

**Agreement on Workers Health Protection through the Good Handling and Use of Crystalline Silica and Products containing it**

- (1) Whereas, crystalline silica is abundant in nature, it makes approximately 12% of the earth crust. Crystalline silica is naturally contained in several other minerals and mineral products.
- (2) Whereas, industry makes intensive use of two of the crystalline forms of silica, i.e. quartz and cristobalite. Both are sold as sand, which is a granular material, or as flours that consist of particles finer than 0.1 millimetres.
- (3) Whereas, crystalline silica, and materials / products / raw materials containing crystalline silica are used in a large variety of industries, including but not limited to the chemical, ceramics, construction, cosmetics, detergents, electronics, foundry, glass, horticultural, leisure, metal and engineering, coatings including paint, pharmaceutical industries, and as filtration media in several industries.
- (4) Whereas, the European Commission's Scientific Committee for Occupational Exposure Limits (SCOEL)<sup>1</sup> concluded, inter alia "that the main effect in humans of the inhalation of respirable crystalline silica is silicosis. There is sufficient information to conclude that the relative lung cancer risk is increased in persons with silicosis (and apparently, not in employees without silicosis exposed to silica dust in quarries and in the ceramic industry). Therefore, preventing the onset of silicosis will also reduce the cancer risk. Since a clear threshold for silicosis development cannot be identified, any reduction of exposure will reduce the risk of silicosis."
- (5) Whereas, there seems to be evidence that there is a variable potency of the effects of Respirable crystalline silica in different industries.
- (6) Whereas there are a series of confounding factors in the epidemiology of lung cancer, for example smoking, radon, and Polycyclic Aromatic Hydrocarbons.
- (7) Whereas, there is currently no occupational exposure limit for Respirable crystalline silica at EU level and the national occupational exposure limits vary.
- (8) Whereas, Respirable crystalline silica differs in many respects – including because of its natural abundance – from the situations normally dealt with under the workers safety legislation. Therefore, the present Agreement, which is in many respects unique, is a suitable instrument for dealing with this particular substance.
- (9) Whereas the Parties act in the firm belief that this Agreement will contribute to protecting jobs, and securing the economic future of the sectors and companies.
- (10) Whereas, the Parties will make their best efforts to obtain application of this Agreement to all companies within the whole sectors they represent.
- (11) Whereas, the Parties to this Agreement act in accordance with Article 139 (1) and (2) EC Treaty.

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<sup>1</sup> SCOEL SUM Doc 94-final on respirable crystalline silica, June 2003.

Having regard to the aforesaid, the Parties conclude the following Agreement on prevention and workers health protection through the good handling and use of crystalline silica and products containing it.

### **Article 1 - Objectives**

This Agreement aims at

- protection of health of Employees and other individuals occupationally exposed at the workplace to Respirable crystalline silica from materials / products / raw materials containing crystalline silica.
- minimisation of exposure to Respirable crystalline silica at the workplace by applying the Good Practices stipulated herein in order to prevent, eliminate or reduce occupational health risks related to Respirable crystalline silica.
- increasing the knowledge about potential health effects of Respirable crystalline silica and about Good Practices.

### **Article 2 - Scope**

- (1) This Agreement addresses the production and use of crystalline silica, as well as materials / products / raw materials containing crystalline silica that may potentially lead to Respirable crystalline silica exposure. Descriptions of industries concerned are provided in Annex 5 hereto.
- (2) The scope of the Agreement includes ancillary activities related thereto, such as handling, storage, and transport. It also applies to mobile workplaces. Mobile workplaces may be subject to specific rules hereunder.
- (3) This Agreement is applicable to the Parties, Employers and Employees as defined and stipulated hereunder.

### **Article 3 - Definitions**

- (1) 'Employer(s)' means the individual companies directly or indirectly represented by the Parties to this Agreement representing industry.
- (2) 'Employees' means the workers directly or indirectly represented by the Parties to this Agreement representing employees who may regularly or from time to time be exposed to Respirable crystalline silica. Employees are understood to mean part-time, full-time, as well as fixed-term employees, and other workers that act under the direct supervision of the Employer (e.g. seconded / posted workers).
- (3) 'Workers Representatives' means workers' representatives with specific responsibility for the safety and health of workers: any person elected, chosen or designated in accordance with national law and / or practices to represent workers where problems arise relating to the safety and health protection of workers at work.
- (4) 'Parties' means the signatories to this Agreement.
- (5) 'Respirable crystalline silica' means the mass fraction of inhaled crystalline silica particles penetrating to the unciliated airways. The respirable convention, which is a target specification for sampling instruments, is defined according to § 5.3. of European Standard EN 481 Workplace Atmospheres - Size fraction definition for measurement of airborne particles.
- (6) 'Good Practices' means the general principles of Directive 89/391 and of Section II of Directive 98/24 as further developed and illustrated by Annex 1 hereto, that may be updated from time to time.

- (7) 'Site' means an operational entity at which Respirable crystalline silica occurs. Storage and transport are considered separate Sites unless they are connected to a production or use Site. Mobile workplaces are also considered Sites.
- (8) 'Non-application' means non-observance of the Agreement including the Good Practices as defined under (6) above resulting in an increased exposure of Employees to Respirable crystalline silica and resulting risk to health that could have been avoided by observing the Good Practices.
- (9) 'National Practices' means competent authorities issued' or industry agreed' guidelines or standards, which are neither law nor regulation.

#### **Article 4 - Principles**

- (1) The Parties will co-operate to enhance the knowledge about health effects of Respirable crystalline silica, in particular by research, monitoring, and dissemination of Good Practices.
- (2) The Parties recognize that there is a need for a European Respirable crystalline silica prevention strategy. However, this does not mean that signature of this Agreement should be considered as acknowledgement of uncontrolled exposure in the sector concerned or actual exposure in the entire sector.
- (3) The Parties acknowledge that the general principles of Directive 89/391, and of Directive 98/24 on the protection of the health and safety of workers from the risks related to chemical agents at work remain at all times applicable (including, in particular, Article 4: determination and risk assessment; Article 5: risk prevention; Article 6: specific protection and prevention measures; Article 7: arrangements to deal with accidents, incidents and emergencies; Article 8: information and training for workers).
- (4) The Parties agree that crystalline silica and materials / products / raw materials containing crystalline silica are, as further described in Annex 5 hereto, basic, useful and often indispensable components / ingredients for a large number of industrial and other professional activities contributing to protecting jobs, and securing the economic future of the sectors and companies, and that their production and wide-range use should therefore continue.
- (5) The Parties agree that the implementation of the 'Good Practices' illustrated in Annex 1 to this Agreement will make an effective contribution to risk management by preventing or, where this is not currently achievable, minimizing exposure to Respirable crystalline silica by the application of appropriate prevention and protection measures in application of Section II of Directive 98/24.
- (6) This Agreement is without prejudice to the Employers' and Employees' obligation to comply with national and EU law in the area of workers health and safety.
- (7) In so far as National Practices in force are shown to be more stringent than the requirements under this Agreement, the Employers and Employees will adhere to these National Practices.

#### **Article 5 - Good Practices**

- (1) The Parties jointly adopt the Good Practices as illustrated in Annex 1 hereto.
- (2) Employers and Employees, and the Workers Representatives, will jointly make their best endeavours to implement the Good Practices at Site level in as far as applicable thereto, including in relation to non-Employees occupationally exposed at Sites, for example contractors (e.g. by making, where applicable, the Good Practices part of the contract specifications).
- (3) Annex 1 may be adapted in accordance with the procedure provided for in Annex 7.

- (4) Employers undertake to organise periodic training, and all concerned Employees undertake to follow this periodic training with regard to the implementation of the Good Practices<sup>2</sup>.

