

Verhand Europäischer Sand - Kies- und Schotter-Produzenten European Aggregates Association

GOOD HEALTH AND SAFETY PRACTICES IN THE **EUROPEAN AGGREGATES** INDUSTRY

UEPG Health and Safety Committee

César Luaces Frades



GOOD HEALTH & SAFETY PRACTICES

IN THE EUROPEAN AGGREGATES INDUSTRY

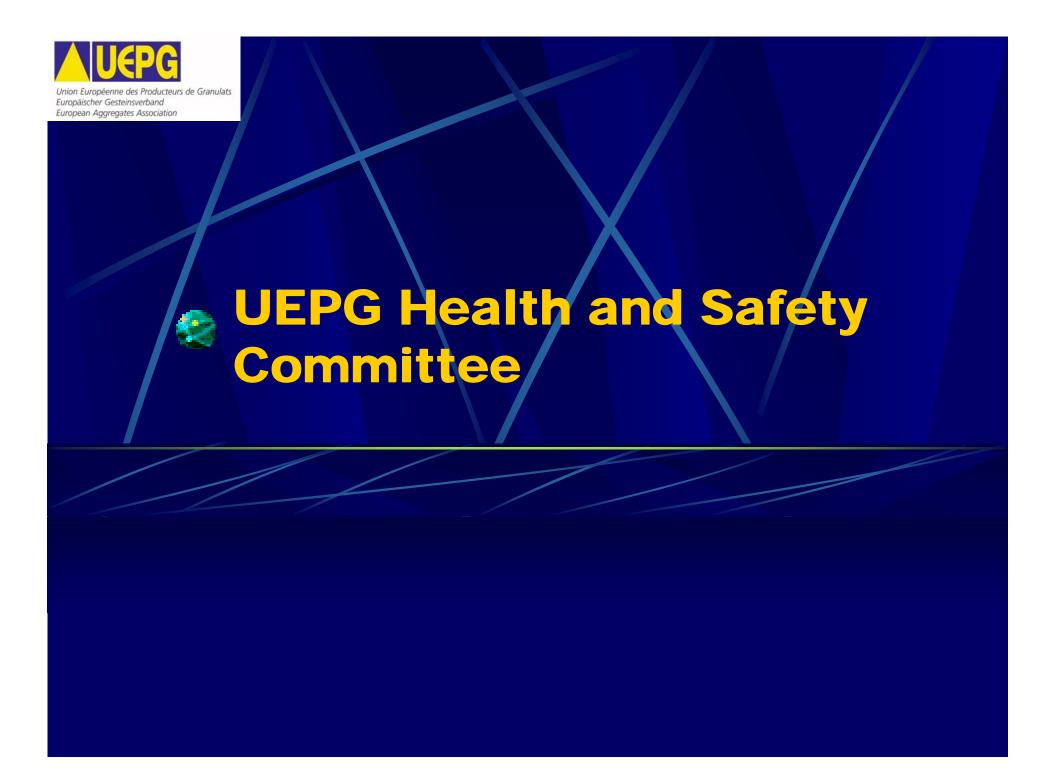




Union Européenne des Producteurs de Granulats UEPG

- 21 countries
- 13.500 companies
- 28.500 extraction sites
- 350.000 workers
- 3.000 Mt of Aggregates/year







UEPG - Health and Safety Committe

- 29 Members
- Supported by technical experts
- Chair: Rafael F. Aller (FdA Spain)
- Vice-chair: Martin Isles (QPA U.K.)
- Secretary: César Luaces Frades (FdA Spain)



Zero accidents objective

- To identify health and safety situation and problems for the European Aggregates Industry
- To promote H&S integration within aggregates companies
- To promote H&S good practices across the aggregates industry
- To establish improvement H&S targets regarding specific issues:
 - exploitations and treatment plants design,
 - workers participation,
 - subcontractors,
 - others



