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GOVERNMENT OF NAGALAND

**A QUICK EVALUATION REPORT ON WAZEHO MINI CEMENT PLANT" IN
PHEK DISTRICT IN NAGALAND**

**DIRECTORATE OF EVALUATION
KOHIMA : NAGALAND**

PREFACE

This is the twenty-seventh, of a quick Evaluation report brought out by the Directorate of Evaluation, Government of Nagaland. The Wazeho Mini cement plant project was approved in 1982 by the NEC, and the Execution of the project works was started by the NEITCO and the NSMDC on priority basis. As desired by the Minister of Planning, a quick study has been conducted by the Evaluation Department.

Due to very limited time the report could not cover all aspects of the project. Hence the study report has been prepared brief observation over the project activities with some finding! and recommendations. Evaluation Department is grateful to the officials of the NSMDC for their co-operation, enabling us to bring out this report in the stipulated time. The department also acknowledges the endeavors made by Shri P.B. Wati, Deputy Director of Evaluation who has taken the responsibility for collection of relevant data, drafted¹ and finalised the report for presentation in time.

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CHAPTER-I.

A QUICK EVALUATION STUDY ON WAZEHO MINI CEMENT PLANT IN PHEK DISTRICT IN NAGALAND.

INTRODUCTION.

1.1. Since Cement is a most essential materials item in modern Economic advance society it is vital for industrial and Economic Development of a State/Country. The production and consumption of cement are considered to be the most important indicator for determining the Economic and Industrial growth of a country today.

PRODUCTION OF CEMENT IN INDIA—DURING 1979-81 AND REQUIREMENT.

1.2. The whole of India cement production assessment made during 1981 shows that the consumption of cement or the demand of cement is increasing year by year; but the production could not meet the made demand. Though India is one of the largest cement producing country, but still very low per capita consumption compared to other advance countries. An assessment made during 1981 there are only 58 cement factories spread all over India with an installed capacity of 24.30 Million tones. However the production of cement during 1979—80 has been only 17.62 Million tones as against demand of 26 Million tones also the demand for 1980—81 has been assessed as 28 Million tones where as the production of cement was likely to be only 20 Million tones by utilising limited installed capacity due to several reasons such as shortages of power supply etc. By now it is presumed that the demand of cement will be much higher than the above assessment due to rapid growing of development day to day

TABLE NO. I

PRODCUTION OF CEMENT AND DEMAND/CONSUMPTION OF CEMENT ALL OVER INDIA TILL 1981 (ASSESSMENT MADE BY M/S NEITCO)

Nos. of cement Factories in India till 1981	Capacity installed	Production during the year		Demand made during the year 1978-1981.
		Year	Production	
1	2	3	4	5
58 Not. of Cement factories spread all over India till 1981 . Tones	24.30 Million Tones	1979-80	17.62 Million	26 Million Tones
		1980-81	20 Million Tones	28 Million Tones.

SOURCE: —(M/S NEITCO)

FEASIBILITY REPORT.

1.3. In view of the above accounts setting up of a 50 tones per day (TPD) capacity of a Mini Cement Plant at Kikehegwe in Phek District based on WAZEHO limestone's deposit has been surveyed and found to be Technically feasible and Economically Viable. Therefore the Techno-Economic feasibility report for the Establishment of a 50 TPD Mini cement Plant at Wazeho was prepared and submitted to NEC in February 1981 by the NEITCO. The same project report was approved during 1982 by the NEC and the execution of the project carried-out by NEITCO and NSMDC.

EXECUTION.

1.4. The Execution of the project has been started from the year 1982 on priority basis such as construction of approach road, power line, water supply and construction of staff quarters and for which Rs. 3.50 crores was provided by the State Government as agreement made between NEC and the State Government NEC has taken only factory part and started for site leveling works in the later part of 1984 simultaneously supply of plant machinery also started, when the project is completed and commissioned NEC will hand-over it to the State Government for operation.