#### **Article 6 - Monitoring**

- (1) Each Site will install a monitoring system for the application of the Good Practices. For this purpose, an Employee (e.g. the team leader of a site) will be designated for each site by the Employer to monitor the application of the Good Practices. He/she will report to the individual designated under (2) upon request.
- (2) An individual will be designated by the Employer in accordance with the provisions of Article 7 of Directive 89/391 to monitor the application or Non-application of the Good Practices regularly. He/she will liaise with the persons designated under (1) above according to a schedule/procedure set up under his/her responsibility after consultation with the works council of the company and Workers Representatives where applicable.
- (3) For dust monitoring, Employers will follow the relevant Dust Monitoring Protocol(s) as outlined in Annex 2. These Protocol(s) may be adapted to the specific needs of smaller Sites and may allow for random selection of Sites in case of a multitude of smaller Sites in specific sectors.

#### **Article 7 - Reporting, Improvement**

- (1) The Employers and the Employees with the support of the Workers Representatives shall jointly and continuously strive to respect the Good Practices, and to improve their application.
- (2) Employers will report the application / Non-application and the improvement through their individual designated under Article 6 (2) every second year, for the first time in 2008 (reporting of 2007 data).  
A reporting format is jointly developed by the Parties as Annex 3 to this Agreement.
- (3) The Parties agree that the number of Non-application situations shall progressively decrease per Employer during the term of this Agreement unless the number of Non-application situations is such as not to allow for further improvement at which point the Employer will make its best efforts to retain the status quo.
- (4) Reporting under (2) above shall be conducted through the respective Party on a consolidated basis to the Council. However, a list of Sites which are repeatedly in a situation of Non-application shall be annexed to the consolidated report.

#### **Article 8: The Council**

##### **(1) Principle**

The main aim followed by the Council is to identify existing problems and to propose possible solutions. The Council shall be the sole and exclusive organ to supervise the implementation and interpretation of the Agreement.

##### **(2) Tasks**

The Council shall review the Article 7 reports and shall issue a Summary Report at the latest by June 30 of the following year summarizing application, Non-application and improvement, stating the level of application / Non-application per industry sector, the reasons therefore and issuing recommendations related thereto. The Summary Report will be forwarded to the Parties and their members, the European Commission and the national authorities responsible for workers safety and shall be marked “confidential/sensitive business information”. An Executive Summary may be made available to the public if desirable. In June 2007, the

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<sup>2</sup> See Article 13 of Directive 89/391.

Summary Report shall be different in format simply summarizing, based on information made available by the Parties, the status of implementation and preparations for the first reporting to take place in 2008.

In cases of repeated Non-applications where these are the result of repeated and unjustified failure to implement corrective actions, the Council will decide on the measures to be taken to address these situations.

In addition to its tasks above, the Council shall also have the following tasks: (a) discussion and resolution of any issues of importance for the working of the Agreement; (b) resolution of any conflicts and interpretation issues under this Agreement, including those brought by individual Parties, Employers and Employees; (c) issuance of recommendations about possible revisions of this Agreement; (d) communication with third parties; and (e) adaptation of the Good Practices in accordance with Annex 7.

(3) Composition

The Council shall consist of representatives of the Parties appointed by them for the first time on the day of the signature of the Agreement for terms of four years each, equal in number representing Employers and Employees. The Parties may also, at the same time or if necessary thereafter, appoint one Alternate Member for each Council member who may accompany as silent observers or replace Council members as the need arises always with a view to ensuring continuity and appropriate expertise. The size of the Council shall be such as to be workable in practice and is fixed at a maximum of 30 (i.e. 15 / 15) including the chairpersons of Article 3 of Annex 6. Should any Party withdraw, resign from the Agreement, or cease to exist, or should a new Party join the Agreement in the course of a term of the Council, the Parties will adjust the membership of the Council accordingly albeit respecting the above maximum number. Parties not represented in the Council as Members or Alternate Members have the right to be heard by the Council and to be present in the debate on their issue. The Council's rules are set out in Annex 6 hereto.

(4) Decision making

The Council aims at taking decisions by consensus. Failing consensus, Council decisions will be taken at a double qualified majority of 75% of the votes respectively attributed to representatives of the Employees and to representatives of the Employers. For example, if the Council consists of 30 members (15 on the Employees' side and 15 on the Employers' side), a majority of 12 votes on each side will be required.

(5) Secretariat

The Council shall be assisted logistically by a secretariat to be set up by the Parties at the time of signature of the Agreement.

## **Article 9 – Confidentiality**

- (1) All oral and written communications among and between the Parties and their members concerning the application of this Agreement shall remain confidential and will not be made available to third parties unless there is a legal obligation of disclosure.
- (2) The confidentiality provision referred to in (1) does not apply to the following:
  - the Summary Report which will only be forwarded to the individuals and organizations listed in Article 8 (2),
  - the Executive Summary which can be made public to third parties,
  - the joint necessary contacts of the Council Chairpersons with third parties,
  - the necessary circulation of information by the Parties to their members as long as those members are affected by the information disclosed.
- (3) The identity of companies named in reports may only be disclosed to the members of the Parties which are concerned, unless otherwise decided by the Council under Article 8 (2). The

receiving persons have to be bound to the same level of confidentiality obligations as set forth by this Agreement.

- (4) Breaches of (1) and (3) shall entitle the damaged Party and/or its members to undertake legal action in accordance with national civil law.

#### **Article 10 - Health Surveillance**

The occupational physician / industrial hygienist or equivalent internal or external organ appointed for the Site will define in accordance with national regulations, Article 10 of Directive 98/24 and the Health Surveillance Protocol as described in Annex 8 the scope of the medical examinations to be performed.

#### **Article 11 - Research - Data Collection**

The Parties will discuss gaps in research and data and make recommendations as to research, including on safer products or processes, which must be subject to a risk assessment before putting them into use. They will also make recommendations as to data collection projects that should be carried out in the future. A list of previous research projects is attached in Annex 4.

#### **Article 12 - Duration - Revision**

- (1) This Agreement is valid for a minimum term of four years and is automatically renewed for consecutive two year terms. Parties are entitled to withdraw from the Agreement with one year notice.
- (2) This Agreement will become void as soon as all of the Parties are no longer representative of their industry sectors, or less than two Parties, one representing Employers and one representing Employees in the same industry sector, would remain Parties hereto.
- (3) Parties are entitled to withdraw at any time without prior notice from this Agreement in the event that their industry sector counterpart will cease to be a party to this Agreement or no longer be representative (“Reciprocity”).
- (4) In case future EU legislation related to crystalline silica should be proposed, the Parties will meet to evaluate the impact of this proposed legislation on this Agreement.

#### **Article 13 - Change of Parties**

- (1) This Agreement is open for signature by additional parties.
- (2) This Agreement will bind successors in law of the Parties.

#### **Article 14 - Miscellaneous**

- (1) This Agreement does not create any rights and obligations other than those stipulated herein.
- (2) Any claims and disputes in relation to the interpretation and application of this Agreement shall exclusively be handled by the Council and shall, because of the unique nature of the Agreement, not be subject to jurisdiction by the local national courts. Any other claims and disputes in relation to this Agreement shall be submitted to the law and jurisdiction of the country of residence of the defendant(s), at the competent local court of residence of the defendant(s).
- (3) This Agreement will be translated into all official EU languages. The English version is binding for interpretation.

- (4) In as far as there is a discrepancy between the Good Practices and more stringent National Practices in a specific jurisdiction, adherence to such National Practices required under Article 4 (7) will not constitute a situation of Non-application under Article 3 (8).

**Article 15 – Entry into Effect**

This Agreement will enter into effect six months after signature by the first two Parties, one representing Employers and one representing Employees in the same industry sector provided the Agreement has been translated into all official EU languages.

