




UEPG Sustainable Development Awards 2007

Promoting good practice

Going beyond what is expected

Providing examples others can follow

UEPG Sustainable Development Awards

UEPG

COUNTDOWN 2010 SAVE BIODIVERSITY

UEPG Sustainable Development Awards

The European Aggregates Industry supports the principles of Sustainable Development. It is committed to operating with care and concern for the environment, for its neighbours and for society as a whole. The UEPG Sustainable Development Awards illustrate this commitment by promoting the dissemination of best practice and encouraging projects which go beyond what is required by planners or regulators. In this way, it is intended that the Awards will provide examples which others can follow.

UEPG Sustainable
Development Awards

Aggregates in Europe

What are Aggregates?

Aggregates are a granular material used in construction. The most common natural aggregates of mineral origin are sand, gravel and crushed rock.

Aggregates can be produced from natural sources extracted from quarries and gravel pits and in some countries from sea dredged materials (marine aggregates). Secondary aggregates are usually by-products from other industrial processes, like blast or electric furnace slags or china clay residues. Recycled aggregates derive from reprocessing materials previously used in construction, including construction and demolition residues and railway ballast.

Aggregates can only be extracted where nature has placed them. Careful planning is therefore needed in order to ensure that a proper balance is struck between society's need for raw materials and the necessity to protect all that is best about our environment. Due to the pressures from land-planning on reserves and stricter environmental regulations, aggregates have become more than ever a strategic raw material.

What are Aggregates used for?

The main end-uses of aggregates are:

Homes

The construction of a typical new home uses up to 100 tonnes of aggregates from the foundations through to the roof tiles.

Hospitals, schools and flood protection

From local hospitals and schools to bridges and flood protection- all are made possible by aggregates. In many cases they provide not just strength but, through special finishes, architectural beauty. The construction of a school requires 3000 tonnes of aggregates. For a sports stadium, up to 300,000 tonnes are needed.

Transportation network

Aggregates feature at all levels of construction of the European transportation network up to the road surface which includes aggregates resistant to polishing, ensuring skid-resistance and safer travel for drivers. The construction of 1 km of motorway requires 30,000 tonnes of aggregates.

Rail services

Aggregates are an essential foundation for Europe's expanding high speed and regional rail network.

What does the European Aggregates Industry represent?

The European Aggregates Industry is the largest non-energy extractive sector in the EU with 3 billion tons produced every year. It consists of more than 28,000 extraction sites across Europe and a majority of operators in the sector are small and medium sized enterprises. The average annual aggregates production represents 7 tons per EU citizen per year. The European Aggregates Industry plays a key role by providing essential materials for the European construction sector. Take away aggregates and our built environment would literally fall apart.

What is UEPG?

UEPG stands for Union Européenne des Producteurs de Granulats (European Aggregates Association). Since 1987, UEPG has represented the interests of the European Aggregates Industry by representing its National Member Associations on economic, technical, environmental and health & safety policy.

UEPG pro-actively identifies EU initiatives and policies that are likely to impact on European aggregates producers. It provides Members with brief and concise information through regular publications and ad-hoc updates, and ensures UEPG positions are considered by EU decision-makers. UEPG positively promotes the profile of the European Aggregates Industry.

UEPG in brief:

- 21 European countries
- 3 billion of aggregates per year
- 28,000 sites
- 350,000 employees

UEPG Sustainable Development Awards

What are the UEPG Sustainable Development Awards?

The European Aggregates Industry is committed to operate with care and concern for the environment, for its neighbours, for its employees and for society as a whole. The UEPG Sustainable Development Awards illustrate this commitment by promoting the spread of best practice and encouraging projects which go beyond what is required by planners or regulators. In this way, it is intended that the Awards will provide examples which others can follow. In 2005, 21 entries from 10 countries were received.

Is it the first time that UEPG has launched an Award scheme?

No. UEPG launched its first European Restoration Award scheme in 1997, which was followed by a second scheme in 1999, a third in 2001. On all three occasions, Member companies from 8 nations received awards. Building on the success of this programme, it was decided to enlarge the scope to all aspects of sustainable development.

What does UEPG intend to achieve through this programme?

The first objective is to reward aggregates companies that have successfully integrated the social, economic and/or environmental dimensions of sustainable development into their operations by concrete achievements beyond what is expected, and to encourage the whole industry to reinforce its commitment to sustainable development. The second objective is to create a more positive understanding and appreciation of the key role played by the European Aggregates Industry, in order to ensure sustainable access to resources.

Under what conditions can a company compete for an Award?

1. Entry was open to companies which were members of National Associations, which are Member of UEPG
2. Entries were limited to three per National Association: one for each Sustainable Development pillar (Environment, Social and Economic).
3. Companies were limited to one entry per country.
4. The entry had to be supported by a certificate signed by the President of the sponsoring National Association and by a 'certificate of commitment' signed by the Chief Executive of the company concerned giving assurance that the submitted project would be maintained to at least the same standard as that existing at the date of entry, during the time that responsibility for it remained with the company.

How were national entries selected?

Selection of Applicants was made in accordance with the following principles:

1. Selection of applications at national level was made by each UEPG Member Association.
2. Each UEPG Member Association used its own assessment criteria that it considered appropriate. However, the project needed to be recognised nationally as a good example of sustainable development achievement and be worthy of an European award.

The Independent Jury


1


2


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- Roger Cans, Journalist, former Environmental Editor for Le Monde, France (President of the Jury)
- Dr. Hildegard Aichberger, Chief Executive Officer, WWF, Austria
- Dr. Per Nicolai Martens, Director, Institute of Mining Engineering, RWTH Aachen University, Germany
- Dr. Alfredo Martini, Press communication manager, Institute of Research on Construction, Italy

Roger Cans

Roger Cans graduated in Classical Literature and Political Sciences. He was at first a teacher of Latin and French in Cambodia, as a volunteer for National Service (1969-70). Then he became a journalist when he joined the regional daily paper "Nice Matin" (1971-1972). He worked for Voice of America in Washington (French Branch to Africa) from 1972 to 1975. In 1976, he was appointed as an Education correspondent by the daily paper Le Monde in Paris. In 1983, he switched to his favorite post as an Environmental Editor for the French newspaper Le Monde.

In 1996, after twenty years with Le Monde in Paris, he decided to move to the countryside and became a freelance journalist, still in the field of environment.

He lives now in a village where he writes books, shoots films for TV and participates in many kinds of symposiums, conferences and workshops. His last book deals with the history of ecological awareness in France ("Petite histoire du mouvement écolo en France", Delachaux & Niestlé Editors).

Dr. Hildegard Aichberger

Dr. Hildegard Aichberger is Chief Executive Officer of WWF (World Wide Fund for Nature), in Austria.

In 2005, she obtained a Doctorate at the University of Natural Resources and Applied Sciences (Austria). From 2000 to 2002, she was Project Manager at the Institute for environmental biotechnology in Tulin (Austria). During her University training, she worked on waste and environmental issues.

Dr Hildegard Aichberger graduated in civil engineering and water management at the University of Natural Resources and Applied Life Sciences (Austria) and obtained a MBA at the University of Dundee in Scotland.

Dr. Per Nicolai Martens

Per Nicolai Martens graduated in mining engineering at the Montauniversität Leoben, Austria. He is a graduate in industrial engineering and business administration at RWTH Aachen University in Germany.

After his Doctorate at the RWTH he spent 15 years in the mining industry in various positions. In 1992 he was appointed Head and Professor of the Institute of Mining Engineering I at Aachen University. From 1997 – 2003 he led an Interdisciplinary Research Project on the analysis of raw material flows.

He organises yearly conferences on topical developments in mining and is one of the founding members of the SDIMI (Sustainable Development Indicators in the Minerals Industry) conference cycle. Research includes: mine planning and systems optimisation, sustainable development in mining, risk assessment, waste disposal, occupational health and safety, and market analysis.

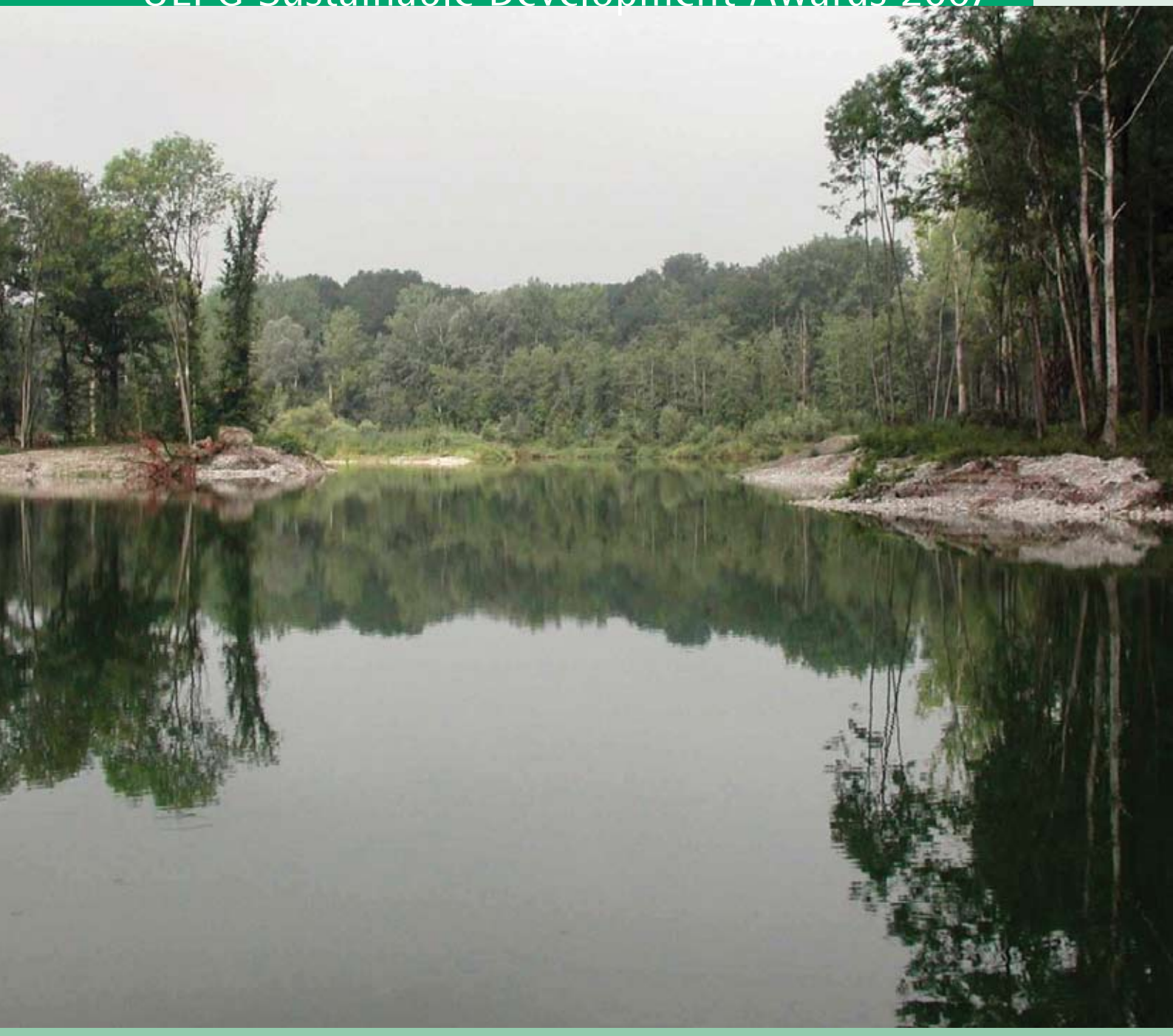
Dr. Alfredo Martini

Alfredo Martini is a journalist and has worked with the construction industry since 1982.

From 15 years he wrote for major Italian technical magazines. From 1995 to 2001 he directed the National Building Constructors Association's journal called "Il nuovo corriere dei costruttori". Since 2001 he has been Communication Manager for the Institute of Research on Construction (CRESME), the most important Italian institute of research about the constructions market.

He is author of studies on Italian entrepreneurship history and the constructions market. He has recently specialized on concrete and cement, by managing communication projects like SAIE CONCRETE (Saie Concrete is one of the most important meetings about building materials and machinery) and CONCRETE PROJECT sponsored by some major associations in the concrete world: AITEC (concrete industry), ATECAP (concrete industry), ASSIAD (additives producers) and SISMIC (steel industry for concrete).

UEPG Sustainable Development Awards 2007



UEPG Sustainable
Development Awards

2007 Awarded Projects

Economic

Award for Economic contribution & Added Value to Society ..... Eton Aggregates Limited (United Kingdom)

Economic Award of Excellence & Award for Operational Best Practice ..... GSM – Italcementi Group (France)

Social

Social Award of Excellence & Award for Local Community Partnership ..... Ariec s.r.l. – Grupo Grigolin (Italy)

Social Award of Excellence & Award for Health & Safety Best Practice ..... Cementos Portland Valderrivas (Spain)

Special Award "Association" ..... www.safequarry.com (United Kingdom)

Environment

Award for Site Restoration ..... Compañia General de Canteras (Spain)

Environment Award of Excellence & Award for Environmental Best Practice ..... Grob Kies AG (Switzerland)

Special Award "Natura 2000" ..... Českomoravské štěrkovny, a.s. (Czech Rep.)

Special Award "Public Relations" ..... Lenz-Ziegler-Reifenscheid (Germany)

Eton Aggregates limited

Eton College – Dorney Lake project.

Award for Economic contribution & Added Value to Society

ETON AGGREGATES LIMITED

Dorney Lake, venue for the Rowing and Canoeing events for the 2012 London Olympics.

A 2,200 metre lake set in a spectacular 170 hectare site, with a spacious Park and Arboretum and a Nature Reserve, all developed from the extraction, processing and sale of 4.1 million tonnes of sand and gravel.

Planning permission for the development was granted after appeal in 1994. Work commenced on-site in May 1996 with initial soil and overburden stripping, the erection of a new processing plant, construction of a public footbridge over the River Thames joining the riverside footpaths of Berkshire and Buckinghamshire. This footbridge also carried part of a 1.6 kilometre conveyor system which enabled some 50%of the excavated mineral to be processed at the existing Bray Quarry on the Berkshire side of the Thames thus reducing the number of lorry movements leaving the Dorney site.

