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UNITED NATIONS INDUSTRIAL DEVELOPMENT ORGANISATION UNIDO

ORIGINAL: ENGLISH

Workshop on Mini Cement Plants Technology

Tianjin, China 26 June / 04 July 1994

FINAL REPORT *

^{*} This document has not been edited

Introduction

The Cement Technology Workshop on Mini Cement Plants was held in Tianjin, China from 27 June to 04 July, 1994. The workshop was sponsored by the United Nations Industrial Development Organisation (UNIDO) and hosted by the Tianjin Cement Industry Design and Research Institute (TCDRI).

The cement industry is a rapidly growing activity in a number of developing countries. It is usually considered as an indicator of economic growth which is also translated into the increase in construction of public and private infrastructure and as a sign of good expectations for both local and foreign investors.

The host organisation is a comprehensive research institute with rich experience and a long tradition of cooperation with UNIDO. It was funded in 1953 and has been responsible for cement plant design, engineering and modernization of this industry in China. In 1981, UNIDO established within TCDRI the China Cement Development Centre. In order to show other developing countries the expertise of the Centre on mini cement plant technology, UNIDO and TCDRI organised a training workshop in May 1991.

Currently TCDRI has over 1000 engineers specialized in designing and manufacturing cement plants of different sizes e.g. 200, 300, 500, 700, 1000 and 2000 tons of clinker per day with regard to their raw materials evaluation, feasibility studies, plant design, construction, commissioning, management and operating plants. Its growing business, particularly expanded towards developing countries, has allowed TCDRI to export in 1993 their technology to turn-key plants for Iran, Malaysia, Pakistan and Brunei.

As part of the workshop, the participants visited not only the facilities at TCDRI, but also small and medium cement plants designed by them in Tianjin, Beijing and Shanghai as well as a machine tool plant which operates with their technology. The workshop also provided a singular opportunity for the twelve participants from 9 developing countries of Asia, Africa and South America (Annex iii) to share their experience and to discuss about potential business and cooperation among themselves and with TCDRI. The workshop was also a further step to foster the development of mini cement plants utilising adequate technologies to achieve cleaner production and saving energy consumption in developing countries.

1. Opening of the Workshop

The opening ceremony started with a welcome speech delivered by Mr Hou Baorong, President of TCDRI; followed by the Vice President of the State Administration of Building Materials Industry (SABMI), Vice Minister Mr Li Jianzhi; Mr Abd El-Rahim Marei, Officer-in-Charge, Industrial Sector Funds Unit, UNIDO headquarters (Vienna); Mr Ian Davies, UNIDO Country Director-China; Mr Yuan Shaofu, Deputy Director General of the China International Centre for Economic and Technical Exchanges (CICETE); Mr Wang Shiqing, Deputy Director, Tianjin Municipal Commission for Foreign Economic Relations and Trade and finally Mr Mohammed A Sabek (Egypt) representing the foreign participants.

II. Proceeding of the Workshop

The workshop proceeded according to the attached programme in (Annex i). The country papers presented by the foreign participants together with the papers presented by TCDRI engineers are listed in Annex ii. In addition, UNIDO representatives made a brief presentation of previous activities carried out in the cement industry (in China and other developing countries) as well as the activities executed under their US\$5 million annual budget in the People's Republic of China, namely study tours, consultancy, procurement of equipment and workshops (this is the 6th workshop organised in China during the last 18 months). UNIDO's continual support to activities related to economic cooperation among developing countries (ECDC) and technical cooperation among developing countries (TCDC) was also highlighted.

III. Economic and Technical Cooperation Discussions

During the evolution of the event, most participants carried out some economic and technical cooperation discussions with TCDRI with the intention of finding out the possibilities for reaching an agreement in order to utilize the Institute's capacity, expertise and technology and apply it in their home countries. Details are explained further in title VI of this report.

IV. Closure of the Meeting

The workshop was closed by Mr Hou Baorong, President of TCDRI who delivered a farewell speech emphasizing the achievements of the event. Closing speeches were also given by Mr Abd El-Rahim Marei, Officer-in-Charge, Industrial Sector Funds Unit, UNIDO headquarters and Mr Cesar Guedes, Programme Officer, UNIDO office in Beijing.

