

DATED 29 JUNE ,1998

**(1) THE GOVERNMENT OF THE REPUBLIC OF ZAMBIA**

and

**(2) NFC AFRICA MINING PLC**

and

**(3) CHINA NONFERROUS METAL INDUSTRY'S FOREIGN ENGINEERING AND  
CONSTRUCTION CORPORATION (GROUP)**

---

**CHAMBISHI MINE  
DEVELOPMENT AGREEMENT**

---

**CLIFFORD CHANCE**  
200 Aldersgate Street  
London EC1A 4JJ

Tel: 0171 600 1000  
Fax: 0171 600 5555  
Ref: VCH/G2181/030/MWC

**CONTENTS**

**PART A**

**GENERAL**

1. **Definitions and Interpretations** ..... 3

**PART B**

**OPERATIONAL AND EMPLOYMENT ISSUES**

2. **Obligations to Develop** ..... 10

3. **Rights to Export and Import and Arms' Length Dealings** ..... 10

4. **Procurement** ..... 11

5. **Local Business Development** ..... 12

6. **Training and Human Resources Management** ..... 13

7. **Insurance** ..... 15

8. **Suspension of Production** ..... 15

9. **Social Assets** ..... 17

10. **Records and Operating Reports** ..... 19

**PART C**

**UNDERTAKINGS NECESSARY FOR OPERATIONS**

11. **Foreign Exchange** ..... 21

12. **Environmental Issues** ..... 23

**PART D**

**TAXATION**

13. **General Obligation to Pay Tax** ..... 28

14. **Clarification of Taxation Legislation** ..... 28

15. **Taxation Stability** ..... 28

**PART E**

**FORMAL CLAUSES**

16.	<b>Assignment</b>	30
17.	<b>Extensions to Time</b>	32
18.	<b>Termination</b>	32
19.	<b>Arbitration and Sole Expert</b>	35
20.	<b>Law Applicable</b>	38
21.	<b>Force Majeure</b>	38
22.	<b>Variation</b>	39
23.	<b>Consultation</b>	40
24.	<b>Notices</b>	41
25.	<b>Waiver</b>	42
26.	<b>Severability</b>	42
27.	<b>Further Acts</b>	42
28.	<b>Counterparts</b>	42
29.	<b>Representations and Warranties</b>	42
	<b>SCHEDULE 1</b>	<b>45</b>
	APPROVED PROGRAMME OF MINING OPERATIONS	
	<b>SCHEDULE 2</b>	<b>48</b>
	PART 1	
	ENVIRONMENTAL PLAN	
	PART 2	
	ENVIRONMENTAL CLEAN UP OBLIGATIONS	
	<b>SCHEDULE 3</b>	<b>52</b>
	PART I	
	CONTRACT AREA	
	PART II	
	MINING AREA	
	<b>SCHEDULE 4</b>	<b>54</b>
	TRAINING AND HUMAN RESOURCES MANAGEMENT PROGRAMME	
	<b>SCHEDULE 5</b>	<b>56</b>
	LOCAL BUSINESS DEVELOPMENT PROGRAMME	
	<b>SCHEDULE 6</b>	<b>58</b>
	REQUIRED INSURANCES	

- PART I**
- MEDICAL SERVICES**
- PART II**
- EDUCATION SERVICES**
- PART III**
- RECREATIONAL SERVICES**
- PART IV**
- MUNICIPAL INFRASTRUCTURAL SERVICES**



**THIS AGREEMENT** is made on 29 JUNE ,1998

**BETWEEN:**

- (1) **THE GOVERNMENT OF THE REPUBLIC OF ZAMBIA**, acting through the Minister of Mines and Minerals Development and the Minister of Finance and Economic Development ("GRZ"); and
- (2) **NFC AFRICA MINING PLC**, a company incorporated in the Republic of Zambia (registered no. 40172), whose registered office is at Amandra House, Ben Bella Road, PO Box 34550, Lusaka, Zambia ("NFCA") and who shall include any permitted assigns or successors of the rights and obligations of NFCA; and
- (3) **CHINA NONFERROUS METAL INDUSTRY'S FOREIGN ENGINEERING AND CONSTRUCTION CORPORATION (GROUP)**, a company incorporated in The Peoples' Republic of China registered no. 1000001002491(4-1), whose registered office is at 12B Fuxing Road, Beijing, Peoples' Republic of China ("China Nonferrous") and who shall include any permitted assigns or successors of the rights and obligations of China Nonferrous.

**WHEREAS:**

- (1) Proposals have been submitted on behalf of NFCA by China Nonferrous for the acquisition, development and operation of the Chambishi Mine and orebody in the Copperbelt Province of Zambia (the development and operation of such large scale mining operation hereinafter referred to as the "Project"), the location of which is more specifically identified by reference to the plans annexed hereto at Schedule 3;
- (2) GRZ has approved these proposals which are hereinafter referred to as the "Approved Programme of Mining Operations", until the approval by GRZ of a revised programme of mining operations pursuant to Clause 2.4 hereof;
- (3) The development and large scale exploitation of the Project will be of major economic significance to the people of Zambia;
- (4) GRZ wishes to ensure that the development and large scale exploitation of the mine and orebody at Chambishi will secure the maximum benefit for, and adequately contribute to the advancement and the social and economic welfare of, the people of Zambia, including the people in the vicinity of the Contract Area in a manner consistent with their needs and the protection of the environment and which secures an appropriate return on investment commensurate with the risks involved to NFCA;
- (5) GRZ, NFCA and China Nonferrous have agreed on a number of matters which are set out in this Agreement and wish the matters agreed upon to be an enduring arrangement of national interest;
- (6) GRZ has granted to the Minister of Mines and Minerals Development and the Minister of Finance statutory authority under Section 9 of the Act to enter into this Agreement on

relating thereto. The Minister has sought and received the advice of the Mining Advisory Committee in accordance with Section 88 of the Act and is acting in accordance with such advice; and

- (7) GRZ, NFCA, ZCCM and China Nonferrous have entered into a Sale and Purchase Agreement dated 29 JUNE, 1998 which requires on its Completion (as therein defined) the entry into of this Agreement.



approved by the Ministry (and appended to the Large Scale Mining Licences pursuant to Section 25(4) of the Act) and which is set out in Schedule 1 hereto;

**"Arms' Length Terms"** means a transaction where:

- (a) the parties in negotiating the transaction have sought to promote their own best interests in accordance with fair and honest business methods;
- (b) the consideration expressed in the agreement for the transaction entered into is the only consideration for the transaction;
- (c) the price and other terms of the transaction have not been affected by, nor determined as a consequence of, any other agreement or any direct or indirect relationship (other than the relationship created by the transaction agreement between the selling party or shareholders of the selling party, or a company in which the selling party is a shareholder, and buying party or shareholders of the buying party, or a company in which the buying party is a shareholder); and
- (d) neither the selling party, nor any person or company connected with it through shareholding or otherwise, has any direct or indirect interest in the subsequent disposal, if applicable, by the buying party of any of the products or services obtained pursuant to the transaction agreement;

**"Assets"** means all the property and assets to be transferred by ZCCM to NFCA pursuant to the provisions of the Sale and Purchase Agreement as are more particularly described therein;

**"Business Day"** means a day other than a Saturday or Sunday upon which banks are open for business in London, Beijing, Dublin, Toronto and Lusaka;

**"Central Bank"** means the Bank of Zambia;

**"Collective Agreements"** means the Standard Conditions of Employment and Service as agreed between ZCCM and the Mineworkers Union of Zambia in effect at the date of Completion of the Sale and Purchase Agreement (which for the avoidance of doubt includes the Standard Code Book, the Disciplinary Code Book, the 1981 Joint Job Evaluation Agreement and the 1997 Redundancy Agreement), as these may be renegotiated by NFCA from time to time following the expiry thereof;

**"Commencement of Normal Operations"** means the last day of the first period of thirty (30) consecutive days in which production of contained copper in concentrate from the Project exceeds sixty per cent. (60%) of the monthly production of contained copper in concentrate projected in the Approved Programme of Mining Operations for the period immediately following four (4) years after Completion;

**"Companies Act"** means the Zambian Companies Act, Chapter 388 of the Laws of Zambia as from time to time amended and in effect;



**PART A**  
**GENERAL**



1. **Definitions and Interpretations**

1.1 In this Agreement, unless the context otherwise requires:

"Act" means the **Zambian Mines and Minerals Act, Chapter 213 of the Laws of Zambia** as from time to time amended and in effect;

"**Affiliate, Affiliated Party, or Affiliated Parties**" means:

- (a) any person in which **NFCA** or a **Shareholder** (as the case may be) holds twenty per cent. (20%) or more of the ordinary voting shares or which holds twenty per cent. (20%) or more of **NFCA's** or a **Shareholder's** (as the case may be) ordinary shares;
- (b) any person which, directly or indirectly, is **Controlled by** or **Controls**, or is under **Common Control** with **NFCA** or a **Shareholder** (as the case may be); or
- (c) any person or group of persons being directors or executive officers of, or in the employment of, any person referred to in (i) or (ii) above;

and "**Control**" means:

- (a) the power (whether directly or indirectly) and whether by the ownership of share capital, the possession of voting power, contract or otherwise to appoint and/or remove all or such of the board of directors or other governing body of a person as are able to cast a majority of the votes capable of being cast by the members of that board as a body, or otherwise to control or have power to control the policies and affairs of that person; and/or
- (b) the holding and/or the ownership of the beneficial interests in and/or the ability to exercise the voting rights applicable to shares or other securities in any person which confer in aggregate on the holders whether directly or by means of holding such interests in one or more other persons (either directly or indirectly) more than fifty per cent. (50%) of the voting rights exercisable at general meetings of that person,

and "**Controlled by**" shall be construed accordingly and "**Common Control**" means the circumstances where two (2) or more persons are controlled by the same person or its **Affiliates**;

"**Agreement**" means this agreement as varied from time to time in accordance with the terms hereof;

"**Approved Programme of Mining Operations**" means the proposals for developing and operating the **Facilities** submitted on behalf of **NFCA** by **China Nonferrous** which have been

**"Completion"** has the meaning ascribed to it in the Sale and Purchase Agreement;

**"Contract Area"** means that land area covered by the Leases, as described in Schedule 3 Part I;

**"Copperbelt"** means Copperbelt Province in Zambia comprising the main copper mining areas in Zambia;

**"Costs to Resume Operations"** means 1.2 ( one and two-tenths) times the costs (which includes the cost of new capital expenditures) required to resume Normal Operations plus 1.2 (one and two-tenths) times the sum of NFCA estimate of:

- (a) royalties;
- (b) Operating Costs; and
- (c) all other incidental costs,

necessary to continue Normal Operations for a further period of twelve (12) months;

**"Director"** means the Director of Mines appointed under Section 83 of the Act;

**"Distributable Profits"** means accumulated after tax profits and reserves of NFCA, available for distribution as dividends in accordance with Section 84 of the Companies Act, as shown in the financial statements of NFCA;

**"Education Services"** means the education services set out in Schedule 7, Part II;

**"Effective Date"** means the date on which this Agreement was executed by the Parties, and in the event that it was executed by different Parties on different dates means the date on which it was executed by the Party who was the last Party to execute the same;

**"Environmental Clean Up Obligations"** means those obligations more particularly described in the document set out in Schedule 2, Part II;

**"Environmental Laws"** means the Mining (Mineral Resource Extractions) Regulations, 1994 (SI 119/1994); the Environmental Protection and Pollution Control Act, Chapter 204 of the Laws of Zambia and regulations enacted thereunder; and Sections 75 to 82 of the Mines and Minerals Act, Chapter 213 of the Laws of Zambia and the Mines and Minerals (Environmental) Regulations, 1997, save for the provisions contained in each of such laws and regulations which relate to mine safety and/or the safety of persons rather than to the protection of the environment, as each may from time to time be amended and in effect;

**"Environmental Plan"** means the programme for environmental clean-up and protection and, where applicable, the proposals to bring NFCA into compliance with the Environmental Laws with which it is not in compliance as at the Effective Date as approved by the Minister for the purposes of Section 25(1)(d) and 76(2) of the Act (and appended to the Large Scale Mining Licences pursuant to Section 25(4) of the Act) appearing as Schedule 2 Part I hereto;

**"Environmental Protection Fund"** means the fund set up for environmental protection by Section 82 of the Act and the Mines and Minerals (Environmental) Regulations, 1997 (SI29/1997);

**"Facilities"** means the mine and concentrator and associated facilities at Chambishi;

**"Force Majeure"** has the meaning given to the term in Clause 21;

**"GRZ"** means the Government of the Republic of Zambia and includes any authorised agent of the Government of the Republic of Zambia;

**"IDF"** means the Import Declaration Fee;

**"Investment Commitment"** means the expenditure required to develop the Mine to achieve production levels of between five thousand two hundred and fifty (5,250) and six thousand (6,000) tonnes of ore per day within four (4) years of the date hereof, such expenditure is currently estimated to be seventy million United States dollars (US\$70,000,000);

**"Kwacha"** means the lawful currency of Zambia;

**"Large Scale Mining Licences"** means large scale mining licences numbers 27, 28 and 29 held by NFCA pursuant to the Act;

**"Leases"** means the leases set out in the Sale and Purchase Agreement;

**"Local Business Development Programme"** means the programme for local business development which is described in Clause 5 and which is set out in Schedule 5;

**"Medical Services"** means the medical services as set out in Schedule 7, Part I;

**"Mine"** means the Chambishi mine and associated assets as the same are described in Clause 2.1 of the Sale and Purchase Agreement;

**"Mine Products"** means the ores, concentrates or minerals produced from the Mining Area;

**"Minerals"** means all minerals excluding petroleum and other hydrocarbons, as the same may be located in the Contract Area;

**"Ministry"** means the Ministry of Mines and Minerals Development or other successor ministry from time to time;

**"Mining"** has the meaning given to the term in the Act and, for the purpose of this Agreement, includes all smelting and treatment operations associated with and beneficial thereto;

**"Mining Area"** means the area covered by the Large Scale Mining Licences as the same is set out in Schedule 3, Part II;



**"Municipal Infrastructural Services"** means the municipal infrastructural services as set out in Schedule 7, Part IV;

**"MUZ"** means the Mineworkers' Union of Zambia;

**"Normal Operations"** means the commercial operation of the Project following the Commencement of Normal Operations carried on in accordance with the Approved Programme of Mining Operations;

**"Notices"** means any notice, consent, demand, approval or other communication required or permitted to be given under Clause 24;

**"Operating Costs"** for any period following the Commencement of Normal Operations means the costs incurred by NFCA during Normal Operations excluding (a) depreciation and other non-cash costs (b) capital costs other than replacement capital costs and (c) financing charges;

**"Parties"** means the persons who are for the time being original parties to this Agreement or parties added or substituted pursuant to Clause 16; **"Project"** has the meaning ascribed to it in Recital 1 hereof;

**"Quarter"**; means:

- (a) January, February, and March; or
- (b) April, May and June; or
- (c) July, August and September; or
- (d) October, November and December;

**"Recreational Services"** means the recreational services as the same are listed in Schedule 7, Part III;

**"Registered Dependants"** means the dependants of employees who, at the date of this Agreement, are registered and thereafter those that shall be registered in accordance with Clause 9.1, in the records of ZCCM as being entitled to use some or all of the Third Party Social Assets. The definition of Registered Dependant shall be any spouse of any employee and any employee's children (including legally adopted children);

**"Rural Electrification Levy"** means the levy chargeable on sales of electricity under the Customs and Excise Act, Chapter 322 of the Laws of Zambia as amended and currently set at ten per cent (10%);

**"Sale and Purchase Agreement"** means the agreement for the sale and purchase of the Assets dated 29 JUNE 1998 and made between ZCCM, NFCA, China Nonferrous and GRZ;

**"Scheduled Programmes"** means the Approved Programme of Mining Operations, the Environmental Plan, the Environmental Clean Up Obligations, the Training and Human Resources Management Programme and the Local Business Development Programme;



**"Shareholder"** means a holder of ordinary shares in NFCA or the holder of the Special Share whose rights are set out in NFCA's Articles of Association;

**"Shareholders' Agreement"** means the agreement of even date herewith amongst certain Shareholders in NFCA, governing the relationship between them as Shareholders in NFCA;

**"Social Services"** means the Medical Services, Educational Services, Recreational Services and Municipal Infrastructural Services;

**"Social Services Access Agreement"** means the agreement concluded between ZCCM and NFCA of even date with this Agreement affording (on the terms and conditions therein contained) employees of NFCA and certain of their dependants access to the Third Party Social Assets of ZCCM;

**"Sole Expert"** means a person appointed pursuant to Clauses 3.3(c), 5.4, 6.4, 7.3, 8.8, 9.4, 12.4, 12.5, 12.8, 15.1(d), 16.5(b), 16.7, 18.6(c), 22.2(b) and 22.4(d) of this Agreement and, in the event the parties in dispute fail to agree on the person to be so appointed, shall be appointed by the Secretary-General for the time being of the International Centre for the Settlement of Investment Disputes (ICSID). For the purposes of this agreement, the Sole Expert shall not be, or have been an employee of GRZ or NFCA or any Shareholder or any of their respective Affiliates or any authority or corporation of GRZ;

**"Speculative Currency Transaction"** means a transaction involving the purchase or sale of Zambian currency, the primary object of which is the making of a profit on the exchange of currency but does not include the taking out of forward cover against reasonably predictable incomes or costs;

**"Third Party Social Assets"** means the Medical Services, the Education Services and the Recreational Services which were available to the employees of NFCA and their dependants prior to the Completion of the Sale and Purchase Agreement but which are to be provided by NFCA pursuant to the Social Services Access Agreement;

**"Training and Human Resources Management Programme"** means the programme forming Schedule 4 hereto as approved by the Minister for the purposes of Section 25(1)(e) of the Act (and appended to the Large Scale Mining Licences pursuant to Section 25(4) of the Act);

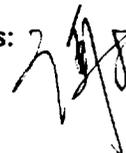
**"US\$", "US dollars" or "United States dollars"** means the lawful currency of the United States of America;

**"VAT"** means value added tax payable under the Value Added Tax Act, Chapter 331 of the Laws of Zambia as from time to time amended and in effect;

**"Zambia"** means the Republic of Zambia;

**"ZCCM"** means Zambia Consolidated Copper Mines Limited;

1.2 In this Agreement, unless the context otherwise requires:



- 
- (a) monetary references are references to United States dollars unless otherwise specifically expressed;
  - (b) the headings do not affect the interpretation or construction;
  - (c) references to an Act includes the amendments to that Act for the time being in force and also to any Act passed in substitution therefor and any regulations for the time being in force thereunder;
  - (d) words importing the singular include the plural and vice versa;
  - (e) words importing any gender include the other gender;
  - (f) references to a person include a partnership, firm or corporation and any instrumentality of GRZ or any political sub-division thereof; and
  - (g) the recitals form part of this Agreement.
- 

## PART B

### OPERATIONAL AND EMPLOYMENT ISSUES

#### 2. Obligations to Develop

- 2.1 NFCA shall, following the date on which the Large Scale Mining Licences are granted to NFCA and, subject to the terms of the Act, regulations made thereunder, the Large Scale Mining Licences and this Agreement, implement the Approved Programme of Mining Operations in accordance with the timetable contained therein and good international mining and metal treatment standards and practices.
- 2.2 Without prejudice to the obligation contained in Clause 2.1, NFCA shall (and China Nonferrous shall procure that NFCA shall) carry out the Investment Commitment substantially in the manner, on the terms and in the amounts set out in the Scheduled Programmes.
- 2.3 Subject in all cases to the provisions of this Agreement, GRZ hereby acknowledges its agreement to the Scheduled Programmes and the compliance of the Scheduled Programmes with Section 24(3) of the Act and further acknowledges that the Scheduled Programmes comply with Section 25(1) of the Act.
- 2.4 GRZ confirms that it considers the proposed mining and treatment practices described in the Approved Programme of Mining Operations not to constitute "*wasteful mining practices*" for the purposes of Section 81 of the Act. This confirmation is without prejudice to the rights of the Director of Mining Safety (acting on behalf of GRZ) to determine that mining practices not specifically referred to in the Approved Programme of Mining Operations constitute wasteful mining practices for the purposes of Section 81 of the Act. Nothing in this Clause 2.4 shall prevent or restrict or otherwise limit GRZ from taking all actions within its power to protect public health and safety.

