judiciary. So much so that Dow admits that asbestos related claims, including future defence costs could have a material adverse impact on its consolidated financial position. In India, Dow is denying any responsibility for what its subsidiary Union Carbide (USA) and its then subsidiary Union Carbide India did in the Bhopal tragedy in 1984.

Article appeared in Times of India on July 3, 2010 Author Subodh Varma

Struggle of an OSH activist

In December 2009, Raghunath Manwar from Ahmedabad, a former thermal power plant worker and an occupational health activist, filed for information under Right To Information Act 2005 with Director General of Industrial Safety and Health (DGISH). This started a long saga of misinformation and running from pillar to post for Raghunath, which he had hardly anticipated.

Raghunath had not asked for anything extraordinary. His questions pertained to implementation of safety norms under

Factories Act and the 1995 Supreme Court order related to medical monitoring of workers handling asbestos in Gujarat Composites Limited (GCL), formerly Shri Digvijay Cements.

He had asked whether DGISH has information on maintenance of medical records; remarks of industrial safety committee; number of permanent and contract workers; provision of personal protective equipment; levels of workplace asbestos fibres; records of OH cases in last 10 years and whether the factory was implementing the SC order.

In its response, the DGISH said that the factory has been closed for last 10 years and therefore no such records existed. Dismissing the application as irrelevant. But Raghunath knew that DGISH was lying since for last 15 years he has been working with workers of GCL, which was still operating. He knew about the abysmal working conditions inside the factory, and about the 72 workers who were suffering from asbestosis (a disease caused due to exposure to deadly asbestos fibres). DGISH also informed Raghunath that Dr P.K. Mehta, the company doctor, who had worked for 22 years in GCL has told them that he has never found a single case of occupational disease in the factory. A lie that DGISH chose to believe.

Undeterred by the response of the Public Information officer, Raghunath filed an appeal with the appellate authority in DGISH. In his meeting with appellate authority, it was revealed that DGISH was in possession of a license which showed that GCL was indeed functioning and had 800 workers on its pay roll. But the information in the license was incorrect. From his interaction with the workers, Raghunath knew that 50% of the workers in GCL, especially the ones hired for handling asbestos, were temporary. But the license only noted 76 workers to be on contract.

To know the correct numbers of workers and how many have ESI coverage, Raghunath then filed another RTI application with Employees State Insurance Scheme (ESIS) in Ahmedabad. ESI responded by saying 840 workers were enrolled in the scheme. Armed with the ESI data, Raghunath went back to DGISH and told them about the misleading information being provided by GCL. Infact,

DGISH too had obtained another set of license from GCL was a subsidiary of the British company Turner and which showed that 1000 workers were employed in the Newall Limited (T&N), at one time the biggest factory.

producer of ashestos products in the world. In 1993

Frustrated by the shenanigans of GCL, DGISH filed a criminal case against the manager and owner of GCL in Metropolitan Magistrate's court under various sections of Gujarat Factories (Model) Rules and The Factories Act 1962. If found guilty, the two will face imprisonment up to two years and fine of Rs 25,000 each. In the coming months the case will be heard in MM's court.

While filing of a criminal case against an asbestos factory is quite a boost for anti-asbestos struggle in the countries, the woes of the workers of GCL and Ahmedabad Electricity Company (AEC) does not end here. For past 10 years, workers from these two factories have been trying to get ESI medical board to examine them and certify that their severe lung ailments has been caused due to work place exposure to asbestos and coal dust. This would entitle them for compensation under the law.

On 8th April 2010, when finally the ESI special medical board met in Ahmedabad, 3 of the workers - Irchai Ramaswamy, Chinnappan, Mutthuswamy, were not called for the board examination. The reason- ESI board did not have any medical records for them. The hospitals where the medical records of these people were supposed to be maintained- D-1 ESIS Dispensary; Bapunagar OD Centre; City Branch Local Office either denied or refused to give the medical records. The three workers and Raghunath ran from pillar to post trying to get the medical records of these workers before 8th April, but only were made to run from one office to the other.

On 8th April, Raghunath and the workers waited outside the hall where the ESI special medical board was being held hoping that the board members would give them a chance to present their case. After waiting outside for the whole day the unfortunate workers were informed that the board will not hear their case. The local press covering the hearing tried to take photographs of the heartbroken workers, but his camera was taken away by the security guards present at the spot, Raghunath too was manhandled and shouted at by the medical staff and guards.

Raghunath has filed numerous complaints, dug up medical records, filed legal cases and continues to knock at the doors of every officer and agency till he gets justice for these victims of occupational diseases.

The Hindustan Ferodo Limited Asbestosis Claim

Hindustan Ferodo Limited (formerly known as Asbestos, Magnesium and Friction Materials Limited) was a company based in Ghatkopar, Mumbai since 1956, producing brake linings, textiles and other products, from mainly chryostile (white) asbestos imported from Canada and Russia. Up and till 1993, it

was a subsidiary of the British company Turner and Newall Limited (T&N), at one time the biggest producer of asbestos products in the world. In 1993, Hindustan Ferodo Limited was sold to the Indian Rasoi Group and became Hindustan Composites Limited (HCL). The Ghatkopar factory was closed in 2005.

Despite T&N being aware of the harmful effects of exposure to asbestos dust since 1930 with the publication of the Merewether and Price Report, there remained an unacceptable level of dust in the Ghatkopar factory, without any adequate protection measures being implemented by the company. A Report of a visit in November 1975 by Dr HC Lewinshon, T&N's chief medical officer, records the following:

"Hand brushes and brooms need to be replaced by industrial vacuum cleaners...Dust levels are high in carding and spinning although I was not given any precise details. A dust monitoring programme is being organised by Dr Ramaswamy who has been trained by Dr Holmes at TBA Rochdale...Adequate medical records do not exist as such and it is only recently that a planned programme of medical screening has been introduced. Because of the lack of registration facilities for births, marriages and deaths, the retrospective and prospective follow-up of asbestos workers cannot be achieved. Until India's population is stabilised and national records for statistical analysis becomes available, occupational health preventative measures based on epidemiological studies cannot be contemplated".