V. Summary of Country Papers

Bolivia, Egypt, Ghana, Myanmar, Uganda, Vietnam and Zambia

In all cases the papers describe the past and present situation of the cement industry as well as the future prospects of the subsector. The majority of these countries have experienced tough structural adjustments in their economies and are presently following strict measures towards achieving a gradual and orderly recovery of their economies including a rapid move towards open market policies. The cement industry has been affected, however the future prospects seem to be promising in the way of a sound revamp of the construction sector which requires a steady augment of the actual national supply of cement which could be met by increasing the production capacity of the existing plants and the building of new ones. All these countries count with sufficient reserves of raw materials to meet future plans to develop their cement industries. Refer to list of country papers in Annex ii.

According to each presentation, the following interests in Chinese technology and expectations of international industrial cooperation were highlighted:

Bolivia

Interest in Chinese technology: design, operation and construction of mini and major cement plants. Pre-heater and precalcining technology, raw milling with roll press method of raw mill grinding, cement milling with roll press method of clinker grinding and instrumentation & control with special emphasis on automation and plant optimisation.

Expectations of international industrial cooperation: inter-exchange of national experiences with regard to similar problems.

Cooperativa Boliviana del Cemento Ltd (COBOCE) could share their expertise in erection, commissioning and trouble shooting of cement plants

The Bolivian representative expressed interest after getting acquainted with UNIDO's successful activities in the field of cement industry to be provided with the technical assistance as given to some developing countries and asked Mr Marei to visit them to evaluate their requirements to be implemented under Trust Fund arrangements. An official invitation will be directed to UNIDO. COBOCE is required to provide air ticket and accommodation.

Egypt

Interest was expressed in exploring commercial and technical cooperation with other partners in: reducing air pollution in cement factories, manufacturing of spare parts for cement plants, and erection of mini cement plants.

The Mining and Refractories Holding Co. could provide expertise in the fields of staff training and environmental protection.

Ghana

The main objective is to upgrade the existing cement industry capacity and make widely known to private investors (both local and foreign), the facilities available in Ghana for the exploitation of the country's rich limestone deposits. Interest was also expressed in acquiring know-how for producing cement out of bauxite waste.

Myanmar

The Myanmar Ceramic Industries produces nearly all the materials required for construction in the country, including cement. the main interest is to carry out efforts to upgrade the present situation in the cement industry. The government, through the Myanmar Foreign Investment Law, is providing appropriate policies to attract foreign investments and encourage the formation of joint ventures.

They have a special interest in the actual Chinese technology on design and construction of mini cement plants, whilst assistance from international organisations will be seeked in order to participate in specialized training opportunities.

Uganda

Being the Ugandan cement industry in a very difficult situation, the actual main concern, now that social and economic stability has been achieved, is to upgrade as far as possible the existing facilities and to study the possibility of erecting mini cement plants that in the medium and long term could satisfy the current demand of the product. In this respect there is a firm interest to observe the recent developments of Chinese technology and consider its application in Uganda for the above mentioned purposes.

Vietnam

The fast growing Vietnamese economy is in great need to improve the actual capacity for producing cement. Vietnam presently counts with 44 mini cement plants, most of them operating with outdated technologies, with low levels of mechanization, uncompleted production lines and causing environmental damage.

China has already provided, in recent years, assistance to construct 3 mini cement plants in Vietnam.

Zambia

The country counts with one cement company which has two cement plants, covering the northern and southern regions of Zambia respectively (separated by 330 km). Due to a decline in the construction industry, the company is now operating at a 60 % of its capacity. Zambia exports 20 % of its cement production to neighbouring countries.

The already ongoing governmental policies to upgrade the economy are expected to bring good results in the next two or three years, together with a higher international price for copper, Zambia's main export commodity. This brings a brighter future for the construction industry, therefore, the existing infrastructure for cement production has to be upgraded in order to meet the expected future increase in demand.

The main areas identified for Chinese assistance are: waste energy management, environmental management, marketing strategies, stock management and preventive maintenance

VI. Agreements on Technical and Cooperation

The President of TCDRI signed Memoranda of Agreements on Technical Cooperation with the representatives of Egypt, Mr Mohamed Ahmed Abdelkarim Sabek, Chairman, Mining & Refractories Co, Cairo and Mr Ahmed Fouad Ahmed El-Mikati, Chairman, Amriyah Cement Co, Alexandria; Namibia, Mr Joel Gebhardi, Managing Director, Okashana Enterprises PTY, Windhoek and Nigeria, Mr Victor Vanni, Chairman, International Cement Co. Ltd, Lagos.