#### 3. Rights to Export and Import and Arms' Length Dealings

- 3.1 Subject to Clause 4 and the payment of applicable duties and taxes not otherwise exempted or deferred pursuant to this Agreement, NFCA may import and where it so desires, re-export without further reference to GRZ, materials, equipment and services to be used in implementing the Scheduled Programmes provided that GRZ has not notified NFCA that the import and/or re-export (as applicable) of such materials and equipment would give rise to the matters specified in Clause 3.2(b)(i) or (ii).
- 3.2 NFCA may market and export without further reference to GRZ all Mine Products and shall have sole control and management of sale of such Mine Products, including the forward selling of such Mine Products, and shall assume all risks therefor, provided that:
- (a) NFCA sells its products on Arms' Length Terms;
  - (b) GRZ has not notified NFCA that the export of the Mine Products would:

- 
- (i) breach an obligation of GRZ arising under international law (including mandatory sanctions imposed by the United Nations); or
  - (ii) result in dealing or contracting with nationals of a state with which GRZ is in a state of declared or undeclared war;
  - (c) manufacturers of processed and semi-processed goods involving copper content with processing facilities located in Zambia which are willing and able to purchase copper cathode at currently prevailing international market prices payable in US dollars to NFCA's account outside Zambia shall be afforded a preference over manufacturers whose processing facilities are not so located Provided that this obligation shall only apply to an amount of copper which does not exceed ten per cent. (10%) of NFCA's annual production from time to time; and
  - (d) no order has been made by the Minister pursuant to Section 69 of the Act.

3.3 NFCA shall advise GRZ of each agreement concerning sales or processing of Mine Products, patent licensing, engineering, construction or management services which is entered into with an Affiliate. Copies of such agreements shall be copied to GRZ forthwith upon execution. If, in the opinion of GRZ, any such agreement is not on Arms' Length Terms, GRZ may, within thirty days (30) of receipt of such agreement, give notice to NFCA of the terms which GRZ considers to be Arms' Length Terms.

Upon receipt of GRZ's notice NFCA -

- (a) may terminate the agreement; or
- (b) may renegotiate the agreement using the terms considered arms' length by GRZ; or
- (c) if NFCA disagrees with the terms so considered by GRZ, it may refer the dispute to a Sole Expert in accordance within Clause 19 for a determination as to what are Arms' Length Terms.

Upon receipt of the Sole Expert's determination NFCA shall renegotiate the agreement, if necessary, to embody those terms decided by the Sole Expert to be Arms' Length Terms or terminate the agreement.

#### 4. Procurement

4.1 NFCA, on an annual basis, shall identify and invite registration of businesses in Zambia (particularly in the Copperbelt and with particular emphasis on businesses directly or indirectly majority owned by Zambian citizens) which are capable of supplying materials, equipment and services to NFCA.

4.2 Where materials, equipment and services required for the implementation of the Scheduled Programmes are manufactured or substantially assembled (or in the case of services, are



procurable) within Zambia from business(es) pre-qualified pursuant to Clause 4.1, such businesses shall have the opportunity to tender and if a tender submission from such businesses:

- (i) meets the specifications of the invitation to tender;
- (ii) is competitive in cost with international sources;
- (iii) meets the delivery requirements of the Project,

then the Company shall not discriminate against such businesses in its award of such tender.

4.3 In assessing the tenders from local contractors and suppliers, NFCA will consider the extra costs it would incur if it was to grant the contract to a foreign supplier or contractor. These extra costs shall include, but are not necessarily restricted to, wharfage costs, shipping costs, stevedoring costs, customs clearance costs, customs duties, and demurrage charges.

4.4 NFCA shall advise GRZ of each such agreement for the supply of goods and services where the counterparty is an Affiliate in which event the provisions of Clause 3.3 (other than the first sentence) shall apply *mutatis mutandis*.

## 5. Local Business Development

5.1 NFCA shall:

- (a) comply with the Local Business Development Programme so as to encourage and assist the establishment of businesses within Zambia (particularly in the Copperbelt and with a particular emphasis on businesses directly or indirectly majority owned by Zambian citizens) to supply materials, equipment and services to NFCA, provided that NFCA shall not be obliged to grant or lend money to any person or organisation;
- (b) conduct an annual review of progress being made on the implementation of the Local Business Development Programme and make such variations to it as required by changing circumstances; and
- (c) employ full-time staff experienced in setting up and managing small business enterprises:
  - (i) to assist Zambian citizens who wish to or have set up businesses to service NFCA and the Project;
  - (ii) to assist in the implementation of the Local Business Development Programme and variations thereof;
  - (iii) to liaise with the appropriate officials from GRZ;
  - (iv) to compile and maintain the register referred to in Clause 4.1; and

- 
- (v) to provide advice and assistance in the development and implementation of long-term business enterprises which can continue after the Approved Programme of Mining Operations is completed.

5.2 NFCA may, with the consent of GRZ (which consent shall not be unreasonably withheld), amend or alter the Local Business Development Programme, with a view to securing the maximum benefit to the establishment of Zambian businesses from the Facilities. If NFCA is unable to comply with some or all of the Local Business Development Programme as a result of:

- (a) circumstances or events beyond its control; or
- (b) a direction of the Director of Mine Safety under the Act (or regulations made thereunder),

then such non-compliance shall not constitute a default under this Clause 5 and NFCA may give notice of alternative or revised plans for the Local Business and Development Programme.

5.3 Should NFCA give notice pursuant to Clause 5.2 (a) or (b), GRZ shall within thirty days (30) either:

- (a) approve those alternative or revised plans, or
- (b) meet with NFCA to discuss and agree upon the alternative or revised plans.

5.4 If the discussions under Clause 5.3 do not lead to GRZ's approval of alternative or revised plans and NFCA considers GRZ's decision to be unreasonable, NFCA may elect to refer the reasonableness of GRZ's decision to a Sole Expert in accordance with Clause 19.

5.5 If the Sole Expert determines that GRZ's decision is not unreasonable, he shall identify to NFCA the changes to the Local Business and Development Programme as will be necessary to bring such programme into compliance with GRZ's requirements in this regard. However, if the Sole Expert determines that GRZ's decision is unreasonable, he shall declare his determination to both parties and the proposed amendment or alternation to the Local Business and Development Programme shall be deemed approved.

## 6. **Training and Human Resources Management**

6.1 NFCA will comply with the Training and Human Resources Management Programme applicable from time to time.

6.2 NFCA may, with the consent of GRZ (which consent shall not be unreasonably withheld), amend or alter the Training and Human Resources Management Programme applicable from time to time, with a view to securing the maximum training of and benefits to Zambian citizens from the Project. If the Training and Human Resources Management Programme is disrupted by:



- 
- (a) circumstances or events which make it difficult or impossible for NFCA to comply with its obligations under the Training and Human Resources Management Programme; or
  - (b) a direction of the Director of Mine Safety under the Act (or regulations made thereunder),

NFCA may give notice of alternative or revised plans to the part of the Training and Human Resources Management Programme affected.

6.3 Should NFCA give notice pursuant to Clause 6.2 (a) or (b), GRZ shall within thirty (30) days either-

- (a) approve those alternative or revised plans, or
- (b) meet with NFCA to discuss and agree upon the alternative or revised plans.

6.4 If the discussions under Clause 6.3 do not lead to GRZ's approval of alternative or revised plans and NFCA considers GRZ's decision to be unreasonable, NFCA may elect to refer the matter to a Sole Expert in accordance with Clause 19. In reaching its decision the Sole Expert shall judge the reasonableness of GRZ's decision. If the Sole Expert determines that GRZ's decision is not unreasonable, he shall identify to NFCA the changes to the Training and Human Resources Management Programme as will be necessary to bring such programme into compliance with GRZ's requirements in this regard. However, if the Sole Expert determines that GRZ's decision is unreasonable, he shall declare his determination to both parties and the proposed amendment or alternation to the Training and Human Resources Management Programme shall be deemed approved.

6.5 NFCA shall not, save as provided below, be restricted in its employment, selection, assignment or discharge of personnel; provided, however, that the employment and the terms and conditions of such employment and the discharge or disciplining of personnel within Zambia shall be carried out in compliance with (i) the laws and regulations of Zambia which are, from time to time, of general application, (ii) any arrangements with the MUZ or any other trade unions from time to time recognised as representing some or all of NFCA's employees and (iii) the terms of individual employment contracts from time to time. The Training and Human Resources Management Programme identifies a minimum number of employees necessary to conduct Normal Operations from time to time. NFCA will ensure that the number of its employees will not be reduced below such levels without ninety (90) days prior notification to GRZ.

6.6 NFCA will not discriminate in its recruitment, selection, promotion and assignment of personnel.

6.7 NFCA acknowledges GRZ's policy to attract qualified Zambian citizens working overseas back to employment within the Zambian mining industry. In order to facilitate the fulfilment of this policy, NFCA will take all reasonable efforts in its recruitment and employment of employees in professional, managerial, engineering and scientific grades (including, but not limited to the advertising of positions in international press and trade journals likely to have

circulation amongst suitably qualified potential employees) to bring to the attention of such qualified Zambians, positions of employment available within NFCA.

6.8 Notwithstanding the provisions of this Clause 6, NFCA (and its contractors or sub-contractors) may bring into Zambia such non-Zambian citizens as, in the reasonable judgment of NFCA's management, are required to carry out operations efficiently and successfully and, at NFCA's request (which shall be accompanied by the requisite information concerning the education, experience and other qualifications of the personnel concerned) GRZ shall, if such non-Zambian citizens qualify for entry under immigration laws and regulations of general application (other than by reason of a prohibition inconsistent with the provisions of this Agreement) within Zambia as in force from time to time, cause all necessary permits (including entry and exit permits, work permits, visas and such other permits or permissions as may be requested) to be issued to such persons and their entitled dependents without undue delay and without hampering the continuous and efficient performance of NFCA's obligations under this Agreement.

## 7. Insurance

7.1 NFCA shall ensure those aspects of its operations that are normally and commercially insurable (and where such insurance is customarily obtained in the mining industry in accordance with good international mining practice) are insured and GRZ shall be advised of the policy or policies in place and shall forward copies to GRZ.

7.2 GRZ agrees that the insurances specified in Schedule 6 are those which, as at the date hereof, would otherwise be required by:

- (a) statutory instrument referred to Section 101(1) of the Act;
- (b) the Director pursuant to Section 101(3) of the Act.

7.3 From the commencement of construction of the Project, NFCA shall, unless the policies of the insurance or any of its loan agreements state otherwise or GRZ otherwise agrees, use any amount paid to it pursuant to any damage or destruction provisions in any contract of insurance to reinstate such elements of the Project (except for Mine Products) in respect of which such amount was paid, provided that NFCA shall not be required to repair or restore any part of the Project that, prior to the damage or destruction, had been obsolete or was of no material value to the actual or potential operations of NFCA or where NFCA, following a review of the facts with GRZ, has notified that in their judgement the cost of doing so is not justified by the incremental economic benefit which NFCA will derive therefrom. In the event that GRZ notifies NFCA that it disagrees with such judgement, the matter shall be referred for determination to a Sole Expert in accordance with Clause 19.

## 8. Suspension of Production

8.1 The parties acknowledge that following the Commencement of Normal Operations, NFCA's right to suspend and curtail production is governed by Section 28 of the Act and that, in the event of any such suspension or curtailment, the Minister may exercise powers under Section 28(3) of the Act and NFCA may exercise its rights under Section 28(1) and (2) of the Act.

- 
- 8.2 GRZ hereby agrees that following the Commencement of Normal Operations:
- (a) the Minister's approval shall be deemed given in accordance with Section 28(3)(a) of the Act upon compliance by NFCA with this Clause; and
  - (b) in such event, any direction capable of being given pursuant to Section 28(3)(b) of the Act will only be given either:
    - (i) in compliance with this Clause; or
    - (ii) if NFCA has not complied with any provision of this Clause and has not remedied such non-compliance within thirty days of being given notice of such non-compliance by GRZ.
- 8.3 Following the Commencement of Normal Operations, NFCA may elect to suspend production if, in its reasonable opinion the Company forecasts in the following six (6) month period, NFCA's revenues from Normal Operations will be less than the sum of royalties and Operating Costs. As soon as possible after giving notice under this Clause, NFCA shall submit a report giving details of projected revenue, royalties and Operating Costs for the period of six (6) months aforesaid giving the reasons why, in its opinion, it is necessary to cease production.
- 8.4 Where pursuant to Clause 8.3 or otherwise in accordance with Section 28 of the Act, NFCA has elected to suspend production, it shall maintain, subject to fair wear and tear, the Project so as to prevent significant deterioration until Normal Operations are resumed.
- 8.5 No later than twelve (12) months from the date on which NFCA suspended production pursuant to Clause 8.3 or otherwise in accordance with Section 28 of the Act and thereafter at no longer than twelve (12) month intervals until Normal Operations are resumed, NFCA shall submit a further report showing its projection of the Costs to Resume Operations and of revenue from Normal Operations (if resumed) for the same period.
- 8.6 If a report submitted pursuant to Clause 8.5 shows NFCA's projection of revenues from Normal Operations for the succeeding twelve (12) month period is greater than its projection of the Costs to Resume Operations for the said twelve (12) month period then NFCA shall promptly take such measures necessary to ensure that Normal Operations are resumed within a reasonable time period.
- 8.7 Where production has been suspended for a continuous period of not less than three (3) years, the Minister may direct NFCA to resume Normal Operations if he is of the reasonable opinion that the Costs to Resume Operations is less than revenue from Normal Operations for the same period. The Minister will provide NFCA with a copy of GRZ's projections of costs and revenues supporting such opinion.
- 8.8 If NFCA disagrees with the Minister's direction pursuant to Clause 8.7 it may elect to submit GRZ's and NFCA's respective projections of revenue from Normal Operations and the Costs to Resume Operations to a Sole Expert for his opinion in accordance with Clause 19.
- 

- 8.9 Where projections made by GRZ and NFCA have been referred to the Sole Expert pursuant to Clause 8.8, the Sole Expert shall determine what projections would be reasonable to make in respect of the twelve (12) month period under review and the opinion of the Sole Expert shall be binding on the Parties so that in the event that the Sole Expert accepts the projections of NFCA or is otherwise of the opinion that if Normal Operations were resumed NFCA's revenue from the Project would be less than the Costs to Resume Operations in respect of the twelve (12) month period, the direction given by the Minister pursuant to Clause 8.7 shall be deemed to have been withdrawn.
- 8.10 Where pursuant to Clause 8.7 the Minister has directed NFCA to resume Normal Operations and that direction has not been or is not deemed to have been withdrawn, NFCA, if it does not promptly take such measures to ensure that Normal Operations are resumed within a reasonable time period, NFCA shall be deemed to have abandoned the Project for the purpose of Clause 18.2(b); provided however, that where projections of revenue from Normal Operations and the Costs to Resume Operations have, pursuant to Clause 8.8, been referred to a Sole Expert, the time period shall run from the date the Sole Expert gave his opinion on the projections.
- 8.11 Nothing herein contained shall prejudice NFCA's rights following the Commencement of Normal Operations to suspend or curtail operations under Section 28 of the Act for any other reason and the exercise by the Minister of his powers under said section save as specifically described herein.

9. **Social Assets**

9.1 Subject to Clause 9.2, NFCA shall:

- (a) provide the Social Services to all employees of NFCA and the Registered Dependants of such employees entitled to benefit therefrom (including for the avoidance of doubt, all persons to whom access to the Social Services is granted by virtue of relevant redundancy or retirement provisions). NFCA agrees to continue to employ the same registration practice for determining the eligibility of dependants to qualify as Registered Dependants as the practice for determining the same which was in place at the date of this Agreement. For the avoidance of doubt, the provision of the Social Services by NFCA to its employees and Registered Dependants shall be under the terms of the Social Services Access Agreement until the expiry of the terms of this Agreement and then by NFCA making such arrangements as NFCA thinks fit (provided always that the level and standard of the Social Services provided remains at the levels specified in Schedule 7);
- (b) ensure that the Social Services made available to those persons described in Clause 9.1(a), at the time of this Agreement coming into effect, at the level and standard then applying and thereafter, at a level appropriate to the number of persons entitled thereto, namely the number of NFCA employees and their Registered Dependants from time to time.