Therefore, T&N did not implement adequate preventative measures at its Ghatkopar factory because there had been no study on the harmful effects of asbestos on workers in India, notwithstanding the fact that there had been such studies done in the UK in the intervening half a century. The anecdotal evidence of the workers indicates that the conditions deteriorated once the factory came under Indian ownership.

It will come as no surprise to learn that the prevailing conditions at the factory has lead to asbestos-related illnesses amongst its formers workers. A 2004 study of workers at the factory has revealed over 42 workers with asbestosis or lung cancer. Subsequent studies on former workers have revealed another infected 100 workers, including two wives of former sweepers at the factory who had contracted asbestosis through washing their husband's dust covered work clothes. However, the number is inconceivably low, due to the

fact that many of the workers were not documented or were sacked once they had difficulties in working.

Following the administration of T&N in 2001, its liabilities for personal injury through asbestos exposure, was transferred to a special UK Trust Fund. So far, 73 claims have been submitted, and new claims are being submitted as they arise. This will be the largest single claim for asbestos-related illness in India. It is hoped that when the former workers finally get some compensation in a few months time, it will encourage many more workers to make claims against their current or former employers for injury caused by exposure to asbestos at work.

The article has been written by Krishnendu Mukherjee Barrister and Advocate

Asbestos Seminar at Rajkot, Gujarat

Seminar on hazards of Asbestos was organized jointly by Peoples Training & Research Centre (Vadodara), Jivan Manglya Trust (Rajkot), Association of Physicians of Rajkot and Family Physician Association of Rajkot on 23 May, 2010 at Red Cross Hall, Rajkot.

Association of Physicians of Rajkot and Familiy Physician Association of Rajkot had invited their members while PTRC and JMT also invited few medical practitioners to participate. 35 Medical practitioners participated.

Program started with well come address by Jagdish Patel of



PTRC. He explained objectives of the Seminar and thanked local organizations for their positive response. He requested Aniruddhasinh to present gifts to Dr.Paliwal and Dr.Choudhury. Jagdish Patel presented ": India's Asbestos time bomb" to Dr. Koradia, President, FPA, Rajkot.

A short video clip on Asbestos related diseases prepared by A-Ban was screened before he started his presentation. Jagdish Patel in his presentation gave information on history of asbestos and ARDs, Asbestos uses, industry denials, import situation of Asbestos in India, ARDs reported in India, situation of compensation, International movement including Global Asbestos Congress and Asian Asbestos Conference at Hong Kong and formation of A-BAN.

It was followed by discussion and questions. There were inquires regarding safer alternates.

Later, he introduced Dr. Nayanjit Choudhury to the audience. Dr.Choudhury did his MD in community medicine and then did his MD in Public Health from Israel. He is working as Researcher in Sri Krishna Hospital And P.S.Medical College, Karamsad. He invited Dr.Choudhury to introduce Dr.Rajiv Paliwal.

Introducing Dr.Paliwal, Dr.Choudhury informed that

Dr.Paliwal is among few top chest physicians in the State. He is respected nationally and has contributed several research papers in and nationally internationally acclaimed



professional journals. He is also invited to write chapters in Medical textbooks. He then invited Dr. Paliwal to deliver his presentation.

Dr.Paliwal at the out set thanked Jagdish Patel for screening short video clip saying it has made his job easy. He said that few among the audience would have seen any patients suffering from ARDs. Reason is "Eyes can see what mind knows." It is high time that we start to think about

occupational lung diseases. going to tell you when you should suspect ARDs and why should you suspect ARD. If you go back home with these two



questions our job is done. Latency period is important factor in Occupational and environmental diseases. In case of Asbestos latency period is 10 to 40 years. High degree of suspicion is important for clinician. Until and unless you suspect you will not be able to make diagnosis. Chrysotile can break longitudinally after inhaled and hence equally hazardous as crocidolite. Smoking affects cilia and then if one is exposed to Asbestos due to better muco-ciilary clearance fibers reach deep into the lungs. Asbestos can affect parenchyma as well as pleura. Non-malignant and malignant both types can be seen. Asbestosis is most disabling disease among all ARDs. Pleural plaques is marker

asbestos exposure. Pleural plaque is nothing to worry, patient can live for years with it. It is not going to cause malignancy. Patient in this condition should stop



smoking to prevent further damage. Diffused pleural thickening is also marker of asbestos exposure. Visceral pleura has lot of nerve ending and hence patient will have complaint of pain. It is as benign as plaque. Fibrosis can also take place. In round opacities patient do not have any complaint regarding weight loss of appetite. Rounded opacities can be miss diagnosed as lung cancer. Mesothelioma is a serious condition. Fluid may be tapped and sent to laboratory for diagnosis. Asbestos will not always cause malignant disease. Radiologically it can not be decided whether it is benign or malignant. He rightly emphasized importance of spirometry in early diagnosis of ARDs. He also tried to explain why diagnosis of ARDs is not done frequently. He advised clinicians that if they come across patient of lung cancer and the patient has history of smoking - do not jump to the conclusion that smoking has caused cancer. Further inquiry should be made on occupational exposures. Generally that is not done.

His presentation was well received. Discussion followed the presentation. Dr.Paliwal replied the questions.



Another video clip was shown which was report of a Canadian News Channel which showed how Asbestos is handled in a Asbestos Cloth

manufacturing unit in Sanand near Ahmadabad. It was very shocking to see workers handling asbestos without any protection.