VII.Conclusions

Throughout the sessions of the workshop and the field visits to cement plants designed by TCDRI in Tianjin, Beijing and Shanghai the participants were able to use extensively the opportunities to exchange their experience in the cement industry and technology.

During the discussions and presentations the Chinese scientists demonstrated that their country has reached a high level of development in the design, technology and construction of small and medium cement plants.

The participants acknowledge the Chinese progress in environmental control measures as well as the rational use of energy. Moreover they were able to observe how this sector is moving rapidly towards the market economy with the consequent economic benefits of the enterprises involved.

Annex i

Final Programme for the

UNIDO Tianjin International Cement Technology Workshop June 26 - July 4, 1994

Sponsored by: The

The Tianjin Cement Industry Design and Research Institute (TCDRI)/The State Administration of Building Materials Industry P.R. China (SABMI), in co-operation with the United Nations Industrial Development Organisation (UNIDO) and China International Centre for Economic & Technical Exchanges (CICETE)/Ministry of Foreign Trade & Economic Co-operation (MOFTEC)

Conference room:

Located on the ground floor of main building of TCDRI, North Star District, Tianjin, Tel. 86-22-6391311, Fax. 86-22-6390071

Sunday June 26:

Arrive Tianjin

Arrival & Registration (TCDRI will arrange to have vehicles meet participants at Tianjin and Beijing Airport)

Accommodation: Geneva Hotel, 32 Youyi Lu, Hexi District, Tianjin City, Tel. 86-22-8352222, Fax. 86-22-8359856

Day 1. Monday, June 27: Tianjin

08:00 Breakfast
09:00 Leave Geneva Hotel for TCDRI Conference Room
10:00 Opening Ceremony
Chairman: Mr. Zhang Ke
Interpreter: Mr. Geng Guangdou
Welcoming speeches to be made by

Speakers:

- (1) Mr. Hou Baorong, President of TCDRI
- (2) Mr. Li Jianzhi, Vice-Minister and Vice President of SABMI
- (3) Dr. Addel Rahim Marei, Officer-in-Charge, Industrial Sector Funds Unit, UNIDO Vienna
- (4) Mr. Ian Davies, UNIDO Country Director-China
- (5) Mr. Yuan Shaofu, Deputy Director General, CICETE
- (6) Mr. Wang Shiqing, Deputy Director, Tianjin Municipal Commission for Foreign Economic Relations and Trade

11.00	Canada introduction on Chinese (Coment Industry			
11:00	General introduction on Chinese Cement Industry <u>Speaker</u> : Mr. Zu Zupei, Senior technical adviser of TCDRI				
11-15	UNIDO's technical assistance activities in the cement industry				
11:15					
	sector Speaker: Dr. Abdel R. Marei, UNIDO				
12:15	Close				
12:15	Group photographs (in front of m	ain huilding, TCDRD			
12:30	Welcome lunch, TCDRI	alli bululig, 10214/			
14:30	Video show: brief introduction	of TCDRI and cement plant			
14:50	projects with capacities of 700 t/d	and 2000 t/d production lines			
	designed by TCDRI	rojects with capacities of 700 t/d and 2000 t/d production lines			
15:00	Visit to TCDRI's laboratories, test	t sites and factory premises			
16:45	Break				
17:00		Egypt, Mr M Sabek			
17.00	belivery or country papers.	Vietnam, Mr V On			
17:45	Questions and answers	•			
18:00	Dinner at TCDRI				
19:30	Return to Geneva Hotel				
17100					
Day 2, Tuesday, Ju	une 28: Tianjin				
07.20	Breakfast				
07:30 08:10	Leave Geneva Hotel for TCDRI c	onference room			
00:10	<u>Chairman</u> : Mr. Zhang Ke, <u>Vice</u>				
	UNIDO Country Director-China.	<u> </u>			
09:00	Introduction to 220 t/d and 320 t/	d cement plants			
	Speaker: Mr. Wang Jingtao, pro	cess engineer of TCDRI			
10:00	Questions and answers				
10:15	Break				
10:30	Introduction to 700 t/d and 1000				
	Speaker: Mr. Hou Xingyuan, pro	ocess engineer of TCDRI			
11:30	Questions and answers				
11:45	Close				
12:00	Lunch				
13:30	Introduction to 500 t/d and 700 t	d cement plants with waste gas			
	generators				
	Speaker: Mr. He Xiaolong, proc	ess engineer of TCDRI			
14:30	Questions and answers				
14:45	Break				
15:00	Introduction to 2000 t/d cement p				
	Speaker: Mr. Ji Huiming, proce	ss engineer of TCDKI			
16:00	Questions and answers	1			
16:15	Introduction to automatic centi	rai control system in TCDRI-			
	designed Chinese cement plants	third Engineer of TCDDI			
	Speaker: Mr. Xia Zhiyuan, Elec	trical Engineer of ICDKI			