TIME SCHEDULE FIXED FOR IMPLEMENTATION OF 'THE PROJECT AND INSTALLATION OF PLANT CAPACITY.

- 1.5. 1. It was assumed that the plant will be commissioned in 24 months, which is Two years time from the date of sanction (this is as per original project report)
2. Civil construction works will be taken around 16 months time.
3. The supply of machinery and erection of machinery will be taken around 18 months time.
4. Installed capacity of the project plant production will be 16,500 M.T. per Annum.
5. When the plant is completed the utilisation of capacity will be 90% (source: - Field investigation)

TRAIL PRODUCTION AND COMMISSIONING.

Tentatively the project was proposed to be commissioned in 1987 according to the original project report, but could not be commissioned due to failure on the part of the Executing agency, that is NEITCO. However the project is completed and installed full capacity of the Machinery i.e. 50 TPD by spending only 40% by NEC and 60% of the cost of the factory Machinery by State Government (NSMDC) due to failure of NEITCO the implementing agency of the NEC. Presently the project is producing 10 tones per day on trail basis and when the trail is over the project will be commissioned. The present trail production of cement at Wazeho is slightly below ICI quantity/standard according to the NSMDC Ltd. auth-rr information.

STUDY NATURE.

1.7. In this present quick study the Department could not covered all in detail of the project activities due to very limited time concern which JS fixed by the Honorable Minister of Planning & Coordinate n Department, Government of Nagaland the study report should be prepared and submitted to the authority within two weeks time and the stipulated time is rather in sufficient to collected data and prepared report it in depth study Hence the report has been prepared with a view to give only a bird eye view of the project activities and some findings and recommendation for immediate utilisation of the authority and hope that at least it may be a beneficial to the viewer of this short' quick study report.

CHAPTER –II.

ORIGIN AND EXECUTION OF THE PROJECT/PLANT.

2.1. In 1980, the Nagaland State Government and NEC had discussed the matter and agreed to set up a 50 tones per day (50TPD) Mini cement plant at Wazeho by using cement research Institute of India Technology(CRI-MVSK Technology) It was also agreed that the Nagaland State Government shall provide all the essential INFRASTRUCTURES facilities such as :-

- (a). Construction of approach road.
- (b). Water Supply works.
- (c). Power Supply.
- (d). Housing for staff and
- (e). Quarry Development works etc. and the NEC shall finance the cost of the CEMENT FACTORY. On completion and commissioning of the project, it shall be handed over to the state Government for operation of the plant.

EXECUTION OP THE PROJECT BY NSMDC LTD. AND NEC IN BRIEF BY STATE GOVT. (NSMDC).

2.2. Based on the agreement the Government of Nagaland has formed NSMDC LTD. In 1992 and had started the infrastructural work during 1992. The whole picture of the working Groups of the project is clearly showing in the Table-II as agreement made between Government of Nagaland and NEC. The main infrastructrural works carried out and completed by the state Government for the Plant are given below as per information gathered in the field

TABLE NO.II

**WORKING GROUPS OF THE 50 TPD WAZEHO MINI CEMENT
PLANT IN PHEK DISTRICT**

Infrastructural facilities provided by the Government of Nagaland (NSMDC.)	II. Plant factory takes up by the NEC. III. Implementing Agency of the project by NEITCO. IV. 3 Sub- Contractors groups for the plant.		
a. Construction of approach Road. b. Power supply. c. Water Supply. d. Housing for staff. e. Quarry development etc.	A. CIVIL WORKS.	B. STRUCTURAL WORKS	C. MACHINERY SUPPLY AND ERECTION WORKS
	a. Site leveling for factory.	a. All factory structure	a.40% achieved by NEITCO
	b. Foundation of the factory.	b. Structure of factory building	b.60% achieved by-State Govt (NSMDC) (Under NEC Scope)
	c. Internal Road.	c. Structure for Machinery	
	d. RSC storage silos.		
	e. Office Building.		
	f. Laboratory of factory.		
	g. Fencing of factory.	: -Balance work with NEC till dateNEITCO	
	h. 5 Nos. quarters.		

