OSH AND ASBESTOS IN INDONESIA

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INTRODUCTION



- INDONESIA IS A LARGEST ARCHIPELAGO IN THE WORLD WITH 17.508 ISLANDS, HAS 5 MAIN ISLANDS
- POPULATION : MORE THAN 260 MILLION, HAVE A LARGE POPULATION, SPREAD OVER A VAST AREA OF ARCHIPELAGO
- MAIN INCOMES :MORE THAN 50% OF THE OVERALL NATIONAL INCOME FROM AGRICULTURE, FORESTRY, FISHERY, MANUFACTURING AND MINING SECTOR.

PERCENTAGE OF WORKERS AS SHOWS BELOW



AGRICULTURE, FORESTRY,FISH ERY	44%	COMMERCE	19,9%	MANUFACTURI NG	12,47%
PUBLIC SERVANT, SOCIAL AND PERSONAL SERVICE	11,5 %	TRANSPORT AND COMMUNICATIO N	5,85 %	CONSTRUCTIO N	4,65 %
SERVICE	11 %	MINING	0,8 %	TOTAL	100 % ₃

OSH in INDONESIA

- IMPLEMENTING OSH IN THE WORKPLACE, ESPECIALLY FOR ENTERPRISES SHOULD BE SUPPORTED BY GOVERNMENT, EDUCATION INSTITUTION, PROFESSIONAL ASSOCIATIONS, ETC
- THE COMPETENT AUTHORITY FOR OSH IS THE MINISTRY OF MANPOWER AND TRANSMIGRATION
- MOST OF OSH LEGISLATION ARE ISSUED BY THIS MINISTRY
- OTHER MINISTRY, WHO RELEVANT OSH, ALSO ISSUED SOME REGULATION SUCH AS: MINISTRY OF HEALTH, TRADE AND INDUSTRY, MINE AND ENERGY, ETC
- AT PRESENT THE GOVERNMENT HAVE PROMULGATED ABOUT 74 OSH LEGISLATIONS, FOR EXAMPLE :
 - 1. THE ACT NO 1,1970,ENTITLED AS THE OCCUPATIONAL SAFETY ACT.
 - 2. MINISTER OF MANPOWER CIRCULAR LETTER NO. 01,1997 IS ABOUT THRESHOLD LIMIT VALUE FOR CHEMICAL.
 - 3. MINISTER OF MANPOWER REGULATION NO 03,1985 ABOUT OSH FOR ASBESTOS
 - 4. THE ACT No.13, 2003, About MANPOWER
 - 5. ETC

FROM THE CONTENT OF PROVISION, OSH LEGISLATION PROVIDE MINIMUM REQUIREMENTS/STANDARDS :



- REQUIREMENT ON MANAGEMENT OF WORKING ENVIRONMENT
- SAFETY REQUIREMENT RELATES TO TOOLS AND MACHINES
- REQUIREMENT ON HAZARDOUS SUBSTANCE AND PRODUCTION PROCESS
- REQUIREMENT ON ADMINISTRATIVE ARRANGEMENT (SUPERVISION, TRAINING AND EDUCATION)
- REQUIREMENT ON OSH PROGRAM WHICH COVER PROMOTION, PREVENTION, TREATMENT AND REHABILITATION ACTIVITIES

Occupational Accident Cases, Total Enterprises and Workers

year	Cases	Total enterprises	workers
2000	98.908	84.439	13.552.141
2001	104.774	93.329	16.356.250
2002	103.804	100.929	17.369.960
2003	105.846	109.807	19.337.886
2004	95.418	118.866	10.939166

STRATEGIC ISSUES IN OSH



- REPORTING OF OCCUPATIONAL HEALTH DISEASE VERY MUCH LACKING
- OSH MANAGEMENT SYSTEM STILL LOW, ESPECIALLY OCCUPATIONAL HEALTH
- TO CONTROL OF CHEMICAL HAZARDOUS AND
 INDUSTRIAL WASTE
- PREVENTION AND TREATMENT HIV/AIDS IN THE WORKPLACE, GLOBAL FUND AID
- GLOBAL ISSUE OF ASBESTOS, INDONESIA STILL PRIORITY TO ECONOMIC REASONS THAN ENVIRONMENT AND HEALTH.