Zero accidents objective

- To identify key health and safety themes for the European Aggregates Industry (e.g. silica sand, vibrations, dangerous substances)
- To promote the industry's health and safety performance more effectively through UEPG website and a strong network
- To establish a workable SDI reporting scheme adapted to the sector, including H&S statistical accident data (official or estimations from Member Associations)



GOODALEALTH AND SAFETY PRACTICES IN THE EUROPEAN AGGREGATES INDUSTRY



IN THE EUROPEAN AGGREGATES INDUSTRY





H&S Good practice concept

European Agency for Safety and Health at Work

- Implemented solutions in aggregates companies to prevent the exposure of workers to risks during quarrying activities, beyond the legal requirements.
- All examples should show good management, particularly the effective use of risk assessment and implementation of its findings, and be focused on the successful prevention of risks to workers.
 - That can be taken at enterprise level to improve working/living conditions
 - Risks tackled at source through good management
 - Successful implementation in the workplace
 - Real improvements
 - Sustainability across time
 - Good consultation between management and the workforce
 - Possibility of transfer to other aggregates companies and preferably to SMEs
 - Freshness of information provided.



Examples of good practices

GENERAL ASPECTS OF RISK	TRAINING			
	INFORMATION			
	PARTICIPATION			
PREVENTION	HUMAN FACTORS			
	OTHER ASPECTS			
EXTR	ACTION SITE			
	CONTROL CABINS			
	HOPPERS, CRUSHERS AND OTHER			
	EQUIPMENT			
TREATMENT PLANT	CONVEYOR BELTS			
	TRANSIT ZONES			
	PROTECTIONS AND SAFEGUARDS			
	WORK CONDITIONS			
MOBILE EQUIPMENT				
	MAINTENANCE			
AUXILIARY OPERATIONS	EXTERNAL TRANSPORT			
AUXILIARY OPERATIONS	SAMPLING			
	VISITORS			



Procedure/Involvement

- A survey has been sent to UEPG Member Associations (10 October 2005)
- Each UEPG Member asked its member companies for examples. Member companies aggregate gave examples of Good Practices in H&S, according to:
 - A short questionnaire, in English.
 - Two pictures in digital format (jpeg or tiff file).
- A small H&S Good Practice Task Group (<6 persons), that has been nominated by the UEPG H&S Committee selected examples and drafted the document.
- The draft was circulated to all UEPG Members for comments.
- The final document (English version) was approved by the UEPG Health and Safety Committee.
- Final document: 7 March 2007



Example of the questionnaire



inter Europianne-das Protections de Granduts Vertiene Gunplitarten Gand, New Jeré Britanie Producerte UEPG HBS Good Practices in the Aggregates Industry Proposal

UEPG Health and Safety Committee

Proposal for a Guide

"UEPG H&S Good Practices in the Aggregates

Industry"

EXAMPLE

COUNTRY			SPAIN					
COMPANY			ARIDOS CUTILLAS, S.A.					
CONTACT			GABRIEL MOÑINO HIDALGO					
TELEPHONE	E NUMBER	0034	0034915021417					
RAME OF THE		ROC	ROCK QUARRY					
ADRESS OF	THE SITE	/ 23, 1	23, Rock Street					
PROCESSIN	IG PLANT		45646 FORTUNA					
		MUR						
OTAL NUM	IBER OF W	ORKERS OF	THE COMP					18
QUARRY	X SAN	D AND GRA	VEL PIT	PROC	ESSING PLA	MT (OTHER	
		(PL		THE APP	ROPIATE BO	OX)		
EXTRACTION SITE	MOBILE MACHIMERY	PROCESSING PLANT	AUXILIARY OPERATIONS (LABORATORIES, GARAGE, SAPPLING, PLAN TENANCE, EXTERNAL TRANSPORT)	GENERAL ASPECTS (TRANDING, INFORMATION, COMPALTATION OF MICRORIES, ACCIDENT ANALYSIS, SAFETY PROCEDURES, SUBCONTRACTO RS)	INHOVATION	HUMAN FACTORS	WORKING CONDITIONS (DUST, NOSS), VERRITIONS, MANUAL LOND HANDLING, ETC.)	OTHER
	×							
					IE GOOD I			
obstruction	raulie ham . This safe	practice prev	o break any ent other da	big stone i	n the primary erations rela	y crusher, a ted with th	avoiding the r te accidental i this equipme	blockage o
ADVANTAG OBSERVED	ES The	risks of fall			l blows are a		he number of	hours that