- A
- (c) ensure that the Social Services are provided to such persons described in Clause 9.1(a) at least to the same standard (as to range and quality of service) as that currently available at the date of this Agreement (and as is specified in Schedule 7); and
  - (d) ensure that the charges for the provision of the Social Services to such persons described in Clause 9.1(a) above are no greater in real terms than those currently levied as at the date of this Agreement.

9.2 In the event that NFCA determines that it will become unable to comply with the provisions of Clause 9.1 for any reason whatsoever, it shall forthwith give notice to GRZ of this fact. GRZ agrees that it will accept such non-compliance with Clause 9.1 and that no action will be taken under this Agreement if, simultaneously with the giving of such notice, (i) NFCA submits proposals to GRZ for an increase in general levels of remuneration or other employment benefits to employees of NFCA in order to compensate such persons for the withdrawal of rights to occupy, receive or use or for NFCA's employees or civilians to occupy or use the Third Party Social Assets and (ii) if NFCA also provides GRZ with reasonable evidence that such proposals are (in the case of (i) above) agreed with any trades union(s) then representing employees of NFCA.

9.3 Pending confirmation from GRZ that such proposals for increases in general levels of remunerations or other benefits are acceptable to it, NFCA will comply in all respects with Clause 9.1. GRZ agrees that it will respond to NFCA's proposal within sixty (60) days of receipt of the same from NFCA.

9.4 If the Parties disagree about:

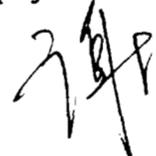
- (a) the availability of the Third Party Social Assets pursuant to Clauses 9.1(a) and 9.1(b);
- (b) the standard of, or charges made for, the provision of the Third Party Social Assets pursuant to Clauses 9.1(c) and 9.1(d); and
- (c) the acceptability of proposals made by NFCA pursuant to Clause 9.2,

either party may elect to submit the matters in issue to a Sole Expert for determination in accordance with the provisions of Clause 19.

9.5 NFCA will perform its obligations under the Social Services Access Agreement(s).

9.6 NFCA shall:

- (a) allow the public and GRZ to use free of charge any roads constructed and/or maintained by NFCA which by custom and practise have been freely available for public use, provided, however, that such use shall not unduly prejudice or interfere with NFCA's operations hereunder;



- 
- (b) allow GRZ and third parties to have access over the Contract Area, provided that such access does not unduly prejudice or interfere with NFCA's operations hereunder;
  - (c) allow GRZ to place, free of charge at its own expense, telegraph and telephone wires on the poles of the lines of NFCA, provided that such installation does not unduly interfere with NFCA's efficient use of such poles and lines.

**10. Records and Operating Reports**

- 10.1 NFCA shall, pursuant to Section 104 of the Act, keep GRZ, through the Ministry, advised concerning NFCA's operations through submission of progress reports, beginning with the first quarter following the date of this Agreement, as to the progress and results of NFCA's mining operations and any prospecting and appraisal activities under this Agreement.
- 10.2 Pursuant to Sections 2(d) and (e) of the Fourth Schedule to the Act, NFCA shall provide quarterly reports to the Ministry, broken out on a mine by mine basis in the case of (a) to (c) below on:
  - (a) quantities of ore mined and average head grades;
  - (b) quantities of waste mined;
  - (c) quantities of copper and cobalt concentrates produced and quantities of contained copper and cobalt;
  - (d) Operating Costs; and
  - (e) progress in implementing the Scheduled Programmes, the extent of any continuing non-compliance by NFCA with Environmental laws and progress made in remedying this in accordance with the Environmental Plan.
- 10.3 NFCA shall file with the Ministry a summary of any geological and metallurgical investigations and such other material data as may be obtained from any prospecting activities and a sample representative of each principal type of mineralisation encountered in such investigations.
- 10.4 NFCA shall provide quarterly reports relating to any prospecting, appraisal and development activities to the Ministry which shall include such information as to the progress of operations in the Mining Area as the Ministry may from time to time reasonably require.
- 10.5 All information furnished to GRZ shall be in English and, in the event that such information is a translation from the original, shall be a certified true translation. All financial data shall be recorded in US dollars.
- 10.6 NFCA shall maintain all original records and reports relating to its activities and operations under this Agreement including all documents relating to financial and commercial transactions with independent parties and Affiliates in its principal office in Zambia. These

records and reports shall be opened to inspection by GRZ through an authorised representative during normal working hours. Such reports and records shall be maintained in the English language and all financial data shall be recorded in US dollars.

10.7 All records, reports, plans, maps, charts, accounts, and information which NFCA is or may be from time to time required to supply under the provisions of this Agreement shall be supplied at the expense of NFCA.

**PART C**

**UNDERTAKINGS NECESSARY FOR OPERATIONS**

**11. Foreign Exchange**

**11.1 The Parties acknowledge that under legislation and practice currently in force in Zambia, NFCA is free to:**

- (a) remit foreign currency out of Zambia;**
- (b) maintain foreign currency accounts outside of and within Zambia; and**
- (c) remit foreign currency accruing to or earned by it outside Zambia into Zambia.**

**11.2 In the event foreign exchange controls were to be re-introduced in Zambia within fifteen (15) years from the Effective Date, NFCA shall have the right to:**

**(a) retain both outside Zambia and within Zambia, in accounts established for that purpose, foreign currency, and to have paid to it and maintain in such accounts the following:**

- (i) proceeds of the sale of Mine Products;**
- (ii) payments made by insurers not resident in Zambia under contracts of insurance in NFCA's favour.**
- (iii) proceeds of any disposal of capital assets received from persons not resident in Zambia for foreign exchange purposes;**
- (iv) the amount of any funds received pursuant to any loan finance provided by persons not resident in Zambia for foreign exchange purposes;**
- (v) any share capital received in foreign currency from persons not resident in Zambia for foreign exchange purposes; and**
- (vi) any other foreign currency earned or accrued in the ordinary course of business from persons not resident in Zambia for foreign exchange purposes.**

**(b) use freely the foreign currency accounts maintained by NFCA to:**

- (i) service payments of principal and interest, service charges and other fees and expenses in respect of any loans arranged with non-Zambian institutions to implement the Approved Programme of Mining Operations or otherwise finance or refinance the Project;**

- 
- (ii) make payments due to (aa) suppliers outside Zambia for the supply of goods and services to NFCA (including capital goods and services of foreign employees and consultants) where goods and services are required to implement the Approved Programme of Mining Operations and (bb) suppliers inside Zambia with respect to the treatment/refining of ores and concentrates and to the supply of electricity to the Project facilities;
  - (iii) finance the payment of dividends to shareholders who are not resident in Zambia for foreign exchange purposes. Provided that such payments are made out of Distributable Profits (as defined in the Companies Act);
  - (iv) pay expatriate employees whose contracts of employment specify that they be paid (in whole or in part) in a currency other than Kwacha; and
  - (v) effect such other payments in foreign currency to persons not resident in Zambia for foreign exchange purposes as may be necessary or desirable in the ordinary course of NFCA's business.

**11.3 NFCA shall submit to the Central Bank:**

- (a) within fifteen (15) days of the end of each Quarter -
  - (i) a statement of the foreign currency accounts maintained overseas by NFCA showing movements on the accounts during the Quarter with Quarter-end balances;
  - (ii) a statement of the foreign currency accounts maintained at banks within Zambia by NFCA showing movements on the accounts during the Quarter with Quarter-end balances;
  - (iii) a statement of the foreign exchange converted into Kwacha and the total amount of Kwacha converted into foreign exchange during the Quarter; and
  - (iv) a forecast of the foreign currency which it expects to receive and retain in a foreign currency account overseas or within Zambia and that which it expects to convert into Kwacha during the ensuing Quarter; and
- (b) within five (5) months of the end of each financial year, audited financial statements showing the amount of Distributable Profits (if any).

**11.4 In the absence of exchange controls in Zambia, NFCA shall have the same rights to buy and sell currencies from authorised dealers as other commercial concerns in Zambia. In the event exchange controls were to be reimposed (and without prejudice to NFCA's rights under Clause 11.2) such controls shall not be applied to NFCA in a manner less favourable to it than the manner in which they are generally applied. NFCA shall be entitled to buy and sell foreign exchange in accordance with such controls at rates of exchange no less favourable than those available to other commercial buyers and sellers of the currency concerned.**



- 
- 11.5 NFCA shall remit to Zambia and convert them into Kwacha for credit to a bank account in the name of NFCA in an orderly fashion sufficient foreign currency earnings arising from the sale of Mine Products to pay all such commitments as NFCA may have incurred in Kwacha (including, without limitation, obligations to pay dividends to local shareholders payable in local currency, taxes, royalties and customs duties).
- 11.6 NFCA shall not engage in or use any provisions of this Clause 11 or any authority or approval given by the Central Bank to engage in Speculative Currency Transactions. If NFCA is in breach of this Clause it shall pay to GRZ as liquidated damages an amount equal to the amount of any net after tax profit or gain which NFCA makes on the Speculative Currency Transaction and any cost incurred by GRZ in establishing that the transaction was a Speculative Currency Transaction.
- 11.7 Where any right or assurance given to NFCA under this Clause 11 requires the Central Bank:
- (a) to approve any act, matter or thing; or
  - (b) to grant authority under applicable law and regulations for its exercise or performance,

and NFCA has supplied any necessary information to the Central Bank and otherwise met the conditions of this Clause 11, GRZ shall, upon request from NFCA ensure by policy directions to the Central Bank or otherwise that such approval is given or such authority is granted.

- 11.8 NFCA will ensure that any borrowings it may incur denominated in Kwacha will not exceed the Kwacha equivalent of five million United States dollars (U.S.\$5,000,000).
- 11.9 NFCA will ensure that the Central Bank will not suffer discrimination by NFCA in access to foreign exchange sold by NFCA for Kwacha save that NFCA shall only be obliged to sell its foreign currency at the prevailing foreign exchange buying rate applicable at the time of sale.

12. **Environmental Issues**

- 12.1 NFCA will (subject to the provisions of Schedule 16 of the Sale and Purchase Agreement and the provisions of and save to the extent provided otherwise in this Clause 12) comply with:
- (i) environmental and safety laws and regulations enacted or promulgated within Zambia from time to time which are of general application (including, for the avoidance of doubt, make such contribution as is required under Section 82 of the Act for the Environmental Protection Fund); and
  - (ii) the Environmental Plan applicable from time to time.
- 



12.2 Without prejudice to the foregoing, NFCA shall perform the Environmental Clean Up Obligations applicable from time to time in accordance with the provisions of the Environmental Plan applicable from time to time and within the timescale and subject to the conditions therein set out.

12.3 Subject to compliance by NFCA with the Environmental Plan and the Environmental Clean Up Obligations applicable from time to time and save as provided in Clause 12.6 below, GRZ hereby confirms that it will not for a period of fifteen (15) years from the Effective Date take any action (and will procure no action is taken by any of its Ministries, departments, agencies or instrumentalities over which it has operational control acting on its behalf) under, or in enforcing, any applicable Environmental Laws with the intent of:

- (a) securing NFCA's earlier compliance with Environmental Laws or earlier implementation of the Environmental Clean Up Obligations than that envisaged by the timetable and conditions set out in the Environmental Plan as applicable from time to time;
- (b) requiring NFCA to clean up and/or remove any stock of pollutants which was pre-existing as at the Effective Date and which is not included as an Environmental Clean Up Obligation applicable from time to time;
- (c) imposing fines or penalties upon NFCA payable under Environmental Laws (or enacting new fines and penalties thereunder which are payable in respect of NFCA's non-compliance with such Environmental Laws and where the Environmental Plan applicable from time to time provides for the remedy of the same in accordance with a specified timetable and NFCA is in compliance with that timetable;
- (d) imposing fines or penalties in respect of NFCA's breach of Environmental Laws in excess of those applying on the Effective Date, adjusted (where denominated in Kwacha) to take account of Zambian inflation since that date,

having, in the case of (a) and (b) above, a material adverse economic effect on the implementation of the Approved Programme of Mining Operations and/or Normal Operations.

12.4 In the event of a material non-compliance with the Environmental Plan or the Environmental Clean Up Obligations applicable from time to time, GRZ will (in the event that such material non-compliance is not remedied within three (3) months notice thereof being provided by GRZ to NFCA or, in the event of a dispute regarding non-compliance being referred to the Sole Expert pursuant to this Clause 12.4, such period as the Sole Expert may decide in any determination that he gives) cease to be bound by the provisions of Clause 12.3 and the Parties acknowledge that GRZ (or its Ministries, departments or such agencies acting on its behalf) shall be free to take such action under, or in enforcing, applicable Environmental Laws as it or they shall consider appropriate or necessary.

12.5 Any dispute regarding a material non-compliance with an Environmental Plan or the Environmental Clean Up Obligations may be referred by either Party to a Sole Expert in



accordance with Clause 19, for determination within thirty (30) days of notice given by a Party to the other of its intention to refer to the matter to the Sole Expert.

12.6 The Minister on behalf of GRZ may propose an amendment to the Environmental Plan applicable from time to time if:

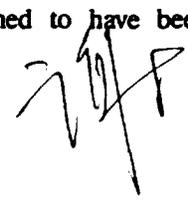
- (a) at any time the conduct of Normal Operations in accordance with such Environmental Plan for whatever reason poses a material danger to public health and safety or may result in significant damage to the ecology of the area which was not contemplated in such Environmental Plan and is or may become irreversible or only become reversible or only be reversed after the lapse of fifteen (15) years; or
- (b) the environmental impact of Normal Operations shall prove substantially more adverse than anticipated in such Environmental Plan; or
- (c) technology or procedures, or improvements thereof shall have been available and economic subsequent to the adoption by NFCA of such Environmental Plan and, if applied to the operation of the Facilities, could materially mitigate the environment impact of Normal Operations.

12.7 In the event of a variation of an Environmental Plan proposed by the Minister on behalf of GRZ under the circumstances set forth in Clause 12.6, NFCA undertakes to consider the proposed variation in good faith and, unless by notice of objection served on the Minister within twenty (20) days of receipt of the proposal made pursuant to Clause 12.7 it informs the Minister that it considers the proposed variation to be unreasonable it shall be deemed to have agreed the same. A notice of objection shall include a written statement of the reasons why NFCA considers the proposed variation to be unreasonable setting out:

- (a) its estimate of the direct costs to implement such change;
- (b) its analysis of the variation in the environmental impact that would be effected by such change; and
- (c) its appraisal of the economic and other effects of the change proposed by GRZ.

12.8 Following receipt of a notice of objection under Clause 12.7, the Minister shall, as soon as possible, inform NFCA by notice in writing whether or not the Minister's proposal for variation of the then applicable Environmental Plan is or is not withdrawn. In the event that the Minister's proposal for variation is not withdrawn it will be deemed to have been agreed unless NFCA elects to submit for the opinion of a Sole Expert in accordance with Clause 19, the question of whether GRZ's proposal for variation is unreasonable. Should NFCA make that election, the opinion of the Sole Expert will be binding on the parties with effect that:

- (i) if the Sole Expert determines that GRZ's proposal for variation is not unreasonable the proposal for variation will be deemed to have been agreed; or



- 
- (ii) if the Sole Expert determines that GRZ's proposal for variation is unreasonable the proposal will be deemed to have been withdrawn.

Provided that the Sole Expert may in his sole discretion suggest alternative proposals or time schedules or mitigation of cost proposals to the Parties who will consider the same in good faith prior to the determination being rendered by the Sole Expert. The period during which such proposals shall be considered by the Parties shall not exceed three (3) months.

- 12.9 Where a variation to as Environmental Plan proposed by the Minister has been agreed by NFCA or is deemed to have been agreed by them pursuant to this Clause 12, the then applicable Environmental Plan shall be amended accordingly.
- 12.10 Nothing in this Clause 12 shall be deemed to limit the right of GRZ to take such other actions within its power, such as those rights given to the Director of Mine Safety under Section 81 of the Act, to protect the public health and safety.
- 12.11 NFCA shall be entitled to amend the Environmental Plan or the Environmental Clean Up Obligations applicable from time to time, provided that following such amendment the Environmental Plan or the Environmental Clean Up Obligations (as the case may be) conforms to specifications and practices established by Zambian standards for the management of the environment as it is affected by mining operations, so as to reflect changes in operations and other circumstances considered to be appropriate by NFCA and shall deliver a copy of such amended plan or obligations to the Minister whereupon it shall become part of the Scheduled Programmes. If however, GRZ considers that any such amendment would constitute a Major Change (as defined in Clause 22.3 herein) the provisions of Clause 22 shall apply.
- 12.12 Notwithstanding the provisions of this Clause 12, NFCA shall, at the invitation of the Minister responsible for the environment, participate either individually or on an industry-wide basis, in discussions relating to the impact and effectiveness of the Environmental Laws or on any prospective changes thereto.
- 12.13 For the avoidance of doubt, nothing in this Clause 12 shall be construed to render NFCA liable for penalties or fines imposed, or third party claims made, in respect of activities undertaken prior to the Effective Date by ZCCM.
- 12.14 GRZ hereby confirms that environmental liabilities of ZCCM to third parties not specifically assumed by NFCA in the Environmental Plan and Environmental Clean-Up Obligations (whether disclosed or undisclosed and including those arising out of stocks of pollutants created in the conduct of ZCCM's operations prior to the Effective Date), to the extent that they arose prior to or relate to activities carried on prior to the transfer of assets to NFCA pursuant to the Sale and Purchase Agreement, and which have not been specifically transferred to or assumed by NFCA, will remain the responsibility of ZCCM as a matter of current Zambian law.
- 12.15 Subject to compliance by NFCA with the Environmental Plan applicable from time to time in all material respects and save as provided in Clause 12.6, GRZ confirms that it will not for fifteen (15) years from the date hereof take any action (which will include a proposal to



amend the Environmental Plan other than as permitted pursuant to Clause 12.6 and which proposed amendment will be further subject, for the avoidance of doubt to the provision in Clauses 12.7 to 12.10) and will procure that no action is taken by any of its Ministries, departments, agencies or instrumentalities acting on its behalf, to make or render NFCA liable for any such environmental liabilities as are referred to in Clause 12.14 in order to provide certainty of application of legislation to NFCA. GRZ hereby confirms that should common law applicable in Zambia be interpreted differently in such period, it will take such action open to it (including the passing of appropriate legislation or regulation) to ensure the legal position set out in Clause 12.14 is maintained.