Excavation of mineral commenced out with the area of the lakes to create reception voids for the deposition of all overburden and in some areas underlying clay which had to be excavated to achieve the required minimum depth of water to meet the international rowing regulations.

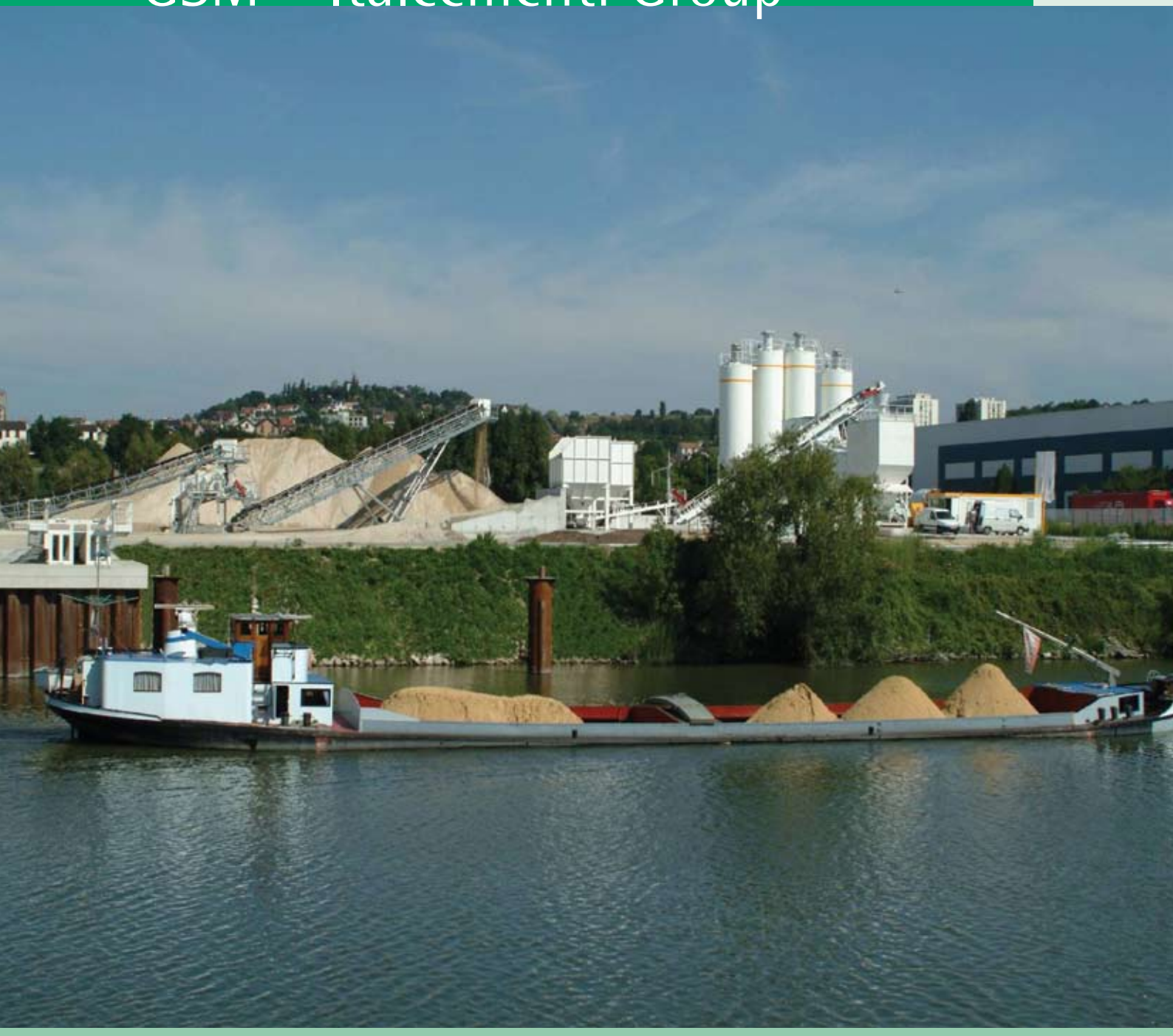
Development of the main lake commenced in November 1997 with 1,250 metres of completed lake together with the boathouse, associated roads, cycleways and other facilities handed over in 2000. This included the major part of the Park and Arboretum with all its planting and seeding much in its second season.

Progress continued with the development of the main lake with ever increasing encouragement from the rowing fraternity, First 1,500 metres and then 2,000 metres were handed over before activity shifted to the excavation of the Return Lake and the adjacent Nature Conservation Area.

The processing plant was removed in the spring of 2004 and all the remaining mineral was sent to the Bray plant via the conveyor for final processing. The last mineral was excavated in September 2006, the conveyor removed and the final section of site reinstated.

Immediately prior to this the Amateur Rowing Association had hosted the 2006 World Rowing Championships at Dorney Lake which was deemed a huge success by all concerned not least the World Rowing governing body, FISA, and many of the local populace who had originally been most vociferous in their opposition to the development.

GSM – Italcementi Group



Gennevilliers Multimodal hub

Economic Award of Excellence & Award for Operational Best Practice

GSM
Italcementi Group

As distances gradually increase between the aggregate deposits and the demand centres in the Greater Paris region, the development of cleaner alternatives to road transport (such as river and rail transport) is becoming imperative to preserve the environment. Combined transport for the haulage of heavy goods in urban areas is a factor in reducing greenhouse gas emissions and conserving fossil energy resources; it also lessens the social cost of the activity (less noise and pollution, better safety).

The multimodal hub developed by GSM at the port of Gennevilliers on the River Seine is an outstanding example of this approach. Located northwest of the Paris metropolitan area, the facility is designed to receive large volumes of construction materials delivered via river and soon by rail to the very heart of the Greater Paris region's dense urban fabric. The new industrial infrastructure (aggregate blending plant, concrete mixing plant) will contribute to local development at a lower ecological cost than all-road solutions. This logistics hub is an industrial instrument to serve public policy in the area of construction materials and transport, as set out in documents which include the Quarry Master Plan of each department, the Urban Mobility Plan for the Greater Paris region, and the Greater Paris Master Plan.

Representing a total investment of about €2 million, the hub, in its final configuration, will have an annual capacity of the order of 700 thousand tonnes per year. According to estimates by ADEME (Agence de l'Environnement et de la Maîtrise de l'Energie) and GSM, the existence of this hub will cut road traffic in the Greater Paris region by about 17,000 truck trips per year. Assuming full trimodal operation, that translates to avoidance of 522 tonnes of CO2 emissions and an energy savings of 533 tonnes of oil equivalent.

By encouraging the growth of construction activities and an increased use of the waterways, this facility also supports the development of traffic strategic for the Paris Port Authority, and with it, the livelihood of independent shipping firms and cooperatives. The partnership between the public and private sectors (ADEME – GSM – PAP) that the project promotes is another of its exemplary characteristics.

The GSM hub at Gennevilliers is therefore entirely consistent with a policy of reconciling economic growth and environmental preservation, in accordance with the principles of sustainable development.

L'éloignement progressif des gisements de granulats nécessaires aux besoins de l'Île-de-France impose le développement de modes de transport alternatifs à la route (fluvial et ferroviaire) et plus propres, dans un souci de préservation de l'environnement. Le transport combiné pour les transports massiques en zone urbaine permet de contribuer à la lutte contre les gaz à effet de serre et à l'économie des ressources énergétiques fossiles, pour un coût social moindre (nuisances, pollution, sécurité..).

La plateforme multimodale développée par GSM sur le port de Gennevilliers sur la Seine constitue une réalisation exemplaire dans ce domaine. Situé au nord ouest de l'agglomération parisienne, le site permet d'accueillir des matériaux de construction en grand volume, acheminés par voie fluviale et bientôt par voie ferrée, au cœur du dense tissu urbain francilien. L'équipement industriel mis en place (recomposition de granulats, centrale à béton) permet de contribuer, à moindre coût écologique, au développement local.

Cette plateforme logistique constitue un outil industriel pour l'application des politiques publiques relatives aux matériaux de construction et aux transport: Schémas Départementaux des Carrières, Plan de déplacements urbains de l'Île-de-France, Schéma Directeur de la Région Île-de-France.

La plateforme, dont le coût total sera de l'ordre de 2 millions d'euros, dans sa configuration finale, aura une capacité de trafic annuel de l'ordre de 700 Kt/an. Avec ce site, les estimations de l'ADEME (Agence de l'Environnement et de la Maîtrise de l'Energie) et de GSM indiquent une diminution du trafic routier sur l'Île-de-France d'environ 17.000 camions/an, soit, en mode trimodal, une non émission de 522 tonnes de CO2 et une économie d'énergie de 533 tonnes équivalent pétrole (Tep).

En favorisant le développement de l'activité du BTP et l'augmentation de l'utilisation de la voie fluviale, ce site soutient également le développement de trafics stratégiques pour le Port Autonome de Paris, et par conséquent les artisans et coopératives de transport fluvial. L'aspect partenarial entre le secteur public et privé de ce projet (ADEME – GSM –PAP) est également à considérer de par son caractère exemplaire.

Le site GSM de Gennevilliers s'inscrit donc pleinement dans une volonté de concilier développement économique et préservation de l'environnement, selon les principes du développement durable.

Ariec s.r.l. – Grupo Grigolin

Environmental recovery of the former “Rovina” area project.

Social Award of Excellence
& Award for Local Community Partnership

The Grigolin Group based in Treviso, Italy, leader in the field of products for the building trade, had the enterprising idea of making a proposal to the relevant local authorities for reclamation of an abandoned area in the municipality of Spilimbergo in the northern Italian province of Pordenone.

Since the 1940s a company named "Cantieri Rovina srl" had been carrying out neutralisation of ammunition and explosive wartime remnants in this area, recycling and selling both the metal and the explosives.

In October 1979 an explosion caused death, injury and damage and strewed the approximately 43 hectares with various types of wartime waste.

For almost 20 years the area was not reclaimed and "Cantieri Rovina srl" went bankrupt without paying the families of the victims anything in the way of compensation.

A.Ri.Ec. srl (an ecological reclamation company) took over from "Cantieri Rovina srl" and presented a reclamation plan in exchange for the setting up of sports facilities, but financial guarantees were not given and the sum made available by the state was never used because no authority was able to manage reclamation.

In April 1997 the Grigolin family intervened to break this impasse by proposing to reclaim and recover the site in exchange for authorization to exploit the reclaimed area as a gravel pit.

The Grigolin Group took over "A.Ri.Ec. srl", that had been declared bankrupt, promised to pay its debts towards creditors, and paid damages to the third parties affected by the explosions.

All the work of clearing the zone was carried out at the expense of the Grigolin Group at a total cost of over two and a half million euros, with a commitment to enforce observance of all the laws and regulations applicable to such operations.

Access to the area involved was prohibited for anyone except the police and the workers; Grigolin also provided personnel who co-operated closely with the Spilimbergo Carabinieri.

The report, drawn up by the company who reclaimed the lard, lists a quantity of approximately 1,230,000 items, including bullets, detonators, rockets, fuses, hand grenades, grenades and aircraft bombs.

The explosive devices found were accumulated and exploded on the site and in the Cellina torrent, except for the specially charged devices, which were transported to the headquarters of the Italian Army's special bacteriological and chemical unit (NBC) at Civitavecchia (Rome).

Clearing of the entire area took ten months and the quarrying activities were accepted willingly by the population and local authorities as a means for solving a serious problem of collective fear and insecurity. For once an industrial project of this type, instead of creating hostility on the part of the local inhabitants, has proved to be the solution to a problem that had remained unsolved for too long.

La capacità imprenditoriale del Gruppo Grigolin di Treviso, leadership nel settore della produzione di prodotti per l'edilizia, è stata quella di proporsi alle Amministrazioni locali con un progetto per bonificare un'area dimessa del Comune di Spilimbergo in provincia di Pordenone.

Sul luogo fin dagli anni 40' la ditta "Cantieri Rovina" esercitava l'attività di inertizzazione di munizioni ed ordigni bellici recuperando e commercializzando sia i metalli che l'esplosivo.

Nell'ottobre 1979 uno scoppio provocò morti, feriti e danni e disseminò i circa quarantatrè ettari di ordigni bellici di varia natura.

Per quasi 20 anni sull'area non avvenne alcun intervento e la società "Cantieri Rovina Srl" fallì sena pagare alcuna somma a titolo risarcitorio ai familiari delle vittime delle esplosioni.

L'A.Ri.Ec. srl (Azienda Risanamento Ecologico) subentrò alla "Cantieri Rovina srl" e presentò una proposta di bonifica in cambio della realizzazione di un'area sportiva, ma mancarono le garanzie di carattere finanziario e la somma messa a disposizione dallo Stato non fu mai utilizzata perché nessun Ente fu in grado di gestire la bonifica.

E' in questa situazione di empasse che nell'aprile del 1997 si inserisce l'intervento della famiglia Grigolin che si propone di bonificare e recuperare il sito ottenendo in cambio l'autorizzazione a coltivare l'area, una volta bonificata, a cava di ghiaia.

Il Gruppo Grigolin rilevò l'A.Ri.Ec. Srl dichiarata fallita, pagò i debiti verso i creditori e risarcì i danni causati a terzi dalle esplosioni.

Tutto il lavoro di pulizia della zona fu effettuato a spese del Gruppo Grigolin con un costo complessivo di oltre due milioni e mezzo di euro e con l'impegno di far osservare le disposizioni di legge e regolamenti vigenti in materia.

Fu vietato a chiunque l'accesso all'area interessata eccetto che per le autorità di P.S. e per gli addetti ai lavori, inoltre Grigolin mise a disposizione del personale che collaborò strettamente con i Carabinieri di Spilimbergo per tutte le operazioni richieste.

Dal rapporto stilato dalla ditta che effettuò la bonifica del terreno fu censito un quantitativo di ca. 1.230.000 di pezzi tra proiettili, detonatori, razzi, spolette, bombe a mano, granate e bombe d'aereo.

Gli ordigni trovati furono accumulati e successivamente fatti brillare sul posto e sul torrente Cellina ad esclusione di alcune decine di migliaia di ordigni a caricamento speciale che furono trasportati fino allo stabilimento del nucleo speciale NBC dell'Esercito italiano a Civitavecchia (Roma):

In dieci mesi fu terminata la bonifica dell'intera area e la cava fu accettata di buon grado da tutta la popolazione e dalle Amministrazioni come mezzo per risolvere una grave situazione di paura e di insicurezza collettiva.