PLEASE SEND ONE TWO PICTURES RELATED TO THE GOOD PRACTICE, IN A DIGITAL FORMAT (JPEG OR TIFF FILE)



Final document

- No of examples: 206
- N° of contributing countries: 16
- N° of companies: 86
- N° of pages: 108
- Size: A4



Contributions

	COMPANIES	EXAMPLES
AUSTRIA	1	2
BELGIUM	2	2
CROATIA	0	0/
CZECH REPUBLIC	2	5
DENMARK	VARIOUS	/1
FINLAND	1 /	1
FRANCE	16	36
GERMANY	26	33
GREECE	O O	0
IRELAND	0	0
ITALY	5	11
NETHERLANDS	VARIOUS	4
NORWAY	2	2
POLAND	1	1
PORTUGAL	1	1
ROMANIA	0	0
SLOVAK REPUBLIC	0	0
SPAIN	15	87
SWEDEN	2	2
SWITZERLAND	1	1
UNITED KINGDOM	11	16
UEPG	86	206
TOTAL COUNTRIES	16	16



The guide

Places for the logo of a National Association (National versions)





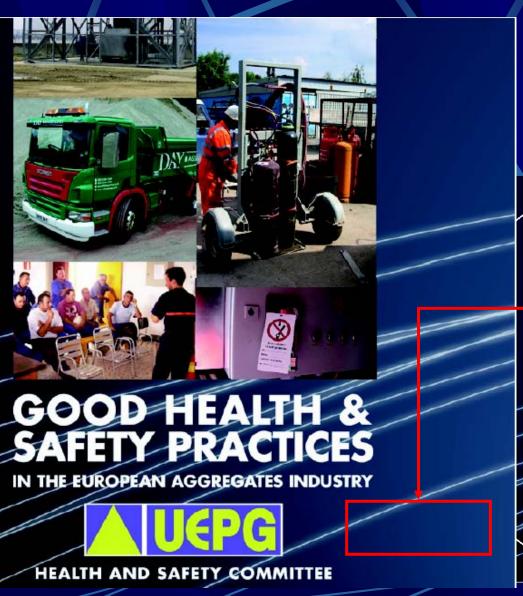
GOOD HEALTH & SAFETY PRACTICES





European Aggregates Association

The CDROM



Places for the logo of a National Association (National versions)

GOOD HEALTH & SAFETY PRACTICES

IN THE EUROPEAN AGERECATES INDUSTRY





Pages

GOOD HEALTH & SAFETY PRACTICES IN THE EUROPEAN AGGREGATES INDUSTRY

Holcim - Italia

TROLLEY FOR THE OXYACETYLENE WELDING GAS CYLINDERS TRANSPORT

This is a trolley for transport of exyacetylene welding gas cylinders.

The support base has been conceived to facilitate the frontal bottles loading and a safe accommodation during the transport.



The bottles transport is now more practical and safe, since the risk of the load falling is now avoided.



Hanson Aggregates

GAS BOTTLE TRANSPORTERS

The fitting department at this Quarryhas designed and fabricated a transporter that makes handling heavy gas bottles a far safer process. A trailer with a winch at the rear lifts the bottles from ground level on a base plate that can be fixed in position. The design incorporates a hobster to prevent the gas nextles being damaged during transit, a bracket to store a fine extinguisher and protruding brackets to keep the hoses neatly stored.