**PART D**

**TAXATION**

**13. General Obligation to Pay Tax**

13.1 Subject to Clause 15, NFCA shall pay tax, royalties and duties from time to time in accordance with applicable legislation.

**14. Clarification of Taxation Legislation**

14.1 GRZ shall ensure that VAT collected on goods and services procured by NFCA is refunded to NFCA as soon as practicable from the date of submission of NFCA's monthly VAT return.

**15. Taxation Stability**

15.1 GRZ undertakes that it will not for a period of fifteen (15) years from the Effective Date:

- (a) increase corporate income tax or withholding tax rates applicable to NFCA (or decrease allowances available to NFCA in computing its liability to such taxes) from those prevailing at the date hereof; or
- (b) otherwise amend the VAT and corporate tax regimes applicable to NFCA from those prevailing as at the date hereof; or
- (c) impose new taxes or fiscal imposts on the conduct of Normal Operations,
- (d) alter the right of any non-Zambian citizens (and entitled dependants) (on his or their arrival or permanent departure from Zambia) to;
  - (i) import free of duty and tax, for personal use, household and personal effects;
  - (ii) export, without let or hindrance or the imposition of duty or tax on export, all personal effects originally imported or acquired during residency in Zambia; and
  - (iii) freely remit all income earned in Zambia during such residency,

so as to have, in each case, a material adverse effect (the issue of whether or not such effect is materially adverse to be determined by a Sole Expert in accordance with Clause 19 in the event of disagreement between the Parties) on NFCA's Distributable Profits or the dividends received by its shareholders.

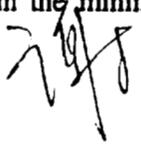
GRZ further undertakes that for the same period of fifteen (15) years, it will not:

- 
- (e) increase:
- (i) the rate of royalty from the level prevailing at the date hereof; or
  - (ii) import duty rates applicable to NFCA (including the IDF) so as to result in the weighted average import duty rate (inclusive of the IDF) to which NFCA is subject on the import of goods and materials required for the Approved Programme of Mining Operations or Normal Operations and which would, at the date hereof, be exempt from customs and excise duties under Section 97(1) of the Act, above a level of five per cent. (5%); or
  - (iii) import duty rates (including the IDF) applicable to NFCA so as to result in the weighted average import duty rate (inclusive of the IDF) to which NFCA is subject on the import of other goods and materials required for the Approved Programme of Mining Operations or Normal Operations and which do not fall under Clause 15.1(d)(ii), above a level of twenty per cent. (20%); or
  - (iv) the Rural Electrification Levy applicable to NFCA's purchases of power from the level applicable on the date hereof; or
- (f) impose other royalties or duties on Normal Operations, so as to have a material adverse effect on NFCA's Distributable Profits or the dividends received by its shareholders.

15.2 GRZ shall ensure that no law, statute, regulation or enactment shall be passed or made which would discriminate against NFCA in respect of any such matters as are referred to in Clause 15.1 or otherwise in its conduct of Normal Operations or any other circumstances under this Agreement when compared to other mining companies or joint ventures conducting similar operations on a scale equivalent to those conducted by NFCA in Zambia provided that GRZ will be at liberty to pass or make any such law, statute, regulation or enactment to enable the performance or amendment of a development agreement entered into by it and another mining company or joint venture and, for the avoidance of doubt any such law, statute, regulation or enactment shall not constitute "discrimination" for the purposes of this Clause.

15.3 GRZ covenants to reimburse NFCA (or, at its option, make offsetting changes in any law, statute, regulation or enactment applicable to NFCA within a reasonable time provided that GRZ shall reimburse NFCA for any loss suffered during the period of time taken to make such offsetting change within a reasonable period of time) to ensure NFCA is fully and fairly compensated for any costs incurred by it by reason of a failure by GRZ to comply with the provisions of Clauses 15.1 and Clause 15.2.

15.4 Notwithstanding the provisions of this Clause 15, NFCA shall be automatically entitled to any favourable changes to the Laws of Zambia of general application within the mining sector.



**PART E**

**FORMAL CLAUSES**

**16. Assignment**

16.1 NFCA may, with the consent of the Minister, assign its interest in the Large Scale Mining Licences and GRZ covenants that the consent of the Minister to an assignment will not be withheld in the circumstances set out in Clauses 16.4 and 16.6.

16.2 If NFCA assigns its entire interest in the Large Scale Mining Licences and its rights and obligations under this Agreement, then upon the assignee giving GRZ the undertaking referred to in Clause 16.3, NFCA shall be discharged from any further liability in respect of any obligation which accrues after the date of that assignment without prejudice to pre-existing rights accrued to GRZ against NFCA.

16.3 Where an assignment takes effect pursuant to Clause 16.1, NFCA shall enter into an agreement with the assignee wherein the assignee agrees with NFCA and undertakes to GRZ that it will:

- (i) become a party to this Agreement; and
- (ii) assume, observe and comply with all obligations of NFCA under the Act, regulations made thereunder and this Agreement.

16.4 Notwithstanding the foregoing provisions of this Clause 16, NFCA may -

- (a) charge by way of fixed or floating charge the whole or any part of its undertaking and assets including the Large Scale Mining Licences, the Leases, any Mine Products and uncalled capital (and premiums) to secure the repayment of principal, and payment of interest and other fees, costs and expenses relating to all loans made to NFCA to finance or refinance the Scheduled Programmes; and
- (b) mortgage and charge any specified asset (whether real or personal property) to secure the purchase price thereof where such amount has been borrowed to finance the purchase of that asset and this asset is to be used as part of Normal Operations;

and GRZ covenants that the consent of the Minister to such mortgages and charges shall be given provided that such mortgages and charges are notified to the Minister upon their grant (and, in any event, within sixty (60) days thereof). Subject to Clause 16.5, any mortgagee or chargee under a mortgage or charge given by NFCA pursuant to this Clause may exercise all rights of sale and other rights included in such instrument of mortgage or charge provided it shall first give to GRZ at thirty (30) days notice of its intention to exercise any rights of sale and five (5) days' notice in all other cases.

16.5 The rights of any mortgagee or chargee under a mortgage or charge given by NFCA pursuant to Clause 16.4 shall be subject to and limited by the rights of NFCA under this Agreement and to GRZ's right to terminate those rights under Clause 18.2. The rights of



such mortgagee, chargee or lender to sell the assets of NFCA so charged shall not be exercisable:

- (a) unless all those assets and undertakings of NFCA which are charged by the mortgage or charge are sold as a going concern (or with such exceptions as GRZ may agree) to a purchaser approved by GRZ (which approval GRZ covenants not to unreasonably withhold); or
- (b) if GRZ has within the thirty (30) day period of notice under Clause 16.4 given notice to the mortgagee, chargee, or lender that it will purchase some or all the assets which the mortgagee, chargee or lender wishes to sell at a price which is equivalent to:
  - (i) the highest price which a *bona fide* purchaser who is at arms' length from NFCA, its shareholders and the mortgagee, chargee or lender has offered to pay for the assets and undertakings; or
  - (ii) if there is no such offer, at a total price equal to the fair market value of the same as an ongoing concern to be determined by agreement between the parties but failing such agreement to be determined by a Sole Expert in accordance with Clause 19,

and settles the purchase by making full payment of the price at the principal address of the mortgagee, chargee, or lender and in the currency denominated in the loan between the mortgagee, chargee or lender and NFCA within ninety (90) days after notification to GRZ of such place for payment and designated currency or otherwise on terms agreed with the mortgagee, chargee or lender.

16.6 Where the Minister's consent is necessary to effect:

- (a) an assignment under Section 54(1) of the Act or a change of control under Section 55(1) of the Act; or
- (b) an assignment pursuant to Clause 16.1,

GRZ will procure that the Minister will not withhold his consent where, in the case of an assignment, the proposed assignee has demonstrated its financial capacity and technical ability to meet its obligations hereunder or, in the case of a change of control of NFCA, the acquiring party has demonstrated that it is of appropriate financial standing having regard, *inter alia*, to the obligations it will assume under the Sale and Purchase Agreement and the Shareholders' Agreement.

16.7 In the event that NFCA considers that the Minister has acted unreasonably in considering that a proposed assignee or acquiring party has not demonstrated such financial capacity or technical ability as is referred to in Clause 16.6, it may refer the issue to a Sole Expert for its opinion in accordance with Clause 19. If the Sole Expert determines that the Minister:



- 
- (a) has behaved reasonably in determining that the proposed assignee or acquiring party has not demonstrated the requisite levels of financial or technical ability, the Minister's determination shall stand; or
  - (b) has behaved unreasonably in so determining, the Minister's determination shall be set aside and the consents referred to in Clause 16.6(a) or Clause 16.6(b) (as the case may be) shall be deemed given.

**17. Extensions to Time**

17.1 Notwithstanding any provision of this Agreement, the Parties by agreement between the persons responsible for giving Notices under Clause 24, may from time to time extend any period referred to in this Agreement, or substitute for any date referred to in this Agreement such later date, as they think fit.

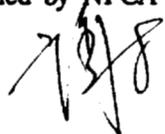
17.2 If NFCA is prevented or hindered by any circumstances or event of a kind set out in Clause 21 or by a reference to a Sole Expert or by an arbitration under Clause 19 from undertaking all or any of its obligations hereunder or exercising any right granted, the period of time allowed for the performance of that obligation or exercise of that right and all periods of time thereafter allowed for the performance of obligations or exercise of rights which are dependent upon the first mentioned obligation or right, shall be extended by a period equal to the period during which such prevention or hindrance continues or during the period from the time when the question, dispute or difference arose until the time of its determination by the Sole Expert or settlement by agreement or arbitration, as the case may be.

17.3 Where any period is, or is deemed to be, extended or any later date substituted for an earlier date under this Clause, that extended or substituted period or date shall be deemed to constitute the period or date referred to in this Agreement (notwithstanding that at the time of such extension or substitution such period may have expired or such date may have passed).

**18. Termination**

18.1 NFCA may terminate this Agreement at any time after the fifteenth anniversary of the Commencement of Normal Operations by giving twelve (12) months notice to GRZ.

18.2 GRZ may terminate this Agreement by notice to NFCA if:

- (a) all of the Large Scale Mining Licences have expired by effluxion of time and have not been renewed; or
  - (b) the land the subject of the Large Scale Mining Licences is abandoned by NFCA under Section 49 of the Act.
- 

18.3 In the event that:

- (a) NFCA is in material default in the performance of the obligations of NFCA set forth in this Agreement. For the purposes of this Clause 18.3(a), "material default" shall mean the default by NFCA of an obligation which significantly effects the performance of NFCA's obligations in respect of the Scheduled Programmes and/or the Investment Commitment and which is not remedied by NFCA within thirty (30) days of a notice by GRZ requiring NFCA to do so; or
- (b) NFCA fails to treat as binding and comply with any award made by a Sole Expert or in an arbitration pursuant to Clause 19,

GRZ may give notice of such default or failure (hereinafter in this Clause called a "Default Notice") to NFCA which shall specify the default or failure alleged. NFCA shall at the same time give a copy of the Default Notice to each lender to NFCA, where the name and address of that lender has previously been notified to GRZ, and to each mortgagee or chargee of any of NFCA's assets under any mortgage or charge notified to the Minister in accordance with Clause 18.4. If NFCA disputes the subject matter of the Default Notice it may refer the issue to arbitration pursuant to Clause 19.

18.4 If within a period of three hundred and sixty (360) days following a Default Notice (or such longer period as may be fixed by an arbitration award where the subject matter of the Default Notice is submitted to arbitration under Clause 19) either:

- (a) the default or failure specified in the Default Notice has not been remedied (or active steps have not been commenced and continued to remedy the default or failure if it is not capable of speedy remedy); or
- (b) compensation is not paid in respect thereof (in the case of a default or failure not capable of remedy but where payment of compensation would be adequate recompense to GRZ),

then, subject to Clauses 18.5, GRZ may by notice (hereinafter in this Clause called a "Termination Notice") to NFCA (which shall be copied to each lender, mortgagee or chargee who was given a copy of the Default Notice) bring about the termination of this Agreement on a date which is not less than one (1) month thereafter (hereinafter in this Clause called the "Termination Date"). GRZ shall ensure that the Minister does not make a decision to suspend or cancel NFCA's Large Scale Mining Licences, and that no other action is taken by or on behalf of GRZ without the approval of NFCA to terminate the Large Scale Mining Licences or any of the Leases prior to the Termination Date.

18.5 If NFCA or GRZ contest:

- (a) the grounds for the issue of the Default Notice; or
- (b) whether the default or failure has been remedied; or
- (c) the adequacy of any compensation paid pursuant to Clause 18.4(b).

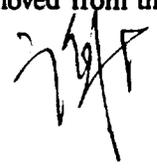
~~X~~

the matter shall be submitted for arbitration pursuant to Clause 19. If the arbitrator finds (in the case of paragraph (a)) that adequate grounds exist for issue of the Default Notice, he shall fix a period during which NFCA must comply with Clause 18.4(a) or 18.4(b) and the amount of compensation payable (if applicable). If the arbitrator finds (in the case of paragraph (b)) in favour of GRZ, he shall fix a period during which NFCA must remedy the default or failure. If the arbitrator finds (in the case of (c)) in favour of GRZ, he shall fix the amount of compensation payable and the period for its payment.

GRZ shall not serve a Termination Notice while arbitration between GRZ and NFCA under this subclause is in progress and any Termination Notice already served will be suspended immediately upon the commencement of such arbitration for the duration of any such arbitration. If the arbitrator finds in favour of NFCA, or within the period fixed by the arbitrator the default or failure is substantially remedied or the compensation is paid, GRZ shall not serve a Termination Notice and any Termination Notice already served shall be deemed withdrawn.

**18.6 If this Agreement is terminated:**

- (a) NFCA will surrender to GRZ the Large Scale Mining Licences and the Leases but without prejudice to the liability of any of the Parties in respect of any antecedent breach or default under this Agreement or in respect of any indemnity given;
- (b) each Party shall forthwith pay to the other Party all monies that may be owing to the other Party hereunder;
- (c) GRZ shall have the option to request that NFCA abandon the Facilities within the reasonable timetable specified by GRZ and the option to purchase (subject to any encumbrances thereon), all or any portion of the Facilities at a price equivalent to the lesser of the then residual value of such assets after tax depreciation or the fair market value of such assets, which fair market value is to be determined by agreement between GRZ and NFCA but failing such agreement by a Sole Expert in accordance with Clause 19. Such option to be exercisable by notice to NFCA within thirty (30) days following termination of this Agreement. If requested to do so by GRZ, NFCA shall also assign to GRZ such contracts to which it is a party as GRZ determines and deliver all records of the Facilities held by NFCA to GRZ;
- (d) NFCA shall have the right, within the one (1) year period following the thirty (30) day notice period referred to in Clause 18.6(c):
  - (i) to assign or otherwise dispose of all or any portion of the remaining Facilities to any person; or
  - (ii) to remove and recover from the Mining Area and export from Zambia any of the remaining Facilities on the condition that such removal does not cause irreparable damage to major assets which are not removed from the Mining Area; and



(e) NFCA shall leave the Mining Area in a safe and stable condition to the reasonable satisfaction of the Director of Mine Safety having regard to natural conditions in the area and applying generally accepted standards of good mining practice, provided that NFCA shall not be required to alter the physical condition of the mine, any tailings disposal site, or other Project facilities beyond the requirements of the Environmental Plan applicable from time to time.

18.7 Upon the expiry of the one (1) year period referred to in Clause 18.6(d), all Facilities which remain on the Mining Area shall become the property of GRZ without any cost to GRZ or any liability for GRZ to pay compensation therefor.

18.8 Clauses 18.6, 18.7, 19, 20 and 21 shall continue in force notwithstanding the termination of the rest of this Contract.

19. **Arbitration and Sole Expert**

19.1 For the purposes of this Clause, "Dispute" means any dispute, disagreement, controversy or claim arising out of or relating to this Agreement, or the interpretation or performance of provisions of this Agreement or the breach, termination or validity thereof, which the Parties are unable to resolve by mutual agreement within a reasonable time. It does not include any difference of view or disagreement which, pursuant to provisions of this Agreement, may be submitted for determination of a Sole Expert.

19.2 GRZ and NFCA hereby consent to submit to the International Centre for Settlement of Investment Disputes (the "Centre") any Dispute for settlement by arbitration pursuant to the Convention on the Settlement of Investment Disputes between States and Nationals of Other States (the "Convention"). Arbitration shall be held in London, or such other place as the Parties may agree in writing.

19.3 It is hereby agreed that, although NFCA is a national of Zambia, it is controlled by nationals of China and shall be treated as a national of China for the purposes of the Convention.

19.4 Any arbitral tribunal (the "Tribunal") constituted pursuant to this agreement shall consist of a sole arbitrator appointed by agreement and an arbitrator, who shall be President of the Tribunal, appointed by agreement of the parties or, failing such agreement by neutral official.

19.5 Any arbitration proceeding pursuant to this Agreement shall be conducted in accordance with the arbitration rules of the Centre in effect on the date on which the proceeding is instituted.

19.6 An award in arbitration proceedings held pursuant to the Convention shall be binding on the parties and judgement thereon may be entered in any court having jurisdiction for the purpose.

19.7 GRZ hereby irrevocably waives any claim to immunity -

(a) in respect of proceedings to enforce any such award including, without limitation, immunity from service of process and from the jurisdiction of the Court, and

AK.

(b) in respect of execution of any such award against the property of GRZ outside Zambia.

19.8 The waiver of immunities referred to herein constitutes only a limited and specific waiver for the purposes of this Agreement and under no circumstances shall it be interpreted as a general waiver by GRZ or a waiver with respect to proceedings unrelated to this Agreement. GRZ has not waived such immunity in respect of property which is (i) located in Zambia; (ii) used by a diplomatic or consular mission of GRZ (except as may be necessary to effect service of process), (iii) property of a military character and under the control of a military authority or defence agency, or (iv) located in Zambia.