Annex 1	[Good Practices (Good Practice Guide)]
Annex 2	[Dust Monitoring Protocol]
Annex 3	[Reporting Format]
Annex 4	[List of Research Projects]
Annex 5	[Descriptions of Industries]
Annex 6	[The Council – The Secretariat]
Annex 7	[Procedure for the Adaptation of the Good Practices]
Annex 8	[Health Surveillance Protocol for Silicosis]

Entered into, April 25, 2006.

By:

**APFE - European Glass Fibre Producers Association**

Mr. R. Furber, Board Member

**BIBM - International Bureau for Precast Concrete**

Mr. E. Danno, Secretary General

**CAEF - The European Foundry Association**

Mr. K. Urvat, Secretary General

**CEEMET - Council of European Employers of the Metal,  
Engineering and Technology-Based Industries**

Mr. U. Combüchen, Secretary General

**CERAME-UNIE - The European Ceramics Industries**

Mr. R. Chorus, Secretary General



**CEMBUREAU - The European Cement Association**

Mr. P. Vanfrachem, Vice-President

**EMCEF - European Mine, Chemical and Energy Workers' Federation**

Mr. P. Mazeau, Deputy Secretary General

**EMF - European Metalworkers' Federation**

Mr. B. Samyn, Deputy Secretary General

**EMO - European Mortar Industry Organization**

Mr. H-P. Braus, Secretary General

**EURIMA - European Insulation Manufacturers Association**

Mr. H. Biedermann, Director General

**EUROMINES - European Association of Mining Industries**

Mrs. C. Hebestreit, Secretary General

**EURO-ROC - European and International federation  
of natural stones industries**

Mr. G. Merke, General Secretary

**ESGA - European Special Glass Association**

Mr. F. Van Houte, Secretary General

**FEVE - European Container Glass Federation**

Mr. A. Somogyi, Secretary General

**GEPVP - European Association of Flat Glass Manufacturers**

Mrs. E. Bullen, Secretary General

**IMA-Europe – The Industrial Minerals Association**

Mr. C. Stenneler, President

Mrs. M. Wyart-Remy, Secretary General

**UEPG - European Aggregates Association**

Mr. D. Audibert, President

**Annex 1 - Good Practices (Good Practice Guide)**

## Annex 2 – Dust Monitoring Protocol

### **Scope**

The dust monitoring protocol is intended to be used by any company that wishes to carry out occupational exposure assessment in order to measure dust exposure levels at the workplace. It is compatible with all current national legislation in the EU. The requirements described below are more applicable for companies with no representative data on dust exposure levels. For the other companies (for example with valid database or implementing a similar dust monitoring protocol for a long time), a lighter version of this protocol (with no need to comply fully with all the requirements) can be applied.

### **Objective**

The objective of the dust monitoring protocol is to collect dust exposure data in order to enable the different companies to assess compliance with relevant national and EU occupational hygiene provisions, such as Occupational Exposure Limit Values, and to guide prevention.

It may also enable to collect representative and comparable data on occupational dust exposure levels among companies where Respirable crystalline silica exposure is experienced in order to produce data on health risk assessment from occupational dust exposures and to start the elaboration and production of exposure data like “job-exposure matrices” available for possible further epidemiological survey.

### **Requirements**

There are two types of measurements commonly used:

- Personal;
- Static.
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Both types of measurement can be used jointly as they are complementary.

It is up to the experts designated by the Employers and the employees’ representatives to opt for the most adequate solutions, while respecting the national and EU provisions.

The following general requirements (taken from the European Standards EN 689 and EN 1232 – see references) should be followed:

- For personal sampling, the sampling equipment must be worn by the worker (within the breathing zone of the worker).
- The collected dust fractions must be at least respirable and (optional) inhalable and thoracic dust fractions.
- The sampling equipment used to collect the dust samples must be in conformity with the European standard EN 481 (for personal measurement – see references).
- The sampling locations should follow at least a set of well-defined job functions<sup>3</sup>.
- The sampling duration should correspond to a full shift (7-8 hours). The number of samples for each job function should be such that it is representative of the worker exposure<sup>4</sup>. When it is

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<sup>3</sup> For example, in the industrial minerals industry, the following job functions were determined: quarry operator (outdoor), crusher operator (indoor), wet process operator, dry process operator, miller operator, bagging operator, transport/bulk loading, foreman/plant management staff, laboratory worker, maintenance and multi-skilled operator (multi-skilled operator is an operator whose percentage of his working time is less than 50% in any other job function category).

<sup>4</sup> For compliance with national legislation or prevention, one or a few samples might be enough but for statistical purposes (for example job-exposure matrices, epidemiological study...), 6 per job function is the minimal number required.

deemed necessary, the Employers' and the Employees' representatives will take joint decisions on the most appropriate sampling duration and periodicity.

- The analytical technique to determine the quartz (and cristobalite) content must be either X-ray diffraction or Fourier transform infrared spectroscopy as required in different national standards.
- A full documentation on the equipment and the procedures must be recorded by the companies (with the help of the organisation responsible for sampling and the analysis) along with dust measurement data.
- The laboratories involved in the quartz analysis should be accredited and/or should join an inter laboratory round exercise to ensure the quality and validity of their procedures and results.

### **Main references**

European standards:

EN 689 Workplace atmospheres-Guidance for the assessment of exposure by inhalation to chemical agents for comparison with limit values and measurement strategy, 1995, CEN.

EN 481 Workplace atmospheres-Size fraction definitions for measurement of airborne particles, 1993, CEN.

EN 1232 Workplace atmospheres-Pumps for personal sampling of chemical agents-Requirements and test methods, 1997.

Note:

Companies should check their national regulation and national standards to make sure their dust monitoring comply with their national requirements. Also, many countries have technical guidance documents available on occupational exposure assessment which may be used to implement dust monitoring at the workplace.

**Annex 3 - Reporting Format**

<b>Agreement on Workers Health Protection through the Good Handling and Use of Crystalline Silica and Products Containing it Reporting Format</b>	<b>Site Level</b>
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Date of latest update

2006-2007
2008-2009
2010-2011
2012-2013

**General Site Information**

1	Company				
	<small>Name of the company</small>				
2	Country				
3	Sector				
4	Site				
	<small>Name of the Site</small>				
5	Reporting Site				
	<small>Select "0" if data for this section only are available, "1" if data for the following sections are available</small>				
6	Number of Employees				
	<small>Total number of Employees on site</small>				

**Exposure Risk**

7	Number of Employees potentially exposed to Respirable crystalline silica				
	<small>Insert the number of Employees potentially exposed to Respirable crystalline silica, e.g. all the Employees working in the production departments</small>				

**Risk Assessment & Dust Monitoring**

8	Number of Employees covered by risk assessment (1)				
	<small>Insert the number of Employees/job for whom the risk assessment procedure has been completed</small>				
9	Number of Employees covered by exposure monitoring (2)				
	<small>Insert the number of Employees/job for whom exposure data are available</small>				
10	Number of Employees with risk assessment requiring Health Surveillance Protocol for Silicosis (3)				
	<small>Insert the number of Employees/job for whom risk assessment procedure suggest the need for starting Health Surveillance Protocol</small>				

**Health Surveillance**

11	Number of Employees covered by generic health surveillance protocol				
	<small>Insert the number of Employees followed up with a generic health surveillance protocol, target value is depending on Company commitments or national laws</small>				
12	Number of Employees covered by Health Surveillance Protocol for Silicosis				
	<small>Insert the number of Employees followed up with the specific Health Surveillance Protocol for Silicosis, part of the Agreement</small>				

**Training**

13	Number of Employees covered by information, instruction and training on General Principles (4)				
	<small>Insert the number of Employees who are included in the General Principles program</small>				
14	Number of Employees covered by information, instruction and training on Task Sheets (5)				
	<small>Insert the number of Employees who are included in the required Task Sheets program</small>				