Advantages Observed

A specially designed transporter reduces the manual handling of gas bottles and thus the risk of injury.



Lafarge, Aridos y Hormigones, S.A.U.

HANDLERS

To reduce as far as possible the risks arising from working at height and the manual handling of leads, the company has decided to provide each of its facilities with a handler unit.

This highly manageable equipment can be fitted with a variety of accessories such as platforms (with handrafs, barriers, baseboards, points to moor belt lifelines, safety controls, stabilisers, etc.), forks to move leads, load hotets, small pois, etc.

Advantages Observed

in addition to ensuring a most notable improvement to safety and the efficiency of maintenance operations (reducing risks of falls, dropped suspended items, excess effort, etc.), this has had the effect of cutting the number of hours the facilities are shutdown.

Alugra

Rüdersdorfer Zement GmbH

WORK PLATFORM ENSURES SAFE REPAIR WORK ON THE LIFTING FRAME OF THE WHEEL LOADER



Repair work had to be carried out on the lifting frame of the CAT 990-type wheel loader time and again. There was no guarantee for the stability of personnel carrying out installation work in particular if oil had been previously spilled.

To eliminate the danger of accidents, a work platform has been constructed which can be mounted onto the wheel loader. Railings and slip-free supplementary grids have been applied to the work platform since it is attached to the right and left sides of the wheel loader at a height of approximately 3.50 m.

Advantages Observed

Maintenance work on the lifting frame of the wheel frame can be carried out easily and safely using this work platform.

Basaltes

DUST SUPPRESSION SYSTEM



A vacuum-cleaning machine for the accumulated dust has been prepared for the screen.

Advantages Observed

Allower exposure to respirable dust of workers in charge of survey, dearing and maintenance of the screen has been achieved.

Compañía General de Caryteras, S.A.

REMINDER SIGNALS FOR THE INSTALLATION OF COVERS



Signals placed on the covers for the mobile or hazardous components of the installation, such as transmission belts, shafts, mill inertia flywheels, screen eccentrics, motor hot points, etc. are a reminder of the obligation to refit these elements following maintenance or repairs. Posters have also been installed on all panels and in cabinets and rooms, which contain electrical elements, with a prohibition on their handling by unauthorised employees.

Advantages Observed

The bad habit of not replacing guards immediately after maintenance has been reduced.

There have been no accidents since 2004 due to mishandling of electrical components or devices.



Examples

Name of the company (Reference in chapter 8)

Title

Reference number

WBB Minerals

SAFETY INDUCTION BOARD GAME



A 30-minute video that uses a fun concept to communicate a serious safety message has greatly improved the company's induction process. The video, which is shown to all new and current employees and contractors, involves a computer-generated character, which works its way around a board game. Each square on the board has a different health and safety topic, such as emergency procedures and incident reporting. When the character lands on a risk square, video users are asked a number of questions to test their knowledge of the issues.

The video effectively promotes company policy and provides basic health and safety information generic to all

sites. Throughout the video, reference is made to the company's commitment to the Health & Safety Executive's Hard Target initiative for accident reduction and to the Health & Safety Executive's 'Hot Topics'. The company's new systems for control of contractors, permits to work and machinery isolation are also covered.

Advantages Observed

 The video is part of a wider induction programme, prompting discussion and a deeper exploration of sitespecific safety issues. Country flag

1 picture



Preface - Pedro Ortun

GOOD HEALTH & SAFETY PRACTICES IN THE EUROPEAN AGGREGATES INDUSTRY



Pedro Ortún Silván Director DG Enterprise & Industry European Commission

I welcome this voluntary initiative of UEPG, the European Aggregates Association to increase knowledge about risk and accident prevention.

This exchange of experience of good practice amongst UEPGs 28,000 sites, which provide jobs for a quarter of a million employees across the European Union, will be a valuable business contribution to promoting corporate social responsibility.