Vote of thanks was proposed by Aniruddhasinh Jadeja. Seminar ended with lunch.

Evening Meeting

In the afternoon Press reporters were invited for briefing. Reporters from *Akila* and *Aajkal* attended. They were given the literature. Jagdish Patel briefed them about the programs in Rajkot as well as issue of Asbestos hazards. *Akila* is a popular eveninger. It carried news of programs with detailed introduction to PTRC and its activities.

In the evening civil society groups were invited. Some how response was poor. Low turn out was explained as high ambient temperature (45° C.), large numbers of marriages in the city and NEW and UNKNOWN subject. 10 citizens



from different walks of life attended the meeting. In this meeting Aniruddha singh Jadeja welcomed the invitees. He explained the objectives of the meeting and invited Jagdish Patel to present his presentation. Jagdish invited

participants to introduce themselves and then introduced himself and activities of PTRC and how organization came into being 20 years ago. He then presented his presentation on Asbestos hazards. He explained how traces Asbestos are found in "export quality" rice! He discussed importance of Asbestos hazards in Gujarat as Alang ship breaking yard is a big source of Asbestos products and how vulnerable buyers are! He talked of surge of ARDs in S. Korea, Japan and other countries and demanded complete ban on all forms of Asbestos.

Dr.Nayanjit Choudhury asked one and all to think out of box. Giving example of high diabetes prevalence in Gujarat he said that normally people believe that it causes because of lack of exercise and obesity. But no one thinks that persistent organic pollutants in the air can cause such problems. High use of pesticides is responsible for many of the diseases, he added. Citing example of Khambhat he said that PTRC initiated process and now with the help of Sri Krishna Hospital they have been able to collect scientific data on silicosis. Such small steps are extremely important.

Vipul Pandya of Construction Workers Union explained how vulnerable construction workers are. He talked of BWI campaign against Asbestos and various programs undertaken. He, too, demanded total ban on all forms of Asbestos.



Taking part in discussion

Bharatbhai said there is need for people to read "Hind Swaraj" of Mahatama Gandhi to resolve such issues. Dinesh Tilva,a graphic designer and photographer, informed the audience that goldsmiths in Rajkot use some Asbestos products and that he will find out more information and share.

Mr. Ramchandran, Secretary CITU (Centre for Indian Trade Union), said that he himself is staying in a house which has Asbestos cement roofs since long. He further said that slowly industrial activities have started in residential zone in Rajkot where citizens are exposed to all kinds of pollutants. He has opposed with Municipal Corporation but the Corporation bureaucrats do not pay any heed. Among the audience was one employee in Municipal Corporation. He assured Mr.Ramchandran to help. It was also discussed if larger cross section of society can join the campaign and



whether any legal action can be taken against Municipal Corporation.

Mr.Dilip Thakar, Majur Mahajan Sangh (Trade Union) also participated in the discussion.

While concluding the program

Aniruddhasinh said that in days to come Memorandum shall be presented to the District Collector as a follow up of the meeting. Medical Camp also shall be organized to identify patients of ARDs.



Literature on Occupational safety and Health published by PTRC was on display. Photo exhibition on Asbestos also was on display inside the hall. Banners on Asbestosis,

Lung Cancer, Mesothelioma and Pleural plaques designed by BANKO and modified (using Gujarati language) for the occasion by PTRC made an impact in both the programs.







More ugly asbestos truths tumble out

With the campaign against asbestos mining and export peaking, Liberal Party leader Michael Ignatieff's stand against asbestos has found support from various quarters. 'Ignatieff's position is the Liberal Party's position,' Liberal Member of Parliament Ujjal Dosanjh said.

'Ujjal supports Mr Ignatieff's position completely,' said his spokesperson Trish Dechman. Canada's only operational mine, in Quebec, where 340 people work has come under the scanner recently. Those in favor of ending asbestos mining have suggested that the government provide transition assistance to the miners and their community.

According to reports, 44 percent of the total asbestos mined in Quebec is exported to India. Though the number of workers affected in India is not known, Mexico, which imports 3.6 percent, has as many as 500 cases of mesothelioma, a rare cancer almost always caused by asbestos exposure, a Globe and Mail report said.

The campaign to ban asbestos has brought tremendous pressure on Quebec Premier Jean Charest and Prime



Minister Stephen Harper.
During his recent visit to India, Charest was greeted by demonstrations against his government's position on asbestos. He defended his position, saying

asbestos could be used safely. In a recent research article in the *American Journal of Industrial Medicine*, it has been revealed that Mexico imports chrysotile asbestos (which is also exported to India) that causes lung cancer.

The survey concluded that for 'every mesothelioma death, there are 2.3 more fatal cases of lung cancer due to inhalation of the mineral.' Guadalupe Aguillar, an occupational health expert who led the team that conducted the research and wrote the article, called the asbestos trade a 'deplorable example of the manner in which dangerous industries are being deliberately exported to Mexico and less industrialized countries.'

Kathleen Ruff, a Victoria, British Columbiabased senior human rights adviser at the Rideau Institute, told India Abroad she has contacted all Indo-Canadian Members of Parliament asking for their views on asbestos. So far only Dosanjh's office has answered to her letter, saying he supports Igntaieff's stand.

In her February 16 letter to Ignatieff, Ruff said, 'The Canadian Medical Association, the Canadian Cancer Society, the World Health Organization and health experts across Canada have all called for Canada's mining and export of asbestos to end, since it has proven impossible to handle any form of asbestos safely and this is particularly the case in poor, developing countries where we ship our asbestos.' Ruff also wrote to the Conservative MPs and party House leader Jay Hill. Hill said the jobs of 350 miners in Quebec depended on asbestos export and they might suffer if the government stopped exporting asbestos. "I told him that we have always asked the government to give transition assistance to the 350 miners — early retirement, retraining, funding new economic initiatives in the mining community in Quebec. We told him the lives of people in India also matter and that we should not profit from destroying the lives of people overseas," Ruff said.