ASBESTOS IN INDONESIA

- SINCE 1959 INDONESIA USE CHRYSOTILE CONTAINING MATERIALS, NEVERTHELESS UNTILL NOW NEVER FOUND HAZARDOUS TO HEALTHY CAUSE OF ASBESTOS.
- ECONOMIC REASONS OF ITS USAGE IN INDONESIA
- AS REPORT FROM PERSAHABATAN 'S HOSPITAL, A LOT OF LUNG CANCER CASES AND MESOTHELIOMA, BUT NO ONES RELATED TO ASBESTOS.
- IN INDONESIA THERE ARE 26 INDUSTRIALS WITH ABOUT 7.000 EMPLOYEES WHO FINISHED PRODUCT CONTAINING CHRYSOTILE MATERIALS.
- STILL NO DATA OR REPORTED ABOUT OCCUPATIONAL DISEASE CAUSED BY ASBESTOS.

INDONESIA ALLOW TO USE CHRYSOTILE CONTAINING MATERIAL BY REGULATION :

- MINISTER OF MANPOWER REGULATION, NO. 03. 1985. ABOUT OCCUPATIONAL HEALTH AND SAFETY FOR ASBESTOS
- PRESIDENT DECISION, NO.22.1993.ABOUT WORK RELATED DISEASE.EX, ASBESTOSIS, MESOTHELIOMA, LUNG CANCER
- MINISTER OF MANPOWER CIRCULAR LETTER, NO.01. 1997.ABOUT THRESHOLD LIMIT VALUES CHEMICAL FACTOR OF ENVIRONMENT WORKING
- MINISTER OF MANPOWER REGULATION NO.74. 2001, ABOUT DANGEROUS AND POISONOUS MATERIAL MANAGEMENT

USE OF CHRYSOTILE ASBESTOS AND THEIR PRODUCTS IN INDONESIA PER YEAR

TYPES OF PRODUCT	USE OF CHRYSOTILE TON/YEAR	NO. OF WORKERS
ASBESTOS ROOF	57 400	2134
CEILING, HEAT INSULATION, CONE BLOCK	360	590
BRAKE SYSTEM, LINING,PADS	200	4120
OTHER	100	389
TOTAL	58060	7233 10

IN INDONESIA, INDUSTRIAL WHO HIGH RISK EXPOSURE TO ASBESTOS CONTAINING MATERIAL ARE :

- PRIMARY ASBESTOS PRODUCTION: MINING
- SECONDARY ASBESTOS PRODUCTION : ASBES CEMENT
- INSULATION WORKING
- SHIP BUILDING AND REPAIRING
- CONSTRUCTION
- RAILWAY WORKSHOP
- FIRE EXTINGUISHER
- CHEMICAL FACTORY MAINTENANCE
- CAR MAINTENANCE
- POWER ENERGY PLANT

IMPORTED ASBESTOS (CHRYSOTILE) AND COUNTRIES OF ORIGIN (2001-2004)



COUNTRY ORIGIN	2001	2002	2003	2004(Jan- April)
AFRICA	7.475 Mt	8.570 Mt	6.290 Mt	3.180 Mt
BRAZIL	4.980 Mt	5.336 Mt	5.928 Mt	6.300 Mt
CANADA	21.438 Mt	18.634 Mt	10.420 Mt	4.470 Mt
HUNGARY	133 Mt			
RUSIA	7.686 Mt	10.155 Mt	10.420 Mt	5.300 Mt
POLAND	1.251 Mt	230 Mt	137 Mt	
USA	833 Mt			
OTHER GERMANY, JAPAN, HOLLAN, DCHINA, TAIWAN, TURKEY	1.068 Mt			969 Mt
TOTAL	45.047 Mt	43.087 Mt	33.273 Mt	20.219 Mt