Initiatives like these can be a particularly valuable tool for small and medium sized companies which do not have the resources of larger companies but wish to develop health and safety strategies relevant and appropriate to their needs.

I wish UEPGall success in promoting good practice across Europe through these case studies.



Introduction - Rafael F. Aller





Rafael Fernández Aller Chairman UEPG Health and Safety Committee

INTRODUCTION

The UEPG Health and Safety Committee has taken the initiative of producing this Good Practice Guide to reinforce internal and external commitment and to provide a useful tool to promote the health and safety performance of the European Aggregates Industry.

This Guide is a compilation of more than 200 case studies voluntarily provided by member companies.

The examples, described by the companies, were developed to resolve specific problems in one or more of their operations. Their possible application to other companies in the sector will depend on the particular drawnstances.

In the context of the Council Directive 89/391/EEC of 12 June 1989 on the introduction of measures to encourage improvements in the occupational health and safety of workers at work, the term 'good practice' implies compliance with the obligations in the legal provisions on the prevention of labour risks and moving shead in actions which make it possible to improve safety.

This guide contains low cost but nevertheless effective measures as well as some involving larger investment which may require a medium to long-term approach.

Most good practice in the prevention of labour risks as described here, has made it possible to improve the production process, increasing workers' commitment to a company, whilest also increasing employee safety as part of their daily working life.

The UEPG Health and Safety Committee has reviewed and selected the information, to assess whether examples fulfil the good practice concept.

This guide will help UEPG to achieve the following strategic objectives:

- To contribute to sustainable development, laying the foundations for a safe industry with a "zoro accident" goal;
- To identify Good Practices in H&S that are applied in European aggregates companies;
- To disseminate effectively UEPGS H&S expertise to EU policy-makers and legislators and become an authoritative source of information on the European Aggregates Industry;
- To exchange knowledge and expertise, from the different member countries;
- To inform UEPG Members and European aggregates companies in a clear and concise way;

As Chairman of the UEPG Health and Safety Committee I would like to thank all the European companies for their health and safety commitment and collaboration. This is the best way to prove that the aggregates industry is well aware of the importance of the social aspects of sustainable development implementation.



Aggregates Industry H&S Statement

GOOD HEALTH & SAFETY PRACTICES IN THE EUROPEAN AGGREGATES INDUSTRY



UEPG HEALTH AND SAFETY STATEMENT

The overall aim of UEPG's Health and Safety engagement is to develop policies aimed at achieving a zero accident objective and safe and healthy working conditions in the European aggregates industry.

UEPG regards "risk prevention at work" as an essential aspect of aggregate production in Europe, already integrated in the EU Sustainable Development policy.

In particular, UEPG has identified the following high-priority issues:

- 1. To convey European aggregate producers the need to integrate the prevention culture in companies and sites.
- To effectively disseminate aggregates sector's health and safety expertise to policy-makers and legislators and become an authoritative source of information on behalf of the Aggregates industry.
- 3. To participate in and promote projects for the improvement of risk prevention at work issues.
- 4. To exchange knowledge and expertise, in addition to legislation and documents.
- To promote health and safety through participation in the forums organized by the administration and other institutions.
- To develop a coherent overall prevention policy for the aggregates industry which covers technology, organization of work and working conditions.
- To encourage engineering and management improvements in safety conditions in extraction sites and treatment plants.
- To upgrade information, dialogue and balanced participation on health and safety at work between employers and workers.
- To promote safety training for workers, adapted to the particular conditions of each extraction site and to promote the need to give them appropriate instructions.
- 10. To promote awareness, exchange of information and improvements in occupational health.
- To promote a common basis for the collection and processing of statistical information to characterise
 the Industry's safety performance.
- 12. To develop methods of statistical comparison in occupational health.