The article appeared in Canada News India Abroad Dated February 25, 2010 written by AJIT JAIN

Health experts concerned over India's asbestos industry

India's reliance on asbestos in buildings and its poor protection for workers exposed to the material could lead to an explosion in related malignant disease, warn experts. Talha Burki reports.

Late last year, the *Times of India* ran an advertorial on behalf of the asbestos industry. Entitled "Blast those Myths about Asbestos", it began by asserting "asbestos is a naturally occurring material". Readers were assured that "only safe white fibre is used in manufacturing of asbestos cement products in India"; and that the "problems" other countries have encountered "are not relevant in the Indian context".

India's surging consumption of asbestos, the industry's hefty political and economic clout—of which the *Times* advertorial was one manifestation—and the country's poor record of worker protection has alarmed experts. A sizeable burden of asbestos-related disease is inevitable. But if current trends continue unabated, the public health consequences will be felt into the next century.

Worldwide, at least 90 000 people die every year from illnesses resulting from occupational exposure to asbestos. However, this number only takes into account workers and ex-workers who have been identified with asbestos-related

lung cancer, mesothelioma, and asbestosis. But asbestos has also been linked to laryngeal and ovarian cancer. Factor in asbestos-related illness among individuals whose work history has not been recorded, the family members of those who work with asbestos, and people living near asbestos factories and mines, and the death toll is much higher.

India's use of asbestos in buildings has risen substantially during the past decade. The lengthy latency period of asbestos-related malignant diseases—in some cases more than 40 years—means that even in countries that no longer use the material, the disease burden continues to rise. The UK, for example, banned all forms of asbestos in 1999 but at least 3500 people die from asbestos-related illnesses every year, and this figure is expected to increase to about 5000 in the coming years.

Chrysotile (or white asbestos) is the only form of asbestos still being mined—it constitutes more than 90% of all asbestos used throughout history. Canada—from where India sources much of its asbestos—is home to the Chrysotile Institute; an influential organisation funded by the Canadian Government, which lobbies internationally on behalf of the material, often hosting events in Canadian embassies. Indeed, Canada has been instrumental in stymieing efforts to have chrysotile listed in the Rotterdam Convention, a UN registry of hazardous materials, which requires "prior informed consent" before they can be exported.

The Chrysotile Institute distinguishes between chrysotile and amphibole forms of asbestos, contending that the former is not so dangerous and can be safely used. Crucially, the Chrysotile Institute maintains that "there is no evidence of increased cancer risk" if worker exposure to chrysotile is less than 1 fibre/cm3; an assertion denied by health experts. "WHO's position is very, very clear", says Maria Neira, director of public health and environment at WHO, "all types of asbestos are carcinogenic". The organisation's guidelines state: "increased cancer risks have been observed in populations exposed to very low levels."

All of which has prompted more than 40 countries—including all member states of the European Union—to ban chrysotile. The World Bank has determined not to use it in any new development projects; and WHO has noted that "the most efficient way to eliminate asbestos-related disease is to stop using all types of asbestos".

Nevertheless, about 125 million people across the globe are exposed to chrysotile in their working environment. Worldwide production remains at roughly the same level as in 1960: nearly 2·2 million metric tonnes per year. Vast development projects in Asia are largely responsible for maintaining the market. In particular, India's asbestos industry is burgeoning.

From 2000—07, India's use of asbestos rose from roughly 125 000 metric tonnes to about 300 000. Nearly all of India's asbestos is mixed with cement to form roofing sheets. Bolstered by asbestos import tariffs that have been reduced from 78% in the mid-1990s to 15% by 2004, the country's asbestos-cement industry is increasing by roughly 10% every year, employing in excess of 100 000 people. Since 2003, companies no longer require a special licence to import chrysotile.

Since 1960, India has incorporated about 7 million tonnes of asbestos into its buildings. The health consequences are already apparent, but the scale of the problem is not clear. "The Government of India has a very poor, almost non-existent, system to record death and disease", explains



Arthur Frank from Drexel University, Philadelphia, PA, USA. Besides, cancer is not a notifiable disease. Frank cites a hospital in Mumbai which sees a dozen cases of mesothelioma every year.

Studies have shown high rates of asbestosis among workers in the industry, including in those whose exposure to the material has spanned less than 5 years. "But I suspect that there has been no real assessment of [asbestos-related disease] to the point that you can get accurate figures", Frank concedes.

It is not simply a case of data collection. Of India's 300 or so medical schools, only one has a training programme in occupational health. 55 million Indians are covered under the Employee State Insurance Corporation. "They have 6500 physicians", points out Frank, "yet virtually none of them have had training in occupational health". Consequently, asbestosis is frequently misdiagnosed as tuberculosis or bronchitis. Besides, "doctors do not have access to the standard ILO [International Labour Office] radiological plate which is needed to diagnose asbestosis", V Murlidhar from the Occupational Health and Safety Centre, Mumbai, India, told *The Lancet*.

Asbestos-cement is durable, fireproof, and easily secured, unlike thatched roofs. It does not clatter in the monsoon or rust, unlike metal roofs; and it will not gust in the wind, unlike a sheet of tarpaulin. Its proponents claim it is vital for sustainable development. Alternatives such as polyvinyl chloride and ductile iron might have to be imported, whereas most countries have access to cement. But, says Frank, "there are many substitutes for asbestos which don't carry the same health risk".