Per una volta tanto questo progetto industriale, anziché creare ostilità presso la popolazione locale, si è dimostrato la soluzione di un problema che era irrisolto da troppo tempo.

Cementos Portland alderrivas – ARIPRESA

“Planta Andujar” workplace Project.

Social Award of Excellence & Award for Health & Safety Best Practice

ARIPRESA

ÁRIDOS Y PREMEZCLADOS, S.A.U. (referred to henceforth as ARIPRESA), is part of the GRUPO CEMENTOS PORTLAND VALDERRIVAS business group, which specializes in the operation of gravel pits quarries, mining, treatment and supply of aggregate for construction and public works. The company's registered offices are at Calle José Abascal nº 59, Madrid, Spain.

ARIPRESA submits its Planta Andujar workplace, located in the province of Jaén, Spain, as a candidate for the 2007 UEPG Sustainable Development Award for Quarry and Gravel-Pit Safety in the Big Business category. The comprehensive overhaul the treatment plant underwent between December 2005 and May 2006 made this facility a pacesetter in occupational risk prevention in the aggregate sector.

The workplace's primary activity is the extraction of sand and gravel from the Guadalquivir River valley to supply the aggregate-crushing and classification plant.

ARIPRESA took a giant step in the management of occupational risk prevention in 2006 by earning Occupational Health and Safety Management System certification pursuant to OHSAS 18001:1999 Occupational Health and Safety Management Systems. ARIPRESA was the first company in its sector to be so certified by AENOR in Spain.

ARIPRESA's commitment to integrating prevention into its organisation showed in 2006 in the creation of an in-house prevention service and the implementation of an ambitious preventive training plan for workers.

ARIPRESA has a workforce of 174 employees at 21 workplaces. The Andujar workplace has six full-time employees who work in the organisation, administration and management of the treatment plant and five workers employed by a contractor, who perform the operations involved in clearing, extraction, loading and transportation of raw materials to the treatment plant.

Here are the five reasons on which our candidacy is grounded:

- Prevention at source. An engineering design aimed at achieving top production under excellent safety conditions, with special consideration for: strain minimisation in manual load handling; the importance of the human factor in the design of accesses to the plan's control points; total protection against the risks of falling, entrapment in moving parts, and flying processed material; facility reliability in terms of the electrical risk; and control over the hygiene risks of exposure to noise and dust.
- Integration of prevention. Creation of ARIPRESA's own In-House Prevention Service and appointment of preventive resources at each workplace, with distribution of preventive management functions among all jobs in the organisation.
- First company in its sector in Spain to earn Occupational Health and Safety Management System Certification pursuant to the requirements of OHSAS 18001:1999.
- Implementation of an ambitious preventive training plan for workers.
- Excellent auxiliary facilities at the workplace, such as restrooms, dining room, dressing room, parking, workshops, storehouse and laboratory.

ÁRIDOS Y PREMEZCLADOS S.A.U. (en adelante ARIPRESA) forma parte del grupo empresarial GRUPO CEMENTOS PORTLAND VALDERRIVAS, especializado en la explotación de graveras y canteras, extracción, tratamiento y suministro de áridos para la construcción y obra pública. La compañía tiene su domicilio social en la Calle José Abascal nº 59 de Madrid (España).

ARIPRESA presenta su centro de trabajo Planta Andujar, ubicado en la provincia de Jaén (España), como candidatura al Premio Europeo de Desarrollo Sostenible de Seguridad en Canteras y Graveras para 2007 en la categoría de Grandes Empresas. La reforma integral acometida en la planta de tratamiento entre diciembre de 2005 y mayo de 2006 ha convertido esta instalación en un referente para la prevención de riesgos laborales en el sector de los áridos.

La actividad principal es la extracción de arenas y gravas en la vega del Guadalquivir para el abastecimiento de la Planta de trituración y Clasificación de Áridos.

ARIPRESA ha dado un paso adelante en la gestión de la prevención de riesgos laborales durante 2006, obteniendo para todos sus centros de trabajo la certificación del Sistema de Gestión de Seguridad y Salud Laboral de conforme a la especificación OHSAS 18001:1999 Sistemas de Gestión de Seguridad y Salud Laboral, siendo la 1ª empresa del sector en conseguir dicha certificación por AENOR en España.

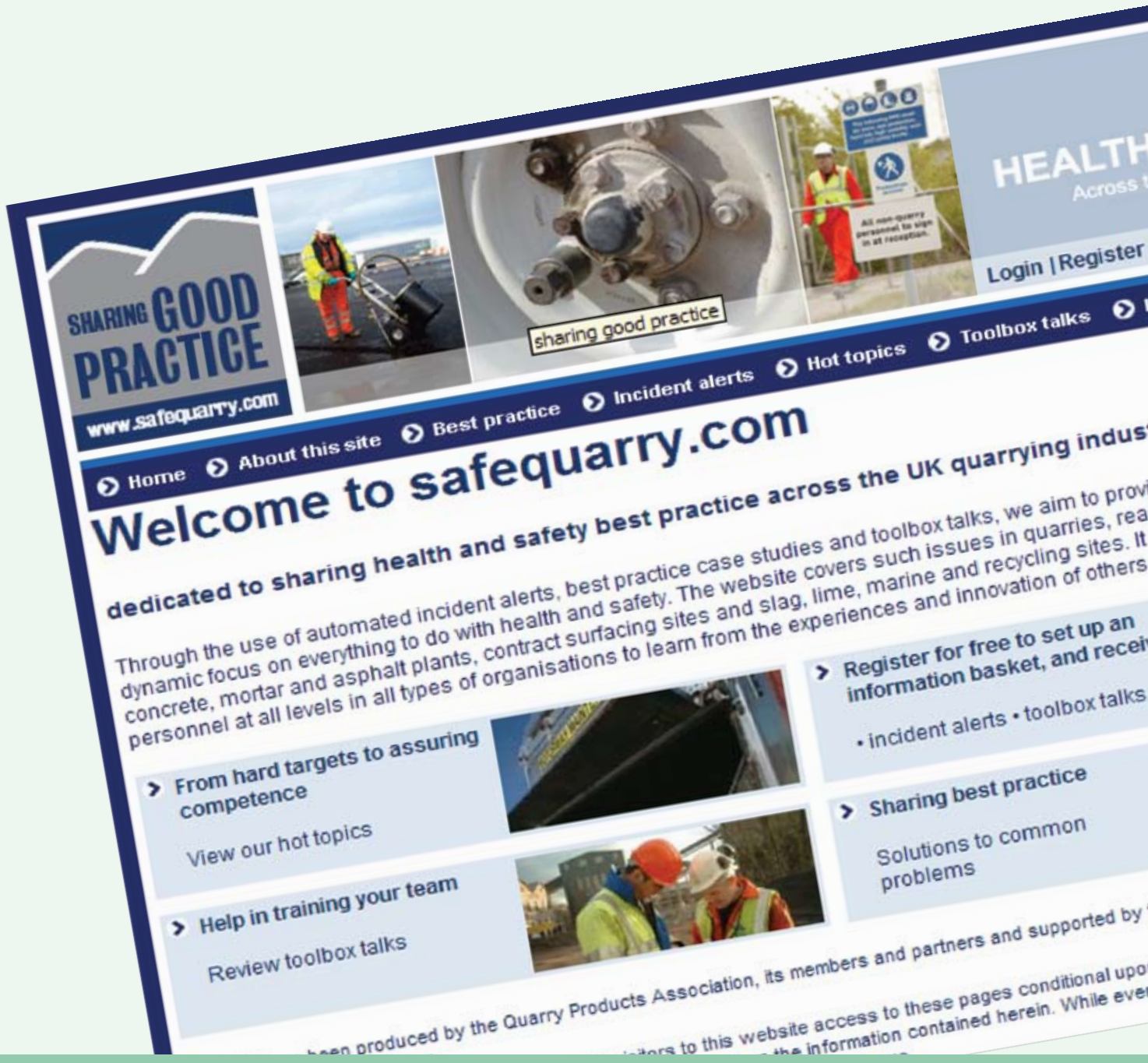
La apuesta por la integración de la prevención en la organización de ARIPRESA se ha constatado en el año 2006 con la creación de un Servicio de Prevención Propio y el desarrollo de un ambicioso Plan de Formación Preventiva para los trabajadores.

ARIPRESA cuenta con una plantilla de 174 trabajadores en 21 centros de trabajo. El centro de trabajo de Andujar cuenta de forma permanente con 6 trabajadores propios en labores de organización, administración y gestión de la planta de tratamiento y 5 trabajadores de una contrata que realizan las operaciones de desmonte, extracción, carga y transporte de materia prima hasta la planta de tratamiento.

A continuación se enumeran las cinco razones que fundamentan nuestra candidatura:

- Prevención desde el origen. Un diseño de ingeniería encaminado a lograr la producción óptima con excelentes condiciones de seguridad, considerando especialmente: la minimización de los sobreesfuerzos en manipulación manual de cargas; la importancia del factor humano en el diseño de accesos a los puntos de control de la planta; la protección total contra el riesgo de caídas de altura, atrapamientos con elementos móviles y proyecciones del material procesado; la fiabilidad de la instalación respecto al riesgo eléctrico y; el control de los riesgos higiénicos de exposición a ruido y polvo.
- Integración de la Prevención. Creación de un Servicio de Prevención Propio de ARIPRESA y nombramiento de recursos preventivos en cada centro de trabajo, distribuyéndose las funciones de la gestión preventiva en todos los puestos de la organización.
- Primera empresa del sector en España en obtener la Certificación del Sistema de Gestión de Seguridad y Salud Laboral conforme a exigencias de la Especificación OHSAS 18001:1999
- Desarrollo de un ambicioso Plan de Formación Preventiva de los trabajadores.
- Excelente dotación de instalaciones auxiliares en el centro de trabajo como: servicios higiénicos, comedor, vestuario, aparcamientos, talleres, almacén y laboratorio.

Quarry Products Association



www.safequarry.com

Special Award "Association"

QUARRY PRODUCTS ASSOCIATION

Background

The UK quarrying industry has taken great strides in improving health and safety practice, particularly by halving the number of incidents in the five years to March 2005, in line with the Hard Target initiative of the Health and Safety Executive, HSE – the national regulator.

Despite these major advances, HSE statistics show that quarrying remains one of the higher risk industries in the UK. The industry recognises that to improve safety performance further, requires even greater emphasis on raising the awareness of employees and contractors at all levels within the industry and, importantly, sharing information between companies of all sizes.

Resources

www.safequarry.com brings together four key elements, viz:

- A database of best practice entries from 8 years of the Health and Safety Best Practice Awards Scheme, run annually by the Quarry Products Association
- The ability to share incident alerts across industry via a dedicated searchable website
- A repository of toolbox talks covering key health and safety issues
- The ability to share information on relevant "hot topics", including industry-specific guidance; consultation documents; award scheme entry forms; etc.

The project was developed as part of a complementary package that included a hard copy guide and a DVD, the contents of which have all been integrated into www.safequarry.com Managed by a steering group that included representatives drawn from large and small companies on the QPA's Health and Safety Committee; the other principal partners were the HSE; EPIC (national training provider to the UK extractives and mineral processing industry); the British Aggregates Association; and the University of Leeds. The overall manager of the project was Martin Isles, Director of Health and Safety for the QPA and the project was co-ordinated by Daybreak Communications.

Benefits

All stakeholders in the 'aggregates' Industry – land & marine-based, also producers of added-value materials – are benefiting from:

- Free access to current 'best practice', moderated by experts from the QPA's H&S Committee
- Personal email notification (if registered) of 'incident alerts' and other new uploads.
- Access to 'toolbox talks' – of particular value to smaller companies
- Access to 'hot topics' – bringing relevant developments to the attention of the whole industry

Since its launch in September 2006, www.safequarry.com has enjoyed continued growth in usage to around 4,000 distinct users a month.

Acknowledgement and Support

In addition to endorsement by the Director General of the QPA, support for this UK Entry into the UEPG Sustainable Development Awards 2007 is presented from the following key organisations:

- Trades Union Congress (TUC), representing all 63 affiliated trades unions across the UK
- Health and Safety Executive (HSE), representing the national regulator
- EPIC, the national training body for the UK extractives and mineral processing industry

Resources Summary

Key elements of the searchable

www.safequarry.com database, are:

- 350 items of Best Practice
- 80 mini-videos
- 53 incident alerts

European Development Potential

QPA has initiated discussions with the European Mines, Chemicals and Engineering Union (EMCEF) to explore a possible social partnership application to the European Commission for funding to develop www.safequarry.com into a multi-lingual platform. This plan would render the resource of even greater value to an industry that has set its ultimate goal as "zero incidents".

Conclusions

This project has made examples of best practice far more accessible. It has created a mechanism by which examples of actual incidents and "near hits" can be rapidly shared across the industry, locally, nationally and, indeed, worldwide.

Compañia General de Canteras
Italcementi Group

Los Arenales Quarry

Award for Site Restoration

COMPAÑÍA GENERAL DE CANTERAS, S.A
Italcementi Group

The restoration project carried out by Compañía General de Canteras (Italcementi Group) on Los Arenales quarry, located in the township of Mijas, on the western coast of the province of Málaga, is a model project based on the agreement of the different agents involved, since the Autonomous Government and Town Council of Mijas have participated in designing it.

When Compañía General de Canteras took over the quarry's operations in 1994, it immediately bore the cost of the restoration work carried out in areas already exploited by the previous quarry owner and was faced with an extremely difficult situation; an irregular slope with a great height that was totally incompatible with the restoration and quarrying work.

The process consisted of a comprehensive restoration project, starting from top to bottom, as the excavation work advanced and dividing the original slope up into 12 slopes with heights of 12 m. In parallel, after achieving the desired morphology, the vegetation was restored, thereby permitting maximum integration of the restored area into the surrounding Mediterranean woodland, an area of great ecological value, and in addition, using a series of ecological criteria in selecting the preferred native plant species.