H&S Good Practice concept

GOOD HEALTH & SAFETY PRACTICES IN THE EUROPEAN AGGREGATES INDUSTRY

HEALTH AND SAFETY GOOD PRACTICE CONCEPT

The European Agency for Safety and Health at Work recommends that good practice examples are developed in aggregates companies to prevent the exposure of workers to risks during quarrying activities, beyond the legal requirements.

All examples show good management, particularly the effective use of risk assessment and implementation of its findings, and are focused on the successful prevention of itsks to workers.

A Good Practice should:

- allow those using it to meet the requirements of the appropriate legal frameworks, including European directives, national laws, regulations, guidance and approved standards.
- demonstrate steps and methods that can be taken at company level to improve working or living conditions, or demonstrate steps and methods that can be taken within an organisation to improve working or living conditions and reduce health and safety risks in other companies.
- be effective and ethically tolerable.
- 7 recommend an action that can be identified and verified as the causal factor in the risk reduction.

The main characteristics of the selected Good Practices are:

- workplace focused.
- risks tackled at source through good management, particularly the effective use of risk assessment and implementation of its findings.
- successful implementation in the workplace.
- real improvements.
- sustainability across time, particularly actions that continue to impact during all the site life.
- good consultation between management and the workforce.
- compliance with relevant legislative requirements, preferably going beyond minimum requirements.
- possibility of transfer to other aggregates companies and preferably to SMEs.

The study cases of Good Practice cover:

- the elimination of risks before work begins on site, for example through:
 - good procurement practices of equipment and materials
 - offective tendering processes
 - m successful planning and design actions
- the effective management of health and safety risks on site, for example through:
 - new and innovative risk assessment
 - minimisation of risks by work scheduling or planning



Structure of the guide

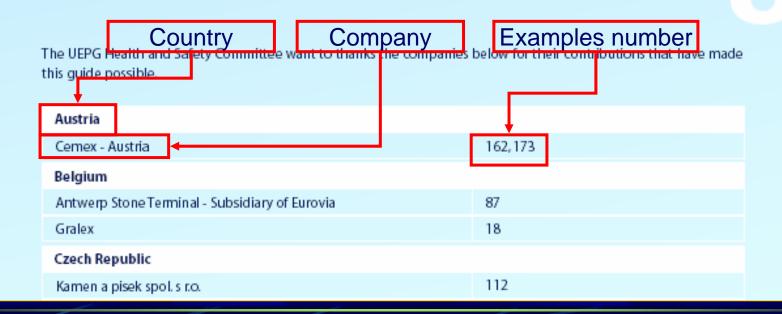
EXAMPLES OF GOOD PRACTICES					
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	PROTECTIONS AND SAFEGUARDS	8			
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	EXTERNAL TRANSPORT	14	54		
	SAMPLING	4		51	
	VISITORS	2			



Collaborating Companies



COLLABORATING COMPANIES





UEPG Members

FEDIEX SCRL - Fédération des Industries Extractives et

AKCR - Aggregates Industry Association of Czech

Transformatrices de Roches non Combustibles



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GOOD HEALTH & SAFETY PRACTICES IN THE EUROPEAN AGGREGATES INDUSTRY

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Conclusions (1)

Achieved targets:

- To contribute to sustainable development, laying the foundations for a safe industry with a "zero accidents" goal.
- **To identify Good Practices in H&S** that are applied in European aggregates companies.
- To disseminate effectively UEPG's H&S expertise to EU policy-makers and legislators and become an authoritative source of information on the European Aggregates Industry.
- To exchange knowledge and expertise, from the different member countries.
- To inform UEPG Members and European aggregates companies in a brief and concise way.



Conclusions (2)

UEPG

- UEPG proves its Health and Safety commitment.
- An UEPG <u>common</u>
 project with strong
 collaboration within
 UEPG member
 Associations.
- We can produce good and useful guides/tools for our member companies.



GUIDE

COMPANIES