The Chrysotile Institute claims that chrysotile can be used safely as long as employers follow basic precautions. This is just not feasible, answers Pat Martin, Canadian Member of Parliament and former asbestos miner. "If we in the developed world haven't found a way to handle chrysotile safely, how can we expect them to do so in developing nations?" he asks.

Vessels laden with asbestos are deposited in Indian ports, to be dismantled by some of the country's 60 000 or so ship breakers. For these individuals, and for most workers in the asbestos-cement industry, the outlook seems bleak. "Most workers are not protected at all", notes Madhumita Dutta from Ban Asbestos Network of India based in Chennai. "Health and safety standards in the asbestos industry in India are negligible", agrees Martin, he talks of factories covered in carcinogenic dust and workers using bits of cloth as rudimentary masks. "There is very low awareness of the adverse effects of asbestos amongst workers", adds Dutta. Many Indians smoke, a factor which massively increases the risk of lung cancer when taken in combination with exposure to asbestos.

The difficulties do not end there. Intact, asbestos-cement locks in harmful fibres. But it does not always remain intact. Indian consumers are unlikely to know that as asbestos-cement erodes and crumbles, dangerous fibres are released; that you must never use power saws on asbestos-cement, nor cut the product dry.

"Every time you put a piece of asbestos-cement in place, you're putting in place the seeds of a potential future problem", Frank stated. Even if building materials are kept in pristine condition and future generations are made aware of the building's contents, there is no legislation for man-made disasters. The 2001 Gujarat earthquake destroyed almost 400 000 homes. In the USA, after the World Trade Centre collapsed, some dust samples showed asbestos concentrations of 4%.

Many of India's ship breakers are unaware of the health risks of exposure to asbestos. Hopes for India's immediate future are muted. "We can expect a lot more death and disease, that's no secret", Frank told The Lancet. "There is no champion for the working person, or for the elimination or reduction in the use of asbestos, that I can see in the central Indian Government", he added. Dutta points out that several parliamentarians have major holdings in asbestos companies, and there are asbestos manufacturing plants in state ownership. "The asbestos industry in India is a very powerful force", agrees Barry Castleman, an environmental consultant who has advised the World Bank and WHO on asbestos. Both he and Frank asserted that the industry has even affected government agency studies into asbestos, providing funding and helping to design questionnaires.

At a minimum, those workers who are already ill must be compensated, says Murlidhar. As things stand only handfuls have received compensation—India's intricate labour laws make it difficult to hold negligent employers to account. The final aim, however distant, is an outright ban. "The health hazards of asbestos don't warrant its use", Martin says simply.

Article appeared in the LANCET on 20 February 2010 written by Talha Burki

http://www.thelancet.com/journals/lancet/article/PIIS014 0673610602516/fulltext? eventId=login&rss=yes

The way ahead

A moratorium on new mines until the contentious issues relating to the mining sector are resolved is the need of the hour.

THE impact of mining spreads across all aspects of the environment – biophysical and psycho-cultural – and is largely by virtue of the geological and ecological conditions of mining. Therefore, accepting the nature of the impact, the industry needs to evolve mitigation measures to contain the damage, and the regulatory authorities are duty-bound to ensure that the sector and the specific industries comply with the highest standards. However, the expectations, both from the industry, of genuine efforts to mitigate the impact, and from the state, particularly the regulators, of enforcing the rule of law are misplaced in the current context.

A look at the biophysical environment around mining from across a section of mines in the country is instructive. As an illustration, take the case of water. Mining is one of the major industrial activities impacting the availability and quality of water. Mining, from small-scale quarrying to deep underground mining, and in the new area of coal bed methane extraction, impacts water. The proposed underground coal gasification will also have an impact.

The impact is far-reaching, but the governance processes still come from a state of denial. Mining and allied industries are the biggest destroyers of natural water storage capacity and the most important cause for the deterioration of water quality. The future of water resources is seriously at stake.

The Central Ground Water Board (CGWB) suggests that intersection of the water table by the mining industries may be taken seriously as in several places the major resources lie beneath the water table. The breaching of the water table must be subject to stricter regulation than there is at present as the very basis of survival of local communities is sacrificed at this stage. Merely to say that mine water is put to "gainful" use misses the point that such use can lead to unsustainable management of the



aquifer. While this may include supplying water to adjacent areas, local communities and water distribution agencies, besides utilisation for dust suppression and other purposes by the industry and for artificial recharge, it will be tantamount to mining water.

Neyveli in Tamil Nadu is a good example of how mining has impacted regional water resources and also induced the threat of seawater incursion. The surface topography and drainage have been obliterated and the accompanying power plant, too, adds to the impact on water resources.

It is an irony that people from an area where water occurred in an artesian condition and water swelled over land before the initiation of lignite mining are today forced to depend upon the State government and the mining company for water, and that too water supplied at very low pressure and intermittently.

However, despite the practise of "precautionary principles" being touted by the government and even the courts, the giant Jayamkondan lignite mining project in Tiruchi district in Tamil Nadu is on the anvil without any serious research or effort to understand the impact and formulate adequate precautionary measures.

At the other extreme is the fact that at no mine in the country the issues of resettlement and rehabilitation (R&R) have been completed even to some degree of satisfaction of the oustees. The dispossession, impoverishment and trauma attached to displacement can probably never be captured with the level of sensitivity that any mitigation demands. In between lies a whole range of impacts such as pollution from the mining activity and from transportation, which is largely by road.

The real concern over the environmental and social impact, whose neglect led recently to the classification of over 70 locations as critically polluted, prominent among them being the mining-industrial complexes, and the often non-violent and sometimes violent protests of the community, with over 200 locations being locked in conflicts, is the scale of expansion being projected in the near future.