ASBESTOS FIBRES RESEARCH BY HIPERKES/NIOSH OF MANPOWER AND TRANSMIGRATION DEPARTMENT,2004

no Fibres/ml		Province/region					TLV
	FIDIeS/III	South sulawesi	East java	yogjakarta	jakarta	North sumatra	Fibre/ml
1	Minimal	No dust det	0.0018	0.0039	0.0022	No.dust det	
2	Maximal	0.0892	0.1654	0.1078	1.9561	0.0027	
3	Sum of Point	20	24	20	20	20	2 fibres/ ml
4	No dust detection	1	-	-	-	11	
5	> TLV	-	-	-	-	-	

ACCORDING WITH HEALTH EXAMINATION REPORT BY CHEST X RAY TO FICMA GROUP EMPLOYEES, AS SHOW BELOW :

NO	NO. OF EMPLOYEE	ENTERPRISES	ABNORMALI TIES CHEST X RAY
1	546	JABESMEN	17
2	317	BAKRI BUILDING	18
3	230	NICHIAS ROAD WORK	10

RESULT OF ASBESTOS RESEARCH IN INDONESIA



- ASBESTOS CONTAINING MATERIALS ENCOUNTERED IN WORKPLACE AVERAGE 0.019 F/CC
- ASBESTOS CONCENTRATION IN AMBIENT AIR, AVERAGE 0.0001F/CC
- THRESHOLD LIMIT VALUES : 2 F/CC
- NO DETECTION OCCUPATIONAL DISEASE CAUSED BY ASBESTOS FIBRES

HOW TO CONTROL ASBESTOS IN INDONESIA

- THE IDENTIFICATION OF ASBESTOS CONTAINING MATERIAL IS NEEDED AS ONE OF MANY STEPS TO MANAGE ASBESTOS FIBRE.ONE THE STEP OF IDENTIFICATION HAVE BEEN CLEARLY CARRIED OUT.
- THE BEST WAY TO PROTECT WORKERS AGAINST THE HAZARDS OF EXPOSURE TO ASBESTOS IS TO ORGANISE THE WORKERS IN EDUCATE THEM ABOUT THE DANGERS OF EXPOSURE TO ASBESTOS
- DON'T DISTURB ASBESTOS CONTAINING MATERIALS UNLESS ABSOLUTELY NECESSARY, CAUSE THEY AREN'T HAZARDOUS AS LONG AS THEY REMAIN INTACT.

THE ELEMENT OF OPERATIONS AND MAINTENANCE PROGRAM TO CONTROL ASBESTOS HAZARDS ARE :

- PERIODIC SURVEILLANCE TO MONITOR OF ASBESTOS CONTAINING MATERIALS
- ROUTINE AIR MONITORING TO ASSES CHANGES THAT MIGHT HAVE OCCURRED IN THE CONDITION OF MATERIALS AS WELL AS FURTHER DOCUMENTING OF THE AIR BORNE CONCENTRATION.
- EMPLOYEE PROTECTION FOR THE MAINTENANCE WORKERS WHO UNDERTAKE REPAIR OR WORK CLOSE TO ASBESTOS CONTAINING MATERIALS.
- MEDICAL SURVEILLANCE PROGRAM TO WHOM THAT MIGHT HAVE EXPOSE TO ASBESTOSES
- TRAINING AND WORK PRACTICES SHOULD BE GIVEN TO PEOPLE WHO COME INTO DIRECT CONTACT WITH ASBESTOS CONTAINING MATERIALS.
- NOTIFICATIONS TO THE OCCUPANTS OF THE BUILDING AND WHO WORK IN THE LOCATIONS OF ASBESTOS CONTAINING MATERIALS, THE POTENSIAL HEALTH RISKS ASSOCIATED WITH ASBESTOS EXPOSURE .



THANK YOU





High resolution photos of asbestos product used in Indonesia















