In making this selection, a study was made of the mountains of Mijas, which made it possible to single out different biotopes in the quarry, in which the Ministry of the Environment, University of Malaga and the Town Council of Mijas took part, in addition to Compañía General de Canteras. This initiative, together with the acclimatising process to which the plants were submitted in a nursery created in situ, promoted the favourable adaptation of the plants to the existing microclimate and a high survival rate.

With a view to helping to recover the fauna of the area at the same time, different initiatives were undertaken including the planting and sowing of plant species that serve as food for the main species of birds and mammals (fig trees, vines, beans, alfalfa), the installing of drinking troughs in certain strategic points in the quarry, the creation of warrens for rabbits and minimising the visual impact of the infrastructures.

Furthermore, actions were carried out to improve the drainage networks and prevent erosive processes, all the plants were fitted with a drip-irrigation system and the topsoil was subjected to an enriching process to improve its filtration capacity, which was done by mixing it with compost, manure and the remains of local pruning operations.

One of the main factors leading to the success of the restoration work was without doubt the spirit of cooperation between Compañía General de Canteras and Mijas Town Council, through the creation of a Follow-Up Committee with the mission of keeping permanent watch and sharing the work.

La restauración llevada a cabo por Compañía General de Canteras (Italcementi Group) en la cantera Los Arenales, situada en el término municipal de Mijas, en la costa occidental de la provincia de Málaga, ha sido un proyecto modélico que se ha llevado a cabo de forma consensuada con los distintos agentes implicados, ya que en su diseño han colaborado la Administración Autonómica y el Ayuntamiento de Mijas.

Cuando Compañía General de Canteras asumió su titularidad en el año 1994 se hizo cargo desde un primer momento del costo de la restauración de las zonas ya explotadas por anteriores entidades, encontrando una situación de partida muy desfavorable, un talud único, irregular y de gran altura, que resultaba incompatible con la labor restauradora y extractiva.

El proceso ha consistido en una restauración integrada, procediendo de arriba hacia abajo a medida que ha ido avanzando la explotación, desdoblando el talud inicial en 12 taludes de 12 metros de altura. De forma paralela, una vez conseguida la morfología deseada se ha ido acometiendo la fase de restauración vegetal propiamente dicha, que ha permitido la máxima integración de la zona restaurada con el bosque mediterráneo circundante, un entorno de alto valor ecológico, incorporando además criterios ecológicos en la selección de las especies autóctonas preferentes.

Para llevar a cabo dicha selección se llevó a cabo un riguroso estudio en la Sierra de Mijas, el cual posibilitó diferenciar distintos biotopos en la cantera, y en el que participaron, además de Compañía General de Canteras, el Ministerio de Medio Ambiente, la Universidad de Málaga y el propio Ayuntamiento de Mijas. Esta iniciativa, junto con la aclimatación a la que han sido sometidas las plantas en un vivero que se ha creado in situ, ha favorecido una adaptación óptima al microclima existente y una elevada tasa de supervivencia.

Con objeto de posibilitar la recuperación paralela de la fauna se han llevado a cabo diversas iniciativas, destacando la plantación y siembra de especies vegetales que han servido de alimento a las principales especies de aves y mamíferos (higueras, parras, habas, alfalfa), la instalación de bebederos en puntos estratégicos de la cantera, la creación de madrigueras refugio para conejos y la minimización del impacto visual de las infraestructuras.

Asimismo se han acometido actuaciones para mejorar las redes de drenaje y evitar posibles procesos erosivos, todas las plantaciones se han dotado de un sistema de riego por goteo y la tierra vegetal se ha sometido a un proceso de enriquecimiento para mejorar su capacidad de acogida, lo que se ha conseguido mediante su mezcla con compost, estiércol y restos de poda de origen local.

Una de las principales razones que han motivado el éxito de los trabajos de restauración ha sido sin duda el clima de colaboración existente entre Compañía General de Canteras y el Ayuntamiento de Mijas, que se ha materializado entre otros en la creación de una Comisión se Seguimiento, que ha tenido por objeto la vigilancia permanente y compartida de dichos trabajos.

Grob Kies AG

"Giving something back" – sustainability as corporate philosophy

Environment Award of Excellence
& Award for Environmental Best Practice

The foundation stone for Grob Kies AG was laid as early as 140 years ago. Even the forefathers were aware of how necessary the balance between economy, social and environmental matters is, with their parallel activities in gravel extraction, as builders, farmers and innkeepers. Their indefatigable activity was not just a business but was also to serve the public good and culture.

This basic attitude has been passed on through the generations into today's time. Due to the unavoidable effects of the activities on the environment, one can persist in the extraction of raw materials in the long run only if one is able to balance the three pillars of sustainability. It is therefore part of the corporate philosophy to give something back to the employees, the clients, to society and to Mother Nature.

Since the foundation of the Fachverband der Schweizerischen Kies- und Betonindustrie (FSKB) association inspectorate in 1975, Grob Kies AG has passed all audits for all parts of the company without exceptions. Since 1997, it is ISO-certified for quality, environment and health and safety. Aggregates and concrete products have been certified according to European standards since 2004.

Next to the activity in accordance with the laws, we dedicate a lot of time to voluntary measures. Machines and plants are continually modernised and achieve a high technical standard. Company representatives do work in clubs, associations and political institutions. We regularly support or even enable cultural events. But we also feel largely bound by our service to Mother Nature, because the interaction of nature and gravel extraction is one of the core responsibilities of our management.

The contribution of Grob Kies AG to biological diversity can be seen on two levels: measures during the extraction activity, and the restoration of habitats in projects. The extraction sites and landfills are visited regularly by experts, and their suggestions are incorporated in the activities. The Degersheim extraction site is even an amphibian spawning area with national importance as well, certified by Fundation Nature and Economy (Stiftung Natur und Wirtschaft) as a Nature Park of the Economy. The extraction of raw materials and the creation of valuable habitats complement each other very well if the planning is right.

The design of former, current and future areas is particularly important to us. Even if the agricultural industry exerts pressure for a redesign of the extraction sites to agricultural areas, natural areas are a top priority for Grob Kies AG. For example, the opening of creeks, the construction of ponds, side slopes, dry meadows, the planting of hedges and the renaturation of river landscapes are part of the permanent programme when it comes to landscape planning in projects. For example, the projects Bräägg and Letzi in the area of the protected river landscapes of the Thur and the Necker showed that valuable habitats that were lost before can be restored.

According to the principle of sustainability and the will for constant improvement, something should be given back, yesterday, today and tomorrow.

Der Grundstein für die Grob Kies AG wurde bereits vor 140 Jahren gelegt. Schon die Urahnen wussten durch die gleichzeitige Tätigkeit in der Kiesgewinnung, als Baumeister, Landwirt und Gastwirt um die Notwendigkeit eines Ausgleichs zwischen Wirtschaftlichkeit, Sozialem und Umwelt. Ihre unermüdliche Tätigkeit galt nicht nur der Geschäftstätigkeit, sondern auch dem Dienst in der Öffentlichkeit und der Kultur.

Diese Grundhaltung hat sich über alle Generationen in die heutige Zeit übertragen. Wegen den unvermeidlichen Auswirkungen der Tätigkeiten auf die Umwelt kann in der Rohstoffgewinnung nur langfristig bestehen, wer einen Ausgleich zwischen den drei Pfeilern der Nachhaltigkeit findet. Es gehört deshalb zur Firmenphilosophie, immer wieder etwas zurückzugeben, den Mitarbeitern, den Kunden, der Gesellschaft, der Natur.

Die Grob Kies AG hat seit der Gründung des FSKB Verbandsinspektorates im Jahre 1975 für alle Betriebsteile die Kontrollen ohne Unterbruch bestanden. Seit 1997 ist sie ISO zertifiziert für Qualität, Umwelt und Arbeitssicherheit. Gesteinskörnungen und Betonprodukte sind seit 2004 nach den gültigen Europäischen Normen zertifiziert.

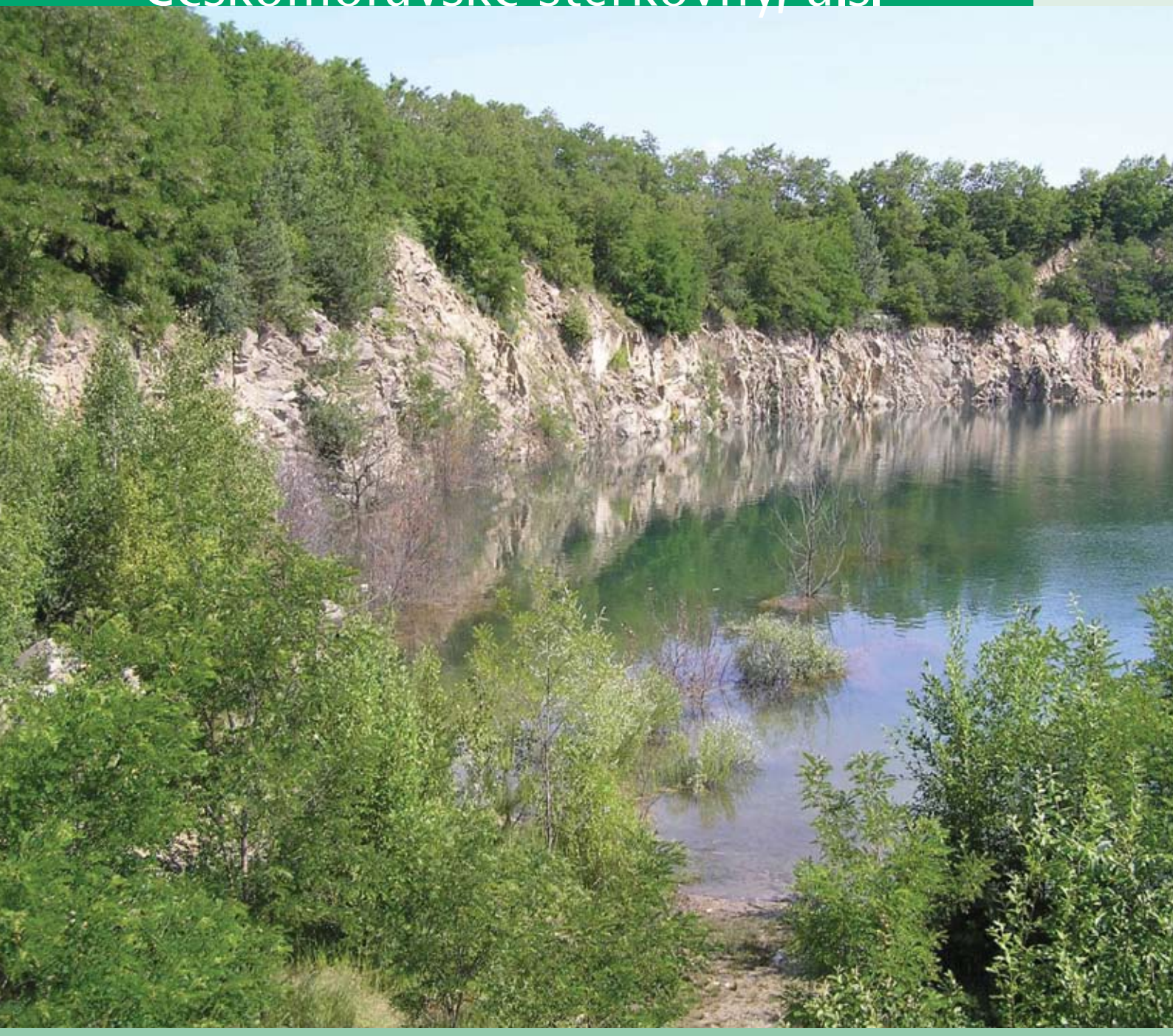
Neben einer gesetzeskonformen Tätigkeit wird viel auf freiwillige Maßnahmen gesetzt. Maschinen und Anlagen werden laufend modernisiert und erreichen einen hohen technischen Stand. Firmenvertreter arbeiten in Vereinen, Verbänden und Politik mit. Regelmäßig werden Kulturveranstaltungen unterstützt oder gar ermöglicht. Ein großes Engagement gilt aber auch der Natur, denn das Zusammenspiel von Natur und Kiesabbau gehört zu den Kernanliegen der Geschäftsleitung.

Der Beitrag der Grob Kies AG zur Artenvielfalt kann in zwei Ebenen gesehen werden: Maßnahmen während der Abbautätigkeit und Lebensraumgestaltung durch die Projekte. Die Abbaustellen und Auffüllungen werden regelmäßig von Fachleuten beaufsichtigt und deren Anliegen in die Tätigkeiten integriert. Die Abbaustelle Degersheim ist sogar gleichzeitig als Amphibienlaichgebiet von nationaler Bedeutung bezeichnet und von der Stiftung Natur und Wirtschaft als Naturpark der Wirtschaft zertifiziert. Der Rohstoffabbau und die Schaffung wertvoller Lebensräume ergänzen sich bei entsprechender Planung hervorragend.

Großen Wert wird auf die Gestaltung früherer, heutiger und zukünftiger Areale gelegt. Wenn auch die Landwirtschaft großen Druck für eine Wiederherstellung der Abbauareale in landwirtschaftliche Flächen ausübt, haben Naturräume bei der Grob Kies AG immer einen großen Stellenwert. So gehören Bachoffenlegungen, Weiherbau, Steilböschungen, Trockenwiesen, Heckenpflanzungen und Renaturierung von Flussufern zum ständigen Repertoire bei der Landschaftsgestaltung in den Projekten. So konnten z.B. mit den Projekten Bräägg und Letzi im Gebiet der geschützten Flusslandschaften der Thur und des Neckers wertvolle, verloren gegangene Lebensräume geschaffen werden.

Getreu dem Grundsatz der Nachhaltigkeit und dem Willen zu ständiger Verbesserung soll auch etwas zurückgegeben werden, gestern heute und morgen.

Českomoravské štěrkovny, a.s.



Recultivation of the Mašovice stone quarry

Special Award "Natura 2000"

ČESKOMORAVSKÉ ŠTĚRKOVNY
HEIDELBERGCEMENT Group

The Mašovice stone quarry is situated in the Czech Republic, in the South-Moravian Region, approximately 6 km west from Znojmo.

The recultivation of the stone quarry started after termination of mining in 2001 and in 2006 the allotment was cancelled.

In the interest area the surface runoff of water sheet was created as a result of mining activities. The interest area was on the basis of biological exploration divided into 13 site diverse fragments. The formation of many remarkable valuable habitats was initiated by subsequent targeted revitalisation with utilisation of natural and controlled succession.