(Source: -Field investigation)

- (a). Power Supply was completed by the Power Department in 1981
- (b). Water Supply had been completed by the PHE Department in 1985
- (c). 98 Staff quarters plus one 12-bedded rest house were completed in 198T by NSMDC Ltd.
- (d). 3 K-m. Approach road to quarry/ mine.
- (e). Beside this? One 30 M-T, capacity weight—bridge was purchased and Installed in 1988 at the cost of 5.00 lakhs,
- (f). One 500 KVA Generator set at the cost of Rs. 40.14 lakhs.

EXECUTION WORKS DONE BY NEC AND ITS AGENTS M/I NEITCO LTD. AND M/S MOVERS LTD.

2.3. Since NEC has taken up all the factory plant activities the contract agreement has been made between the NEC and its agency M/S NEITCO Ltd. for the Execution of the project Plant. The M/S NEITCO main implementing agency of the NEC had entered into an agreement with the M/S Movers Pvt. Ltd. Bangalore (Sub-Contractor) for supply and erection and commissioning of the project. However M/S Movers Pvt. Ltd. Could not supply all the plant machinery in spite of releasing 90% pertain to them and the project stand still by the end of 1987 due to failure of the M/S NEITCO and its agency. Hence expenditure sanction for the factory plant was made available direct to M/S NEITCO Ltd. by NEC the State Government has got no idea about the financial discrepancies between the NEC and its agency (As informed by the NSMDC Officials)

THE EXECUTION WORKS ACHIEVED BY THE NEC AND ITS AGENCY

2.4.(a) The NEC and its agency M/S NEITCO Ltd. has started site leveling works for the factory in the later part of 1984.

(b). Simultaneously supply of machinery for the factory also started in 1984.

(c). By the end of 1988 about 95% of the civil works comprising foundation. Factory structures, RCC silos and the Factory building were completed.

(d). The Plant machinery could supply only 40% of the machinery component by the agency, and by the end of 1987 the project activities stand still due to failure of implementing agency and suspended 60% of the project plant component.

2.5. The machinery supply and installation works and everything stand still by the end of 1987 by the agencies. It was estimated that only 40% of the plant machinery was supplied by the agency and suspended about 60% of the cost of machinery. This report has been prepared and estimated by the cement corporation of India (CCIS) representatives in January 1988 (The survey was carried out at the instance of state Government (NSMDC Ltd.) A court case is going. On between NEITCO and its sub-contractor M/S MOVERS PVT Ltd Bangalore but till today there is no amicable settlement between them (source: - Field Investigation).

FACTORY MACHINERY COST 60% BALANCE TAKING OVER BY NSMDC.

2.6. Since the machinery supplier was not in a position to supply the balance machinery costing to 60% of the projected amount, NEC has proposed to the Govt, of Nagaland (NSMDC) to take up the balance works with an appropriate authority arranging additional fund and engage an alternative FIRM to complete the project. But this suggestion proposed was not appreciated by the State Government (NSMDC) and try to manage the 60% of the factory cost of machinery from different angles of the NSMDC project activities.

2.7. As such NSMDC had entered into a contract agreement with the M/s Promac on 16—1 — 1989 to supply and install the balance 60% machinery which was left over by the NEC' and its executing agency NEITCO, and had completed the project factory by spending only Rs.58.05 lakhs (including Transportation charges) which expenditure is less than projected estimate cost.

2.8. Being under the scope of NEC the NSMDC is demanding an extra expenditure of Rs. 58.05 lakhs incurred by the NSMDC Ltd. for the factory which is under NEC direct execution sponsored as agreement made between Nagaland State Government and the NEC. In this connection NEC already agreed in principle, but still matter could not be materialised (for 2.6. 2.7, and 2.8 above details will be seen in the next chapter—III Financial aspects of the project plant).

BALANCE WORKS WITH NEC.