19.9 Unless otherwise agreed or provided, the cost of any arbitration procedure will be borne -

(a) equally by the two (2) parties to the Dispute where it has been referred jointly by them, or otherwise,

(b) by the unsuccessful party.

19.10 Where a Dispute has been referred to the Centre for arbitration then the Parties to the extent practicable may otherwise exercise their rights and perform their obligations under this Agreement. Neither Party shall be entitled to exercise any rights or election arising in consequence of any alleged default by the other arising out of the subject matter of the Dispute until the Dispute has been resolved by the decision of the arbitrators.

19.11 A difference of view or disagreement may be referred by a Party to a Sole Expert pursuant to Clauses 3.3(c), 5.4, 6.4, 7.3, 8.8, 9.4, 12.4, 12.5, 12.8, 15.1(d), 16.5(b), 16.7, 18.6(c), 22.2(b) and 22.4(d) hereof. Where any difference of view or disagreement is referred by a Party or Parties to the Sole Expert, the other Parties shall have twenty (20) days to consent to such referral and upon the consent of all the parties the difference of view or disagreement shall be referred promptly upon consent. In absence of consent in writing by all the parties, such difference of view or disagreement may be considered a Dispute pursuant to Clause 19.1. Any such reference may be made by a Party by notice served pursuant to Clause 24.

19.12 To the extent practicable, a party intending to make a reference to a Sole Expert shall provide reasonable advance notice to the Party(s) of such intention and shall allow such Party(s) to discuss the basis for such reference and affording a reasonable opportunity to such Party(s) to take whatever steps it/they considers appropriate to remove the basis of the dispute.

Where any difference of view or disagreement is referred by an individual Party to the Sole Expert, consideration of the difference of view or disagreement in question shall be initiated by the Party who is seeking consideration of the difference of view or disagreement by the Sole Expert submitting to both the Sole Expert and the other Party written materials setting forth:

(i) a description of the difference of view or disagreement;



(ii) a statement of the submitting Party's position; and

(iii) copies of records (if relevant) supporting the submitting Party's position.

19.13 Where any difference of view or disagreement is referred by the Parties jointly to the Sole Expert, consideration of the difference of view or disagreement in question shall be initiated by the Parties jointly by each party submitting to the Sole Expert and the other Party or Parties (as the case may be) the written materials referred to in Clause 19.12.

19.14 Within (ten) 10 Business Days of the date that a Party has submitted written materials to the Sole Expert pursuant to Clause 19.12, the other Party or Parties (as the case may be) may each submit to the Sole Expert:

(i) a description of the difference of view or disagreement;

(ii) a statement of their position; and

(iii) copies of records (if relevant) supporting their position.

19.15 The Sole Expert shall consider any information submitted by the responding Party/Parties within the period provided for in Clause 19.14 and, in the Sole Expert's discretion, may consider any additional information submitted by any Party at a later date.

19.16 The Parties shall not be entitled to apply for discovery of documents but shall be entitled to have access to the other party or parties (as the case may be) relevant records and to receive copies of the records submitted by the other Party or Parties (as the case may be).

19.17 Each Party shall designate one (1) person knowledgeable about the issue which has been referred to the Sole Expert who shall be available to the Sole Expert to answer questions and provide any additional information requested by the Sole Expert. Except for such person, a Party shall not be required to, but may, provide oral statements or presentations to the Sole Expert or make any particular individuals available to the Sole Expert.

19.18 Except as provided in Clause 19.20 with respect to the payment of costs, the determination of the Sole Expert shall be without prejudice to any Party and any evidence given or statements made in the course of this process may not be used against a Party in any other proceeding. The process shall not be regarded as an arbitration and the laws relating to commercial arbitration shall not apply.

19.19 When a Sole Expert's determination is initiated, the Sole Expert shall be requested to provide a determination within fifteen (15) Business Days after the ten (10) Business Day response period provided in Clause 19.14 above has run. If the Sole Expert's determination is given within such fifteen (15) Business Day period, or if the Sole Expert's determination is given at a later time and no Party has at such time initiated any other proceeding concerning the difference of view or disagreement, the Parties shall review and discuss the determination with each other in good faith for a period of ten (10) Business Days following deliver of the determination before proceeding with any other actions.

- 
- 19.20 The costs of engaging a Sole Expert shall be borne by the unsuccessful party.
- 19.21 The Sole Expert's determination shall be final and binding on the Parties save in the case of manifest error.

**20. Law Applicable**

- 20.1 This Agreement shall be governed by and construed in accordance with the laws of Zambia which the Parties acknowledge and agree includes, so far as they are relevant, the rules of international law.

**21. Force Majeure**

- 21.1 Any failure on the part of a Party hereto to comply with any of the terms, conditions and provisions of this Agreement (except any obligation of a Party to make payment of money to the other Party) shall not be grounds for termination or give the other Party hereto any claim for damages insofar as such arises from Force Majeure, if the first-mentioned Party:

- (a) has taken all appropriate precautions, due care and reasonable alternative measures with the objective of avoiding such failure and of carrying out its obligations under this Agreement; and
- (b) has given notice to the other Party of the occurrence of Force Majeure on becoming aware of such an event.

The first-mentioned Party shall take all reasonable measures to overcome the Force Majeure and to fulfil terms and conditions of this Agreement with the minimum of delay (provided that no Party has an obligation to settle a labour dispute or to test the constitutionality of any legislation or law) and shall give notice to the other Party on the restoration of normal conditions.

- 21.2 For the purposes of this Agreement, Force Majeure shall include war, insurrection, civil disturbances, blockades, riot, embargoes, strikes, lock-outs and other labour-conflicts, land disputes, epidemics, volcanic eruptions, earthquakes, cyclones, floods, explosions, fires, lightning, governmental restrictions, changes in applicable law or unavailability of materials or equipment and any other event which the party claiming force majeure could not reasonably be expected to prevent or control.
- 21.3 In the event of any circumstances or event of a kind set out in this Clause 21 the period of time allowed for the performance of those obligations or exercise of those rights which are delayed by such event of Force Majeure and the periods of time thereafter allowed for the performance of obligations or exercise of rights which are dependant upon the first mentioned obligations or rights, shall be extended by a period equal to the period during which such event of Force Majeure continues until the time of its settlement by agreement.
- 21.4 Where any period is, or is deemed to be, extended or any later date substituted for an earlier date under this Clause 21, that extended or substituted period or date shall be deemed to constitute the period or day referred to in this Agreement (notwithstanding that at the time

of such extension or substitution such period may have expired or such date may have passed).

**22. Variation**

22.1 The Parties may from time to time by agreement in writing add to, substitute for, cancel or vary all or any of the provisions of this Agreement, the Approved Programme of Mining Operations, the Large Scale Mining Licences or any programme (including all of the Scheduled Programmes), proposal or plan approved for the purpose of more efficiently or satisfactorily implementing or facilitating the objectives of this Agreement.

22.2 (a) Except as otherwise provided in Clause 22.4, where NFCA proposes to modify or vary the Approved Programme of Mining Operations (hereinafter called a "Modification") and by such Modification NFCA would not be in substantial compliance with the Approved Programme of Mining Operations NFCA shall provide notice of such Modification to GRZ. Such Modification shall be deemed to be approved by GRZ and the Approved Programme of Mining Operations shall be amended to the extent necessary to reflect such Modification unless GRZ within ninety business days of the notice being given to it notifies NFCA that GRZ considers the Modification to be a Major Change. If NFCA accepts that the Modification is a Major Change it is deemed that notice has been given pursuant to Clause 22.4(a) on the date GRZ gave notice it considered the Modification is a Major Change.

(b) If NFCA does not agree that the Modification is a Major Change then it may refer to the Sole Expert in accordance with Clause 19, the question whether the Modification is a Major Change. If the Sole Expert determines that the Modification is a Major Change then it is deemed that notice has been given pursuant to Clause 22.2(a) as of the date of the Sole Expert's decision and the provisions of Clause 22.4(b) to (e), inclusive, apply, unless NFCA has implemented or commenced implementation of the Major Change. If such implementation has occurred or commenced then the Sole Expert shall also determine:

(i) what action NFCA must take; or

(ii) what compensation NFCA must pay and to whom such compensation shall be paid.

If a Sole Expert determines that the Modification is not a Major Change, such Modification shall be deemed approved by GRZ and the Approved Programme of Operation shall be amended to the extent necessary to reflect such Modification without further variation or payment of compensation by NFCA.

22.3 For the purpose of this Clause 22, a proposed Major Change to the Approved Programme of Mining Operations means a proposed material change involving the elimination or material dilution in the capacity of the Facilities or in the mine plan or mine production schedule if a consequence of such proposed material change would be to materially reduce or materially delay receipt of GRZ's tax revenues or royalties derived from the Project's

operations or in a material respect adversely impact or increase the adverse impact of NFCA's mining activities on the environment.

22.4 No Major Change shall take effect unless it has been approved or is deemed to have been approved by GRZ and where NFCA intends to make a Major Change the following provisions shall apply -

- (a) NFCA shall, by notice to GRZ of the proposed Major Change, give full details including an economic analysis of the proposed Major Change entitled "Proposed Major Change to the Approved Programme of Mining Operations";
- (b) if GRZ does not notify NFCA that it objects to the Major Change within thirty (30) days of the notice, GRZ shall be deemed to have approved the Major Change;
- (c) where GRZ requires additional time to evaluate the Major Change, it shall within the thirty (30) days stipulated in Clause 22.4(b), extend the period by an additional thirty (30) days and if within that thirty (30) day period GRZ does not notify NFCA of any objections it shall be deemed to have approved the Major Change;
- (d) where GRZ objects to the Major Change and NFCA considers the objection to be unreasonable, NFCA may elect to refer the question of the reasonableness of GRZ's objection to the Sole Expert under Clause 19. In assessing the reasonableness or otherwise of GRZ's objections the Sole Expert shall have regard to the impact which withholding approval to the change would have on the economic viability of the project, as well as the impact on GRZ revenues;
- (e) if the Sole Expert determines that GRZ's objection is unreasonable, GRZ shall be deemed to have approved the Major Change.

22.5 Where GRZ approves or is deemed to have approved a Major Change, the Approved Programme of Mining Operations shall be varied or amended to the extent necessary to reflect the Major Change.

22.6 For the purposes of this Agreement, a reduction in the number of employees of NFCA shall not in and of itself, constitute a Major Change.

### 23. Consultation

- 23.1
- (a) A Committee shall be formed, comprising of one member from each of the Ministry, NFCA and the Municipal Council and chaired by a representative of the Ministry of Labour, which shall have no powers to bind NFCA but shall monitor the implementation of the Training and Human Resources Management Programme.
  - (b) This Committee shall operate during the term of this Agreement and NFCA shall furnish it with quarterly reports outlining the progress of the Training and Human Resources Management Programme, problems encountered, positions filled and the number of local people employed.

- 
- 23.2 (a) A Committee shall be formed, comprised of one member from each of the Ministry of Mines and Minerals Development, the local Government and NFCA and chaired by a representative of the Ministry of Commerce, Trade & Industry, which shall have no powers to bind NFCA but shall monitor the supply and procurement of goods and services to the Project.
- (b) The Committee shall operate during the term of this Agreement and NFCA shall furnish it with quarterly reports comprising the following information:
- (i) a list of successful tenderers which shall include the items supplied, residence of tenderers and the reasons for awarding the tender; and
- (ii) a list of unsuccessful locally based tenderers which shall include reasons for not awarding the tender.

**24. Notices**

- 24.1 (a) Any notice, consent, demand, approval or other communication (a "Notice") required or permitted to be given shall be deemed to have been given if:
- (i) in the case of a Notice given by GRZ, such Notice is signed on behalf of GRZ by either the Minister or Permanent Secretary to the Ministry as their respective responsibilities require; or
- (ii) in the case of a Notice to be given by NFCA, such Notice is signed by a director or by the Secretary of NFCA.
- (b) Each such Notice shall, as elected by the Party giving such notice, be personally delivered or transmitted by telex to the other Party as follows -

**A Notice to GRZ**

If by facsimile -  
 Permanent Secretary  
 Ministry of Mines  
 and Minerals  
 Development

+2601 251244/252916

If by hand -  
 Permanent Secretary  
 Ministry of Mines  
 and Minerals  
 Development

PO Box 31969  
 Haile Selassie Avenue  
 Lusaka, Zambia

**A Notice to NFCA**

If by facsimile -  
 The Secretary  
 Mr Ma Jin Ping  
 +260 1 235350

If by hand -  
 The Secretary  
 Mr Ma Jin Ping  
 c/o Bank of China  
 Amandra House





**Ben Bella Road  
PO Box 34550, Lusaka**

24.2 Except as otherwise specified herein, all Notices and other communications shall be deemed to have been duly given on the earlier of:

- (i) the date of receipt if delivered personally; and
- (ii) the date of transmission with confirmed answerback if transmitted by facsimile.

Either Party may change its address by Notice to the other Party in accordance with the provisions of this Clause. All Notices and all documents or instruments delivered in connection with this transaction shall be in the English language.

24.3 Where NFCA is required to submit any plans, proposals or other material for the approval of GRZ, the date of submission shall be deemed to be the date on which GRZ received the said plans, proposals or other materials.

**25. Waiver**

25.1 The failure of any Party to enforce at any time any of the provisions of this Agreement shall in no way be construed to be a waiver of the provision or any part thereof or the right of any Party thereafter to enforce each and every part of the provision in respect of any subsequent default or breach.

**26. Severability**

26.1 The provisions of this Agreement shall be separate and severable each from the other to the extent that if any portion or any one provision or portion is deemed to be inoperative then the remainder of this Agreement shall remain binding upon and enforceable by the Parties hereto. Nothing herein shall preclude one Party from requesting the other Party to renegotiate any provision herein.

**27. Further Acts**

27.1 The Parties shall execute such documents and do and perform such acts that lie within their power and are necessary to give full effect to this Agreement.

**28. Counterparts**

28.1 This Agreement may be executed in any number of counterparts, each of which executed shall be deemed to be an original, and such counterparts shall together constitute one Agreement.

**29. Representations and Warranties**

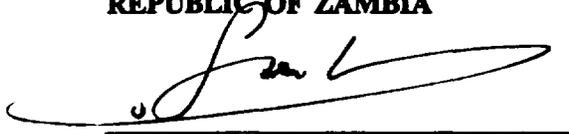
29.1 Except as expressly stated in this Agreement, no representation, inducement or warranty was, prior to the execution of this Agreement, given or made by one of the Parties hereto with the

intent of including the other Party to enter into this Agreement, and any representations, inducements or warranties that may have been so given are hereby denied and negated.

IN WITNESS WHEREOF this Agreement has been duly executed by the Parties on the

29<sup>th</sup> day of JUNE, 1998

SIGNED for and on behalf of the )  
GOVERNMENT OF THE )  
REPUBLIC OF ZAMBIA )

  
\_\_\_\_\_

THE COMMON SEAL of )  
NFC AFRICA MINING PLC and )  
hereunto affixed by authority of the )  
Board of Directors in the presence of )

  
\_\_\_\_\_ Director

\_\_\_\_\_  
Secretary

THE COMMON SEAL of )  
CHINA NONFERROUS METAL )  
INDUSTRY'S FOREIGN ENGINEERING )  
AND CONSTRUCTION CORPORATION )  
(GROUP) )  
hereunto fixed by authority of )  
the Board of Directors )  
in the presence of )

  
\_\_\_\_\_ Director

\_\_\_\_\_  
Director/Secretary



## SCHEDULE 1

### APPROVED PROGRAMME OF MINING OPERATIONS

NFC Africa Mining PLC ("NFCA") will, within 4 years of the date of this agreement, have ore production levels at between 5,250 and 6,000 tonnes per day, and contained copper in concentrate at between 35,000 and 40,000 tonnes per year. NFCA will carry out the following programme of mining operations to bring Chambishi Mine back into production as early as possible.

#### Year 1 (starting from the date of this agreement)

- Increase compressed air capacity to a level which satisfies the existing Cobalt and Acid Plant demand and future underground mine requirements.
- Equip and commission the 948 level pump station.
- Start dewatering drilling above 900 level.
- Carry out underground exploration drilling above 900 level.
- Carry out repairs to the 972 loading box.
- Award contract to start primary development on the 900 level.
- Start development and trial mining above 500 level.
- Start surface exploration and in-fill diamond drilling.
- Re-install materials handling infrastructure on 548 level.
- Rehabilitate 572 loading station.
- Source and replace rock winder drum shells. Check and refurbish if necessary the braking and control systems on both the rock and service winders and return safe skip capacity to 17 tonnes.
- Upgrade mine ventilation system above the 500 level.
- Repair overhead ore/waste conveyor between No. 3 shaft head frame and ore/waste bins.
- Renovate coreshed, mining, geological and engineering offices and prepare capital stores to receive equipment for rehabilitation of concentrator and construction of backfill plant.

#### Year 2

- Continue primary and start some secondary development on 900 level, and start primary development on intermediate levels above 900 level.

- Continue mine dewatering programme on 900 level and above.
- Continue exploration of Chambishi West resource.
- Continue underground exploration drilling.
- Award civils and mechanical contracts for the rehabilitation of the concentrator and construction of the backfill plant.
- Rehabilitate the surface conveyor system transporting ore from shaft bin to concentrator live stockpile.
- Award contract to mine an additional fresh air intake to 900 level.
- Start mining of ore above 500 level in east of mine and stockpile on surface.
- Achieve mine production level of 3,000 tonnes of ore per day.

#### **Year 3**

- Continue underground development on 900 level and intermediate levels above 900 level.
- Continue underground dewatering and exploration drilling.
- Continue mining above 500 level and stockpile ore on surface.
- Award electrical and instrumentation contracts for concentrator and backfill plant.
- Award contract to install underground backfill delivery system.
- Commission concentrator at 5,250 tonnes per day throughput using ore stockpiled on surface.
- Start mining updip from 900 level and begin hoisting ore to surface.
- Commission backfill plant and underground backfill delivery system.

#### **Year 4**

- Continue surface exploration drilling programme to increase mine resources.
- Continue mine dewatering programme.
- Continue primary and secondary development above and below 900 level.
- Continue underground dewatering and exploration drilling programme.
- Maintain underground production at between 5,250 and 6,000 tonnes per day.