**Good Practices**

15	Technical measures to reduce generation/dispersion of Respirable crystalline silica				
	<small>Select "1" if the specific Practice is implemented on Site, "0" if not implemented or not applicable</small>				
16	Organizational measures				
	<small>Select "1" if the specific Practice is implemented on Site, "0" if not implemented or not applicable</small>				
17	Distribution and use of Personal Protective Equipment, where necessary (6)				
	<small>Select "1" if the specific Practice is implemented on Site, "0" if not implemented or not applicable</small>				

**Key Performance Indicators**

18	% of Employees potentially exposed to Respirable crystalline silica				
	<small>Line 7 divided by line 6; it gives the % of total Employees working in contact with materials potentially generating Respirable crystalline silica</small>				
19	% covered by risk assessment				
	<small>Line 8 divided by line 7; it gives the % of implementation of the risk assessment procedure</small>				
20	% covered by exposure monitoring				
	<small>Line 9 divided by line 7; it gives the % of implementation of the dust monitoring protocol</small>				
21	% with risk assessment requiring Health Surveillance Protocol for Silicosis				
	<small>Line 10 divided by line 7; it gives the % of Employees with potentially high exposure</small>				
22	% covered by generic health surveillance				
	<small>Line 11 divided by line 7; it gives in %, the commitment of the Company towards generic health monitoring or compliance with national laws</small>				
23	% covered by Health Surveillance Protocol for Silicosis				
	<small>Line 12 divided by line 10; it gives the % of implementation of the specific Health Surveillance Protocol for Silicosis</small>				
24	% covered by information, instruction and training on General Principles				
	<small>Line 13 divided by line 7; it gives the % of implementation of General Principles spreading</small>				
25	% covered by information, instruction and training on Task Sheets				
	<small>Line 14 divided by line 7; it gives the % of implementation of Required Task Sheets</small>				

**Key Notes**

Insert any relevant comment on the implementation of the Agreement at Site level ( e.g. highlight positive or non satisfactory achievements, announce future improvement programs, describe new good practices adopted .....)

Name:			
Position:			
Date: ___/___/___		Signature	

(1) The Risk Assessment procedure can be found in the Annex I - Good Practices to the Agreement ( Good Practice Guide, Part I, Chapter 4)  
 (2) Refer to the Annex 2 - Dust Monitoring Protocol to the Agreement  
 (3) Refer to the Annex 8 - Health Surveillance Protocol for Silicosis to the Agreement  
 (4) General prevention principles are illustrated in Annex 1 - Good Practices to the Agreement (Good Practice Guide, Part I, Respirable Crystalline silica essentials)  
 (5) Good Practices are illustrated in Annex 1 - Good Practices to the Agreement (Good Practice Guide, Part II, General and Specific Task Sheets)  
 (6) A task sheet on PPE can be found in Annex 1 - Good Practices to the Agreement (Good Practice Guide, Part II, Task sheet 2.1.15)



<b>Agreement on Workers Health Protection through the Good Handling and Use of Crystalline Silica and Products Containing it Reporting Format</b>	<b>Company Level</b>
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Date of latest update					
	<table border="1" style="display: inline-table; border-collapse: collapse;"> <tr> <td style="padding: 2px;">2006-2007</td> <td style="padding: 2px;">2008-2009</td> <td style="padding: 2px;">2010-2011</td> <td style="padding: 2px;">2012-2013</td> </tr> </table>	2006-2007	2008-2009	2010-2011	2012-2013
2006-2007	2008-2009	2010-2011	2012-2013		

**General Company (Country) Information**

1	Company				
	<small>Name of the Company</small>				
2	Country				
3	Sector				
4a	Number of Sites				
	<small>Count of line 4 - Site Level</small>				
4b	Number of Reported Sites				
	<small>Sum of line 5 - Site Level</small>				
4c	% of Reported Sites				
	<small>Line 4b divided by line 4a; it gives the % of implementation of the Reporting in term of number of Sites</small>				
5a	Number of Employees				
	<small>Sum of line 6 - Site Level</small>				
5b	Number of Reported Employees				
	<small>Sum of line 6 where line 5 is "1" - Site Level</small>				
5c	% of Reported Employees				
	<small>Line 5b divided by line 5a; it gives the % of implementation of the Reporting in term of number of Employees</small>				

**Exposure Risk**

7	Number of Employees potentially exposed to Respirable crystalline silica				
	<small>Sum of line 7 - Site Level</small>				

**Risk Assessment & Dust Monitoring**

8	Number of Employees covered by risk assessment (1)				
	<small>Sum of line 8 - Site Level</small>				
9	Number of Employees covered by exposure monitoring (2)				
	<small>Sum of line 9 - Site Level</small>				
10	Number of Employees with risk assessment requiring Health Surveillance Protocol for Silicosis (3)				
	<small>Sum of line 10 - Site Level</small>				

**Health Surveillance**

11	Number of Employees covered by generic health surveillance protocol				
	<small>Sum of line 11 - Site Level</small>				
12	Number of Employees covered by Health Surveillance Protocol for Silicosis				
	<small>Sum of line 12 - Site Level</small>				

**Training**

13	Number of Employees covered by information, instruction and training on General Principles (4)				
	<small>Sum of line 13 - Site Level</small>				
14	Number of Employees covered by information, instruction and training on Task Sheets (5)				
	<small>Sum of line 14 - Site Level</small>				

**Good Practices**

15	Technical measures to reduce generation/dispersion of Respirable crystalline silica				
	<small>Sum of line 15 - Site Level</small>				
16	Organizational measures				
	<small>Sum of line 16 - Site Level</small>				
17	Distribution and use of Personal Protective Equipment, where necessary (6)				
	<small>Sum of line 17 - Site Level</small>				

**Key Performance Indicators**

18	% of Employees potentially exposed to Respirable crystalline silica				
	<small>Line 7 divided by line 5a; it gives the % of total Employees working in contact with materials potentially generating Respirable crystalline silica</small>				
19	% covered by risk assessment				
	<small>Line 8 divided by line 7; it gives the % of implementation of the risk assessment procedure</small>				
20	% covered by exposure monitoring				
	<small>Line 9 divided by line 7; it gives the % of implementation of the dust monitoring protocol</small>				
21	% with risk assessment requiring Health Surveillance Protocol for Silicosis				
	<small>Line 10 divided by line 7; it gives the % of Employees with potentially high exposure</small>				
22	% covered by generic health surveillance				
	<small>Line 11 divided by line 7; it gives in %; the commitment of the Company towards generic health monitoring or compliance with national laws</small>				
23	% covered by Health Surveillance Protocol for Silicosis				
	<small>Line 12 divided by line 10; it gives the % of implementation of the specific Health Surveillance Protocol for Silicosis</small>				
24	% covered by information, instruction and training on General Principles				
	<small>Line 13 divided by line 7; it gives the % of implementation of General Principles spreading</small>				
25	% covered by information, instruction and training on Task Sheets				
	<small>Line 14 divided by line 7; it gives the % of implementation of required Task Sheets</small>				
26	% of Technical measures to reduce generation/dispersion of Respirable crystalline silica				
	<small>Line 15 divided by line 4b; it gives the % of Sites where the specific measure is adopted</small>				
27	% of Organizational measures				
	<small>Line 16 divided by line 4b; it gives the % of Sites where the specific measure is adopted</small>				
28	% of Distribution and use of Personal Protective Equipment, where necessary				
	<small>Line 17 divided by line 4b; it gives the % of Sites where the specific measure is adopted</small>				

**Key Notes**

Insert any relevant comment on the implementation of the Agreement at Company level ( e.g. highlight positive or non satisfactory achievements, announce future improvement programs, describe new good practices adopted .....)