The massive increase in the power production targets will require the mining of almost twice the amount of coal that is mined at present in the country. The regulators, who are not able to manage the 561 mines at present, will, in the next decade, need to be equipped to handle at least twice as much work. Considering the shortcomings of the entire process, from the prospecting stage to the closure, it can be surmised that more places will come into the category of severely polluted zones.

As a corollary to this, more and more States are being linked inextricably to this destructive enterprise for their economic sustenance, and any reversal from it will only add to the worsening quality of life of the people around the mine. While the problems of the legally operating

mines themselves look insurmountable, India has the dubious distinction of having more illegal mines than legal ones. There are around 8,784 major mineral leases spread across the country, apart from thousands of leases for minor minerals and quarries.

A Parliamentary Committee on Illegal Mining identified 14,504 illegal mines in 2005. Its report states: "The government in its efforts to promote and develop mining sector had taken a number of steps and commissioned studies from time to time under the National Mineral Policy, 1993. But, the impact thereof has been far from satisfactory and the exploration and development of mineral wealth of the country remained unproductive both economically and socially."

It adds: "The conservation as well as systematic and scientific harnessing of mineral resources is the bedrock of economic development of a nation. However, unscientific and unlawful mining has been thriving endlessly causing not only immense loss to the national exchequer but destruction of natural environment."

Figures released recently by the Ministry of Mines estimates the number of illegal mines for major minerals at 2,496 and for minor minerals at a whopping 28,055. The proposed new mining Act will enhance the scale of impact as the limit for a single lease area is sought to be raised to 100 sq km. While the largest mine lease currently is of the order of 2000 hectares, a fivefold increase in the area of lease will have widespread regional ramifications.

In the interest of the long-term conservation of the environment and respecting the laws already in place to protect the environment and the community, Mines, Minerals and People (MM&P), an alliance of mining-affected communities, demands a moratorium on new mines. New leases could be given when illegal mining is removed; the closed, abandoned and orphaned mines are restored; strict compliance is sought at the unit level; and brownfield expansion is encouraged as against greenfield mining. These activities, if undertaken seriously, will not diminish economic growth significantly and will pave the way for a more systematic utilisation of non-renewable resources.

This calls for a rationalisation of the management of natural resources, stricter due diligence during the grant of lease and accompanying environmental and forest clearances, and a vigilant society to be able to stem the abysmal state of affairs.

R. Sreedhar is managing trustee, Environics Trust, and Convener, Mines, Minerals and People.

<u>Silicosis Update - Rajasthan</u>

In a major order, NHRC has directed to give compensation to 20 death cases of silicosis in Rajasthan and provide

immediate interim relief to 40 other victims. The recommendations of NHRC in this regards are attached.

Compensation for silicosis victims

NHRC Panel Orders Various Steps for Relief Of Miners In Jodhpur

Jaipur: The National Human Rights Commission (NHRC) has ordered payment of compensation to the next of kin of 21 persons who died due to silicosis contracted while working in various mines in Jodhpur.

The commission's order follows a visit by three members of the National Human Rights Commission, New Delhi, to various mines in Jodhpur between January 12 and 15 after a complaint by activist Ashok Kumar of the Mine Labour Protection Campaign (MLPC).

The team visited mines around Jodhpur and recorded statements of the next of kin who had reportedly died due to silicosis.

The National Human Rights Commission has also ordered payment of interim relief to 40 sick miners who are suffering from the disease. The commission has empowered the district administration to make the payments directly to the victims. The commission has also informed the chief secretary and asked him to submit a report of compliance of these orders while asking him to take steps to rehabilitate the afflicted miners.

The chief secretary has also been ordered to direct a senior secretary-level officer to meet the officers of the departments of mines and geology, Rajasthan Pollution Control Board (RPCB), labour enforcement department, and mines safety department, to take measures to prevent spread of silicosis in Jodhpur and other parts of the state. Rana Sengupta of the MLPC said, "This is the first time that it has been recognised that mine workers here are afflicted with silicosis. In fact, the government hospital had suppressed data that nearly 700 mine workers are affected by the disease." The NHRC has also called for roping in some NGO to educate workers on the cause and consequence of silicosis.

The RPCB has also been asked, along with the department of mines and geology, to ensure compliance of pollution norms in these mines. It has asked for linking mine licence along with pollution consent certificates. A strict monitoring of the ambient air quality by the RPCB has also been ordered from time to time. "If the pollution level is found beyond the permissible limit, cancellation of licence of defaulters must be recommended," the order says.

The labour department has also been asked to ensure that labour laws are implemented in various mines and the mine owners maintain a strict record of people working in them so as make them accountable in case of a compensation claim.

Finally, the NHRC has urged the Union mines safety department to place an officer at Jodhpur for the speedy implementation of the provisions.

The article appeared in the Times of India – Jaipur Edition written by Anindo Dey dated 25-06-2010

WILL A DRAFT LAW REBOOT e-MESS?

THE GOVT PROPOSES TO TURN SCRAP DEALERS INTO RECYCLERS. BUT IN THE SPRAWLING WASTE MARKETS OF BANGALORE, THERE ARE FEW TAKERS

SILICON CITY SCRAPYARD					Source: WHO	
E-Was	te Projection F	or Bangalore				
YEAR	POPULATION	WASTE (in kg)			TOTAL WASTE	
		Computers	TV	Cell phone		
2009	1.68cr	90,610	15,100	15,700	1,21,410	
2010	1.71cr	92,240	15371	15,982	1,23,593	
2011	1.74cr	93,900	15,647	16,269	1,25,816	
2012	1.77cr	95,590	15,928	16,561	1,28,079	
2013	1.80cr	97,310	16,214	16,859	1,30,383	



In one of the many e-waste dismantling yards of Gowripalya in Bangalore, a young boy stoops over a printed circuit board and pulls out tiny bits of metal, it's business as usual. Of course, he has no inkling that soon, the scrap shop will shut down if doesn't get a recycler's certification, as the draft e-waste rules get enforced. The dark underbelly of IT city hasn't changed much even after



the international community raised concerns over open segregation and recovery of e-waste.