17:00	Questions and Answers
17:15	Depart for Food Street
17:45	Dinner at Jhejiang Restaurant, Food Street
19:30	Tianjin TV Tower
20:30	Return to Geneva Hotel

Day 3, Wednesday, June 29: Tianjin-Beijing-Tianjin

06:30	Breakfast
07:00	Leave Tianjin by bus for Liulihe Cement Plant (2000 t/d) and
	Yanshan Cement Plant (700 t/d), located near Beijing City
09:30	Arrive at Yanshan Cement Plant, Northern Beijing. Commence
	visit of plant
12:30	Lunch at Yanshan cement plant
14:00	Leave for Liulihe Cement Plant, near Beijing
16:00	Arrive at the plant and commence visit
17:30	Return to TCDRI
19:30	Supper at TCDRI Guest House
20:00	Return to Geneva Hotel

Day 4, Thursday, June 30: Tianjin-Shanghai

07:30	Breakfast
08:10	Leave Geneva Hotel
09:00	Visit to Tianjin Steel Piping Works
10:30	Visit to the Tianjin Economic and Technological Development Area
	(TEDA)
12:00	Lunch
13:30	Leave for Tianjin Airport
15:20	Flight Tianjin-Shanghai: Air China CA 1523
17:00	Arrive at Shanghai Airport
18:00	Arrive at Peace Hotel, Shanghai
18:30	Supper at Hotel
20:00	Leave Hotel for Downtown (shopping & sightseeing)
23:00	Return to Hotel

Day 5, Friday, July 1: Shanghai-Tianjin

07:30 08:00	Breakfast at Peace Hotel Leave for Chuansha Cement Plant (700 t/d), Pudong (East Shanghai)
10:00	Arrive at the plant and start visit to the plant

11:30	Leave for Xinjian Cement Machinery Plant, Pudong
12:30	Lunch at Plant
13:30	Visit to Xinjian Cement Machinery Plant, Pudong
15:30	Leave for Shanghai Airport
17:00	Arrive at Shanghai Airport
17:50	Flight Shanghai-Tianjin: CA 1524
19:30	Arrive at Tianjin Airport
19:45	Depart the Airport for the TCDRI Guest House
20:30:	Arrive
21:00	Supper

Day 6, Saturday, July 2

08:00	Breakfast		
09:00	Leave for conference room		
10:00	Delivery of Country Papers		
	Chairman Dr A Marei		
	Ghana, Mr R Tandor		
	Uganda, Mr E Gumisiriza		
	Zambia, Mr E Simakoloyi		
	Nigeria, Mr V Vanni		
	Myanmar, Mr Aung Gyi		
12:00	Lunch		
14:00	Closing Ceremony		
	Chairman: Mr. Zhang Ke		
	Interpreter: Mr. Geng Guangdou		
	Speakers:		
(1)	Mr. Hou Baorong, President of TCDRI		
(2)	Dr. Abdel R. Marei, Technical Adviser-UNIDO		
(3)	Mr. Cesar Guedes, UNIDO Beijing Office		
(4)	Country Paper, Bolivia, Mr M Vilca		
15:30	Close		
18:00	Farewell Dinner		

Day 7, Sunday, July 3

08:00	Breakfast
08:30	Visit to the historical scenic spots around Beijing or Tianjin

Day 8, Monday, July 4

Departure from Tianjin Airport for Hong Kong (Flights: Dragonair KA 337, 12:50, Air China, CA 103, 09:25)

Annex ii

List of country papers presented by foreign participants

Overview of the Situation of the Cement Industry in Bolivia by Mr Mario Villca

The Cement Industry of Egypt by Mr Abdelkarim Sabek

Current Situation, Problems, Prospects and Possible International Industrial Cooperation in the Cement Industry of Ghana.
by Mr Robert Tandor

. .