Name: _____ Position: _____ Date: ___ / ___ / ___	Signature
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(1) The Risk Assessment procedure can be found in the Annex 1 - Good Practices to the Agreement ( Good Practice Guide, Part I, Chapter 4)  
 (2) Refer to the Annex 2 - Dust Monitoring Protocol to the Agreement  
 (3) Refer to the Annex 3 - Health Surveillance Protocol for Silicosis to the Agreement  
 (4) General prevention principles are illustrated in Annex 1 - Good Practices to the Agreement (Good Practice Guide, Part I, Respirable Crystalline silica essentials)  
 (5) Good Practices are illustrated in Annex 1 - Good Practices to the Agreement (Good Practice Guide, Part II, General and Specific Task Sheets)  
 (6) A task sheet on PPE can be found in Annex 1 - Good Practices to the Agreement (Good Practice Guide, Part II, Task sheet 2.1.15)

<b>Agreement on Workers Health Protection through the Good Handling and Use of Crystalline Silica and Products Containing it Reporting Format</b>	<b>Country Level</b>
---	----------------------

Date of latest update					
	<table border="1" style="display: inline-table; border-collapse: collapse;"> <tr> <td style="width: 15%;">2006-2007</td> <td style="width: 15%;">2008-2009</td> <td style="width: 15%;">2010-2011</td> <td style="width: 15%;">2012-2013</td> </tr> </table>	2006-2007	2008-2009	2010-2011	2012-2013
2006-2007	2008-2009	2010-2011	2012-2013		

<b>General Country (National Association) Information</b>
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<b>1</b>	Association <small>Name of the Association</small>				
<b>2</b>	Country				
<b>3</b>	Sector				
<b>4a</b>	Number of Sites <small>Count of line 4a - Company Level</small>				
<b>4b</b>	Number of Reported Sites <small>Sum of line 4b - Company Level</small>				
<b>4c</b>	% of Reported Sites <small>Line 4b divided by line 4a; it gives the % of implementation of the Reporting in term of number of Sites</small>				
<b>5a</b>	Number of Employees <small>Sum of line 5a - Company Level</small>				
<b>5b</b>	Number of Reported Employees <small>Sum of line 5b - Company Level</small>				
<b>5c</b>	% of Reported Employees <small>Line 5b divided by line 5a; it gives the % of implementation of the Reporting in term of number of Employees</small>				

<b>Exposure Risk</b>
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<b>7</b>	Number of Employees potentially exposed to Respirable crystalline silica <small>Sum of line 7 - Company Level</small>				
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<b>Risk Assessment &amp; Dust Monitoring</b>
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<b>8</b>	Number of Employees covered by risk assessment (1) <small>Sum of line 8 - Company Level</small>				
<b>9</b>	Number of Employees covered by exposure monitoring (2) <small>Sum of line 9 - Company Level</small>				
<b>10</b>	Number of Employees with risk assessment requiring Health Surveillance Protocol for Silicosis (3) <small>Sum of line 10 - Company Level</small>				

<b>Health Surveillance</b>
----------------------------

<b>11</b>	Number of Employees covered by generic health surveillance protocol <small>Sum of line 11 - Company Level</small>				
<b>12</b>	Number of Employees covered by Health Surveillance Protocol for Silicosis <small>Sum of line 12 - Company Level</small>				

<b>Training</b>
-----------------

<b>13</b>	Number of Employees covered by information, instruction and training on General Principles (4) <small>Sum of line 13 - Company Level</small>				
<b>14</b>	Number of Employees covered by information, instruction and training on Task Sheets (5) <small>Sum of line 14 - Company Level</small>				

<b>Good Practices</b>
-----------------------

<b>15</b>	Technical measures to reduce generation/dispersion of Respirable crystalline silica <small>Sum of line 15 - Company Level</small>				
<b>16</b>	Organizational measures and Good Practices at work <small>Sum of line 16 - Company Level</small>				
<b>17</b>	Distribution and use of Personal Protective Equipment, where necessary (6) <small>Sum of line 17 - Company Level</small>				

<b>Key Performance Indicators</b>
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<b>18</b>	% of Employees potentially exposed to Respirable crystalline silica <small>Line 7 divided by line 5b; it gives the % of total Employees working in contact with materials potentially generating Respirable crystalline silica</small>				
<b>19</b>	% covered by risk assessment <small>Line 8 divided by line 7; it gives the % of implementation of the risk assessment procedure</small>				
<b>20</b>	% covered by exposure monitoring <small>Line 9 divided by line 7; it gives the % of implementation of the dust monitoring protocol</small>				
<b>21</b>	% with risk assessment requiring Health Surveillance Protocol for Silicosis <small>Line 10 divided by line 7; it gives the % of Employees with potentially high exposure</small>				
<b>22</b>	% covered by generic health surveillance <small>Line 11 divided by line 7; it gives in %, the commitment of the Company towards generic health monitoring or compliance with national laws</small>				
<b>23</b>	% covered by Health Surveillance Protocol for Silicosis <small>Line 12 divided by line 10; it gives the % of implementation of the specific Health Surveillance Protocol for Silicosis</small>				
<b>24</b>	% covered by information, instruction and training on General Principles <small>Line 13 divided by line 7; it gives the % of implementation of General Principles regarding</small>				
<b>25</b>	% covered by information, instruction and training on Task Sheets <small>Line 14 divided by line 7; it gives the % of implementation of required Task Sheets</small>				
<b>26</b>	% of Technical measures to reduce generation/dispersion of Respirable crystalline silica <small>Line 15 divided by line 4b; it gives the % of Sites where the specific measure is adopted</small>				
<b>27</b>	% of Organizational measures <small>Line 16 divided by line 4b; it gives the % of Sites where the specific measure is adopted</small>				
<b>28</b>	% of Distribution and use of Personal Protective Equipment, where necessary <small>Line 17 divided by line 4b; it gives the % of Sites where the specific measure is adopted</small>				

<b>Key Notes</b> Insert any relevant comment on the implementation of the Agreement at Country level ( e.g. highlight positive or non satisfactory achievements, announce future improvement programs, describe new good practices adopted ..... )
---

Name:	
Position:	
Date: ___/___/___	Signature

(1) The Risk Assessment procedure can be found in the <i>Annex I - Good Practices</i> to the Agreement ( Good Practice Guide, Part I, Chapter 4) (2) Refer to the <i>Annex 2 - Dust Monitoring Protocol</i> to the Agreement (3) Refer to the <i>Annex 8 - Health Surveillance Protocol for Silicosis</i> to the Agreement (4) General prevention principles are illustrated in <i>Annex 1 - Good Practices</i> to the Agreement (Good Practice Guide, Part I, Respirable Crystalline silica essentials) (5) Good Practices are illustrated in <i>Annex 1 - Good Practices</i> to the Agreement (Good Practice Guide, Part II, General and Specific Task Sheets) (6) A task sheet on PPE can be found in <i>Annex 1 - Good Practices</i> to the Agreement (Good Practice Guide, Part II, Task sheet 2.1.15)
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<b>Agreement on Workers Health Protection through the Good Handling and Use of Crystalline Silica and Products Containing it Reporting Format</b>	<b>Sector Level</b>
---	---------------------

Date of latest update					
	<table border="1" style="display: inline-table; border-collapse: collapse;"> <tr> <td style="padding: 2px;">2006-2007</td> <td style="padding: 2px;">2008-2009</td> <td style="padding: 2px;">2010-2011</td> <td style="padding: 2px;">2012-2013</td> </tr> </table>	2006-2007	2008-2009	2010-2011	2012-2013
2006-2007	2008-2009	2010-2011	2012-2013		