2 .9. As indicated in the Table—I (A Civil works) till date NEC could not complete its full civil works such as (a). Fencing of factory, (b) 5 Nos. quarters for factory at least this balance works should be completed within a reasonable time other wise the above given account indicated that NEC neglected to control the implementing agency which should not be.

AQUISATION OF LAND FOR THE PLANT.

2.10. Presently the plant had already acquired about 200 acres of land at the cost of Rs.243.52 lakhs.

CHAPTER-III.

THE FINANCIAL ASPECT OF THE PLANT UNDER NEC.

ORIGINAL COST OF THE PLANT (Total plant components)

3.1. The original cost of the project plant approved in 1982 by NEC which is under NEC scope and its Executing Agency M/S NEITCO was Rs.139.78 lakhs. This was again revised to Rs. 217. 32 Lakhs in March 1987. Again due to escalation of the Project plant was re-revised in 1988 to Rs.242.52 lakhs. As per information given by the NSMDC Ltd. that the whole amount was said to be (already released to M/S NEITCO its implementing Agency by NEC is a24-3-1988. But plant could not be completed by the agency M/S NEITCO >.

PLANT MACHINERY COMPONENT.

3.2. As mentioned above the project plant was revised to Rs.242.52 lakhs which was the total plant revised cost sanctioned by the NEC. Out of which Rs.126.25 lakhs was Machinery component of the plant. But the total supply of plant Machinery by M/S NEITCO was assessed only 40% according to the assessment report submitted by CCI representatives (This assessment has been done by CCI at the instance of State Government).

3.3. The actual cost of Machinery already supplied by the M/SNEITCO is only Rs.50.50 lakhs (Assessment of 40% Machinery Supply) out of total plant Machinery component of Rs. 126.85 lakhs. On this matter the rest of amount Rs.75.75 lakhs utilised by M/S NEITCO has got no idea by the NSMDC Ltd. whether the amount is diverted to other items of works in the project or not, since the whole sanctioned amount was released to M/S NEITCO directly and is implementing agency by N E C and failed to make supply of 60 % machinery by executing agency of the plant and suspended the work

TABLE NO. 111

SANCTION ACCORDED SO FAR BY NEC FOR THE FACTORY AND ITS MACHINERY.	EXPENDITURE INCURRED BY STATE GOVERNMENT FOR THE PLANT.
(a). Original sanction Rs. 139.78 lakhs in July, 1982	(a). Infrastructural works Rs. 3.50 crores
(b). Revised sanction Rs.227.32 lakhs in March, 1987	(b). Installation of machinery in the Factory by NSMDC Ltd
(c). Re-revised sanction Rs.242.52 lakhs in March, 1988	Rs. 300.57 lakhs.
(d)Expenditure so far incurred Rs. 242.52 lakhs	(Which is under NEC Scope).
(e). Anticipated Expenditure - Rs.242.52- Rs.58.05 - Rs. 58.05 lakhs	(c). HEC has sanctioned Rs. 7.59 lakhs direct to NSMDC Ltd. in 1988 to procure one packing machine and spares. (Since M/S NEITCO failed sanctioned has made direct to NSMDC by NEC.)

(Source: - Field Investigation)

NB: - The total project cost was Rs. 242.52 lakhs- for the factory and the whole amount was said to be released by NEC to the executing agency i.e. NEITCO. But machinery could not be installed in full, so Govt. of Nagaland (NSMDC Ltd) compelled to spend another Rs.58, 05 lakhs and install complete machinery.

TABLE NO. IV.

ORIGINAL AND REVISED SANCTIONED MADE BY NEC FOR THE FACTORY AND ITS MACHINERY COMPONENTS.

1.	Original Projected sanction	Rs.139.78 lakhs
2.	Total revised sanction up to date	Rs.242.52 lakhs
3.	Machinery supply component out of Rs. 242.53	Rs.126.26 lakhs
4.	Other factory works component	Rs.116.27 lakhs
SI. No. (3 to 4) TOTAL		Rs.242.53 lakhs
5.	40% cost of Machinery component	Rs.50.50 lakhs
6.	60% cost of Machinery Component	Rs.75.75 lakhs
	Total -	Rs.126.25 Lakhs

(Source - Field Investigation)

UNDER TAKEN BY NSMDC LTD FOR THE BALANCE 60% OF MACHINERY COMPONENT WORKS.