Myanmar Cement Industry by Mr Aung Gyi

Country Paper on Cement Industry in Uganda by Mr Ephraim Gumisiriza

Report on the Cement Industry in Vietnam by Mr Vu Van On

Country Paper on Cement Industry in Zambia by Mr Edward Simakoloyi

List of Technical Papers Presented by TCDRI Engineers

General Introduction to Chinese Cement Industry by Mr Zu Zupei

Introduction to 220 t/d and 320 t/d Cement Plants by Mr Wang Jingtao

Introduction to 700 t/d and 1000 t/d Cement Plants by Mr Hou Xingyuang

Introduction to 500 t/d and 700 t/d Cement Plants with Waste Gas Generators by Mr He Xiaolong

Introduction to 2000 t/d Cement Plants by Ji Huiming

Introduction to Automatic Central Control System in TCDRI Design Chinese Cement Plants
by Mr Xia Zhiyuan

Annex iii List of Participants

UNIDO/TCDRI TIANJIN INTERNATIONAL CEMENT TECHNOLOGY WORKSHOP

TIANJIN, CHINA, 27JUNE/3 JULY 1994

No.	FULL NAME	CITIZENSHIP	COMPANY/ORGANIZATION	OCCUPATION	COMMUNICATION
1	MR MOHAMED AHMED ABDELKARIM SABEK		MINING & REFRACTORIES (EGYPTIAN JOINT STOCK HOLDING CO.)	CHAIRMAN	NO.9-9B STREET P.O. BOX 304 EL MAADI CAIRO 11728, Egypt
2	MR AHMED FOUAD AHMED EL-NIKATY	EGYPTIAN	AMRIYAH CEMENT CO.	CHAIRMAN	TEL. 99 12 77 FAX 99 12 75 BORG EL-GARBANIYAT ALEXANDRIA, EGYPT
3	MR VU VAN ON	VIETNAMESE	CONSULTANCY COMPANY ON CONSTRUCTION OF BUILDING MATERIAL PROJECTS, MINISTRY OF CONSTRUCTION	DIRECTOR	NGUYEN TRAI ROAD, THUONG DINH DONG DA HANOI, VIETNAM TEL. 582 231/521 960 FAX 84 42 81112
1	MR NGUYEN DUY AN	VIETNAMESE	STATE PLANNING COMMITTEE, CONSTRUCTION DEPARTMENT	SENIOR EXPERT	2 HOAN VAN THU HANOI, VIETNAM TEL 258 241 EXT.4442
š	Mr.Marius Liefferink	SOUTH AFRICAN	CEMENT INDUSTRIES OF NAMIBIA	DIRECTOR	P.O. BOX 652 WALVIS BAY, NAMIBIA TEL 4724 FAX, 4921
6	MR. JOEL ROBERT GEBAHARDT	NAMIBIAN	OKASHANA ENTERPRISES (PTV) LTD.	MANAGING DIRECTOR	P.O.BOX 24579 WINDHOEK NAMIBIA TEL: 35625 FAX: 224536
7	DR. VICTOR OJE VANNI	NIGERIAN	INTERNATIONAL CEMENT CO. LTD	CHAIRMAN	I, VANNI CLOSE OGBA INDUSTRIAL ESTATE LAGOS, NIGERIA TEL: 962264/961918
3	MR EDWARD SIMAKOLOYI	ZAMBIA	CHILANGA CEMENT LTD.	WORKS MANAGER	P.O.BOX 71572 NDOLA,ZAMBIA TEL:615621 FAX: 615621
9	MR.ROBERT TANDOR	GHANAIAN	MINISTRY OF TRADE & INDUSTRY	INDUSTRIAL PROMOTION OFFICER	P.O. BOX M47 ACCRA, GHANA TEL. 665 869, 665 421 EXT. 6555 FAX 233 21 662 428
10	mr Ivan Mario Villca Arevillca	BOLIVIAN	CO-OPERATIV BOLIVIANA DEL CEMENTO "COBOCE"	PRODUCTION MANAGER	AV. BALLIVIAN #576 COCHABAMBA TEL 69077 FAX 591-411 7019