**General Sector (EU25 Association) Information**

<b>1</b>	<b>Association</b> <small>Name of the Association</small>				
<b>2a</b>	<b>Number of Countries</b> <small>Insert the number of Countries represented by the Association</small>				
<b>2b</b>	<b>Number of Reported Countries</b> <small>Count of line 2 - Country Level</small>				
<b>2c</b>	<b>% of Reported Countries</b> <small>Line 2b divided by line 2a, it gives the % of implementation of the Reporting in terms of countries</small>				
<b>3</b>	<b>Sector</b>				
<b>4a</b>	<b>Number of Sites</b> <small>Sum of line 4a - Country Level</small>				
<b>4b</b>	<b>Number of Reported Sites</b> <small>Sum of line 4b - Country Level</small>				
<b>4c</b>	<b>% of Reported Sites</b> <small>Line 4b divided by line 4a, it gives the % of implementation of the Reporting in term of number of Sites</small>				
<b>5a</b>	<b>Number of Employees</b> <small>Sum of line 5a - Country Level</small>				
<b>5b</b>	<b>Number of Reported Employees</b> <small>Sum of line 5b - Country Level</small>				
<b>5c</b>	<b>% of Reported Employees</b> <small>Line 5b divided by line 5a, it gives the % of implementation of the Reporting in term of number of Employees</small>				

**Exposure Risk**

<b>7</b>	<b>Number of Employees potentially exposed to Respirable crystalline silica</b> <small>Sum of line 7 - Country Level</small>				
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**Risk Assessment & Dust Monitoring**

<b>8</b>	<b>Number of Employees covered by risk assessment (1)</b> <small>Sum of line 8 - Country Level</small>				
<b>9</b>	<b>Number of Employees covered by exposure monitoring (2)</b> <small>Sum of line 9 - Country Level</small>				
<b>10</b>	<b>Number of Employees with risk assessment requiring Health Surveillance Protocol for Silicosis (3)</b> <small>Sum of line 10 - Country Level</small>				

**Health Surveillance**

<b>11</b>	<b>Number of Employees covered by generic health surveillance protocol</b> <small>Sum of line 11 - Country Level</small>				
<b>12</b>	<b>Number of Employees covered by Health Surveillance Protocol for Silicosis</b> <small>Sum of line 12 - Country Level</small>				

**Training**

<b>13</b>	<b>Number of Employees covered by information, instruction and training on General Principles (4)</b> <small>Sum of line 13 - Country Level</small>				
<b>14</b>	<b>Number of Employees covered by information, instruction and training on Task Sheets (5)</b> <small>Sum of line 14 - Country Level</small>				

**Good Practices**

<b>15</b>	<b>Technical measures to reduce generation/dispersion of Respirable crystalline silica</b> <small>Sum of line 15 - Country Level</small>				
<b>16</b>	<b>Organizational measures</b> <small>Sum of line 16 - Country Level</small>				
<b>17</b>	<b>Distribution and use of Personal Protective Equipment, where necessary (6)</b> <small>Sum of line 17 - Country Level</small>				

**Key Performance Indicators**

<b>18</b>	<b>% of Employees potentially exposed to Respirable crystalline silica</b> <small>Line 7 divided by line 5b, it gives the % of total Employees working in contact with materials potentially generating Respirable crystalline silica</small>				
<b>19</b>	<b>% covered by risk assessment</b> <small>Line 8 divided by line 7, it gives the % of implementation of the risk assessment procedure</small>				
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<b>25</b>	<b>% covered by information, instruction and training on Task Sheets</b> <small>Line 14 divided by line 7, it gives the % of implementation of required Task Sheets</small>				
<b>26</b>	<b>% of Technical measures to reduce generation/dispersion of Respirable crystalline silica</b> <small>Line 15 divided by line 4b, it gives the % of Sites where the specific measure is adopted</small>				
<b>27</b>	<b>% of Organizational measures</b> <small>Line 16 divided by line 4b, it gives the % of Sites where the specific measure is adopted</small>				
<b>28</b>	<b>% of Distribution and use of Personal Protective Equipment, where necessary</b> <small>Line 17 divided by line 4b, it gives the % of Sites where the specific measure is adopted</small>				

**Key Notes**

Insert any relevant comment on the implementation of the Agreement at Sector level ( e.g. highlight positive or non satisfactory achievements, announce future improvement programs, describe new good practices adopted .....)

**Name:** \_\_\_\_\_  
**Position:** \_\_\_\_\_  
**Date:** \_\_\_ / \_\_\_ / \_\_\_ **Signature**

(1) The Risk Assessment procedure can be found in the *Annex 1 - Good Practices* to the Agreement ( Good Practice Guide, Part I, Chapter 4)  
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(5) Good Practices are illustrated in *Annex 1 - Good Practices* to the Agreement (Good Practice Guide, Part II, General and Specific Task Sheets)  
(6) A task sheet on PPE can be found in *Annex 1 - Good Practices* to the Agreement (Good Practice Guide, Part II, Task sheet 2.1.15)

#### **Annex 4 - List of Research Projects**

##### **Past research projects:**

Scientific opinion on the health effects of airborne Crystalline Silica, IOM report, 1996.

The quartz hazard: a variable entity, K Donaldson & PJA Borm, Amer. J. Occup. Hyg. 42 (5), 287-294, 1998.

Evaluation & comparison of personal dust & quartz exposure, measurements from the UK & German silica producers industry, IOM report to client, 1998.

Epidemiological evidence on the carcinogenicity of silica: factors in scientific judgments, C. Soutar et al, Amer. J. Occup. Hyg. 44 (1) 3-14, 2000.

Inflammatory effects of respirable quartz collected in workplaces versus DQ12 quartz: Particle surface correlates, A. Clouter et al, Toxicol. Sc. 63, 90-98, 2001.

In vitro genotoxicity assessment of commercial quartz flours in comparison to standard DQ12 quartz, G. Cakmak et al, Int. J. Hyg. Environm. Health, 207 (2004); 105-113.

Different toxic, fibrogenic and mutagenic effects of four commercial quartz flours in the rat lung, F. Seiler et al, Int. J. Hyg. Environm. Health, 207 (2004); 115-124.

Determining significant variance of biological activity between different respirable quartz flours by a vector model, J. Bruch et al, Int. J. Environm. Health (accepted).

Relationships between the state of the surface of four commercial quartz flours and their biological activity in vitro and in vivo, B. Fubini et al, Int. J. Hyg. Environm. Health, 207 (2004); 89-104.

Mortality in the UK Industrial Sand Industry: 1. Exposure Assessment and 2. Mortality, T.P. Brown and L. Rushton, accepted for publication in Occupational and Environmental Medicine Journal (OEMJ) in 2005.

## **Annex 5 - Descriptions of Industries**

### **Aggregates**

Aggregates are a granular material used in construction. Nearly 3 billion tonnes of aggregates are produced and used in Europe annually. However, a majority of operators in the sector are small and medium sized enterprises. A typical small site provides direct employment for 7 to 10 persons. The aggregates industry consists of around 25,000 extraction sites across Europe, with 250,000 employees in the EU.

The most common natural aggregates are sand, gravel and crushed rock with a wide range of free silica content (from 0% to 100%). Subject to the individual risk assessments to be carried out under this Agreement, only the deposits with a high content of silica are relevant. But even in such cases, the risks of Respirable crystalline silica exposure for workers are normally low. Aggregates produced from rocks containing a small percentage of silica are, without prejudice to individual risk assessment, likely to be negligible in terms of their impact on worker's health.

### **Ceramics industry**

The ceramics industry uses silica principally as a structural ingredient of clay bodies and as a major constituent of ceramic glazes. The principal ceramic products containing silica include tableware and ornamental ware, sanitary ware, wall and floor tiles, bricks and roof tiles, refractories etc.

Around 2,000 companies produce ceramics in the EU. The number of employees in the EU ceramics industry is estimated at around 234,000. The ceramic industry is present in virtually all EU Member States.

### **Foundries**

The foundry industry's products are ferrous, steel or non-ferrous metal castings produced by pouring molten metal into moulds which are typically, in total or in parts, made of bonded silica sand. The foundry industry is an important supplier to the automotive industry, mechanical engineering and other industries. It is a branch of mostly small and medium sized companies: roughly 4,000 foundries with 300,000 employees are situated in the EU Member States.