This site within the Natura 2000 network is currently registered as the Special Area of Conservation (SAC) – Mašovice – the quarry, code of site CZ0623357, and suggested as a natural monument.

The Mašovice quarry was incorporated into the Natura 2000 network as the Special Area of Conservation (SAC) in 2005. The main subject of protection is the Crested Newt (Triturus carnifex). Currently the Mašovice stone quarry is one of the most significant localities of this species within the Czech Republic.

The termination of mining does not mean the termination of environmental care of site. In cooperation with state nature protection and other authorities, the monitoring of results are undertaken continuously.

The long term objective is to exploit the logging area for the benefit of nature and landscape protection interests, to create suitable conditions for long-term existence of identified rare species, to preserve valuable geological cross-sec and to increase the biodiversity generally with maximum exploitation of natural processes.

Kamenolom Mašovice se nachází v České republice, Jihomoravském kraji, cca 6 km západně od města Znojmo.

Rekultivace kamenolomu byla zahájena po ukončení těžby v roce 2001 a v roce 2006 byl dobývací prostor zrušen.

V zájmovém území byl vytvořen v důsledku těžby antropogenní reliéf s vodní plochou. Zájmové území bylo rozděleno na základě biologických průzkumů na 13 stanovištně odlišných dílčích ploch. Následnou cílenou revitalizací s využitím přirozené i řízené sukcese byl iniciován vznik celé řady mimořádně cenných společestev. Aktuálně představuje prostor lomu stanovištně diverzifikovanou lokalitu (ekologickou niku) v intenzivně obhospodařované zemědělské krajině.

V současné době je tato lokalita v rámci soustavy NATURA 2000 zařazena jako Evropsky významná lokalita „Mašovice – lom", kód lokality CZ0623357 s navrhovanou kategorií zvláště chráněného území – přírodní památka.

V roce 2005 byl kamenolom Mašovice začleněn jako evropsky významná lokalita (kód EVL CZ 0623357) do soustavy Natura 2000. Hlavním předmětem ochrany je čolek dravý (Triturus carnifex). Aktuálně patří kamenolom Mašovice patří k nejvýznamnějším lokalitám tohoto druhu v České republice.

Ukončením těžby péče o lokalitu nekončí. Ve spolupráci se státní ochranou přírody a dalšími složkami je prováděn monitoring, jehož závěry a doporučení jsou průběžně realizovány.

Dlouhodobým cílem projektu je využití těžebny ve prospěch zájmů ochrany přírody a krajiny, vytvoření podmínek pro dlouhodobou existenci identifikovaných vzácných druhů i společenstev, uchování cenných geologických profilů a celkové zvýšení biodiverzity s maximálním využitím přírodních procesů.

Lenz-Ziegler-Reifenscheid

Public relations activities for Sand and Gravel

Special Award “Public Relations”

Notwithstanding the building recession, sand and gravel have proved to be the most important resources of our country; nevertheless, this fact is not always recognised by the population at large. The negative image of the gravel extraction entails additional potential for conflict.

Public relations work will allow this negative image to be removed and make the population aware that these valuable habitats will be created by the obtaining of sand and gravel – the most important resources of our country.

The Bavarian construction material company based in Kitzingen, called Lenz-Ziegler-Reifenscheid (LZR) set up a catalogue of measures which proved how much can be done for nature already during the excavation stage and that species protection and gravel extraction can be connected. By means of "Concept 2000" the general public should be informed, convinced and eventually enthused about the gravel extraction. The construction of a nature trail around the gravel pit was a part of the concept, as well as solutions to the conflicts with bathers.

"Man-made habitats" are so interesting that they are suitable for excursions by every age group. Gravel pits are ideal "outdoor classrooms", but it is necessary to find ways to awake the interest of the target group for a visit to the gravel pit.

LZR succeeds in doing so over and over again: children come during the day to the "Giant sand-pit" and are entertained with games and projects. Teachers are trained by experts outdoors as to the various methods of preparing lessons, and return later to the excursion site with their own students. Some projects, such as the construction of an isle and the building of a dragonfly pond are performed together with LZR. Specialised excursions on several areas of Universities and Polytechnic Colleges take place at the LZR gravel pits. Nature protection groups discover the animal and plant world in a habitat made out of sand and gravel, as well as other associations and bodies.

Opening the gravel pits means to reveal the company fully and openly. Transparency creates confidence and this, on the other hand, is a valuable foundation for good cooperation. The active participation in actions such as "Bavarian Nature Tour", the "GEO Day of Variety of Species" and eventually the participation in the "Bavarian Environment Pact" round the image being conveyed by LZR, which abides by the principles of environment protection.

Examples taken out of the LZR public relations work serve as incentive to teachers so that their school lessons are close to practice and inter-disciplinary. This is also good incentive for other gravel pit owners to open them to the interested public. Only by doing so, shall we be able to enthuse the population concerning sand and gravel resources and thus receive "applause for our gravel pits".

Trotz Baurezession ist Sand und Kies nachweislich der wichtigste Rohstoff unseres Landes, doch diese Tatsache ist immer noch nicht im Bewusstein der Bevölkerung verankert. Das Negativ-Image des Kiesabbaus birgt zusätzlich Konfliktpotential in sich.

Durch Öffentlichkeitsarbeit muss dieses negative Image ausgeräumt und der Bevölkerung bewusst gemacht werden, dass diese wertvollen Lebensräume erst durch die Gewinnung von Sand und Kies – des wichtigsten Rohstoffes unseres Landes – entstehen konnten.

Das Kitzinger Unternehem Lenz-Ziegler-Reifenscheid (LZR) erstellte einen Maßnahmen-Katalog der belegte, wie viel bereits während der Abbauphase für die Natur getan werden kann und dass Artenschutz und Kiesabbau zu vereinbaren sind. Mit diesem „Konzept 2000" sollte die Öffentlikeit über den Kiesabbau informiert, überzeugt und letztendlich begeustert werden. Die Anlage eines Lehrpfades mit Spazierweg um die Kiesgrube gehörte ebenso zum Konzept, wie die Konfliktlösung mit den Badegästen.

Die „Lebensräume aus zweiter Hand" sind derart interessant, dass sie sich für Exkursionen aller Altersklassen eignen. Kiesgruben sind ideale „Klassenzimmer im Freien", nur gilt es Wege zu finden, um bei den verscheidenen Zielgruppen das Interesse für einen Besuch in der Kiesgrube zu wecken.

LZR gelingt dies immer wieder: Kinder kommen zum Tag im „Riesen-Sandkasten" und werden mit Spielen und Aktionen unterhalten. Pädagogen werden von Fachleuten in verschiedenen Methoden der Unterrichtsgestaltung im Freien geschult und kommen später mit ihren Schülern zu Exkursionen vorbei. Eigene Schulprojekte, wie der Bau einer Insel oder die Anlage eines Libellenteiches werden mit LZR realisiert. Fachexkursionen finden für die unterschiedlichsten Fachgebeite von Universitäten und Hochschulen in LZR-Kiesgruben statt. Naturschutzgruppen entdecken die Tier- und Pflanzenwelt im Lebensraum Sand- und Kiesgrube ebenso, wie andere Verbände und Gremien.

Die Kiesgruben zu öffnen bedeutet auch, das Unternehem im Ganzen offen zu zeigen. Transparenz schafft Vertrauen und dies wiederum ist wertvoller Grundstock für ein gutes Miteinander. Engagement bei Aktionen wie der „BayernTour Natur", dem „GEO-Tag der Artenvielfalt" und letztendlich Beteiligungen am „Umweltpakt Bayern" runden das Bild ab, dass LZR den Umweltschutzgedanken vorlebt.

Die Beispiele aus der Öffentlichkeitsarbeit von LZR sollen Anregung für Pädagogen sein, praxisgerechten und fächerübergreifenden Unterricht zu halten. Weitere Kiesgrubenbesitzer sind herzlich eingeladen, für diesen Zweck ihre Gruben der Öffentlichkeit zugänglich zu machen. Denn nur so werden wir die Bevölkerung für den Rohstoff Sand und Kies begeistern und erhalten letztendlich „Applaus für unsere Kiesgruben".

Projects Recognized Nationally as Good Examples of Sustainable Development

UEPG Sustainable
Development Awards

Economic

Economic contribution & Added Value to Society

Kámen A Písek spol. s r.o ..... Czech Republic
Lohja Rudus Oy Ab ..... Finland
Quarzwerke ..... Germany
Lafarge Perlmooser GmbH – WWF Austria ..... Austria

Operational Best Practice

Canteras de Alaiz, S.A. ..... Spain
Hanz Zöchling GmbH ..... Austria

Social

Local Community Partnership

Cimescaut ..... Belgium
Morenia ..... Finland
Groupe Lafarge - Granulats Rhône-Loire ..... France
Gericke Kieswerke GmbH Co. KG ..... Germany
Kästli AG Bauunternehmung ..... Switzerland

Health & Safety Best Practice

Tarmac CZ a.s. ..... Czech Republic
Holcim Aggregati s.r.l. ..... Italy

Environment

Site Restoration

Katharina Hacker oHG ..... Germany
Cemex ..... United Kingdom

Environmental Best Practice

Groupe Vicat - Granulats Rhône-Alpes ..... France
Asamer & Hufnagl ..... Austria

Recycling yard in the Ševětín Quarry Project

The first mention of stone quarrying near the town of Ševětín goes back to 1930, when stone was quarried without the use of explosives and processed mainly into aggregate for railway construction. The stone bed lies approximately 800 m from the town of Ševětín. The significance of the bed increased as the years went by and it is now one of the major quarried beds in Southern Bohemia. With an annual production of 500 thousand tons, the supply is calculated to last 30 years.

The stone quarried here is granodiorite, which is used for backfilling materials, aggregate for the structural layers of railways and roads, aggregate for concrete and coated mixtures as well as railway gravel or aggregate used for reinforcing riverbanks. As the production developed, so did the stone processing technology, which is located less than 400 m from the nearest dwellings.

After the privatisation in 1992, the new owner, Kámen a písek, spol. s r.o., acquired a mined-out granodiorite bed. The bed was partially filled with overburden material from a newly opened quarry. Nothing was done with the mined-out area for several years, until a need arose to store recycled materials, soils etc. arose in 2006.

The company Kámen a písek, spol. s r.o. together with the Ševětín municipality established a recycling yard in the mined-out Ševětín in 2006. This recycling yard serves for storing a wide range of materials such as soils, excavated material, asphalt, concrete and other non-dangerous materials.

The Ševětín municipality contributed land to the project, the operation and technological processing is secured by Kámen a písek, spol. s.r.o. The recycling process itself is carried out using a METSO mobile line, using one or two levels of granulating as needed. The recycled material is then used for repairing roads and other infrastructure.

Conclusion:

The implementation of this joint project is very beneficial for the further development of the Ševětín municipality as well as for investment activities such as repairs of roads and other infrastructure.

První zmínky o těžbě kamene u obce Ševětín jsou z roku 1930, kdy se těžil kámen bez použití trhavin a zpracovával hlavně na kamenivo pro výstavbu železnice. Ložisko leží cca 800 m od vesnice Ševětín. S pěibývajícími léty rostlo ložisko na významu a v souěasnosti je jedním z velkých roztěžených ložisek na jihu ěech. Zásoby jsou zde pěi roění těžbě 500 tis. tun vypoěteny na 30 let.

Těží se zde granodiorit, ze kterého se vyrábí od zásypových materiálě, pěes kamenivo pro konstrukění vrstvy železnice a vozovek, kamenivo do betonu a obalovaných směsí, až po drážní štěrky, nebo kamenivo pro zpevěování běehě vodních tokě.

S rozvojem ložiska se rozvíjela i technologie zpracování kamene, která je od nejbližších Po privatizaci v roce 1992 nový vlastník, spoleěnost Kámen a písek, spol. s r.o., získal i již vytěžené ložisko granodioritu. Ložisko bylo ěásteěně zavezeno skrývkovým materiálem z nově otvíraného lomu. Poté se několik let s vytěženým prostorem nic nedělo, až v roce 2006 vyvstala potěeba ukládání recyklovaného materiálu, zemin atd.

Spoleěnost Kámen a písek, spol. s.r.o. ve spolupráci s obcí Ševětín loěském roce 2006 v této lokalitě již vytěženém lomu Ševětín zěídila recyklaění dvěr. V tomto recyklaěním dvoru lze ukládat velkou škálu materiálě napěíklad zeminy, výkopové materiály, asfalty, betony a ostatní nezávadné materiály.

Obec Ševětín do projektu vložila pozemky, vlastní provoz a technologické zpracování zajišěuje spoleěnost Kámen a písek, spol. s.r.o. samotná recyklace je prováděna pojízdnou mobilní linkou od firmy METSO, podle potěeby s jedním stupněm drcení nebo se dvěma stupni drcení. Materiál po recyklaci je dále využíván pro opravy komunikací a další infrastruktury.

Závěr :

Závěrem lze konstatovat, že tento spoleěný podnik velmi pěispívá k dalšímu rozvoji obce Ševětín a zároveě i na investiění akce jako jsou opravy komunikací a další infrastruktury.

The Renkomäki Project in Lahti, Finland

Lohja Rudus is active in the ready mixed concrete, concrete products, aggregates, crushing contracting, asphalt and recycling businesses in Finland, the Baltic countries and Russia. The Lohja Rudus Group's net sales for 2006 amounted to 372 million euros and the company employed on an average 1270 persons. In Finland the company employed approximately 970 persons.

In 1999 Lohja Rudus was acquired by CRH plc. The shares of CRH plc are listed on the Irish, London and New York (NYSE) Stock Exchanges. The company's net sales for 2005 were 14.4 billion euros. CRH plc has operations in 26 countries employing approximately 66,500 people at over 2,600 locations.

Lohja Rudus has a history of over 100 years in Finland. The company began its aggregates business in 1931, and entered the ready mixed concrete business in 1958.

The Renkomäki area has been used as an aggregate extraction area for a long period of time; it has been producing aggregates for the Lahti area since the 1960s.

The production of aggregates in its current form was initiated in 1987, when the City of Lahti and Lohja Rudus Oy Ab (hereafter: Lohja Rudus) acquired the right to extract aggregates according to a joint plan.