No.	FULL NAME	CITIZENSHIP	COMPANY / ORGANIZATION	OCCUPATION	COMMUNICATION
	<u> </u>				
11	MR. EPHRAIM DIAZ GUMISIRIZA	1	CEMENT SUBSECTOR, MINISTRY OF TRADE & INDUSTRY	SENIOR INDUSTRIAL OFFICER	P.O. BOX 7103 KAMPALA TEL. 256 254 091 FAX 256 245 077
12	MR AUNG GYI	MYANMAR	MYANNA CERANIC INDUSTRIES	MANAGING DIRECTOR	NO.192 KABA AYE PAGODA ROAD P.O. BOX 338 YANGON, MYANMAR
13	MR. IAN DAVIES	AUSTRALIAN	UNIDO BEIJING OFFICE	COUNTRY DIRECTOR	TEL:1-5324425 FAX: 1-5322613
14	MR CESAR GUEDES	PERUVIAN	UNIDO BEIJING OFFICE	PROGRAMME OFFICER	TEL:1-5322731 FAX: 1-5322567
15	MR. ABDEL RAHIM ABDEL FATTAH MAREI	EGYPTIAN	UNIDO HEAD OFFICE	O.I.C.OF INDUSTRIAL SECTOR FUNDS UNIT	TEL:211310 FAX: 237404 P.O.BOX 300, A-1400 VIENNA, AUSTRIA

6 天津水泥工业设计研究院

TIANJIN CEMENT INDUSTRY DESIGN & RESEARCH INSTITUTE (TCDRI)

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Telex: 234043 TCDRI CN

Your ref.

Your letter dated

Our ref. (Please quote)

Date

Page

MEMORANDUM

Tianjin Cement Industry Design and Research Institute (TCDRI) and United Nations Industrial Organisation(UNIDO) jointly organised UNIDO Tianjin Cement Technology Workshop on June 26-July 3, 1994, Tianjin, China. During the Workshop, the Participants paid respective visits to Yanshang Cement Plant(700t/d), Liulihe Cement Plant, Tianjin Steel Piping Works, Chuansha Cement plant (700t/d) and Shanghai Xinjian Machinery Factory and TCDRI experts gave the technical presentation of Cement Plants with capacity ranging from 200 t/d, 300 t/d, 500 t/d, 700 t/d, 1000t/d and 2000t/d and Computer Central Control System designed by TCDRI, Through these activities the participants knew the development of China's cement Industry and capability of TCDRI. As part of the Workshop, the friendly discussion were held between TCDRI, Mining & Refractories(Egyptian Joint Stock Holding Co.), Amriyah Cement Company and UNIDO on intentions of future co-operation on cement projects between the three parties. The following points reviewed, discussed and agreements were reached during discussion.

1. TCDRI will send five engineers to visit Egypt in August, 1994. while Five engineers from Mining & Refractories will pay a visit to China following the visit of TCDRI's experts. Both parties agreed to bear the international travelling costs for his experts and the host will provide the visiting experts with boarding & lodging and transportation costs locally, except for the international telephone calls and personal expenses.

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- 2. The purpose of the visit is to evaluate and investigate urgent requirements of the Egyptian cement industry, give the presentation of TCDRI's technologies and exchange the technical views, to find the possibilities of co-operation fields between two parties, such as convention of the existing wet process plants, modification on the existing EP, provision of TCDRI's technical assistance, joint manufacture of spare parts in existing Egyptian workshops, or in the workshops to be build up jointly and to facilitate the establishment of TCDRI's office in Egypt after the approval of the Egyptian authorities. UNIDO's assistance is appreciated to be provided during the activity to be carried out by TCDRI.
- 3. Mining & Refractories agreed to provide necessary help and assistance for TCDRI to establish this proposed office in Egypt, which will promote TCDRI's technology and expand business scope in African countries and neighbouring Asian countries.
- 4. Mining & Refractories will issue the invitation to TCDRI's engineers for their trip to Egypt in two weeks after return to Egypt enabling TCDRI's engineers to start the mission in August.

At the end of the meeting the UNIDO official gave his high appreciation to quick response by both parties and assured all parties of full support and co-operation of UNIDO for actions to be taken for implementing of such co-operation.

Mr.Hou Base

President

Mr. Mohamed Ahmed Abdelkarim Sabek

Chairman of Mining & Refractories

(Egyptian Joint Stock Holding Co.)

Mr. Ahmed Fouad Ahmed El-Mikaty

Chairman of Amriyah Cement Company.

Dr. Abdel Rahim Abdel Fattah Marei

Technical Advisor of UNIDO

July 2, 1994

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Your letter dated

Our ref. (Please quote)

Date

Page

DATE: July 5, 1994

Dear Mr. Deroy,

We draw your attention sir to our Letter attached to Memorandum signed on 28 May 1992 in Tianjin and all the following correspondence between UNIDO and TCDRI regarding this matter for the establishment, providing equipment of new cement plants and the technical assistance to be provided.