- 
- Prepare detailed feasibility study to bankable document level for Chambishi West deposit if viable which would envisage total mine production level of 9,000 tonnes of ore per day.

**Year 5**

- Maintain mine production level at between 5,250 and 6,000 tonnes per day.
- Start stripping for Chambishi West open pit if project goes ahead.
- Continue mining updip towards 500 level.

NFCA will, within two (2) years of the Completion of the Sale and Purchase Agreement, submit an updated Approved Programme of Mining Operations for approval by GRZ and the Ministry of Mines and Minerals Development.



## SCHEDULE 2

### PART 1 ENVIRONMENTAL PLAN

NFC Africa Mining PLC (NFCA) will from the date of this Agreement adopt, and commit to, in terms of resources, the ZCCM Environmental Impact Statement (EIS) issued in March 1997, for all environmental issues relating to the operation of Chambishi underground copper mine, concentrator and associated facilities, but not those relating to the operation of the Chambishi Cobalt and Acid plant. In accordance with the provisions of the Mines and Minerals (Environmental) Regulations, the EIS will be updated by 30 September 1998 after an independent environmental audit is conducted. Within 3 months of the completion of the EIS NFCA will prepare an Environmental Management Plan which will be submitted to the Ministry of Mines for approval. At such time NFCA will also submit, in the light of their new EIS, a set of revised Environmental Clean-Up Obligations to GRZ for their approval. Further, NFCA undertakes to employ an environmental officer as provided for by the said Regulation. NFCA also acknowledges the concluding decommissioning and closure costs applicable to Chambishi mine, concentrator and associated facilities which amount to US\$1,601,000 (comprising Underground Workings \$230,000; Plan Area and Buildings \$914,000; and TD19 Musakashi Dam \$457,000). NFCA further undertakes to meet the Environmental Protection Fund Obligations currently envisaged to be 5-20% of the concluding decommissioning and closures costs, payable over 5 years, as provided for in the Mines and Minerals Act. The NFCA Environmental Plan shall comply in all respects to the requirements of the Mines and Minerals Act and its subsidiary Legislation.



**PART 2**  
**ENVIRONMENTAL CLEAN UP OBLIGATIONS**

NFCA will, as far as is practicable, perform the Environmental Clean Up Obligations applicable from time to time in accordance with the Environmental Plan and within the timescale laid down. NFCA will however, in the first instance, specifically discharge the Clean Up Obligations stipulated in the ZCCM EIS as follows:

<b>Mines Component</b>	<b>Progressive Rehab. 1997-2016 US\$</b>	<b>Activities</b>
Archaeological	34,000	Archaeological protection of six sites.
Underground Workings	22,000	Decommissioning of old structures.
Open Pit Workings	3,000	Used tires to be used to prevent inadvertent access to the open pit.
Overburden, waste rock and low grade ore dumps	1,304,000	Construction of perimeter bundwall to arrest solids in surface runoff. Extent of bund wall to be assessed.
Plant Area and Buildings	26,000	Access soil contamination, demolish selected plant building and revegetate some areas.
Tailings Facilities:- Dumps 7, 7A, 8, 10, 13, 15 and 17	748,000	Construct toe bundwalls to contain solids in surface runoff and revegetate upper surfaces.
Tailings Facilities (cont.) TD6	310,000	Diversion of Chambishi stream around TD6, create evaporation paddock and revegetate upper surface.
TD16 Luano tailings dam	242,000	Upgrade spillway and monitor.
Surface Water Management Facilities Werners Dam	285,000	Construct toe bundwall and revegetate (subject to reclaim studies).

<b>Mines Component</b>	<b>Progressive Rehab. 1997-2016 US\$</b>	<b>Activities</b>
New Dam	5,000	Assess spillway requirements.
TD6 Feed channel	100,000	Stream clean up/dredging
Musakashi stream	50,000	Stream clean up/dredging
<b>Totals</b>	<b>\$3,129,000</b>	

NFCA will, as provided for by the above stated Regulations annually amend or update the Environmental Plan and, or the Environmental Clean Up Obligations to reflect changes in its operations and other circumstances, especially as the mine is brought back into production, and with reference to the following Key Aspects List. Changes will conform to specifications and practices established by Zambia standards for management of the environment as it is affected by mining operations.

#### **Environmental Safeguards - Key Aspects**

Key aspects of the Environmental plan for the rehabilitation and reconstruction of the mining operation at Chambishi include protection of the environment, public health and safety; minimising environmental impacts; and allowing for a productive post mining land use or an acceptable alternative following cessation of the mining activities. Specific measures that will be taken to safeguard the environment during the feasibility study stage will include:

- There will not be any liquid effluents discharged to surface water.
- An Erosion and Sediment Control Plan will be prepared, and all dirt roads and drill sites will be constructed and maintained so as to ensure adequate drainage to prevent damage to soil, water or other resource values.
- A management plan will be developed for handling, storage and disposal of any chemicals and reagents.
- Any hazardous (reactive, flammable, radioactive, corrosive or toxic) materials will be stored in clearly labelled containers at a designated and secure location.
- Hazardous wastes will be disposed of in a manner consistent with local regulations.
- Secondary containment and fire prevention systems will be provided for all petroleum product storage.
- A reclamation plan will be prepared and implemented, with the objectives of returning the land to conditions capable of supporting productive land uses. All surface disturbances resulting from feasibility study activities (eg, but not limited to, surface diamond drilling) will be fully reclaimed. To the extent possible, reclamation activities will be concurrent with

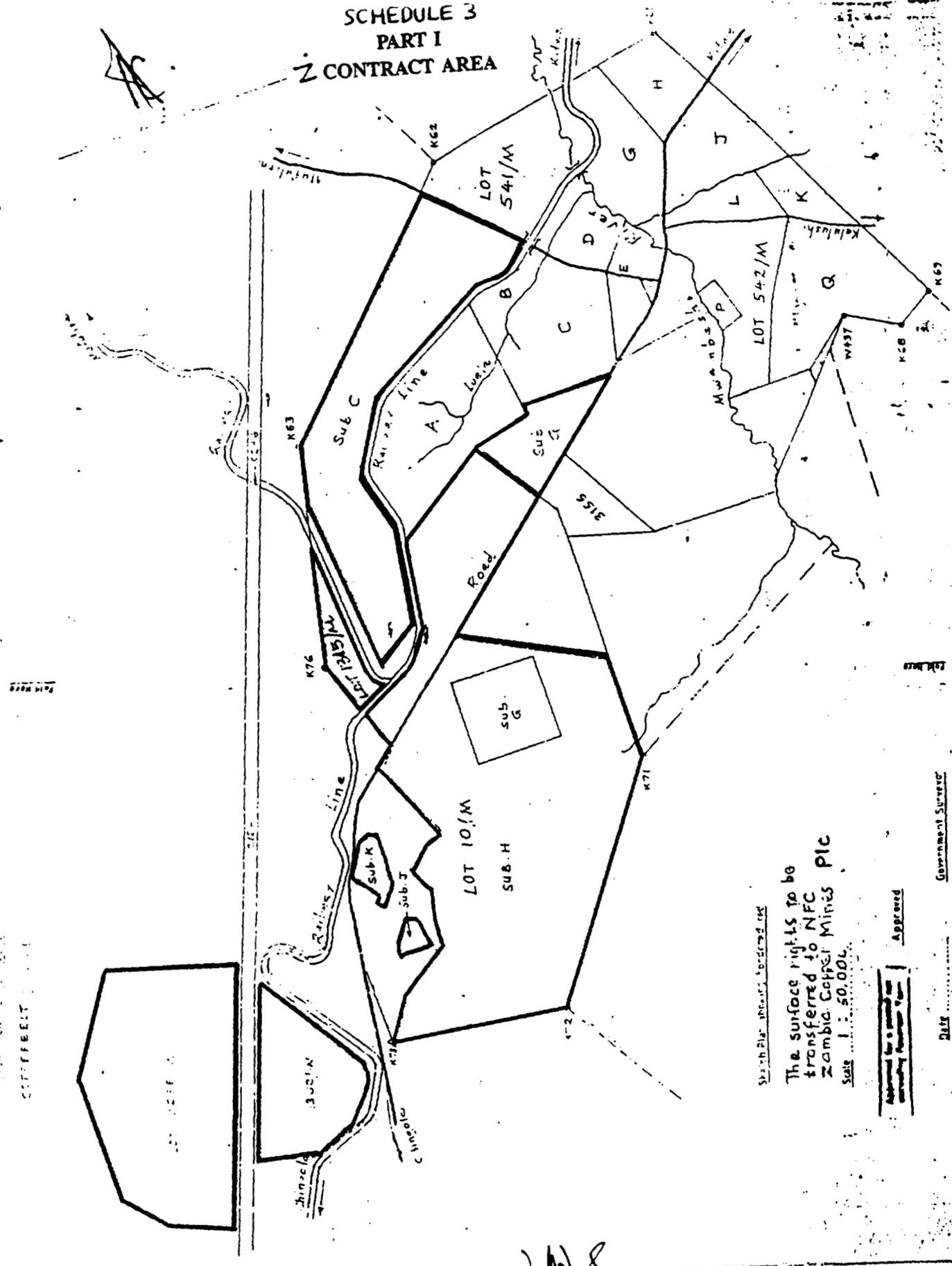


feasibility activities. Reclamation will include all newly constructed access roads, drill sites and mud pits.

- All drill holes will be plugged or capped at the surface to prevent possible ground water contamination, and to prevent possible injury to the public, livestock or wildlife.
- A site environmental monitoring programme will be conducted during the rehabilitation and reconstruction of the mining operations at Chambishi to monitor possible environmental impacts and to characterise the mine site and receiving environment. The monitoring programme will include air quality, surface and ground water quality and meteorology. All environmental monitoring information will be maintained in a computer database management programme.



SCHEDULE 3  
PART I  
Z CONTRACT AREA



The surface rights to be transferred to NFC Zambia Copper Mines PLC  
Scale 1:50,000

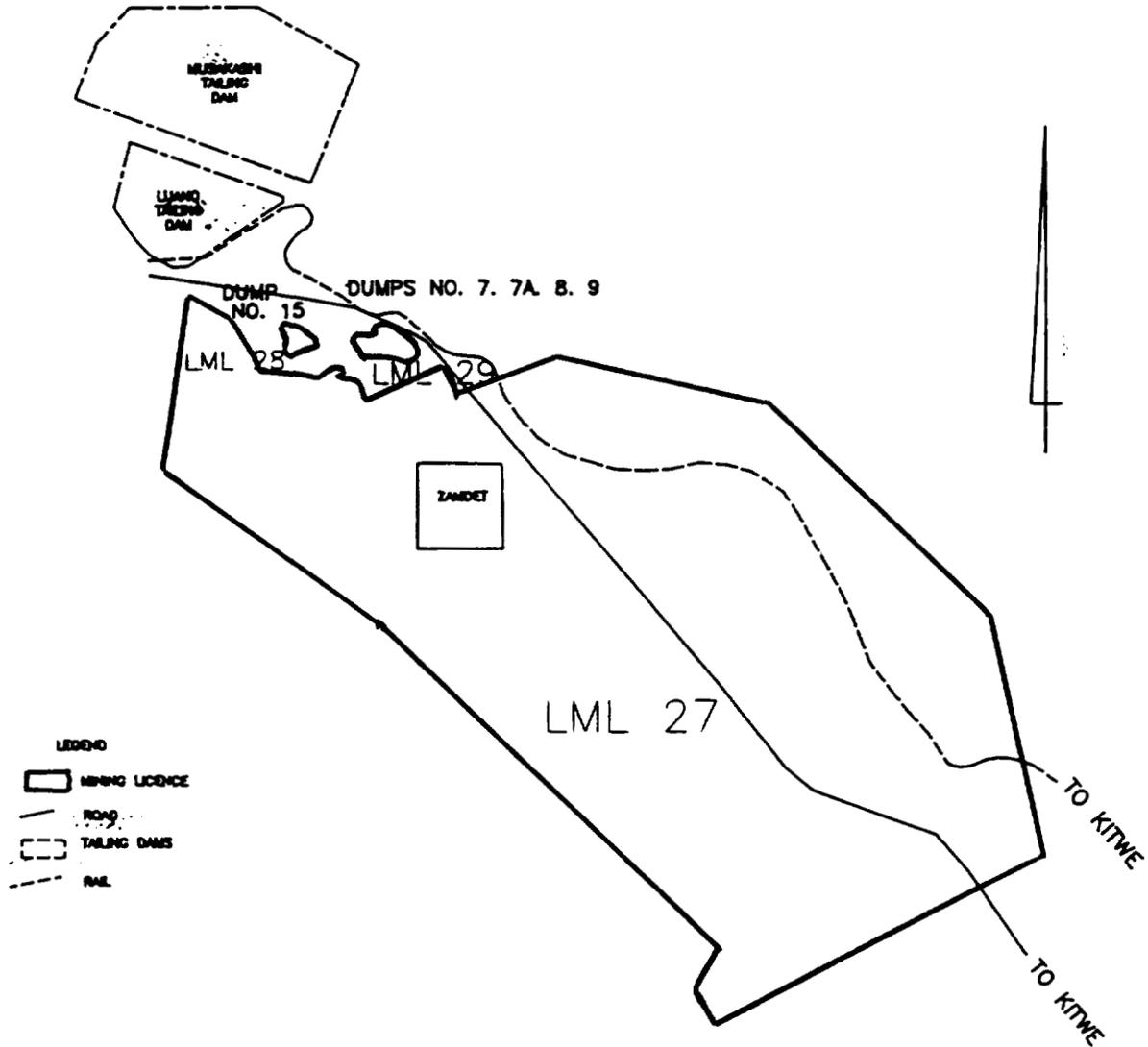
Approved for a period of 12 months by the Government of Zambia  
Approved  
Date  
Government Surveyor

*[Handwritten signature]*

PART II  
MINING AREA

SITE PLAN FOR  
NFC ZAMBIA COPPER MINES PLC  
CHAMBISHI MINING LICENCE AREA  
LML 27, LML 28, LML 29

SCALE 1 : 120 000



SAMUEL C. MAANGQ  
MINING SURVEYOR

3/03/98

MINES DEVELOPMENT DEPARTMENT



## SCHEDULE 4

### TRAINING AND HUMAN RESOURCES MANAGEMENT PROGRAMME

Chambishi Mine is currently operating on care and maintenance only and NFCA will sustain this as a baseline minimum level of activity for the duration of the mine and concentrator rehabilitation. As no obligation in terms of Human Resources Management is being inherited from ZCCM (compared to the other operating mines), NFCA feels that it is appropriate to offer a provisional document covering their Training and Human Resources Management Programme, at this stage.

NFCA shares the viewpoints of the GRZ with respect to the reopening and development of the Chambishi Mine that it should achieve the following broadly defined objectives:

- Development and exploitation of the project will be of major economic significance to the people of Zambia;
- Must ensure project secures maximum benefit for and adequately contributes to the advancement and social and economic welfare of the Zambian people, especially in the vicinity of Chambishi and the rest of the Zambian Copperbelt, in a manner consistent with their needs and the protection of the environment and which secures an appropriate return on investment commensurate with the risks involved to NFCA.

NFCA will conduct a full investigation into the manpower requirements for the project which will include training and development. The following ten key points will be incorporated into the Training and Human resources Management Programme which will evolve from this study.

- NFCA is committed to reopening Chambishi Mine as a flagship operation for the region where employees are properly trained, well motivated and proud members of a successful and contented workforce. NFCA believes the key to achieving this aim is by releasing the potential of the local Zambian workforce to the maximum.
- NFCA is committed to the very highest safety standards and as such safety training will be mandatory for all employees as part of their induction and on an on-going basis to ensure that each individual is aware of his own safety, the safety of persons around him and the safety of all persons working under him.
- During the project construction and pre-production, including the continuation of care and maintenance operations at Chambishi Mine, NFCA will maintain a minimum workforce of approximately 140 persons (such workforce may comprise both NFCA direct employees and contractors).
- When Chambishi Mine is in full production NFCA will maintain a minimum workforce of 866 persons, comprising direct employees of NFCA and contract labour.



- 
- NFCA will not discriminate in its recruitment, selection, promotion and assignment of personnel.
  - NFCA may recruit from time to time, non-Zambian citizens, where in the judgement of management they are required to carry out specialised operations for which skills are not available locally, or for local training purposes. Such recruitment will comply with Zambian immigration laws with the understanding that GRZ will not hamper the continuous and efficient performance of NFCA.
  - NFCA will take all reasonable efforts to attract qualified Zambian citizens working overseas back to Zambia.
  - When Chambishi Mine is in full production NFCA will establish a Consultative Committee to monitor its Training and Human Resources Management Programme, in conjunction with representatives from local and national government.
  - Zambian citizens in management positions will be given exposure to overseas operations as an integral part of their development.
  - NFCA will comply with all Zambian labour laws. NFCA will recognise the MUZ for collective bargaining purposes and agrees to be bound by the existing conditions of service and the Collective Agreement with the MUZ. NFCA will recognise the terms of any individual contracts to be transferred from ZCCM at closure.
  - NFCA will submit a detailed Training and Human Resources Management Plan, covering all categories of employees, for approval by GRZ, Ministry of Mines and Minerals Development, within 12 months of Completion of this Agreement.
- 



## SCHEDULE 5

### LOCAL BUSINESS DEVELOPMENT PROGRAMME

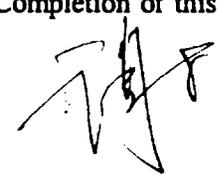
Chambishi Mine is currently operating on care and maintenance only and NFCA will sustain this as a baseline minimum level of activity for the duration of the mine and concentrator rehabilitation. As no obligation in terms of participation in the local business community is being inherited from ZCCM (compared to the other operating mines), NFCA feels that it is appropriate to offer a provisional document covering their Local Business Development Programme, at this stage.

NFCA shares the viewpoints of the GRZ with respect to the reopening and development of the Chambishi Mine that it should achieve the following broadly defined objectives:

- Development and exploitation of the project will be of major economic significance to the people of Zambia.
- Must ensure project secures maximum benefit for and adequately contributes to the advancement and social and economic welfare of the Zambian people, especially in the vicinity of Chambishi and the rest of the Zambian Copperbelt, in a manner consistent with their needs and the protection of the environment and which secures an appropriate return on investment commensurate with the risks involved to NFCA.