Utilising and managing the joint raw material resources in the Renkomäki aggregate extraction area has ensured the resources of development for each party involved in the operations.

The City, representing its residents, has been able both to reduce the effects of extracting aggregates and to acquire the rock material for building the community in an effective and inexpensive manner. Lohja Rudus has been able to maintain long-span operations, which has enabled the company to develop its methods of operation and ensure that they are reliable, effective and environmentally friendly.

Lohja Rudus Oy Ab harjoittaa valmisbetoni-, betonituotteet-, kiviaines-, murskausurakointi-, asfaltti- ja kierrätysliiketoimintoja Suomessa, Baltiassa ja Venäjällä. Vuonna 2006 Lohja Rudus

-konsernin liikevaihto oli 372 miljoonaa euroa ja henkilöstön määrä oli keskimäärin 1 270.

Suomessa yhtiön palveluksessa työskentelee noin 970 henkilöä. Vuodesta 1999 lähtien Lohja Rudus on kuulunut maailmanlaajuisesti toimivaan irlantilaiseen CRH plc -konserniin, joka on listattu Dublinin, Lontoon ja New Yorkin (NYSE) pörsseissä. CRH toimii 26 maassa ja konsernin palveluksessa on 66 500 henkilöä yli 2 600 toimipisteessä. Vuonna 2005 konsernin liikevaihto oli 14,4 miljardia euroa.

Lohja Ruduksen historia ulottuu Suomessa yli 100 vuoden taakse. Kiviainestoiminnan yhtiö aloitti vuonna 1931 ja valmisbetonitoiminnan vuonna 1958.

Renkomäen alueelta on otettu soraa jo pitkään. Alue on toiminut merkittävänä raakasoran lähteenä Lahden seudulla aina 1960-luvulta asti.

Nykymuotoinen soranotto alkoi 1987, jolloin Lahden kaupunki ja Lohja Rudus Oy Ab saivat maa-ainesten ottoluvan yhteisen ottosuunnitelman mukaisesti. Lahden kaupunki ja Lohja Rudus Oy Ab omistavat alueesta kumpikin noin puolet.

Yhteisen raaka-ainevarannon hyödyntäminen ja hoitaminen Renkomäen ottoalueella on ollut kummallekin toimijalle tärkeä kehityksen voimavara.

Kaupunki on asukkaiden edustajana voinut yhtä aikaa sekä vähentää soranoton vaikutuksia että saada yhdyskunnan rakentamisen kiviainekset tehokkaasti ja edullisesti. Lohja Rudus Oy Ab on voinut toimia pitkäjänteisesti, jolloin on ollut mahdollisuus kehittää toimintatapoja luotettaviksi, tehokkaiksi ja ympäristöystävällisiksi.

Promoting environmentally sound products and packaging

Since Quarzwerke is a family business with a more than 120-year-long history, the management, owners and employees feel committed to sustainable business practices. Indeed, sustainability is one of the five objectives the company defined as its guiding principles in 2006.

Pursuant to this objective, the company began an internal study in 2006/2007 that systematically examines the company's structure and practices on the basis of the three pillars of sustainability (ecology, social responsibility and economics). According to the study's assessment, the ideal of sustainability has already been internalised and is being consistently implemented in many areas of the company.

The results of the internal sustainability study will be published in a report. The sustainability report will subsequently serve as the basis for continuous monitoring of the company's sustainability and ongoing optimisation of sustainable business practices.

The (current) project on the basis of which we would like to participate in the 2007 UEPG competition for sustainable development awards comprises the following:

- the company's commitment to sustainability as the guiding principle for our economic activities,
- the systematic appraisal of all aspects of sustainable business practices,
- the publication of the results in a sustainability report,
- the optimisation of sustainable business practices on the basis of subsequent reevaluation of the sustainability report at regular intervals.

Als Familienunternehmen mit einer mehr als 120-jährigen Tradition fühlen sich Geschäftsführung, Gesellschafter und Mitarbeiter einem nachhaltigen Wirtschaften verpflichtet. Deshalb wurde der Grundsatz der Nachhaltigkeit einer von insgesamt fünf Zielvorstellungen, die das Unternehmen im Jahr 2006 in sein Leitbild aufgenommen hat.

Daran anknüpfend hat das Unternehmen im Jahr 2007 eine interne Studie begonnen, mit der die Nachhaltigkeit des Unternehmens in den drei Säulen der Nachhaltigkeit (Ökologie, Soziales und Ökonomie) systematisch betrachtet werden soll. Die durch die Studie gewonnene Bestandsaufnahme ergab, dass Nachhaltigkeit bereits in vielen Bereichen des Unternehmens gelebt und umgesetzt wird.

Die interne Nachhaltigkeitsstudie soll als Nachhaltigkeitsbericht ausgestaltet und veröffentlicht werden. Dieser Nachhaltigkeitsbericht ist schließlich die Grundlage für eine regelmäßige bewusste Überprüfung der Nachhaltigkeit des Unternehmens, die ständige Optimierung eines nachhaltigen Wirtschaftens.

Das (laufende) Projekt, mit dem wir uns an dem Wettbewerb um den Nachhaltigkeitspreis 2007 der UEPG beteiligen möchten, besteht demnach aus:

- dem Bekenntnis zur Nachhaltigkeit als Leitziel unternehmerischen Handelns,
- der systematischen Bestandsaufnahme zu den Aspekten nachhaltigen Wirtschaftens,
- der Niederlegung der Ergebnisse in einem Nachhaltigkeitsbericht,
- der Optimierung des nachhaltigen Wirtschaftens durch Fortschreibung des Nachhaltigkeitsberichts in regelmäßigen zeitlichen Intervallen.

Lafarge Perlmooser GmbH – WWF Austria

"School for a living planet" project

Lafarge and WWF are partners in the WWF global Conservation Partnership since 2000. In that context, the Austrian branch Lafarge Perlmooser and the Austrian WWF developed an indicator for biodiversity to measure quarry reclamation performance in its cement plant limestone quarry. Based on this common work, the new project "Schools for a Living Planet" was born, to make children, as the adults of tomorrow, aware of the importance of preserving biodiversity and natural resources.

The project addresses pupils from 9 to 13 years of age. Through them, the project aims to involve teachers and parents into the topic of biodiversity and ecological footprint.

For that purpose, the teams of Lafarge and WWF developed together education tools particularly for school teaching including a DVD film. With the support of school authorities and the ministry of education, educational experts of ecology went into more than 80 schools to teach the topics biodiversity and natural resources use. Additionally 45 excursions into nature reserves and Lafarge quarries have been performed, which included practical exercises in identification of species have been realised. More than 10,000 brochures containing the main messages about biodiversity and ecological footprint have been ordered, showing the overwhelming request of the project. A summer camp, performed at Seewinkelhof in the nature reserve Neusiedler See, was the highlight for the 15 winners of 1,500 participants of the pupils contest which was included with the teaching tools.

The biodiversity index, developed by Lafarge Perlmooser and WWF Austria, forms the scientific starting point of the project. It is a statistically computed indicator which shows the diversity of species in selected areas of the quarry in relation to a representative area around the same quarry. As a result, the biodiversity within the quarry can be higher than outside i.e. without having the quarry operation.

In May 2006, the project has been awarded with the Austrian Trigos Award for the most excellent sustainability project in the category "company".

LAFARGE ZEMENT

Lafarge, der weltweit führende Baustoffhersteller und die weltweit größte Umweltschutzorganisation WWF haben seit März 2000 einen Partnerschaftsvertrag abgeschlossen, mit dem Lafarge der erste industrielle Partner des Conservation Partnership – Programms wurde. Nach dem der Vertrag nach einem Zeitraum von fünf Jahren ausgelaufen war, wurde er wegen der guten Fortschritte bei der Reduktion von CO2-Emissionen, Verbesserungen im Bereich der Steinbruchrekultivierung und der Umsetzung der acht wesentlichen Leistungsindikatoren 2005 für weitere drei Jahre verlängert. Zu den acht Leistungsindikatoren zählen weiters: Umweltaudits in Steinbruchbetrieben; Treibhausgas-Emissionen; Wasser-, Energie- und Rohstoffverbrauch; Abfallverwertung; Staubemissionen und Energie-Recycling. Mit der Erneuerung der internationalen Partnerschaft werden speziell Initiativen zwischen den lokalen Standorten beider Organisationen forciert. Schon seit 2002 wurde auf lokaler Ebene im Rahmen der Partnerschaft zwischen der Österreich-Tochter Lafarge Perlmooser und dem WWF Österreich ein gemeinsames Pilot-Projekt „Leitfaden zum naturverträglichen Betrieb von Steinbrüchen am Beispiel des Abbaustandortes Mannersdorf" an der Entwicklung eines Indikators für die Artenvielfalt in rekultivierten Steinbruchbereichen erarbeitet. Das Ergebnis dieser Arbeit war der sogenannte Longterm Biodiversity Index (LBI), über den auch eine Reihe an Publikationen erschienen ist. Die erfolgreiche Entwicklungsarbeit erschien den beiden Partnern als eine geeignete Basis für eine breitere gemeinsame Informationsarbeit über Artenvielfalt. Daraus wurde das hiermit zum Bewerb vorgelegte Projekt „Schools for a Living Planet" entwickelt. Das Thema Artenvielfalt und Ressourcenverbrauch allgemein und besonders in Steinbrüchen sollte Schulkindern in einer speziell vorbereiteten Unterrichtseinheit in Abstimmung mit den Schulen nahe gebracht werden.

ITC – 07 Adaptation Project

CANTERAS DE ALAIZ

Operation of the quarry began in 1969 using the classic upward benching system. Using this method, benches were produced in the 1980s reaching heights of up to 115m, and from then until now progress has advanced upwards by means of three 70m benches with narrow 15m berms.

The new system of operation is based on quarrying by means of a downward benching system, in such a way that blasted material is loaded and transported as far as the chute, from where it is vertically transported by gravity.

The Project began in 2001. There were already some documentary references to operations of this type. The first Chutes we know of in Europe work by collecting material using a wheel loader in a small gallery, some of the more advanced examples load and transport inside the gallery, while very few have a crushing system inside, and those that we know of have much lower production than that processed by our operation. There was a high-production quarry in America, but not in the same sector, which used a simpler production process, and which had no need to separate two production lines from the outset.

In 2003, the decision was made to go ahead with the investment. The Operational Project was accepted in 2004 and work on implementing it was carried out in 2005 and 2006. In August 2006, the system began production.

La explotación de la Cantera se inició en el año 1969 mediante un avance clásico por banqueo ascendente. Por este método se llegaron a alcanzar en los años 80 bancos de alturas de hasta 115m y desde entonces hasta ahora se ha procedido por avance con 3 bancos de 70m de altura cada uno y bermas estrechas de 15m.

El nuevo sistema de explotación basa su proceso en aprovechamiento por banqueo descendente, de manera que el material volado es cargado y transportado hasta la chimenea y esta soluciona el tránsito vertical por gravedad.

El proyecto se inició en el año 2001. Existía alguna referencia documental en cuanto a explotaciones de este tipo. Las primeras chimeneas que conocimos en Europa funcionan recogiendo el material con pala cargadora en una pequeña galería, algunas más avanzadas realizan carga y transporte en el interior de la galería, pocas tienen un sistema de trituración en el interior, y de las que tuvimos conocimiento son de una producción muy inferior a la que nuestra explotación procesa. Sí había une cantera en América de elevada producción, pero no del mismo sector, con un proceso productivo más simple, sin tener que separar dos líneas de producción desde el inicio.

En el año 2003 de decidió llevar la inversión adelante, en el 2004 fue aprobado el Proyecto de Explotación y entre el 2005 y el 2006 se llevó a cabo la ejecución del mismo. En agosto de 2006 el sistema dio sus primeras producciones.

Ropeway conveyor system at the Ramsau hard rock quarry

Working procedure

The ropeway conveyor is a 287 meter long regular conveyor belt with the wheels axle vulcanized into the conveyor belt. The ropeway conveyor is carried by two steel ropes 10 centimeters in diameter. At the bottom level of the quarry the steel ropes are anchored with a huge concrete block to the solid rock. This is the main reason why the system does not need further resting pods for a length up to 500 meters.

Advantage of the use of a ropeway conveyor

- Reduction of 2 haulers, 1 wheel-loader and 1 power set
- CO_2 reduction up to 900 tons per year
- Emission reduction
- Noise reduction
- Dust reduction
- No maintenance of haulers roadway
- Energy reduction by using ropeway conveyor
- No resting pods for ropeway conveyor

Aims of the project

- CO_2 and noise reduction
- Energy production
- Reducing dust
- Reducing deadhead of haulers (minus 50 %)
- Enlarging the amount of extracted material

Application

High energy consumption, difficult road concepts, new transport concepts which are flexible, economic and useable for difficult landscape and the use of heavy machinery in operation areas are a great and new challenge.

Economic benefits

- Reduction of diesel consumption up to 190 liters per year
- Less maintenance work on working equipment
- Running the quarry under rainy (bad) conditions
- Electric energy production

Durchführung

Es wurde eine Materialseilbahn in Form eines 287 m langen Förderbandes von der Bergförderstation zum Zwischensilo und Bunker im Tal errichtet. Getragen wird das Ganze von zwei 10 cm dicken Stahlseilen, die links und rechts auf Laufrollen aufgespannt sind und im Tal und am Berg in je einem riesigen Betonblock verankert sind. Dies ist unter anderem der Grund wieso dieses System bis zu einer Länge von 500m keine Stütze benötigt.

Vorteile der Materialseilbahn

- 2 Muldenkipper, 1 Radlader und 1 Stromaggregat können ersetzt werden
- eine CO_2-Reduktion von ca. 900 Tonnen pro Jahr,
- Reduktion der Abgase,
- Verringerung der Lärmbelästigung,
- Verringerung der Staubbelastung,
- keine Instandhaltung der Zufahrtswege für Muldenkipper,
- die Seilbahn erzeugt Strom,
- die Seilbahn benötigt keine Stützen.