3. 4. As the M/S NEITCO Machinery supplier was not imposition to supply the balance 60% Machinery, NEC proposed, to the Government of Nagaland to take up the balance works with an appropriate authority for arranging an additional fund and engaged an alternative FIRM to complete the project. This was conveyed vide DO NO. NEC/1/M/2(U) 84 dated 29th November 1988.

3. 5. Hence the NSMDC Ltd. had entered into a contract agreement with M/S PROMAC on 16-1-1989 for supplying and installation of 60% balance Machinery and by the end of 1991 M/S PROMAC Ltd. had completed both supply of machinery and installation works and for which state Government spent Rs-58.05 lakhs (including Transportation Charges.) Actually the projected revised estimated cost of 60% balance machinery works was assessed amounting to Rs. 71.75 lakhs. Where as the expenditure made for the same work by the State Government (NSMDC Ltd.) is only Rs. 58. 01 lakhs and the above expenditures have been made by NSMDC Ltd. out of its own sources from different angles.

RE—IMBURSEMENT OF RS 58.05 LAKHS SPENT BY THE STATE GOVERNMENT (NSMDC LTD.) FOR THE PLANT.

3. 6. Setting up of factory being under the scope of NEC the extra expenditures made by the State Government (NSMDC LTD.) for the plant* should be borne by the NEC or its agency NEITCO. The NSMDC Ltd. and the State Government is demanding that, Rs. 58. 05 lakhs, the amount which was spent by NSMDC for the balance work of 60% installation and supply of machinery in the factory In fact NEC had agreed in principle to re—imburse this expenditure amount in the meeting held at Guwahati on 4-2-1990 on condition that the factory put into production and clinkers are procured. However NEC could not repay the amount till date to the NSMDC LTD even though the factory is already in production since **September 1992**. (10 tones per day on trial production).

LAST DISCUSSION WITH NEC ON 5-4-1993.

3.7. The last discussion on this issue was held at WAZEHO Project site on 5-4-1993 and Secretary NEC had suggested that some additional items of works costing to Rs.58.00 lakhs be included in the project with the help of the implementing agency M/S NEITCO in order to revised that cost of the project cost for the third time to make up the amount spent" by NSMDC Ltd. (The total amount as per the-1998 revised cost being already released to M/S NEITCO) It is understood that including 60% balance work for Machinery is already released and spent and third time revision is require to make up Rs.58.05 lakhs spent by the state Government for the plant which is under the scope of NEC.

NEC HAD MADE AVAILABLE RS. 7.59 LAKHS DIRECT TO NSMDC LTD. FOR THE PLANT.

3.8. An amount of Rs. 7.59 lakhs was made available and released to NSMDC LTD. by NEC. In 1988 out of which Rs.2.54 lakhs was spent for the purchase of one packing machine and Rs. 5.05 was for spar.. However the amount was utilised in procuring and installation of other machinery which are more essential for the plant immediately by NSMDC LTD.

STATE GOVERNMENT/NSMDC, LTD. PART IN THE PROJECT.

3.9. As Agreement made between NEC and State Government (NSMDC LTD.) all the infrastructural facilities are to be provided by the NSMDC and as such execution of the works has been taken up from 1982. With the total expenditure of Rs. 3.50 crores purely for infrastructural facilities of the project and had finished works as items of works mentioned in the Chapter-I (2.1.)

CHAPTER - IV.