NFCA will conduct a full investigation into the proactive development and establishment of the local business sector. The following key points will be incorporated into the Local Business Development Programme which will evolve from this study.

- NFCA will employ full time staff experienced in setting up and managing small businesses to undertake the following;
    - assist Zambian citizens to set up businesses to service NFCA.
    - assist in the implementation of the Local Business Development Programme.
    - liaise with GRZ.
    - compile and maintain a register of local suppliers of goods and services.
    - advise and assist the establishment of long term business enterprises.
  - NFCA will actively encourage and assist the establishment of businesses in Zambia (particularly in the Copperbelt and with a particular emphasis on businesses directly or indirectly majority owned by Zambian citizens) to supply materials, equipment and services to NFCA.
  - NFCA will conduct an annual review of progress being made on the implementation of the Local Business Development Programme and make variations to it as required by changing circumstances.
  - NFCA's procurement activities will be conducted in a fair, open and transparent manner.
- 

- 
- NFCA will identify and invite registration of businesses in Zambia (particularly in the Copperbelt and with a particular emphasis on businesses directly or indirectly majority owned by Zambian citizens) which are capable of supplying materials, equipment and services to NFCA. This register will be reviewed annually.
  - NFCA recognises the availability of a pool of suitably qualified mine workers following the privatisation of ZCCM and the downsizing of the company's operations at, *inter alia*, Mufulira Mine and undertakes to assess and, if appropriate, encourage the employment of such mineworkers at its operations.
  - NFCA will form a Consultative Committee comprising representatives from NFCA, national government and local government to monitor the supply and procurement of goods and services to the Project. The committee will report quarterly on, *inter alia*, details of successful tenderers, and details of unsuccessful local tenderers.
  - NFCA will submit a detailed Local Business Development Programme for approval by GRZ, Ministry of Mines and Minerals Development, within 12 months of the Completion of this Agreement.
- 

**SCHEDULE 6**

**REQUIRED INSURANCES**

**A PROPERTY INSURANCES**

1. **Fire and Perils Insurance;** in respect of physical loss, destruction or damage to fixed assets of Buildings Plant and Machinery.
2. **Project/Construction Insurance;** for loss, damage or destruction of project works that may arise from commencement to project commissioning.

**B PUBLIC LIABILITY INSURANCE**

**Public, Employer's Motor Third Party Insurances;** against legal liability for death, disease or bodily injury to employees and the general public, loss or damage to their property, arising from the Company's operations.

**C MARINE INSURANCES**

**Imports Insurance;** in respect of loss or damage to imported orders of machinery, equipment, materials and other goods, while these are in transit from the supplier's to the Company's premises in Zambia.

**D CASH/MONEY INSURANCE**

**Cash and Fidelity Guarantee Insurance;** in respect of pecuniary loss to the Company from loss of money or other forms of negotiable documents, including pecuniary loss from infidelity by staff in positions of trust.

## SCHEDULE 7

### PART I - MEDICAL SERVICES

#### INTRODUCTION

The Chambishi Mine operates under the Nkana Division of ZCCM which administers two hospitals all based in Kitwe. Prior to the take over of Chibuluma Mine by the Metorex Consortium, the Division was responsible for a third hospital based at Kalulushi. The three hospitals thus made up the medical services which catered for all ZCCM employees based in Kitwe, Kalulushi and Chambishi. Employees of ZCCM had a choice of three hospitals depending on where they lived. The hospitals are supplemented by clinics based in the townships in the three towns as well as the plant and works areas.

#### CHAMBISHI CLINICS

Chambishi employees and their registered dependants residing at Chambishi are served by two clinics one situated in the township and which caters for employees registered dependants, while the other in the plant and work area caters for mine employees as well as ZAMDET employees, a ZCCM subsidiary company. Both clinics are run and maintained by ZCCM on 24 hours services. They are staffed by ZCCM employees and visited three days in a week by doctors from Nkana Hospital or by arrangement from Kalulushi Hospital. The cost of running the clinics in the period April - October 1997 are set out in the table below:

CHAMBISHI CLINICS (TOWNSHIP AND PLANT SITE) ACTUAL COST AGAINST BUDGET APRIL TO OCTOBER 1997

COST ELEMENT	BUDGET K'000	ACTUAL K'000
LOCAL LABOUR (31)	95,037	90,298
DRUGS	3,249	7,486
STATIONERY	56	108
CLEANING MATERIAL	1,809	242
FOODS STUFFS	366	169
OTHER MTCE STORES	53,842	0
TOTAL	154,359	98,303

All employees of Chambishi Mine and their registered dependants are entitled to free medical services and attend hospitals at Kalulushi and Nkana and Nkana Hospital. ZCCM provides a bus service to enable dependants to visit the sick at Kalulushi Hospital and, an ambulance service is available at Chambishi to ferry cases which need to be attended to by a doctor or for hospitalisation at Kalulushi or Nkana Hospitals. Employees have a choice to use the contributory or the non-contributory part of the hospital at Kalulushi or Nkana.

## **HOSPITAL SERVICES**

Chambishi employees needing hospitalisation or specialised medical attention attend the Kalulushi or Nkana Hospitals. In this report, a full description of the hospital services offered by Nkana Division in Kitwe are set out below:

### **NKANA MEDICAL FACILITIES**

#### **HEALTH CARE SERVICES**

##### **Introduction**

Nkana Division has two Hospitals, Nkana Hospital, which is high cost (i.e. Contributory) and Wusakili Hospital which is low cost (Non-Contributory).

Employees of Nkana Division and their registered dependants are entitled to use the low cost Non-Contributory facilities at no cost. Employees and dependants wishing to use the high cost facilities are required to pay K2,000 for employees and K400 for each dependant per month. Non mine personnel are charged a commercial rate for use of the medical facilities at either of the Hospitals i.e. K4,500 membership fee for both hospitals and K93,000 and K37,000 as pre-payment fee for Nkana and Wusakile hospitals respectively.

Nkana Division provides Curative and Preventive Health Services. This is to meet the objective/mission of the Medical department which is to "provide quality health services to miners and their dependants.

#### **SUMMARY OF HEALTH SERVICES PROVIDED AT THE HOSPITAL**

The following services are provided by ZCCm hospitals to serve mine employees, their dependents and others:

##### **a) CLINICAL SERVICES**

Surgery, Internal medicine, Paediatrics, Obstetrics and Gynaecology, Orthopaedic surgery, Anesthesia, Ophthalmology, Dental and Accident and Emergencies)

##### **b) OTHER SPECIALISED SERVICES**

Intensive Care Therapy, Computed Tomography Scanner and Ultrasound (only at Nkana Division), Radiology and Hiopathology (only at Nkana Division).

c) **MATERIAL AND CHILD HEALTH SERVICES**

Immunisation, Antenatals, Post Natal, Family Planning Nutrition Surveillance and Home Based Care for HIV/Aids patients and the terminally ill.

d) **OTHER**

**PUBLIC HEALTH  
LABORATORY**

**Staffing**

The Medical department has 610 employees and those comprise the Medical Doctors, Nurses and Paramedical Staff. The Medical department has an Establishment of 38 Medical Doctors out of which 14 are in Consultant Positions. These Consultant positions are in the following disciplines; Internal Medicine, General Surgery, Orthopaedic Surgery, Paediatrics, Obstetrics and Gynaecology, Ophthalmology, Radiology and Histopathology.

The other 24 positions are General Medical Officers at various levels of experience.

The Manning level for Nursing Staff is 323.

These Nursing Staff are either Enrolled Nurses or Registered Nurses. Other Nurses are in Specialised fields, like Theatre Nursing, Intensive Care Nursing etc.

The Supportive Paramedical Staff include Radiographers, Pharmacists, Laboratory Technologists, Physiotherapists, Clerical and Maintenance sections etc.

**BED CAPACITY**

The current bed capacity of the Hospitals are broken as follows:-

Type	Adult Beds	Cribs/ Cots	Incubators	Delivery Beds	Total
Nkana Hospital	67	12/18	3	1	101
Wusakili Hospital	248	22/43	5	2	332
Intensive Care Wusakili	5	0	1	0	6
Total Medical Facilities	320	34/61	9	3	439

## **Paramedical Services**

- (a) **Laboratory Services:-** The Central Medical Laboratory is at Wusakili. It is a well equipped laboratory with modern diagnostic equipment. The laboratory has the biochemistry, Microbiology/Serology, Haematology, Histopathology and Blood Transfusion Services. All these sections are headed by trained staff. The excellence of the laboratory is consistently monitored by the Local and International Quality Control Performance.
- (b) **Pharmacy:-** The main dispensary and storage for Pharmaceutical drugs is housed at Nkana Hospital. The Pharmacy also does local manufacturing of cough mixtures etc.
- (c) **Radiography:-** Nkana Hospital houses the CT Scanner computed Tomographic Imaging Centre, some of the examinations done are Brain Scanning and general Ultra Sonography. This section is manned by Radiographers and is headed by two Radiologists.
- (d) **Dental Services:-** Nkana and Wusakili hospitals, have a dental clinic each. Wusakili Dental Clinic caters for all general dental cases while Nkana Clinic specialises in Orthodontic dentistry.
- (e) **Catering Services:-** Nkana hospital provides choice meals on a varied menu basis. Patients are accorded the pleasure to decide their meals unless their ailment disallows. The kitchen is spacious with cold rooms and cooking facilities.
- (f) **Intensive Care Unit:-** Wusakili hospital houses the only Intensive Care Unit. It has five beds and one crib catering for both hospitals. This facility is for critically sick or injured patients needing life support. The Intensive Care Unit is spacious with modern life support machines such as new port ventilators and the bedside central monitors.
- **Laundry:-** All the cleaning of linen and patients garments are done here.
  - **Transport:-** Wusakili hospital operates the ambulances and general call out vehicles. The ambulances are fitted with radio communication systems. These are controlled by the Switchboard Operators at Wusakili.
  - **Radiology:-** Wusakili hospital caters for general Radiography. Nkana runs the computed Tomographic services (CT Scan) which is the only one in the country.
  - **Theatre:-** Wusakili hospital has a large theatre with autoclave machines. It caters for theatre cases for both hospitals. Nkana theatre is closed.
  - **Physiotherapy:-** Like Nkana, Wusakili hospital has Physiotherapy electrotherapy and physical exercise facilities.

## Preventive Services

The Division runs 14 M.C.H. clinics in the residential areas and 5 clinics at Plant Site Clinics. The residential clinics are mainly concerned with general screening of female and children patients, maternal and child services (ante-natal) and Immunisation services for children under 5), Nutritional Surveillance, cookery demonstration, Family Planning and Home Based Care Services for HIV/AIDS patients and the terminally sick. All patients are encouraged to attend the nearest clinic when they are ill to decongest the Hospital Out Patients services.

Plant Site Clinics:- These offer First Aid services to accident victims and also deal with minor ailments to miners. Serious conditions are referred to the hospital.

## OUTPATIENT ATTENDANCE

Contributory	1993/94	1994/95	1995/96
Mine Employees	10608	10117	11025
Mine Dependants	27514	17157	35923
Non Miners	5432	5122	5684
<b>Total</b>	<b>43554</b>	<b>32396</b>	<b>52633</b>

Non-Contributory	1993/94	1994/95	1995/96
Mine Employees	19960	16115	13917
Mine Dependants	49631	36434	33313
Non Miners	5467	4503	5031
<b>Total</b>	<b>75058</b>	<b>57052</b>	<b>52261</b>

## HOSPITAL ADMISSION

Contributory	1993/94	1994/95	1995/96
Mine Employees	772	579	663
Mine Dependants	2390	1813	2036
Non Miners	976	703	831
<b>Total</b>	<b>4138</b>	<b>3095</b>	<b>3530</b>

<b>Non-Contributory</b>	<b>1993/94</b>	<b>1994/95</b>	<b>1995/96</b>
Mine Employees	2791	2802	2353
Mine Dependants	10845	10341	9225
Non Miners	2459	2357	1988
<b>Total</b>	<b>16695</b>	<b>15500</b>	<b>13566</b>

**Bed Capacity and Occupancy**

<b>Contributory</b>	<b>1993/94</b>	<b>1994/95</b>	<b>1995/96</b>	<b>1996/97</b>
Average Bed Occupancy	39	38.9	41	40.1
Average Stay of Patient (day)	3.84	3.46	0.58	3.16
Bed Occupancy Rates %	29.1%	27%	3.7%	36.9%

<b>Non Contributory</b>	<b>1993/94</b>	<b>1994/95</b>	<b>1995/96</b>	<b>1996/97</b>
Average Bed Occupancy	180	175	168	160
Average Stay of Patients	4.6 days	4.5	4.63	4.6
Bed Occupancy Rates %	54%	53%	50%	48%

Summary of Hospitals/Clinics Attendance for the Last Three Years is as follows:

	<b>1993/94</b>	<b>1994/95</b>	<b>1995/96</b>
Mine Employees	27,159	25,264	17,989
Mine Dependant	55,328	66,867	60,183
Non Employees	12,164	10,139	8,437
% of Non Employees	44.7%	40.1%	46%

AC

**TABLE 1**

**HOSPITAL ATTENDANCES FOR ZCCM AND SUBSIDIARY COMPANIES (1996/97)**

**ZCCM LIMITED**

**DIVISION/PT. TYPE (NO.)  
NKANA/WUSAKILE**

	<b>EMP</b>	<b>DEP</b>
WORKING	10,962	55,611
RETIRED	230	
MEDICAL DISCHARGE	203	
INTER DIVISIONAL		

**SUBSIDIARY**

MPELEMBE DRILLING	699	1,004
NDOLA LIME	--	--
SCAW LIMITED	41	192
TECHPRO	51	278
OTHER (SPECIFY) MUZ	40	232
<b>TOTAL</b>	<b>12,226</b>	<b>57,317</b>

**TABLE 2**

**OPD ATTENDANCES (1996/97)**

**PATIENT TYPE**

<b>Facility Type</b>	<b>Mine Employees</b>	<b>Dependants</b>	<b>Inter Div.</b>	<b>Non-Mine NRP</b>	<b>Ex-Miners (MD &amp; R/E)</b>	
<b>NKANA</b>						
LOW	13,844	36,371	8,325	736	5,771	1923
HIGH	8,612	19,140	101	410	4,108	20
<b>TOTAL</b>	<b>22,456</b>	<b>55,511</b>	<b>8,426</b>	<b>1,146</b>	<b>9,879</b>	<b>1943</b>

Handwritten signature or initials over the total value 9,879.

## HOSPITAL

### ESTABLISHMENT OF DOCTORS

CHIEF MEDICAL OFFICER/GROUP MEDICAL ADVISER	01
SENIOR CONSULTANT ORTHOPAEDIC SURGEON	01
SENIOR CONSULTANT PHYSICIAN	01
GROUP PHYSICIAN OCCUPATIONAL HEALTH	01
GROUP CONSULTANT RADIOLOGIST	02
CONSULTANT SURGEON	02
CONSULTANT PAEDIATRICIAN	01
CONSULTANT ANAESTHETIST	02
CONSULTANT OBS/GYNAECOLOGY	01
CONSULTANT PHYSICIAN	01
CONSULTANT PATHOLOGIST	01
DEPUTY CHIEF MEDICAL OFFICER	01
GROUP SPECIALIST OPHTHALMOLOGIST	01
SPECIALIST SURGEON	01
MEDICAL OFFICER	19
INTERNEE DOCTOR	02

**ESTABLISHMENT OF NURSES** 323

### PHARMACY:

SENIOR PHARMACIST	01
PHARMACIST	01
PHARMACY TECHNICIAN	07
STOREKEEPER MEDICAL STORES	01
PHARMACY ORDERLY	01
<b>TOTAL</b>	<b>11</b>

### MEDICAL PATH LAB

CHIEF LAB TECHNOLOGIST	01
SECTIONAL LABORATORY TECHNOLOGIST	04
LABORATORY TECHNOLOGIST	07
BLOOD TRANSFUSION OFFICER	01
SECRETARY/TYPIST	01
MORTUARY ASSISTANTS	03
ORDERLY LAB ASSISTANT	01
CLEANER/ATTENDANT PATH LAB	01
<b>TOTAL</b>	<b>19</b>

### PHYSIOTHERAPY

PHYSIOTHERAPIST IN-CHARGE	02
PHYSIOTHERAPIST	01

**RADIOGRAPHY**

RADIOGRAPHER IN-CHARGE	02
RADIOGRAPHER	01
DARK ROOM ASSISTANT	02
<b>TOTAL</b>	<b>05</b>

**PUBLIC HEALTH**

CHIEF HEALTH OFFICER	01
SENIOR HEALTH OFFICER	01
HEALTH OFFICER	01
HEALTH ASSISTANTS	02
CREW BOSS PUBLIC HEALTH	01
STOREMAN PUBLIC HEALTH	00
WATER SAMPLER	01
LEADING HAND PUBLIC HEALTH	01
SPRAYER/SEARCHER	07
REFUSE ATTENDANT	00
<b>TOTAL</b>	<b>17</b>

**DENTAL SURGERY**

SENIOR DENTAL SURGEON	01
DENTAL SURGEON	01
DENTAL THERAPIST	01
CLERK/RECEPTIONIST DENTAL	01
DENTAL CLEANER	01
<b>TOTAL</b>	<b>05</b>

**FIRST AID TRAINING**

SENIOR FIRST AID OFFICER	02
DEMONSTRATOR/TRAINING ASSISTANT FIRST AID	01
ORDERLY FIRST AID	01
<b>TOTAL</b>	<b>04</b>

<b>CLINICS</b>	<b>NO. OF BEDS</b>	<b>HOURS OPEN/DAY</b>
J - CLINIC (CHAMBOLT)		24 HOURS
C7 - CLINIC (MUMANA)	05	24 HOURS
NKANA EAST CLINIC	03	24 HOURS
NKANA WEST CLINIC	--	08 HOURS
TWIBUKISHE CLINIC	03	24 HOURS
MINDOLO II	06	24 HOURS