Ziele des Projekts:

- CO_2 Emissionen und Lärmemissionen zu reduzieren
- Energie in Form von Strom zu produzieren
- Staubbelastung verringern
- Leerfahrtenanteil von 50% auszuschalten
- Abbaumenge erhöhen

Einsatzbereiche:

Gerade in Bereichen, in denen schwere Baugeräte zum Einsatz kommen und somit ein sehr hoher Energieverbrauch in Form von Treibstoff gegeben ist, ist die Entwicklung neuer Transportkonzepte, die flexibel, wirtschaftlich und auch im schwierigen Gelände umsetzbar sind, eine große Herausforderung.

Wirtschaftlichkeit:

- die starke Reduktion des Treibstoffverbrauchs von ca. 190.000 l Diesel pro Jahr
- geringere Wartungsarbeiten durch den Wegfall von Baugeräten
- Vorteile im Betrieb des Steinbruchs, wie zum Beispiel bei schlechter Witterung
- die Stromerzeugung und damit verbundenen Einsparungen

The Transhennuyere Project

S.A. CARRIERES D'ANTOING, subsidiary of C.B.R. (HEIDELBERGCEMENT GROUP) and CIMESCAUT, operated the carboniferous limestone of the Tournai's area for about one century.

At the beginning of the sixties, as this company increased its production, the quarry had to be extended and excavated. The result of this excavation was the significant increase of the pumping out water volume.

At the same time, piezometric (of the hydraulic head of groundwater in aquifers) measures revealed that the carboniferous limestone water table was exploited beyond its replenishment acapacities and fell in a continuous and worrying way (of the order of 1 m/year).

The depletion of the water table affects the flow rate in the wells used by the public authorities, by industry and by private users; it also increases drinking water production costs impacting on the economic outlook of a complete region. Moreover, the constant lowering of the piezometric level has led to a number of karstic collapses putting in danger several buildings.

To solve these problems, a reduction of pumping was imposed on the different users. Its consequence was the necessity of finding an alternative source of water to preserve the water table.

So, the public authorities thought to recover excess water from the quarries, located within the perimeter of the water table, which were directly pumped into the Escaut River. That was the origin of the TRANSHENNUYERE project to which CIMESCAUT actively collaborated.

The use of quarry water permitted a considerable reduction in water extraction from the depleted water table which level started to stabilize in 1998 and has increased by some 40 cm/year since 2002.

Based on this ecological success and due to the ever increasing demand for drinking water the Société Wallonne des Eaux (S.W.D.E) has decided to launch two similar quarry water projects in BELGIUM.

La S.A. CARRIERES D'ANTOING, filiale de C.B.R. (GROUPE HEIDELBERGCEMENT) et de CIMESCAUT, exploite le gisement de calcaire carbonifère du Tournaisis depuis environ un siècle.

Au début des années 60, la société ayant augmenté sa production, la carrière dut être agrandie et approfondie. Cet approfondissement entraîna une augmentation importante du volume d'eau d'exhaure.

Des mesures piézométriques relevées simultanément révélèrent que la nappe aquifère du calcaire carbonifère était surexploitée et qu'elle diminuait de manière continue et inquiétante (de l'ordre de 1 m/an).

L'épuisement de la nappe aquifère affecte le débit d'écoulement des puits utilisés par les autorités publiques, les industries et les particuliers ; il augmente également les coûts de production d'eau potable hypothéquant l'avenir économique de toute une région.

De plus, l'abaissement continu du niveau piézométrique a entraîné de nombreux effondrements karstiques mettant en danger plusieurs bâtiments.

Afin de résoudre ce problème, une réduction des prélèvements fut imposée aux utilisateurs principaux. Il fallut donc trouver une autre source d'alimentation en eau afin de préserver la nappe aquifère.

Les autorités publiques pensèrent alors récupérer les eaux excédentaires des carrières, situées dans le périmètre de la nappe captive, lesquelles étaient rejetées dans l'Escaut. C'est ainsi que naquit le projet de la TRANSHENNUYERE auquel CIMESCAUT collabora activement.

L'utilisation de l'eau d'exhaure permit de limiter considérablement les prélèvements d'eau dans la nappe aquifère. Grâce à cela, on remarqua une stabilisation du niveau en 1998 et une remontée de 40 cm/an à partir de 2002.

Suite à ce succès écologique et à la demande croissante d'eau potable, la SWDE a décidé de lancer deux nouveaux projets de valorisation d'eau d'exhaure en Belgique.

Morenia's neighbours project

This guide is intended for people living or owning land near to one of our quarry sites. Its purpose is to help ensure smooth and straightforward co-operation regarding environmental matters and other aspects of our operations.

Further more this guide is meant to be an enclosure within the applying documents as well as being used in the neighbour meetings when planning new quarry sites to discriminate printed information in one package.

This guide can also be used for business exhibitions and other co-operative meetings.

Tämä opas on tarkoitettu Morenian maa-ainespaikan naapurissa asuville tai maata omistaville, jotta yhteistyömme ympäristöasioissa ja muissa toimintaamme liittyvissä kysymyksissä olisi mahdollisimman helppoa ja vaivatonta.

Lisäksi opasta voidaan käyttää maa-aineslupaa haettaessa liitteenä ja pidettäessä naapuri tapahtumia, joissa on tarkoituksena jakaa tietoa toimintamme vaikutuksista tiivistetysti.

Opasta voidaan käyttää myös alan erilaisilla messuilla ja muihin yhteistyö tarkoituksiin.

Millery Quarry – creating a drinking water reservoir project

Consultation efforts dating back to the 1980s have led Granulats Rhône Loire to adjust its course around changing rehabilitation projects accommodating evolving local economic, social and environmental agendas.

Original plans in the 1970s involved building a recreational facility. Plans in the 1980s focused on the establishment of a nature and water reserve. In 2000, stakeholders opted for a drinking water supply for the local population.

The company's responsible approach has called attention to the quality of the site's water, and provided for its preservation and monitoring. Selling this 100-hectare property to water companies for the symbolic price of one euro will be the next step. At that point, the Millery quarry will have everything it takes to become the natural drinking water reservoir that future generations need.

Par la mise en place d'une concertation depuis les années 80, la société a adapté l'évolution des objectifs de remise en état du site de la carrière en tenant compte des impératifs économiques, sociaux et environnementaux locaux.

D'une base de loisirs dans les années 70, au parc de l'eau et de la nature en 80, le site est devenu en 2000 une réserve d'eau destinée à l'alimentation en eau potable des populations locales.

Par sa conduite responsable, la société a garanti la connaissance, la préservation et le suivi de la qualité des eaux, par la rétrocession de l'ensemble de la propriété (100 ha) à l'Euro Symbolique aux syndicats des eaux, la carrière de Millery dispose de tous les atouts pour constituer une réserve naturelle d'eau potable nécessaire aux générations à venir.

Gravel primer for school children

1. Restoration

From 1997 further surveys were commissioned by Gericke for the Büro für angewandte Biologie (office for applied biology) to be conducted. The test results showed an excellent water quality and great habitat potential for animals and plants that usually exist in water bodies with low nutrient content.

2. The "Kiesfibel" (gravel primer for school children)

In 1997, due to frequent requests from teachers wishing to visit the gravel plant with their classes Gericke had the Büro für angewandte Biologie compile the "Kiesfibel" and being so successful has been adopted by the Industrieverband Nord e.V. (North German industry association) for the whole of Lower Saxony and made compatible for the State of Schleswig-Holstein in a revised edition.

3. "Coated cable drums"

Gericke, in cooperation with Lutze Fördertechnik GmbH succeeded in markedly reducing wear and tear with grab dredgers.

4. GEKO – Vegetation substrates

With the development of numerous vegetation substrata Gericke, in cooperation with the ingenieurbüro Baumann, is in a position to solve two problems at the same time: residues from the extraction are fit for commercial use, offering Gala construction enterprises high-quality vegetation substrata as well as construction mixes of consistent quality with detailed application recommendations.

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1. Wiederherrichtung

Ab 1997 ließ die Firma Gericke weitere Untersuchungen durch das Büro Für Angewandte Biologie durchführen. Die Untersuchungsergebnisse ergaben eine sehr gute Wasserqualität und ein hohes Lebensraumpotential für Tiere und Pflanzen nährstoffärmerer Gewässer.

2. Die „Kiesfibel"

Auf Grund der häufigen Anfragen von Lehrern, die mit ihren Schulklassen das Kieswerk besichtigen wollten, ließ die FA. Gericke 1997 durch das Büro Für Angewandte Biologie die „Kiesfibel" erarbeiten und wurde auf Grund ihres Erfolges vom damaligen Industrieverband Nord e.V. für ganz Niedersachsen übernommen und in einer veränderten Auflage auch für Schleswig-Holstein kompatibel gemacht.

3. „Beschichtete Spulenkörper"

Durch ein neuartiges Verfahren ist es der Firma Gericke in Zusammenarbeit mit der Firma Lutze Fördertechnik GMBH gelungen, Verschleißerscheinungen bei Schwimmgreifern deutlich zu reduzieren.

4. GEKO – Vegetationssubstrate

Mit der Entwicklung von zahlreichen Vegetationssubstraten hat die Firma Gericke in Zusammenarbeit mit dem IngenieurBüro Baumann gleich zwei Probleme gelöst: Nicht verwertbare Reststoffe aus dem Abbaubetrieb werden einer wirtschaftlichen Verwendung zugeführt und Gala-Baubetriebe erhalten qualitativ hochwertige Vegetationssubstrate sowie Baustoffgemische in gleich bleibender Qualität mit detaillierten Einbauempfehlungen.

Education-Site Gravelpit Rubigen project

Project-Idea and Motivation

Kästli AG Bauunternehmung, a 120 years old family-business, today in its fourth generation of family management, has been working on portraying and communicating the positive aspects of gravel pits for many years. By running our operations a considerate and respectful way towards nature and the environment, we achieved a very good relationship with the local authorities and our neighbours. But we wanted to go even further and make the uniqueness of gravel pits accessible to a larger public and thereby benefiting more of society.

The Project

The "Lernort Kiesgrube" is a classroom in the open air. Here, school classes can look into natural and gravel-related subjects in a practical and eventful way. For this purpose, we established a practical infrastructure, specially equipped workstations, "ready to use" lesson aids in different, nature- and gravel-related subjects and tailored to different levels, as well as all necessary materials.

Realisation of the Project

From the very beginning, all interested parties were contacted and involved in the project – the network "Lernort Kiesgrube" was established. Thanks to close cooperation early on with the state education authority, optimal coordination with the official state curriculum was achieved. In that way we could ensure, that the official school and the "Lernort" correspond ideally without competing one another. Inter-disciplinary teams of specialists guaranteed a high degree of professionalism while developing the lessons and infrastructure.

Projektidee und Motivation

Die Kästli AG Bauunternehmung, ein 120 Jahre altes, in vierter Generation geleitetes Familienunternehmen, ist daher seit langem bestrebt, dank rücksichtsvoller Bewirtschaftung die positiven Aspekte der Kiesgrube in verschiedenster Form zu kommunizieren. Das dadurch entstandene gute Verhältnis mit den lokalen Behörden und Nachbarn war uns aber noch nicht genug. Wir wollten die Einzigartigkeit von Kiesgruben auch einer breiteren Öffentlichkeit zugänglich machen und einen noch umfassenderen Nutzen für die Gesellschaft erreichen.

Das Projekt

Der „Lernort Kiesgrube" ist eine Schulstube im Freien. Hier können sich Schulklassen auf praktische und erlebnisreiche Art mit naturkundlichen und kiesgrubenspezifischen Themen auseinandersetzen. Dafür stehen eine neu erstellte, zweckmäßige Infrastruktur, speziell eingerichtete Arbeitsplätze, stufengerecht aufbereitete Unterrichtshilfen und alles benötigte Material zur Verfügung.

Projektumsetzung

Von Beginn weg wurden sämtliche Interessengruppen angesprochen und ins Projekt miteinbezogen. Durch die frühzeitige, enge Zusammenarbeit mit der Erziehungsdirektion des Staates wurde eine optimale Abstimmung zum offiziellen, staatlichen Lehrplan erreicht, so dass offizielle Schule und Lernort sich ideal ergänzen. Hohe Professionalität bei der Erarbeitung der Inhalte garantierten interdisziplinäre Teams aus Fachleuten

Healthy enterprise project

Idea:
Safe work and healthy employee = Healthy Enterprise = Healthy Environment

Communication during project:
- Direct discussions at operations centres with employees and subcontractors
- Regular safety meetings
- Safety seminars for managing employees
- Safety seminars for managing employees amongst subcontractors
- Lectures and distribution of printed materials with health theme
- Public awareness – distribution of company magazine, company Website

Realisation and evaluation of project:
Purposefulness of health protection and care procedures used at Tarmac Czech Republic are verified also with the help of external auditors.

The first audit of this type took place in May 2005. This resulted not only in suggestions for further improvement, but also in an award to TCZ in the national contests "Company Supporting Health". During 2006, we were attempting to apply newly gained experience and we have confronted our procedures when justifying them for the purpose of the aforementioned award. In June 2006, another control audit took place that provided us with valuable feedback and further points for improvement and confirmed the overall positive development in the occupational health and safety department. The aims of the project are gradually met, and evaluation shall take place in December 2006.

Benefit of project:
- Zero percent work-related injuries
- Removal of risk work areas
- Constant preventative health care
- Improving environment
- Involving the general public in the project and increasing their safety
- Recognition by state institutions

Myšlenka:
Bezpečná práce a zdravý zaměstnanec = Zdravý podnik = Zdravé okolí

Komunikace při projektu:
- Přímé diskuse na provozovnách se zaměstnanci a dodavateli
- Pravidelné Safety Meetingy
- Bezpečnostní semináře pro řídící pracovníky
- Bezpečnostní semináře pro vedoucí pracovníky dodavatelů
- Přednášky a distribuce tiskovin se zdravotní tématikou
- Informovanost veřejnosti – distribuce firemního časopisu, firemní internetové stránky

Realizace a vyhodnocování projektu:
Účelnost postupů dosud uplatňovaných u TCZ při ochraně a péči o zdraví prověřujeme i pomocí externích auditorů. První audit tohoto druhu proběhl v květnu 2005 a výsledkem byly nejen náměty k dalšímu zlepšení, ale i ocenění TCZ v národní soutěži o „Podnik podporující zdraví ". V průběhu roku 2006 jsme se snažili aplikovat nově získané zkušenosti a opět jsme své postupy konfrontovali při obhajobě shora uvedeného ocenění. V červnu 2006 tak proběhl další kontrolní audit, který nám opět poskytl cennou zpětnou vazbu, další náměty ke zlepšení, přičemž potvrdil celkově pozitivní vývoj na úseku ochrany zdraví při práci. Cíle projektu jsou postupně plněny a vyhodnocení proběhne v prosinci 2006.