Indeed, critics of electronic waste recycling point out that 90% of the waste does not get recycled; instead it finds its way to developing countries such as India and China, turning them into hazardous dumps, in the absence of scrutiny. Within India, Delhi (Mundka, Seelampur) and Bangalore (Gowripalya, Nayandahalli) are prime receivers,

from where they move to other markets. The draft of the E-waste (Management and Handling) Rules 2010, made public in the last week of April and set to come into force soon, lays a lot of responsibility on the producer. The producer, which includes the manufacturer or seller of products imported or made by contractors, should collect "ewaste generated from the end of life" of their products in line with the principle of "Extended Producer Responsibility (EPR)" and ensure that it is channelized to a "registered refurbisher, dismantler or recycler", says the draft rules. Since most of the waste now finds its way into the informal market, the informal dismantlers need to put their house in order to get clearances from the Central Pollution Control Board.

It's a multi-crore market, say e-waste scrap dealers in Bangalore, who send the segregated ewaste parts to Delhi and Mumbai every alternate day. "The Delhi party has a huge godown in city market area. They buy scrap from us and transport it to Delhi in trucks. I am not sure what happens to the scrap after that," says Imran, a dealer who started his scrap yard a few months ago.

He has no idea about the draft regulations. "Why should the government shut our business? There are no health impacts among the workers," he adds. His blackened hands and nails worn out by acid bleaching and handling of metals apparently don't count.

"My whole family has been in this business for several decades. It started with my father, he used to get general scrap and then started specializing in e- waste because it was more profitable," says a dismantler from another shop in Gowripalya. "After so many years, my nephew has bought a patch of land in the outskirts for formal recycling and has applied for CPCB clearance. But if people don't make profits in the formal sector, business will continue undercover in the informal sector." And it's not a business he will give up easily. He earns around Rs 2-3 lakh a month from selling the dismantled e-waste to Delhi, he reveals. And there are at least 50 shops here.

But the fault begins far ahead in the e-waste chain. One of the main reasons the informal sector has little incentive to convert to formal recycling is that, companies, both in the public sector and private, prefer auctioning their ewaste to informal dismantlers and get a good price for it. "If the new rules are imposed, it will minimize environmental and health risks. But the informal sector is huge and they have been dismantling waste as a family business. What does the government plan to do with them," asks Asif Pasha of E-Wardd, the first company to

formalize dismantling in Gowripalya. "They need to be trained and the government needs to try and incorporate them into the formal recycling sector. I have employed 52 youths in my recycling hub and have recently received CPCB certification for my company. As of now, the formal sector is ignored by companies, we don't get enough material from anyone."

The sentiment is echoed across the market. "It is a welcome move that material will flow only to formal recyclers or dismantlers. But there has to be enough incentive for these scrap dealers to convert to recyclers.

The five formal recyclers in Bangalore do not get enough material from companies. Both public and private sector need to be motivated to give their waste to formal recyclers. We are hoping that the rules will be implemented soon. At least after a three



year long wait, the draft is out," said Wilma Rodrigues of NGO Saahas.

Appeared - The Times Of India Delhi; Date: May 21, 2010; Section: Green Cover; Page:13; Author Jayashree Nandi

<u>iPhone manufacturer to shutter China</u> factories - Foxconn idles up to 800,000

Foxconn – the massive Taiwan-based contract manufacturer whose clients include Apple, Dell, HP, Intel, Sony, and others – will shutter its mainland China operations in a restructuring that could move as many as 800,000 workers into the ranks of the unemployed.

This news comes by way of the Chinese-language news site $\mathit{ON.CC}$ — a Google translation is available here — and couldn't immediately be independently verified.

The announcement came at a shareholders meeting of the Hon Hai Group, Foxconn's parent company. Chairman Terry Gou said that production would be withdrawn from mainland China and shifted to Taiwan, Vietnam, and India. There are currently 800,000 Foxconn workers on the mainland, and if all Foxconn manufacturing there eventually ceases, they would all be out of work.

Foxconn has been under fire recently for a series of suicides at its Shenzhen, China factory. Gou said that the Chinese government had sent 200 inspectors to the plant, which employs somewhere between 270,000 (*Financial Times*) and 400,000 (Steve Jobs) workers, and that Foxconn management had been exonerated.

Guo also said that the ongoing rash of suicides could be of the copy-cat variety, fueled by media coverage. He also noted that the company had suspended death benefits to remove that impetus for jumping, the favored method of suicide not only at Foxconn's Shenzhen plant, but in urban China in general.

In another bid to improve conditions at its mainland Chinese factories, Foxconn announced two substantial pay raises: a 30 per cent across-the-board raise announced last week, and a 66 per cent performance-based raise to go into effect in October.

According to *ABC News* the company provided no details on how performance would be evaluated.

Rik Myslewski, Posted 10th June 2010 22:45 GMT, Source http://www.theregister.co.uk/2010/06/10/foxconn restructuring/

Another great Australian union video

Remember that great video produced by Australian unions -- "What have the unions ever done for us?" It won the Labour Video of the Year competition earlier this year.

The people who made it are at it again -- with a terrific new video entitled "It's Going to Ruin Us http://www.youtube.com/watch?v=H4PcQfz0MfU&featu re-player embedded>

" Australian unions are eager for people around the world to view it. Have a look yourself -- and spread the word!