THE PRESENT POSITIONS OF THE PLANT IN BRIEF

4.1. The factory was put into trial production on 14th September 1992 and continued up to end of December 1992 and there-after had stopped (reason) for lack of COKE-BREEZE (the fuel) since the requirement of coke-breeze in the factory is required 12 M.T. per day and GYPSUM (raw-materials) required 2.5 M.T. per day when 100% production capacity is used in the plant. Since these raw materials requirements has been made from outside, the state like COKE-BRBEZE from West Bengal and GYP SUM from Bhutan. As such problem for want of these raw materials arises, some time in the project/Plant.

CLINKERS.

4.2. The clinkers (the hard burned nodules) so far produced is about 825 M.T. within the period of 4 (four) months (i.e. Sept/92 to Dec/92) which is equivalent to 866 M.T. of cement with 5% GYPSUM or 17,320 bags of cement. As and when any customer turn up, the clinkers are to be grained with 5% GYPSUM to make cement powder for sale.

NOTE'— Clinkers: — In cement manufacturing processes clinkers is second final manufacturing stage 95% clinkers plus 5% GYPSUM— Cement.

THE PRESENT CAPACITY OF PRODUCTION AND QUALITY

4.3. The daily average production of cement during trial period of production was only 10.M.T. or 200 bags par day which is equivalent to 20% of the rated/ installed capacity of the project only. The above production has been made with a lot teething problems being, faced and attended to, since it was initial trial production period of the project/plant. As information given by the NSMDC LTD. authority the present production quality is slightly below ICIs standard and hope of produced the same as ICTs standard of quality in the near future.

METHOD OF CEMENT MANUFACTURE STAGES.

4.4. The following are the important stages for manufacturing cement: -

1. Quarrying; - Extraction to limestone and clay
2. Transportation of Limestone and clay to the plant side by Truck.
3. Crushing: - By Primary Crusher and Secondary crusher.
4. Proportioning of all raw materials i.e.71% limestone, 17% clay, and 2% of Coke Breeze.
5. Grinding of the mixed raw ma
6. Blending/Mixing by Aeration/Cyclone
7. Notarizing
8. Burning of the Nodules, and the out come is the hard burned Modules Called CLINKERS.

9. Grinding of CLINKERS with 5% Gypsum i.e. 95% clinkers plus 5% Gypsum = the products is CEMENT.
10. Packing of cement.

(Source: -Field Investigation)

DEMAND OF PRODUCT.

4.5. As and when any customer turn up and placed their requirement the clinkers 3re to be grinded with 5% GYPSUM to make cement for sale. (Since GYPSUM is expires within short time, it is not kept in the clinkers before demand is placed), presently the NSMDC Ltd. selling the product to any interested public as well as any department who ever placed their demand.

PRESENT COST OF PRODUCTION.

4.6. The production cost of 20% capacity achievement was workout to be Rs.87 per bag (Excluding depreciated values) The present selling expenses are such as Jute backing leading and Excise duty and NST etc.

PRESENT MAIN ACTIVITIES OF THE PLANT.

4.7. The main activities being carrying out now in the plant are as follows: —

1. (a). Quarrying (b) Drilling (c) Blasting and (d) Transportation of lime stone to plant site (which is about 6 KM. from quarrying to plant site).
2. Crushing of limestone and stocking of clay (since clays is required 17% as raw material).
3. Rectification works in the plant, such as repair and replacement of machinery and other part of the factory.
4. General maintenance works-
5. Grinding of clinkers for sale.

THE PRESENT MAIM CONSTRAINTS OF THE PLANT. IRREGULARITY OF POWER SUPPLY.

4.8. For manufacturing process requires continuous power supply, however, power supply in the plant is so irregular so that, continuity of the process cannot be insured and it effect s both the quantity and quality of product in the plant.

4.9. Presently one 500 KVA Diesel Generator set had already been procured and installed to be used as stand by power supply but to be used all the time is too costly to maintain heavy D. Oil. consumption and affected the plant as stated above.

IRREGULARITY SUPPLY OF COKE BREEZE.