### **Glass Industry**

Silicon dioxide is the principal glass forming oxide and thus silica sand is the major ingredient in all types of glass. The main glass products include packaging glass (bottles, jars etc.), flat glass (for buildings, mirrors, cars, etc.), domestic glass (tableware: drinking glasses, bowls; decoration, etc.), glass fibre (for reinforcement, insulation) and special glass (for tv, laboratory, optics etc.).

More than 1,000 companies produce glass in the EU. The glass industry is present in all European countries and employs more than 230,000 people in the EU.

After melting the raw material, there is no crystalline silica any more. Glass is an amorphous material.

### **Industrial Minerals and Metalliferous Minerals industries**

Industrial Minerals:

A number of industrial minerals products are composed of silica. Silica is found commonly in the crystalline state but occurs also in an amorphous (non-crystalline) state. Crystalline silica is hard, chemically inert and has a high melting point. These are prized qualities in various industrial uses, mainly in the glass, foundry, construction, ceramic and chemicals industries. 145 million tons of

industrial minerals (e.g. bentonite, borate, calcium carbonate, diatomite, feldspar, gypsum, kaolin & plastic clay, talc, etc) are extracted every year in Europe. Although not all do, industrial minerals may contain variable amounts of crystalline silica.

Those industrial minerals are produced by 300 companies or groups operating about 810 mines and quarries and 830 plants in 18 EU Member States, and in Switzerland, Norway, Turkey, Bulgaria, Romania and Croatia. The industrial minerals industry employs about 100,000 persons in the EU.

Metal ores:

A wide range of metal ores are extracted within the EU and for some, such as mercury, silver, lead, tungsten, zinc, chromium, copper, iron, gold, cobalt, bauxite, antimony, manganese, nickel, titanium, the EU is a relatively significant producer. In some cases, the European producers rank amongst the first ten producers in the world.

Metal ores are produced in 12 EU Member States as well as in Norway, Turkey, Bulgaria, Romania, Kosovo and Serbia. In the EU, this section of the mining and minerals industry employs directly about 23,000 people.

Although not all do, metal ores may contain variable amounts of crystalline silica.

### **Cement Industry**

Cement is a powdered substance mainly used as the binding agent in the making of concrete. It is produced through several stages, basically made up of the two following essential phases:

- manufacture of a semi-finished product, so-called "clinker", obtained from the calcination in a high-temperature kiln (1 450°C) of a "raw mix" made up of a mixture of clay, limestone, and several other additives.

- manufacture of cement as a finished product, obtained by the homogeneous mixture of the ground clinker and calcium sulphate (gypsum) with or without - depending on the type of cement - one or more additional components: slag, fly ash, pozzolana, limestone, etc.

In 2004, the cement production of the current 25 Member States of the EU has reached 233 million tons, about 11% of the total world production (2,1 billion tons).

There are nearly 340 plants in the EU. Four of the five largest cement companies in the world are European. The cement industry employs about 55,000 persons in the EU.

### **Mineral Wool**

Mineral wool has a unique range of properties, combining high thermal resistance with long-term stability. It is made from molten glass, stone or slag that is spun into a fibre-like structure which creates a combination of thermal, fire and acoustic properties, essential to the thermal and acoustic insulation as well as to the fire protection of domestic and commercial buildings or industrial facilities.

These properties derive from its structure, a mat of fibres which prevent the movement of air, and from its chemical composition.

Insulation manufacturers are developing to meet the growing environmental concerns of society, improving standards and regulations for the use of insulation materials.

Among mineral wools, only glass wool is of concern with regard to crystalline silica as glass wool is manufactured using sand, whilst stone wool is not. After melting the raw material for glass wool, there is no crystalline silica any more, as it becomes an amorphous material.

The mineral wool industry is present in all European countries and employs over 20,000 people across the EU.

## **Natural Stone Industry**

Dimension stone exists in nature as an almost ready-made building material. Few realize, however, that it takes millions of years for this material to get to the point at which it can be easily produced and processed.

The industry consists only of small and medium sized companies of between 5 to 100 employees and is an essential supplier of the building industry. More than 40,000 companies exist in the EU, employing around 420,000 persons in the EU. Work with natural stones not only covers the production of stone in quarries, much more important is the processing of stones and the implementation of stones. Restoration and high-tech applications need qualified education and training which starts with stone workers up to high-tech stone engineers.

## **Mortar Industry**

Mortar is defined as a mixture of aggregates, generally with a grain size of less than 4 mm (sometimes less than 8 mm, e.g. mortar for special decorative renders or floor screed mortar) and one or more binders and possibly additives and/or added mixtures.

Mortar with inorganic binders contains in addition water. The application and use of mortar is not limited to masonry constructions. The field of floor screed mortar is growing. There are many special kinds of mortar which are used for concrete repair, for tile fixing, for roofs, for the anchoring of bolts and for many other applications.

In addition the external thermal insulating composite systems (ETICS) are also a product of the mortar industry playing an important role in energy saving measures. More than 1,300 companies produce mortar in the EU. The EU mortar industry has more than 34,400 employees.

## **Precast Concrete Industry**

Precast concrete is a factory-made building material widely used worldwide and available in all sizes and forms, from very small paving units to more than 50 meters long bridge elements.

Its production process consists in mixing cement, aggregates, water, additives and admixtures in different proportions, pouring them in moulds and let them harden. The products are supplied to the market in a dust-free hardened state. Dust generation can mainly occur in raw material handling and post-manufacturing mechanical treatments.

The industry is composed of small to medium-size enterprises, spread all over Europe. Estimated figures for the EU are: 10,000 production units, 250,000 workers and 300 to 400 million tons of products.

## **Annex 6 – The Council – The Secretariat**

### **Article 1 - Scope**

The Council is in charge of the tasks assigned to it under Article 8 of the Agreement. However, the tasks listed in Article 8 (2) (b) and (d) of the Agreement shall be in the exclusive and joint competence of the four Chairpersons designated in accordance with Article 3 hereunder.

### **Article 2 – Meetings / Decisions**

- (1) The Council shall meet at least once every second year for two days, during the second half of June of the respective year in Brussels. The Secretariat will provide logistical and secretarial support for this meeting and will organize and call for the meeting.
- (2) Members will receive the Employer Parties' consolidated reports 20 business days before the first day of the respective meeting for preparation of the meeting. During the two day meeting, Members shall prepare and draft the Summary Report as required by Article 8 (2) of the Agreement. Minority statements and opinions shall be recorded in an Appendix but shall be kept to a minimum.
- (3) The two Co-Chairpersons designated under Article 3 below may jointly decide to hold more frequent meetings if they consider this necessary.
- (4) Members can issue proxies to other Members or Alternate Members.

### **Article 3 - Chairpersons**

The Council will be chaired by two Co-Chairpersons, and two Co-Vice-chairpersons, each appointed by the Parties representing Employees and Employers for terms of four years, for the first time at the date of the signature of this Agreement.

### **Article 4 - Minutes, Records**

- (1) The Council meetings shall be minuted. Minutes will be provided to the Parties within two weeks after the respective meeting. Unless Members object to the minutes within one further week, minutes shall be considered as final.
- (2) The Secretariat or a third party appointed by it shall maintain all records in relation to the Council.

### **Article 5 – Costs of the Council / Secretariat**

All common reasonable and justified expenses / costs emanating from the operation of the Council (meeting room, simultaneous interpretation in FR / EN / DE excluding individual travel and accommodation) and from the Secretariat shall be equally split among the Parties representing Employers.