Přínos projektu:
- Nulová pracovní úrazovost
- Odstranění rizikových pracovišť
- Stálá preventivní zdravotní péče
- Zlepšení životního prostředí
- Zapojení široké veřejnosti do projektu a zvýšení její bezpečnosti
- Ocenění státních institucí

Occupational Health & Safety (OH&S) Awareness Campaign and OHSAS 18001 certification project

We would like to introduce our approach to OH&S and in particular two projects: the OH&S Awareness Campaign and the achievement of the OHSAS 18001 certification for 4 aggregates quarries.

In 2002 we adopted the Health and Safety Policy, developed by Holcim Ltd. In 2005 we introduced a safety management / monitoring system made up by our Group. Since 2006 we focused our attention on employees' information and learning and on starting the process for OHSAS 18001 certification.

As we strongly believe that OH&S is a matter of "safety culture", we developed the OH&S Awareness Campaign - planned by Holcim Ltd. The purpose of the campaign is to discuss personal safety as a daily way of acting and making safety a fixed idea for each employee.

As regards plants' organisation the most important project has been the certification - from an independent foundation - of the safety management system that has been developed in 4 of our aggregates quarries. The impact of the safety management has been strong especially for the hazardous activities. Regulations have been introduced for ordinary, maintenance and non routine activities.

In questa sede vogliamo presentare il nostro approccio nei confronti della sicurezza ed, in particolare, due progetti: la realizzazione della "OH&S Awareness Campaign" e la recente certificazione di quattro cave di aggregati ai sensi della norma OHSAS 18001.

Nel 2002 abbiamo adattato a livello locale la Politica di Sicurezza e Salute nei Luoghi di Lavoro definita a livello di casa madre. Nel 2005 abbiamo introdotto un nuovo sistema interno di gestione/ monitoraggio della sicurezza sviluppato dalla casa madre. Dal 2006, inoltre, abbiamo rafforzato i progetti volti all'informazione / formazione e coinvolgimento dei dipendenti e avviata la certificazione OHSAS 18001.

Dalla convinzione dell'importanza della diffusione della cultura della sicurezza è nata, a livello di casa madre, la OH&S Awareness Campaign, poi personalizzata a livello italiano. L'obiettivo della campagna è discutere di sicurezza personale come modo di operare nel quotidiano e far diventare la sicurezza un "chiodo fisso" di tutti.

Dal punto di vista degli impianti, invece, il progetto più importante è stato la certificazione - da parte di un ente esterno- del sistema di gestione della sicurezza per quattro delle nostre cave di aggregati. L'adozione e la certificazione del sistema di gestione consente di controllare i rischi relativi alla salute e sicurezza dei lavoratori, migliorando le performance ed assicurando al contempo il rispetto e l'applicazione della normativa cogente.

A livello operativo l'impatto dell'implementazione del sistema di gestione si è incentrato soprattutto sulle attività che presentavano un rischio significativo.

Sono state così regolamentate le attività di conduzione degli impianti, quelle manutentive e soprattutto altre attività non routinarie per le quali vi era il rischio del verificarsi di un incidente grave.

Gravel Extraction – Man-made Habitat

The Gravel Excavation "Altholz", owned by the Katharina Hacker oHG Company in Deggendorf, Germany, lies in the hinterland dam, which is highly valuable according to national and international criteria. The challenge is that gravel removal must be financially profitable on the immediate reservation area and eventually generate an ecologically valuable area.

To this end, a new dry procedure for extracting gravel was employed where the excavation area was made watertight against penetrating ground water by the use of a thin wall, and the ground water containing sediment was pumped out. The raw material could then be obtained with a wheeled loader and transported to the preparation plant.

Gravel pits represent a substitution for lost habitats for the little ringed plover and the sand martin, although these are not their only habitat. The little ringed plover has for a long time been the regular breeding bird on the "Altholzweiher" and the sand martin took up immediate residence on the steep walls during the excavation in order to hatch successfully.

Equally, the bluethroat was detected in the northern part of the terrain that had already been modelled, with the "Altholzweiher" being the natural continuity of the bluethroat habitats on the bordering rubble area. Hundreds of animals can be found in the small but relatively deep ponds.

Im Deichhinterland liegt unmittelbar an diesem höchst wertvollen Gebiet von, je nach dem betrachtenden Kriterium von nationaler bis internationaler Bedeutung, der Kiesabbau „Altholz" der Firma Katharina Hacker oHG, Deggendorf. Die besondere Herausforderung besteht darin, dass der Kiesabbau unmittelbar am Naturschutzgebiet wirtschaftlich rentabel sein soll und am Ende eine ökologisch wertvolle Fläche hervorbringen muss.

Zu diesem Zweck wurde ein neuartige Trockenabbauverfahren angewendet, bei dem das Abbaugebiet mit einer Schmalwand gegen eindringendes Grundwasser abgedichtet und das darin enthaltene Grundwasser abgepumpt wird. Der Rohstoff kann dann mit Radladern gewonnen und zur Aufbereitungsanlage transportiert werden. Der Trockenabbau erleichtert auch die teilweise Wiederverfüllung und die Gestaltung des künftigen Bodenprofils.

Sowohl für den Flussregenpfeifer, als auch für die Uferschwalbe stellen Kiesgruben einen, wenn nicht den einzigen Ersatz für verloren gegangene Lebensräume dar. Der Flussregenpfeifer ist seit langem regelmäßiger Brutvogel am „Altholzweiher" und die Uferschwalbe fand sich sofort mit der Fortführung des Abbaus an den entstandenen Steilwänden ein, um erfolgreich zu brüten.

Der nördliche, schon ausmodellierte Teil der Fläche weist, ebenfalls seit längerer Zeit, das Blaukehlchen als Brutvogel auf, für das der „Altholzweiher" die natürliche Fortsetzung der Blaukehlchenhabitate der angrenzenden Schüttwiesen ist. In den kleineren, aber relativ tiefen Tümpeln konnten Hunderte von Tieren nachgewiesen werden.

Attenborough Quarry and nature reserve project

The Quarry Products Association (QPA) is pleased to submit the Attenborough Nature Centre for the consideration of the Judges of the UEPG Sustainable Development Awards 2007 under the Environment Pillar's Restoration category. CEMEX UK Materials won the QPA's Cooper-Heyman Cup, the premier award, in the 2006 Restoration Awards. It is an excellent and innovative example of restoration best practice that has a very positive impact both environmentally and socially.

Located close to the major population centres of the East Midlands in England, the Attenborough Quarry and Nature Reserve has been the site of mineral extraction since 1929 and remains a working quarry today.

The site gained recognition by the Sand and Gravel Association in 1993 and by the QPA in 1997, but the Reserve has nevertheless made huge strides forward in more recent years in advancing its amenity value whilst at the same time enhancing the habitat and biodiversity opportunities it represents.

Beset by a range of problems and challenges caused by inappropriate public access, litter, anti-social behaviour and deteriorating amenity, the major stakeholders recognised that a programme of concerted action, development and a realisation of the potential of the site in all respects was required.

The programme, led by these principal stakeholders, CEMEX, the Nottinghamshire Wildlife Trust and Broxtowe Borough Council, would include litter clearance, access improvements and advances in habitat provision. Footpaths, car parks and approaches to the reserve were improved utilising a number of initiatives and recruiting additional partners.

Access and amenity for disabled visitors were greatly advanced during the footpath improvement to the stringent Fieldfare Trust for Disabled Access and BT Millennium Miles standards.

Litter picking, the provision of more facilities for depositing litter and dog waste and a generally improved environment have greatly assisted in addressing this problem.

A major enhancement of the Reserve was the creation of an award winning, energy efficient and eco-friendly Visitor Centre, which was completed and opened in 2005. An innovative project in many ways, the Centre provides a wide range of facilities for visitors including educational programmes for schoolchildren and students, displays, catering and meeting and conference rooms as well as being an exceptional focal point for the Reserve's activities.

With this emphasis on amenity improvement and development, it would have been understandable if habitat and biodiversity had been neglected. At Attenborough these two issues have advanced together. Initiatives have included the planting of new reed beds, the significant remodeling of some areas of open water to create shallows and the establishment of new wetland and pasture.

Attenborough represents tremendous progress in both amenity and ecological terms in an area so close to major population centres. This has been achieved by an extremely successful partnership between the principal stakeholders supported by many others along the way including English Nature (now Natural England), the Countryside Agency, Nottinghamshire County Council, the Environment Agency and many, many individuals.

Attenborough could easily have remained unremarkable; vision, energy and a shared desire have ensured that it has become a very special place

La Motte Servolex Project

Necessity is the mother of invention, an adage that applies to all of the partners involved in quarrying projects.

The restoration project planned by the GRA Company's Impact Assessment is drawing to a close:

- slopes are wooded
- agricultural land created (meadows have served as pasture for a herd of 25 dairy cows for the past several years)
- drainage ditches have been dug and hedgerows planted around certain sections
- and at the bottom of the quarry, an ecological pond was created by a geologist and enhanced by an ecologist.

Finally, we are beginning to work together toward the same goal – this practice of pooling our skills and resources is what must be handed down to future generations.

Stakeholder expectations differ, but by paying attention to the economic imperatives of our society, understanding its lifestyle aspirations and protecting biodiversity, we can map out a very appealing future.

La pénurie nous rend intelligent, nous étant l'ensemble des partenaires travaillant sur les projets de carrières.

La remise en état prévue dans l'Etude d'Impact de notre Société G.R.A. voit sa fin.

- des talus boisés ;
- des terres agricoles (prairies utilisées depuis plusieurs années par le troupeau de 25 vaches laitières) ;
- des parcelles entourées de fossés drainants, de haies d'arbres ;
- et en fond de carrières, une mare écologique créée par le Géologue, mais améliorée par l'Ecologue.

Enfin, nous commençons à travailler ensemble. C'est cela qu'il faut transmettre aux générations futures.

Les attentes des parties prenantes sont différentes, mais si l'on est attentif aux besoins économiques de notre Société, à ses aspirations de mode de vie et aux nécessités de maintenir la biodiversité, nous pouvons dessiner un avenir très positif.

Biodiversity assessment and definition of ecological improvment measures project

The conservation of biodiversity is a central responsibility for the quarrying industry. Important ecological niches and new biospheres for threatened species of animals and plants can often be created in quarries. Therefore, nature conservation needs to be an integral element of the business activities of the minerals industry.

Respective action is not only possible in used or closed quarries, but also during active quarries. The partnership between Asamer & Hufnagl and WWF is built around that idea in order to conserve and promote biodiversity on the quarrying sites of the company.

The objective of the present perennial project is a biodiversity assessment of 4 selected quarries in 3 countries (Austria, Czech Republic and Slovakia) with the definition of recommendations for ecological improvement measures and their respective implementation in accordance with the business activities.

WWF Austria was assigned by Asamer & Hufnagl for the above objective in spring 2005. The scientific outdoor work was done by a partner of WWF called V.I.N.C.A., a local ecological landscape institute. The findings from the outdoor work were also presented to the scientific advisory board of WWF Austria, in order to provide state-of-the-art scientific results to Asamer & Hufnagl.

The project results showed high levels of biodiversity in all quarries that provide a definite reason for respective conservation measures. The assessment showed that on average 230 flowering plants species, about 30 different breeding birds and about 5 amphibians and reptiles, for example.

Particularly the diversity of birds and amphibians confirmed that the quarries present an important contribution to the biodiversity of threatened local species in the respective countries. However, improvements are still necessary in order to keep the high levels of diversity as well as improve the situation particularly in the quarry in Slovakia. The ecological improvement measures encompass minor ones as well as more substantial measures.

Die Erhaltung der Biodiversität ist eine zentrale Verantwortung für die mineralische Rohstoffe abbauende Industrie. Wichtige ökologische Nischen und neue Rückzugsgebiete für bedrohte Tier- und Pflanzenarten können in den Steinbrüchen geschaffen werden. Folglich muss die Natur- und Artenerhaltung ein integrales Element der Geschäftstätigkeiten der Mineralrohstoffindustrie sein.

Die Maßnahmen sind nicht nur in beendeten Steinbrüchen möglich sondern auch während der aktiven Tätigkeit. Die Partnerschaft zwischen Asamer & Hufnagl und dem WWF wurde geschaffen, um die Biodiversität in den Gewinnungsstätten zu erhalten und fördern.

Das Ziel des gegenständlichen Projektes ist eine Biodiversitätseinschätzung in den vier ausgewählten Steinbrüchen in den Ländern Österreich, tschechische Republik und in der Slowakei. Dabei sollen Empfehlungen für die ökologische Verbesserung und Maßnahmen und ihre jeweilige Implementierung gemeinsam mit dem Unternehmen erarbeitet werden.

WWF Österreich wurde von Asamer & Hufnagl für dieses Ziel im Frühjahr 2005 ausgewählt. Die wissenschaftliche Arbeit wurde vom WWF-Partner V.I.N.C.A., ein lokales ökologisches Landschaftsforschungsinstitut, erledigt. Die Ergebnisse der Arbeiten in den Gewinnungsstätten wurden im wissenschaftlichen Beirat des WWF Österreich beraten und die wissenschaftlichen Resultate dem Unternehmen zur Verfügung gestellt.

Die Projektergebnisse zeigten ein hohes Niveau an Biodiversität in allen Steinbrüchen. Dies war somit ein guter Grund für die Vornahme von Konservierungsmaßnahmen. Die Einschätzung zeigte im Durchschnitt 230 verschiedene Pflanzensorten, 30 unterschiedliche brütende Vogelarten und 5 Amphibien und Reptilienarten.

Die Verschiedenartigkeit der Vogel- und Amphibienarten bestätigt, dass Steinbrüche einen wichtigen Beitrag zur Biodiversität lokaler bedrohter Arten in den jeweiligen Ländern darstellen. Jedoch sind noch Verbesserungen notwendig, um das hohe Niveau der Verschiedenartigkeit zu erhalten, insbesondere im Steinbruch in der Slowakei.

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