(The fuel/Raw— material)

4.10. The requirement of Coke-breeze at 100% capacity production is above 12 MT per day. The nearest source as of now is Durgapur Steel Plant West Bengal and its quality being very critical in the raw mix design availability of sufficient quantity and good quality COKE—BREEZE at the plant site is one of the main constraint in order to achieve higher capacity production in the plant.

MAN POWER AT PRESENT AND REQUIREMENT

4.11. Presently there are fifty three (53) regular staff such as Administrative and operational (Technical) staff and fifty (50) casual laborers but according to information given by the authority the labourers staffs are not sufficient at all to execute the whole plant. Therefore 12 (twelve) more staff have been recently recruited and they are giving a short training course at Bokajan (Assam) and on completion of the said training they are also joining in the plant. But the project still requires about 2) more staff. (Total man power requires (140 NOS = 53 + 50+12 f25 = 140 NOS.)

THE BALANCE WORKS UNDER THE NEC AND ITS AGENCY M/S NEITCO.

4.12	BALANCE WORKS UNDER THE SCOPE OF NEC.	(B) APPRO COST REQUIRED.
1.	Supply and erection of factory fencing with Gate and security guard shed.	Rs. 8.00 Lakhs
2.	Construction of 5 Nos. quarters 3 Nos 'B' Type plus 2 Nos, of 'D' Type	Rs. 15.00 Lakhs.
3.	Supply of one (1) Tupper Truck 3for quarry.	Rs. 5.50 Lakhs
4.	Supply of one bag branding Machine	Rs. 0.50 Lakhs
5.	Repairing and handling over of one Compressor machine (to be repaired).	Rs. 0.50 Lakhs.
6.	To be repaired and hand over one jeep.	Rs. 0.50 Lakhs
	Total	Rs. 30.00 Lakhs

But the above balance works are completely stopped till date by NEC and its agency M/S NEITCO.

**BALANCE WORKS UNDER THE SCOPE OF NSMDC LTD.
APPRO COST 4.**

4.13.	1.	Procuring and installation of one packing machine	Rs.7.00 Lakhs
	2.	Procuring of spare parts for two years.	.05 Lakhs
		Total	Rs.12.05 Lakhs

When fund is available the NSMDC Ltd. is going to take up the balance works.

CHAPTER. V.

MAIN FINDING AND RECOMMENDATION MACHINERY SUPPLY AND OTHER PLANT WORKS

5.1. By the end of 1988 about 95% of the civil work* comprising Foundation, factory structures, R.C.C silos and factory building were completed by the implementing agency. But the case of machinery supply and installation works, everything came to a stand still by the end of 1987. It was estimated that only 48% of the machinery was supplied as per the report submitted by CC. Its representatives in January 1988. In this connection a court case is going on between M/S NEITCO and its sub-contractor M/S Movers Pvt.LTD. But, still there is no settlement between the two. In this connection it is suggested that N.E.C. should pressurise the matter for early court verdict and intimate the same to the state Govt.

EXPENDITURE ON MACHINERY COMPONENT.

5.2. The original cost of the project as per the contract agreement made between NEC and its agency M/S NEITCO was Rs.97.75 lakhs and this was revised twice during 1987 and 1988 amounting to total Rs.242.52 lakhs and the whole amount was said to be already released by N.E.C. to its agency M/S NEITCO. Out of this, the machinery components = Rs. 126.25 lakhs, and 40% of which Rs.50.50 lakhs was completed by M/S NEITCO and 60% of its component cost is Rs-75.75 lakhs which has not been completed the supply but released the whole amount, The State Government had entered into a contract agreement with M/S PROMAC for simplified and installation of the balance 60% of the machinery at the cost of Rs.58.05 lakhs only which expenditure is less than earlier project estimated cost. In this connection, setting up of the factory plant being under the scope of N.E.C. the NSMDC. LTD. and the state Government had been demanding that Rs.3805 lakhs, the amount which was spent by NSMDC. Ltd. for the balance 60% of the machinery components by re-imbursed to NSMDC by NEC. In principle NEC agreed to repay the amount to NSMDC However NEC could not repay the amount till date even though the factory is already in production.