### **Article 6 - Liability, Indemnification**

- (1) Membership in the Council is on behalf of the Parties represented and Members and Alternate Members can therefore not be held individually and directly liable for their membership duties.
- (2) Parties shall jointly and severally indemnify and hold harmless Members, Alternate Members, their heirs and successors from and against any and all claims, fees, costs, expenses, liabilities



and damages (including reasonable attorneys' fees) reasonably incurred or imposed upon them in connection with or resulting from any action, suit, proceeding or claim to which they may be made party or may become involved in relation to or as a result of their membership in the Council, unless the action, suit, proceeding or claim has been caused by willful misfeasance or malfeasance in their duties.

**Article 7 – Notifications / Language**

All notifications, collection and dissemination of documents under Annex 6 shall be done by electronic mail. Communications from and to the Council shall be routed through the electronic mail addresses of the Secretariat. All notifications, communications and meetings shall be conducted in the English language.

## **Annex 7- Procedure for the Adaptation of the Good Practices**

Pursuant to Article 1 Third Indent of the Agreement, the Agreement aims, among other, at increasing the knowledge about Good Practices. In accordance with this 'dynamic' nature of the Good Practices and pursuant to Article 5 (3) of the Agreement, this Annex provides the procedure to be followed for adaptation of the Good Practices.

### **Article 1 – Submission of New or Revised Task Sheets to the Parties**

Employers and Employees are encouraged, at any time during the duration of the Agreement, to submit to the Party by which they are represented (the Introducing Party), draft new or revised existing Task Sheets (both hereafter 'New Task Sheets'), accompanied, in the case of draft revised existing Task Sheets, by a written explanation and justification why and how these draft revised existing Task Sheets constitute an improvement of workers protection or achieve the same protection by alternative practices and techniques compared to the existing Task Sheets. The Introducing Party shall assess and may support such New Task Sheets.

### **Article 2 – Agreement of New Task Sheets by the Industry Counterpart ('Mirroring' Party)**

Pursuant to having expressed its support under Article 1 above, the Introducing Party shall submit the supported New Task Sheets to their industry counterpart for discussion and approval. It is for the respective Mirroring Parties to organize their exchange of views on and approval of the New Task Sheets. Once approved by both parts of the industry, the New Task Sheets will be submitted to the Council (Article 8 (2) of the Agreement).

### **Article 3 – Adoption by the Council**

The Council is responsible for the final review and adoption of New Task Sheets in order to ensure that the New Task Sheets do not conflict with the Agreement (including other Task Sheets, other parts of the Good Practices etc.). This includes the withdrawal of outdated Task Sheets.

### **Article 4 – Validity of Adaptations**

Following Article 3 adoption, all adaptations of the Good Practices shall be communicated via electronic mail or Extranet to the other Parties. They shall be valid three months after their communication, unless another validity date is stipulated by the Council.

### **Article 5 – Frequency of the Adaptation Procedure**

It is recalled that the Council will meet at least every second year. Parties are therefore encouraged to bundle their adaptation requests if at all feasible in line with the Council's meeting schedule.

## **Annex 8 – Health Surveillance Protocol for Silicosis**

### **GENERAL GUIDELINES**

Employers shall in the first instance carry out a workplace risk assessment as it is described in the Good Practice Guide, to identify where Employees may be at specific risk from health hazards related to Respirable crystalline silica. The implementation of the Health Surveillance Protocol will depend on the results of the risk assessment.

All health surveillance shall be conducted professionally by competent medical personnel and in accordance with current national legislative requirements.

The employee(s) or external medical adviser who has a responsibility for the safety and health program should have a working knowledge of the elements of the respiratory medical surveillance program.

The objectives of the specific Respirable crystalline silica related health surveillance are to:

- Detect adverse health effects early;
- Establish a baseline from which to assess changes that may develop;
- Prevent further harm being caused.

The potential benefits are:

- Identifying individuals affected;
- Identifying potentially hazardous working conditions and check the effectiveness of the control measures in the workplace;
- Providing feedback on the accuracy of risk assessments;
- Developing data on which epidemiological studies can be based.

### **RESPIRATORY HEALTH RISKS**

The primary health risk of exposure to dust containing Respirable crystalline silica is a respiratory disease called **silicosis**. It's why it is essential to focus the medical surveillance on the lungs. Further, there is some evidence that people suffering from silicosis are at a higher risk of developing lung cancer. Also people exposed to dust in general and those suffering from dust related respiratory diseases (pneumoconiosis, silicosis, etc.) have a higher risk of developing tuberculosis. This should be taken into consideration when performing the medical surveillance.

### **CONTENT OF THE RESPIRATORY MEDICAL SURVEILLANCE PROGRAM**

#### **1) The respiratory medical surveillance program should include the following:**

- A **medical file** will be established for each Employee at the time of hiring. The actual format is unimportant, but the records need to be accessible for authorised medical professionals, updated, secure, linked (e.g. dust exposure data), confidential and kept for 40 years following the end of exposure.

This dossier comprises in particular, in accordance with national legislation, the following essential elements:

- Identification data;
- Other useful demographic data (personal and family history);
- Employee job profile;
- History of the occupational and extra-occupational activities which detail exposure to potentially harmful dust, chemicals and other physical agents (radiation);

- Medical history that focuses on the presence of respiratory symptoms (e.g. cough, sputum, shortness of breath, wheezing);
- Smoking habits (number of cigarettes per day, duration...).
- **Medical examination** of the thorax. The examination should note whether observations relating to the chest are normal or not (e.g. symmetry, expansion, percussions, breath sounds, palpitation, wheezes, rales and rubs).
- **Functional testing:**
  - Although abnormalities shown by spirometry or pulmonary function tests are non-specific (e.g. smoking is an important confounding factor), respiratory functional testing is regarded as a useful component of respiratory medical surveillance program for baseline evaluation and periodic monitoring. It allows detection of a pulmonary function loss in its earliest stages.
  - Standardized methods for spirometry testing and equipment specifications have been recommended by professional associations such as the European Respiratory Society (1993) and the American Thoracic Society (1995).
- **Radiological examination:** To follow the radiographic changes in workers exposed to crystalline silica is the most sensitive means of early detection of silicosis. Abnormalities are usually seen radiographically before pulmonary function loss can be detected by spirometry or before symptoms appear. Periodic chest x-rays are therefore a vital part of the respiratory medical surveillance.
  - A full size, postero anterior (PA) chest X-rays, preferable obtained using a high kilovoltage technique (smaller formats coming from computerized techniques are not suitable).
  - Films should be read by qualified and trained radiograph readers or pneumologists.
  - Guidelines on proper equipment and techniques have been extensively published. More information on current practice can be obtained from the International Labour Organization (ILO), 1211 Geneva 22, Switzerland.
  - Films should be classified in accordance with the 2000 Guidelines for the Use of ILO International Classification of Radiographs of Pneumoconiosis. The implementation and the follow-up of the guidelines on proper equipment and techniques could allow later, if necessary, to classify the chest X-ray accordingly.
  - The frequency of the chest X-ray examination will be determined by an occupational health practitioner, based on an assessment of the risk from exposure to Respirable crystalline silica. Be aware of existing regulatory restrictions in some countries about the frequency of the X-ray examination. For advice, consult a qualified occupational health practitioner.
  - The employees, having been in contact with / exposed to Respirable crystalline silica and who have stopped their activities with a particular Employer (retired / new professional orientation) must be able to benefit from a medical follow-up at their request. The Employers commit themselves within the framework of national and EU provisions to facilitate this medical follow-up.

## 2) Record keeping and confidentiality:

- **Medical records** must be kept securely, whether in-house or out-sourced. Access to these medical records will take place only in accordance with national legislation.
- Good **communication** is essential if the objectives of a health surveillance program are to be met.
  - The Employee must be informed of the results of his medical check-up;

- The results of the medical surveillance program, disclosed in such a manner that individuals cannot be identified, should be used to enhance existing health and safety control measures at the workplace.

#### REFERENCES:

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