Artillery drills spark asbestos fears

http://www.abc.net.au/news/stories/2010/06/29/293948 9.htm - By Josh Bavas , Jun 29, 2010



An internal investigation was been launched after one of the charges broke at the Puckapunyal training base. (Department of Defence)

There are fears that Australian

soldiers could have been exposed to deadly particles by firing dummy charges which contained asbestos during artillery training drills.

An internal investigation has been launched after one of the charges broke and spread asbestos dust in a small room of people at the Puckapunyal training base last October.

The Australian Defence Force (ADF) has been importing dummy charge bags containing white chrysotile asbestos from the United States for the last 46 years.

It was thought the material was safe for soldiers to use, but that view has now changed.

Lindsay Kranz, the director general Occupational Health and Safety for Defence, says the dummy charges come as part of a training kit for the Army's 105mm howitzer.

He says the charge bags were recently removed from use after the Puckapunyal incident.

"In October last year one broke and a couple of people in close proximity were exposed and that's when there was an internal investigation of that scenario," he said.

"Then that went further into the whole use of those dummy bags and at that point they were all withdrawn from service."

Mr Cranz says the chances of artillerymen being exposed to deadly fibres are slim.

But he is asking for personnel to come forward if they are experiencing breathing difficulties.

"It appears that in the main they were used outside," he said. "If they had broken and asbestos had been released ... it was in the open air and therefore not in concentration ... we think that the risk even to the people dealing with the bags all the time is probably very low."

Kevin Reed, who trained with the howitzers for nearly 12 years, says soldiers were asked to destroy the bags after use.

"Any charge bags that were left over at the end of the live firing period, we burnt off," he said.

Dangerous substance

Kevin Reed knows the dangers of asbestos exposure but he says he is not concerned about the threat of contracting mesothelioma.

"We're talking about people who grew up post-war," he said. "We lived in fibro houses, asbestos was everywhere, and some small amount in a charge bag probably didn't worry the great majority of us."

But Barry Robson, from the Asbestos Disease Foundation, says it could take up to 30 years before an exposed soldier starts showing symptoms.

"The whole gun crew would have been affected and anybody else standing around near them when the charges were let off," he said.

Mr Robson says the Defence Force is responsible for whatever ill effects the soldiers may face in the future.

"They should be held very accountable, especially if they knew that these charge bags contain asbestos fibres and then they still used them up until just recently," he said.

"I find it borders on criminal."

OEHNI Updates

Silicosis Case in Supreme Court

Case is ongoing in Supreme Court regarding Silicosis. Talks are underway to implement the courts earlier order (March 2009) to provide compensation to the deceased victims through concerned authorities. In a significant

development NHRC has called a meeting of Prinicipal Secretaries of Gujarat and Madhya Pradesh to decide on the compensation element of the Interim SC order on July 21, 2010. It is expected that the amount and means of compensation will be decided in this meeting. It is also proposed to suggest a compensation plan to NHRC / SC in which a compensation of Rs 5 Lac / victim will be proposed to be put into a Pension fund from which a monthly 6. pension of approx Rs 4000-5000 / month will be given and upon death of the victim, the amount of Rs 5 lac will be given to the legal heir.

Asbestosis Case in Rajasthan High Court

The case is yet to be appear for a hearing in the court.

OEHNI Meeting in Vadodara

OEHNI group meeting was organised in Vadodora on June 19 and 20 (sponsored by PTRC). Several important decisions like Annual Asbestos and Silicosis campaign, ESI Campaign, Collection of data on victims in other parts of the country etc were taken.

Questions and Answers

Answers to Questions asked in the Volume 1.

1. What are the maximum number of hours you should work per week?

No adult worker shall be required or allowed to work in a factory for more than forty-eight hours in any week. This is in accordance with the Factories Act 1948

2. What are the regulations that govern the maximum working hours?

Factories Act 1948

3. What workers have special working hour's rules?

Children, Adult Women. No child who has not 11. Name two of the four most common causes of completed his fourteenth year shall be required or allowed to work in any factory.

A child who has completed his fourteenth year or an adolescent shall not be required or allowed to work in any factory unless- (a) a certificate of fitness granted with reference to him under section 69 is in the custody of the manager of the factory, and (b) such child or adolescent carries while he is at work a token giving a reference to such certificate.

4. What is the average working hours limit in a 24 hour period for people who work at night?

The average is 9 hours in a 24 hour period with a break after a maximum period of 5 hours. The interval of rest will be at least half hour duration.

5. Name two items in a workplace that may cause lung diseases.

Silica Dust, Asbestos Fibres

Name two symptoms of silicosis / Asbestosis.

Loss of Weight, Tiredness and weakness, loss of appetite, lot of cough

7. How do you identify the fire risks at work?

You should conduct, or arrange for a trained person to conduct, a fire safety risk assessment.

8. Name two dangerous substances you may find in the workplace.

LPG (liquefied petroleum gas); fuel such as petrol; cleaning chemicals; solvents; decorating materials such as paint; adhesives.

How do musculoskeletal problems arise in the workplace?

Muscles problems relate to damaged joints and muscles. Poor workplace conditions and working practices can be the cause. Most commonly, muscles problems occur to people who use computer keyboards every day, and to staff who lift heavy items without following safety instructions.

10. Name three safety signs you'd expect to see in a workplace.

Fire exit; first aid room/cupboard; fire extinguisher; fire alarm point; no smoking; toxic or flammable material; signs that tell staff to wear protective clothing, helmets, or eye protection.

workplace accidents.

Slips and trips; manual handling (lifting, carrying, and holding); traffic accidents (warehouses and depots); electric shocks and burns.

Any Questions - Please send in your questions on Occupational Health and Safety to oehni.del@gmail.com and our expert team will endeavor to provide all details

OCCUPATIONAL AND ENVIRONMENTAL HEALTH NETWORK OF INDIA (OEHNI)

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