5.3. The last discussion on this issue on 5-4-93 at WAZEHO NEG Secretary suggested to NSMDC authority, some additional items costing to Rs.58-00 lakhs be included in the project with the help of the implementing agency' NEITCO in order to revise the cost of the project for the third time and to make up the amount (pent by NSMDC (The total amount as per the last revised cost being already released to M/S NEITCO) by the NBC. But the Suggestion was not appreciated by the NSMDC. LTD. Since NEC did not agree to sanction the above expenditure to the state Govt. (NSMDC Ltd.) In this matter to avoid the financial discrepancies within the Department, NEC should make available sanction to the NSMDC LTD. to make up the expenditures borne by the NSMDC instead of adjusting, in the ether extra items. Since the execution of work is under the scope of NEC.

BALANCE WORKS WITH NEC AND M/S NIITCO.

5.4. Still NEC has got some balance works to be above in the project such at (a) supply and erection of factory fearing with gate and security guard shed, (b) construction of 5 Nos quarters in the project, (c) supply of one Tipper Truck for quarry which is most essential item in the factory.

(d) Supply of one bag branding machine.

(e) Repairing and handling over, one compressor machine.

The approximate cost of the above work is about Rs. 30.00 lakhs so NEC should provide those essential facilities immediately to the project, since project is going in to production from Sept/92.

BALANCE WORKS UNDER, NSMDC. LTD.

5.5. (1) Procuring and installation of one packing machine

(2) Procuring of spares parts for two years and the amount require for the above items is Rs, 12.00 lakhs (Approx cost), when the required fund is available the state Govt. is going to take up the above balance works and the same matter should be taken up by the state Government immediately.

SUPPLY OF RAW MATERIALS.

1.8. The most essential raw-materials require in the cement factory are (1) Clay 17% (2) Limestone 71% (3) Coke-Breeze 12% and GYPSUM 5% — cement. Out of the above items coke-breeze and gypsum are getting from outside the state like Coke-breeze from West Bengal and Gypsum from Bhutan as such problem for want of Gypsum arises in the factory due to transportation bottle neck problem. As and when the plant is put into full capacity of production of cement the factory is needed Gypsum 2.5 M.T. per day and Coke-Breeze 1 M.T. per day presently. The factory has stopped production due to shortages of Gypsum in the factory. So such problem should be avoided in the near future by placing necessary requirement intend within a reasonable time to the supplier of such raw-materials which are not locally available.

POWER SUPPLY.

5.7. Power supply is one of the most essential item in the factory for production. But it was informed to the investigating party that the supply of power is so irregular in the factory which badly effect both the quality and quantity of production in the Plant. At present department has purchased one 500 KVA Diesel Generator set to be used as stand by power supply, but to be used all the time is for costly due to heavy consumption of

Diesel oil etc. Since factory is running purely on Commercial basis the regular power supply choose arranged by the State Government to avoid the above problem.

MAN POWER.

5.8. Man power is one of the most important items in the factory of production. Presently there are fifty three(53) regular staff both for administrative and operational (Technical) Staff, also fifty (50) casual labours in the plant. But as per information given by the project authority the actual requirement of man power in the project is about 140 Nos. regular plus casual labours. When the plant is put into use 85% to 95% of its capacity sufficient man* power is necessary to run the factory normally and to maintain factory's normal production, sufficient staff should be appointed.

PRESENT TECHNICAL PROBLEMS IN THE PROJECT.

- 5.9
1. Irregularity of power supply by the power Department.
 2. Non-availability of spares in the local market.
 3. Non-availability of COKE-BREEZE and Gypsum in the local market.
 4. Non- availability of Diesel Oil in the local area.
 5. Transportation bottle neck.

SUGGESTION FROM THE DEPARTMENT. (NSMDC LTD.)

- 5.10.
1. Regular power supply should be insured by the power Department.
 2. Sufficient fund should be given for purchase of spare part.
 3. All Departments should be directed to purchase cement from the project.