We hereby confirm again to you and UNIDO what was concluded and agreed in this Memorandum, the attached letter and following correspondence that TCDRI will pay based on the payment schedule included in any of the projects to be implemented and based on the signed Memorandums whether in 1991 during the Mini Cement Plants seminar or during the period 25/6 - 4/7/1994 between TCDRI and the concerned representatives of the developing countries participating in these seminar or workshop 5.0% as UNIDO's overhead and programme costs.

This per-centage will cover the activities to be provided by UNIDO's HQ's and the concerned country directors offices regarding the implementation of the projects.

5 天津水泥工业设计研究院

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Tianjin, China

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Your ref.

Your letter dated

Our ref. (l'!ease quote)

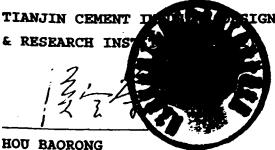
Date

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We assure you that our mutual co-operation will support the development of the cement industry in the developing countries.

Looking forward to hear from you, I remain

Your Sincerely



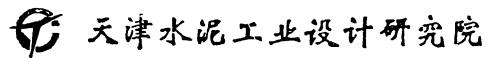
PRESIDENT

Mr. Jean - Marc DEROY, Managing Director Mobilization and Management of Financial Resources Division (FMD) UNITED NATIONS INDUSTRIAL DEVELOPMENT ORGANIZATION (UNIDO)

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Your letter dated

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Date

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MEMORANDUM

SUBJECT: MINI CEMENT PLANT/NAMIBIA 300 TPD

This is to confirm that the following discussions and understanding have been agreed on today 2nd July 1994 at TCDRI, Tianjin, China.

Present: J.R. Gebhardt - Okashana Enterprises, Namibia
Hou Baorong - President of TCDRI, China
Zhang Ke - Asst. President of TCDRI, China
Dr. ABD EL RAHIM ABD ELFATTAH MAREI - O. I. C. of
Industrial Sector Funds Unit - UNIDO, VIENNA

- TCDRI is going to assist Namibia to set up a mini cement plant with a capacity of 300 TPD under UNIDO supervision.
- TCDRI will send three (3) Engineers by September 1994 to Namibia to carry out a pre-feasibility study on this project.
- 3. The three (3) Engineers are expected to complete their pre-feasibility study in three weeks and present a detailed report on their findings one month after the completion of the study. Copy to be sent to UNIDO to review, study, comment and advise both parties.

4. TCDRI is to fund the international travelling expenses of the three engineers.

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天津水泥工业设计研究院

TIANJIN CEMENT INDUSTRY DESIGN & RESEARCH INSTITUTE (TCDRI)

Add.: North Suburb.

Tianjin, China

Cable: TIANJIN 8940 Telex: 234043 TCDRI CN

Date

Tel.: 691311

Page

Your ref. Your letter dated

Our ref. (Please quote)

The Namibia counterparts will submit all available data on the proposed project.

- The Namibian Counterparts will meet all local costs including accommodation, meals and local travelling, and any other local assistance the engineers may require.
- 7. UNIDO's involvement in this project will be covered by a separate Trust Fund Agreement to be signed between UNIDO and Okashana Enterprises (Pty) Ltd to cover all the phases required for the establishment of this production line.

Signed:

Signed:

Signed:

Dr.MAREI

GERHARDT

for

OKASHANA ENTERPRISES

HOU for

TCDR

for UNIDO

DATED THIS 2ND DAY OF JULY 1994 IN TIANJIN, CHINA.

分 天津水泥工业设计研究院

TIANJIN CEMENT INDUSTRY DESIGN & RESEARCH INSTITUTE (TCDRI)

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MEMORANDUM OF UNDERSTANDING

Between

Tianjin Cement Design And Research Institute

And International Cement Company. Ltd.

Be it known to all men that a memorandum of understanding between both parties named above hereby agree today 2nd July 1994 the following:

1. Cement Plant Price

That the price of the machinery and equipment of 2000 tpd cement plant similary to that of Shuangyang Cement Plant at the price of forty million (40,000,000) U.S. Dollars is the agreed FOB (Free on Board) for a period of twelve (12) months starting from the date of return to China of the TCDRI staff to be sent to Nigeria in August 1994.