MINDOLO I	07	24 HOURS
MISESHI MATERNITY	04	24 HOURS
P-MATERNITY	02	24 HOURS

**PLANT SITE CLINICS**

SOB CLINIC		24 HOURS
CENTRAL SHAFT		24 HOURS
REFINERY		24 HOURS
MINDOLO MAIN		24 HOURS
MINDOLO NORTH		24 HOURS

**ADMINISTRATIVE**

HOSPITAL ADMINISTRATION, CATERING - RECORDS, CLERK ETC.	185
---	-----

GRAND TOTAL	610
-------------	-----

Table 1

People expected to use Medical facilities post privatisation

CATEGORY	NUMBER	%
Working Employees & Dependents	180441	89
Mpelembe Drilling	9336	5
Ndola Lime	2802	1.4
Ndola Copper Refinery	1449	1
Retired	1062	1
Techpro (Z) Limited	549	0.3
Medical Discharge	504	0.2
Prosec (Z) Limited	407	0.2
Zamdet	304	0.2
Scaw Limited	329	0.2
MUZ (Mine Workers Union of Zambia)	272	0.1
Interdivisional	62	0.03
Mpelembe Properties	43	0.02
Others	5408	3
Total	202,968	102

\* Rounding error Source: Submissions from Chief Medical Officers

NKANA HOSPITAL - MEDICAL COSTS TO OCTOBER 1997

	94/95		95/96		96/97 Todate	
	KM	US\$000	KM	US\$000	KM	US\$000
Budget	4376	5830	4611	6360	6923	5835
Actual	3848	5850	4881	5209	5909	4699



**NKANA DIVISION MEDICAL COSTS TO OCTOBER 1997**

**COST BY ELEMENT**

	94/95		95/96		96/97 Year Todate	
	KM BUDGET	ACTUAL	KM BUDGET	ACTUAL	BUDGET	ACTUAL
Local Labour	1309	1767	2124	2228	3782	3349
Expatriate Labour	363	241	188	409	558	600
Stores (General)	3672	2922	3466	3107	4374	3168
Drugs & Dressing	804	1958	1963	1108	22375	1595
Chemicals/Reagents	360	206	409	241	371	321
Food Stuff	306	240	246	290	271	387
P/Clothing	157	19	36	33	58	19
Stationery	88	13	78	22	45	24
Cleaning Materials	227	31	32	37	71	52
Medical Gases	41	44	59	59	73	82
MV Spares	21	6	12	20	55	16
Reallocated Expenses	149	118	172	185	2279	404
Sundry Expenses	152	15	44	55	28	29
Working Costs Projects	41	8	72	0	120	21
Contractors	253	14	40	68	72	92
Inter Div Charges	-1277	-829	-1091	-625	-1784	-1291

**LOCAL EMPLOYEES Professional Staff (Alphabetical Order)**

NAME	QUALIFICATION	SPECIALISATION
------	---------------	----------------



<b>Chiponda Charles Dr</b>	<b>Bsc (HB) MBBS (OSM)</b>	<b>Assistant Chief Medical Officer (Health Services Management)</b>
<b>Kabole Mwape Mbewe (Dr)</b>	<b>Bsc MB ChB MRCP - UK</b>	<b>Consultant Paediatrician Paediatrics</b>
<b>Maboshe Patrick Mwanawina</b>	<b>Bsc MB ChB MRCP - UK</b>	<b>Senior Consultant Physician Internal Medicine (Physician)</b>
<b>Mulenga Henry (Dr)</b>	<b>Bsc MB ChB MRCP - UK</b>	<b>Consultant Physician Internal Medicine (Physician)</b>
<b>Mutale Chola Baldwin (Mr)</b>	<b>MD/FRCS Higher Surgical Training in orthopaedics UK GDR</b>	<b>Senior Consultant Orthopaedic Surgeon Orthopaedics</b>
<b>Ngoma Charles Caleb (Dr)</b>	<b>Bsc MB ChB FRCR</b>	<b>Consultant Radiologist Radiology</b>
<b>Sendama John (Dr)</b>	<b>Bsc MB ChB, FRCS I London, FRCS I Dublin</b>	<b>Specialist Ophthalmologist Ophthalmology</b>
<b>Simukonde Musyani (Dr)</b>	<b>Bsc MB ChB M Comm H Dip HSM (UK)</b>	<b>Group Medical Adviser and Chief Medical Officer, Public/Community Health, Health Service Management</b>
<b>Simwizye Tresphor Kapupula (Mr)</b>	<b>Bsc MB ChB FRCS - UK</b>	<b>Consultant Surgeon General Surgery</b>
<b>Tembo Dixon Chaponda (Dr)</b>	<b>Bsc MB ChB FRCA II - UK DA - UK</b>	<b>Consultant Anaesthetist Anaesthesia</b>

*[Handwritten mark]*

**EXPATRIATE EMPLOYEES**

NAME	QUALIFICATION	SPECIFICATION
Desai H M (Dr)	BDS, D Orth,RCs	Orthodontic Dentistry
Goel R G (Professor)	MBBS Dip Chin Path.MD Pathology	Consultant Pathologist Histopathology
Menon GK (Dr)	MB BS DA	Consultant Anaesthetist Anaesthesia
Patel CK (Dr)	MB BS DD MRE NB	Consultant Radiologist Radiology
Sinha P (Mr)	MB BS FRCS	Consultant Surgeon Surgery
Sathya Naathan (Dr)	BDS	Dental Surgeon Dentistry/Acupuncture
Waloch M (Dr)	PhD (University Medical School Warsaw)	Consultant Obs/Gynae Obstetrics and Gynaecology

**LABOUR DISTRIBUTION BY FUNCTION**

CATEGORY	LOCAL	EXPAT	TOTAL
Doctors	34	7	41
Nurses	273	0	273
Paramedicals	44	0	44
Administration Staff	153	0	153
<b>Total</b>	<b>604</b>	<b>7</b>	<b>611</b>

**Table 1**

**OUTPATIENTS ATTENDANCE by Mine Hospital for Mine Employees, dependants, interdivisional and non mine**

FACILITY TYPE	NCHANGA		NKANA		TOTAL
	HIGH	LOW	HIGH	LOW	
MINE EMPLOYEE	382	2089	8612	13844	24927
DEPENDANTS	1932	1470	19140	36371	58913

INTERDIVISIONAL			101	8325	8426
NON MINE	287	1117	4108	6507	12019
TOTAL	2601	4676	31961	655047	104285

**Table 2**

**BED CAPACITY, OCCUPANCY RATE (Average stay in hospital, bed occupancy rate, inpatient days)**

**By different Mine Hospitals**

FACILITY TYPE	NCHANGA		NKANA	
	HIGH COST	LOW COST	HIGH COST	LOW COST
Bed Capacity	110	450	101	338
Average Stay in Hospital	5	6	4	5
Bed Occupancy Rate %	30	52	40	48
In Patient Days	7030	45630	11800	47462

**Table 3**

**Admissions by Mine Hospitals for mine employees, dependants, interdivisional and non mine**

FACILITY TYPE	NCHANGA		NKANA		TOTAL
	HIGH	LOW	HIGH	LOW	
Mine Employees	26	121	526	2112	2785
Mine Dependants	88	538	1864	8559	11049
Non Mine	53	202	405	1301	1961
Interdivisional			59	81	140

*[Handwritten mark]*

**PEOPLE EXPECTED TO USE MEDICAL FACILITIES POST PRIVATISATION at Mine Hospitals**

DIVISIONAL/PT TYPE NO.	NCHANGA		NKANA/WUSAKILE	
	EMP	DEP	EMP	DEP
<b>ZCCM LIMITED</b>				
Working	8,766	20,153	10,962	55611
Retired	12	-	230	
Medical discharge	20	-	203	
Inter Divisional	9	-	-	
<b>SUBSIDIARY</b>				
Mpelembe Properties	-	-	-	
Mpelembe Drilling	331	1,655	699	1004
Prosec (Z) Limited	-	-	-	
Ndola Lime	-	-	-	
Techpro (Z) Limited	-	-	-	
Ndola Copper Refinery	-	-	-	
ZAM DET	-	-	-	
Scaw Limited	-	-	51	278
MUZ	-	-	40	232
Others	1,352	4,056	-	
<b>Total</b>	<b>10,490</b>	<b>25,864</b>	<b>12,185</b>	<b>57,125</b>

**LEGEND:**

Emp = Employee, Dep = Dependant of employee

*[Handwritten signature]*

*AS*

**PART II - EDUCATION SERVICES**

ZCCM Nkana Division runs two primary schools, one in Kitwe and the second school at Kalulushi which has since been taken over by the Metorex Consortium.

There are no ZCCM schools at Chambishi township. Employees' children and dependants attend local (government) primary schools and a junior secondary school at Chambishi. The majority of secondary school children attend the secondary school in Kalulushi. ZCCM provides a bus service to employee's children and dependants attending secondary school education (Government schools) in Kalulushi. Estimated cost of this bus service is K100 million per annum.

**EDUCATION FACILITIES (NKANA PRIMARY SCHOOL)**

School Enrolment = 870920 in 1998)

Number of classes = 32 (34 in 1998)

Number of Teachers = 42

Administrative Staff = 03

**Breakdown of Staff by Grade**

ADMIN STAFF		TEACHING STAFF		SUPPORT STAFF						TOTAL
G12	G11	G1	G2	G3	G4	G5	G6	G7	G8	
3	0	22	20	0	9	2	0	2	8	66

Type of syllabus followed: Basic Zambia Primary Course

High Quality cost-effective education is offered.

- NB:
1. Will be recruiting 5 Class Teachers and 1 Computer Science Teacher by November 1997.
  2. Will lose on Class Teacher on transfer to Nkwaz Primary School in Lusaka at end of this term.

*AS*

### **PART III - RECREATIONAL SERVICES**

#### **SOCIAL SERVICES**

There is one Social Club run by ZCCM through a Club Committee and also two other clubs which operate autonomously. (The details of which are set out overleaf).

All these clubs are in the Council area but use ZCCM facilities. Services provided by ZCCM are water, electricity, general maintenance of the buildings, lawns and surroundings.

The company provides assistance to a number of youth programmes and youth clubs who are suitably registered under Community Services. The services provided include transport for outside sporting activities, accommodation expenses for team members and officials, the sports kits and where necessary registration and affiliation fees with National Sports Bodies.

The detail and cost of these social services to ZCCM is shown in the table set out below:

**NKANA DIVISION / CHAMBISHI MINE  
COMMUNITY SERVICES**

**DETAILS OF SOCIAL AND MUNICIPAL SERVICES AT THE CHAMBISHI MINE AS AT 9 DECEMBER 1997  
SOCIAL CLUBS**

**CLUBS WITH CLUB HOUSES**

NAME OF CLUB	LOCATION/OWNERSHIP	STATUS	SERVICES PROVIDER		COST (IF ANY)	REMARKS
			WATER	ELECT		
RUGBY	CHAMBISHI	AUTONOMOUS	ZCCM	ZCCM	Difficult to quantify but cost are mainly through services provided to the club. Cost of maintenance on buildings also borne by the company	SEE APPENDIX II
TENNIS	CHAMBISHI	AUTONOMOUS	ZCCM	ZCCM		
MINE CLUB	CHAMBISHI	AUTONOMOUS	ZCCM	ZCCM		
FOOTBALL	CHAMBISHI	ZCCM SPONSORED	ZCCM	ZCCM		

**CLUBS WITHOUT CLUB HOUSES**

<b>NAME OF CLUB</b>	<b>LOCATION/OWNERSHIP</b>	<b>STATUS</b>	<b>HALL/FACILITY USED</b>	<b>REMARKS</b>
DARTS	CHAMBISHI	ZCCM SPONSORED	TENNIS CLUB	Refer to section 1a
CHES	CHAMBISHI	ZCCM SPONSORED	MINE REC. CLUB	
BADMINGTON	CHAMBISHI	ZCCM SPONSORED	MINE REC. CLUB	
CROQUET	CHAMBISHI	ZCCM SPONSORED	MINE REC. CLUB	
DRAUGHTS	CHAMBISHI	ZCCM SPONSORED	MINE REC. CLUB	
NETBALL	CHAMBISHI	ZCCM SPONSORED	GOVT SCHOOL	
BASKETBALL	CHAMBISHI	ZCCM SPONSORED	MINE REC. CLUB	
TABLE TENNIS	CHAMBISHI	ZCCM SPONSORED	MINE REC. CLUB	
VOLLEY BALL	CHAMBISHI	ZCCM SPONSORED	GOVT SCHOOL	
HAND BALL	CHAMBISHI	ZCCM SPONSORED	GOVT SCHOOL	
JUDO	CHAMBISHI	ZCCM SPONSORED	MINE REC. CLUB	
BOXING	CHAMBISHI	ZCCM SPONSORED	MINE REC. CLUB	
YOUTH SOCCER	CHAMBISHI	ZCCM SPONSORED	STADIUM	
ATHLETICS	CHAMBISHI	ZCCM SPONSORED	STADIUM	
KARATE	CHAMBISHI	ZCCM SPONSORED	MINE REC. CLUB	
DRAMA	CHAMBISHI	ZCCM SPONSORED	MINE REC. CLUB	

## **FOOTBALL FIELDS**

There are two playing fields in Chambishi township; one is a football pitch and the other is a rugby field. The fields and buildings are maintained by ZCCM. One stadium is used by the First Division Chambishi Football Club which is sponsored by ZCCM through the Community Services. ZCCM meets all costs of the team's kit, travel expenses, hotel accommodation, food and transport. ZCCM also bears winning bonuses, camp and training allowances for the players including local cup games. Details of expenses for the current year are given in the table below:

**ZAMBIA CONSOLIDATED COPPER MINES LIMITED  
NKANA DIVISION/CHAMBISHI MINE**

**CHAMBISHI FOOTBALL CLUB EXPENDITURE ON LEAGUE/CUP GAMES**

<b>NO. OF GAMES</b>	<b>WINNING ALLOWANCES K</b>	<b>TRAINING ALLOWANCES K</b>	<b>CAMPING ALLOWANCES K</b>	<b>MATCH OFFICIALS K</b>	<b>TOTALS K</b>
15 (HOME)	7125000	1950000	1950000	810072	11835072
15 (AWAY)	7125000	1950000	1950000	0	11025000
5 (HOME)	2375000	650000	650000	630000	4305000
<b>TOTAL</b>	<b>16625000</b>	<b>4550000</b>	<b>4550000</b>	<b>1440072</b>	<b>27165072</b>

**NOTE**

1. Winning allowances are paid to 16 players and 3 officials i.e. Coach, Assistant Coach and first Aider.
2. Camping expenses are spent on food, cleaning materials and toiletries for the team for one night. Three meals are prepared.
3. Match officials are paid to 3 Referees and 1 Match Commissioner.
4. The home games are expected to attract gate takings. However, these have not be expectations since the team entered 1st division. An average of K25000 is collected per game.

## **WOMEN CENTRES**

There is one Women Centre situated in the main township. The centre has one ZCCM employee who is assisted by one temporary worker. All equipment, teaching aids, and materials are funded by ZCCM. The centre caters for an average of 60 women per year. They are trained in Basic and Advanced Home Economics Course. Trainees are spouses of ZCCM employees and their dependants.

## **OTHER SERVICES**

Public Health related services such as refuse collection and township cleaning are contracted out to registered contractors.



#### **PART IV - MUNICIPAL INFRASTRUCTURAL SERVICES**

ZCCM employees in Chambishi live in two townships, namely Chambishi Township with 654 houses of which 453 are low cost, 185 medium cost and 15 high cost houses and Kabanga Township which has a total of 297 low costs houses.

All the townships are within the area serviced by the local Council. Utilities such as water, sewerage, street lighting, road maintenance are the responsibility of the Council who provide the services at a cost to ZCCM. ZCCM in turn provide these services free of charge to the employees. Electricity to the houses is provided by ZESCO who bill ZCCM for the service.

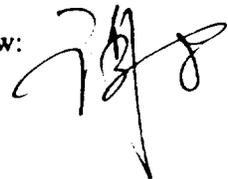
Due to a continued deterioration of Council services and in order to maintain the standard of services due to its employees living in Chambishi Township, ZCCM has over the years taken an active role in helping the Council with some of the responsibilities:

- (i) Roads in the township are maintained by an independent contractor who is, however, supervised by ZCCM on behalf of the Council.
- (ii) Sewerage services and water reticulation plants are maintained by ZCCM. The water source is mainly from the mine and ZCCM owned pumping stations.
- (iii) Supervision of contractors responsible for refuse removal who are employed by the local Council.
- (iv) Street lighting is maintained by ZCCM.

All the above services are a responsibility of the Council and there is an arrangement for ZCCM to recover any costs from the Council.

A number of Chambishi Mine and Chambishi Cobalt/Acid Plant employees reside in Kalulushi and Kitwe. These employees are entitled to the same quality of municipal and social services as applicable to other ZCCM employees in the location where they live.

The range of municipal and housing services is shown in the table set out below:



**ZAMBIA CONSOLIDATED COPPER MINES LIMITED  
NKANA DIVISION/CHAMBISHI MINE**

**MUNICIPAL INFRASTRUCTURE AND HOUSING SERVICES AS AT 17 NOVEMBER 1997**

TOWNSHIP	TOTAL NUMBER OF UNITS	BREAKDOWN OF HOUSING UNITS			UTILITY PROVIDER & COST		SOCIAL SERVICES PROVIDER				
		LOW COST	MEDIUM COST	HIGH COST	WATER & SEWERAGE	ELECTRICITY	REFUSE COLLECTION	STREET LIGHTING	ROAD MAINTENANCE	PUBLIC HEALTH	HOUSING MAINTENANCE
CHAMBISHI	654	453	186	15	CITY COUNCIL K'000/YR 120,000	ZESCO K'000/YR 1380,000	CONTRACTED BY COUNCIL K'000/YR 434,000	CITY COUNCIL K'000/YR 123,000	CITY COUNCIL K'000/YR 239,000	ZCCM K'000/YR 213,000	ZCCM K'000/YR 1,807,000
KABANGA	297	297	NIL	NIL	CITY COUNCIL					AGGR	AGGREGATED
<b>TOTAL</b>	<b>951</b>	<b>750</b>	<b>186</b>	<b>15</b>							