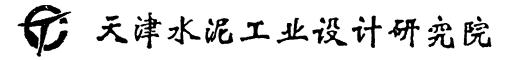
2. Method of payment

Method of payment shall be by Letter of Credit or Bank payment on the following basis:

- a. 25% payment at downpayment
- b. 50% payment on shipment and issuance of cement plant machinery performance guarantee
- c. 25% payment after one (1) year of successful commissioning the cement plant

 Witness

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TIANIIN CEMENT INDUSTRY DESIGN & RESEARCH INSTITUTE (TCDRI)

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Tianjin, China Tel.: 691311

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Page

3. The price of the cement machinery plant shall include: inter alia

- a). cement plant machinery of 2000 tpd
- b). spare parts for two years (24 months) operation
- c). 300 man-month of supervision for installation under UNIDO supervision.
- d). Provision of two civil works engineers under UNIDO supervision
- 4. The cement plant components inspection shall be carried out by UNIDO appointed experts in the Chinese workshops.
- 5. TCDRI shall operate and maintain the plant for three years after commissioning under supervision of UNIDO. Service fee shall be paid by client and exclude inside U.S. \$40,000,000 (Say Forty million U.S. Dollars only).

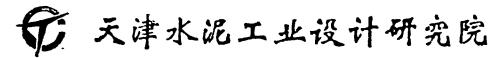
6. Staff training

On-the-job training of the Nigeria staff shall be carried out by TCDRI before, during and after the commissioning. Training fee should be paid by client and exclude inside U.S. \$40,000,000 (Say Forty million U. S. Dollars only).

7. UNIDO will assign a consulting company as a sub contractor to supervise all the work to be carried out for all the phases required for civil work commissioning

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TIANJIN CEMENT INDUSTRY DESIGN & RESEARCH INSTITUTE (TCDRI)

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8. UNIDO involvement to support the established of a 2000 TPD cement plant through all the phases required will be covered by. Trust fund agreement.

sincerely yours,

Witness

DR.VICTOR VANNI

CHAIRMAN

HOU BAO RONG

PRESIDENT

DR. MAREI

O.I.C OF INDUSTRIAL

SECTOR FUNDS UNIT

UNIDO

INTERNATIONAL CEMENT CO. LTD.





3rd FLOOR, CITY CENTRE, LEVINSON ARCADE, INDEPENDENCE AVE P.O.BOX 24579, WINDHOEK, NAMIBIA, Tel: (061) 35625, Fax: (061) 22 4536

Our ref: JRG/P.1

10 th July 1994

Dr Earle Taylor
UNIDO Country Director
Office of the Resident Representative
Plot No 9350 Alic Nkhata Rd
PO Box 31966
LUSARA 10101
ZAMBIA

Dear Dr Taylor

REPORT ON MINI CEMENT WORKSHOP IN TIANJIN, CHINA. FROM 26TH JUNE TO 6TH JULY 1994.

I would like to thank UNIDO and you personally for making it possible for me to attend the above workshop.

The workshop was an eye-opener for me as it was the first time for me to attend this type of a workshop and I have seen and learned a lot relating to the cement industry in China. Moreover the visits to other cement plants as well as the visit to the factory which produces machinery for cement plants visits have highlighted the Chines technology and expertise.

The workshop has also enabled me to get to know varied problems facing different countries in this particular industry, from the country papers delivered during the seminar.

We were also able to exchange views on this industry with participants from other countries and have made friends. Should another workshop on a similar subject or topic come up in the near future, I would appreciate it very much if I could be given another opportunity to attend.

This workshop has been of special significance for Namibia because, in due course, a memorandum was signed between our Company Okashana Enterprises, TCDRI and UNIDO. I attach a copy for your information.

FACSINILE TRANSHISSION COVER SHEET

10-07-94 DATE . CALL FAX 0943-1-237404
TO .
UNIDO VIENNA
ATTENTION
DR A MAREI
FROM
JR GEBHARDT-WINDHOEK MAMIBIA!
MY FAX NO.: NO. OF PAGES, Including cover sheet 3
Copies of letter to Dr Taylor for your information
· · · · · · · · · · · · · · · · · · ·
Ligardo
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RECEIVED

1 1. Juli 1994

FMD/PF/IS

We are looking forward to signing the separate Agreement between ourselves and UNIDO to be able to start with the new cement plant which is so much needed for Namibia.

Finally, I would like to most sincerely thank UNIDO once more.

Yours sincerely

JR GEBHARDT

cc: Dr A Marei, Special Technical Adviser Industrial
Co-operation and Funds Mobilization Division
UNIDO Vienna

H.E. Mr C. Shihepo Namibian High Commissioner - Zambia

Mr A Diallo Resident Representative UNDP Windhoek Namibia

Permanent Secretary- Ministry of Trade & Industry Namibia