



ENVIRONMENTAL COUNCIL OF ZAMBIA (ECZ)

DECISION LETTER

1.0 PROJECT TITLE:

Proposed Limestone Processing Plant in Senior Chief Chiwala's Area in Masaiti District by Neekanth Lime Zambia Limited

1.1 DATE WHEN PROJECT WAS SUBMITTED: 16/02/2011

1.2 AGENCY DECISION MATURITY DATE: 29/02/ 2012

1.3 PROPONENT/ DEVELOPER:

Neelkanth Lime Zambia Limited

CONTACT PERSON:

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1.4 LOCATION

The proposed project site is located in Chief Chiwala's Area in Masaiti District, with Zambezi Portland Cement to the south, and Ndola Lime Company Limited to the west. To the north is Handyman's Paradise exploration area while to the east is land that has been offered to Dangote Cement. The site is about 12 Kilometres from the Ndola - Kapiri Mposhi Road and about 20 kilometres southeast of the Ndola Central Business District.

2.0 PROJECT DESCRIPTION

Neelkanth Lime Zambia Limited has its registered office located in Ndola. The company has its operation zone in Senior Chief Chiwala's Area in Masaiti District. The Company has been given about 150 hectares of land in Senior Chief Chiwala area and has since obtained Surface Rights and Mining Rights specifically to mine and process limestone. Initially, the project will start with 17 kilns. When fully operational, the lime plant will have a total of 34 vertical brick kilns each having a capacity of 15 tons per day.

The source of raw limestone feedstock for the lime plant will be from the on-site quarrying and when excess is needed it will be bought from existing quarry operations within the area.

The proposed Lime production plant complex will consist of the following main components: -

- Limestone quarry
- 34 Brick Kilns
- A loading ramp
- Mill house
- Warehouse
- Small workshop
- Weigh Bridge
- Crusher plant

Limestone will be brought in from the quarry in 15 ton tipper trucks and off loaded at the yard. Prior to loading these aggregate stones at the Quarry the stones will have been reduced to 34 inch size. Initially there will be a layer of fire wood which will be used as igniters for the kiln. This will be done once in five years when the inner layer of bricks will be replaced.

The limestone will then be loaded in batches of 15 tonnes on top on the first layer after which the fuel (Pet Coke) will be laid on top of the limestone.

The Kiln is then ignited using firewood to start the process. The fire calcines the limestone immediately above it and ignites the pet coke at the other layer. Calcination is basically the breaking down of limestone into Calcium Oxide and Carbon Dioxide, in a reaction which takes place at a temperature of about 898°C.

3.0 DECISION BY AGENCY:

3.1 The Project is **approved** subject to the following conditions:

- 3.1.1 Neelkanth Lime Zambia Limited shall implement the project and all the environmental management commitments as proposed in the Environmental Impact Statement (EIS) **with changes** as proposed by the Zambia Environmental Management Agency (ZEMA) in this Decision Letter and any other conditions that may be issued thereafter.
- 3.1.2 Neelkanth Lime Zambia Limited shall develop a mining code of practice in consultation with the Mines Safety Department that will be adhered to by any contractor that will be engaged.
- 3.1.3 Neelkanth Lime Zambia Limited shall employ the **Best Available Technology Not Entailing Excessive Costs (BATNEEC)** for the installation of the proposed processing plants so as to cause minimal pollution to the environment.

- 3.1.4 Neelkanth Lime Zambia Limited shall limit project activities to 116 hectares. In event that Neelkanth Zambia Limited decides to extend the project, Neelkanth Lime Zambia Limited shall inform ZEMA.
- 3.1.5 Neelkanth Lime Zambia Limited shall initially construct 17 kilns for the proposed project. Thereafter, Neelkanth Lime Zambia Limited shall seek the approval of ZEMA prior to constructing the remaining 17 kilns.
- 3.1.6 Blasting shall be conducted in a manner that shall not cause significant disturbance to nearby communities.
- 3.1.7 Neelkanth Lime Zambia Limited shall maintain vibration and noise levels within acceptable levels throughout the project cycle, and shall frequently monitor vibration and noise levels around the project site especially in nearby communities.
- 3.1.8 Neelkanth Lime Zambia Limited shall employ effective dust suppression techniques in all areas of operation throughout the project cycle.
- 3.1.9 Neelkanth Lime Zambia Limited shall maintain the speed limit in all access roads that shall not endanger life or cause dust.
- 3.1.10 Neelkanth Lime Zambia Limited shall conduct construction activities in such a way as not to cause soil erosion which can lead to sedimentation of nearby Kasamba and Kabundi Streams.
- 3.1.11 Neelkanth Lime Zambia Limited shall adequately consult with the affected people before implementing the project. This consultative process shall be ongoing throughout the project cycle.
- 3.1.12 Neelkanth Lime Zambia Limited shall fully resettle and adequately compensate all the affected households, agricultural field owners, vegetable garden owners and any other issues that may arise during the course of the project. The compensation shall be implemented in consultation with the Ministry of Agriculture and Cooperatives and the Ministry of Community Development and Social Welfare.
- 3.1.13 The site where the Resettlement Action Plan (RAP) will be executed shall be authorized by the appropriate authority and shall be far enough from the proposed project site so that the community is not disturbed by project activities.
- 3.1.14 Neelkanth Lime Zambia Limited shall conduct a detailed survey of the affected area within the proposed project site and the relocation site to ensure that there are no conflicts of interest and that no private land is encroached by the resettlement exercise.
- 3.1.15 Neelkanth Lime Zambia Limited shall conduct progressive rehabilitation and revegetation of quarry site, plant area and any other disturbed areas throughout the project cycle.
- 3.1.16 Neelkanth Lime Zambia Limited shall progressively carry out re-vegetation of the cleared surfaces during the project life-cycle to produce a sustainable vegetation cover, improve visual aesthetics and minimize post closure re-vegetation requirements.
- 3.1.17 Neelkanth Lime Zambia Limited shall not conduct open air burning at any given time throughout the project cycle.
- 3.1.18 Firefighting equipment shall be placed where it can be easily accessed and it shall always be kept in good working conditions. Reflective material shall be used to facilitate visibility at night.

- 3.1.19 Neelkanth Lime Zambia Limited shall provide all workers with personal protective equipment and all workers shall undergo **annual** medical checkups.
- 3.1.20 Neelkanth Lime Zambia Limited shall provide all workers with appropriate firefighting equipment and train all workers in firefighting and in occupational health and safety.
- 3.1.21 Neelkanth Lime Zambia Limited shall prepare an emergency preparedness and response plan before project implementation for verification by the Zambia Environmental Management Agency.
- 3.1.22 Neelkanth Lime Zambia Limited shall obtain permits from Zambia Environmental Management Agency and comply in full with the following regulations throughout the project cycle:
- a) The Air Pollution Control (Licensing and Emission Standards) Regulations, 1996.
 - b) Waste Management Regulations, SI No.71 of 1993;
 - c) Water Pollution Control Regulations, SI No. 72 of 1993,
 - d) Hazardous waste Management Regulations, SI No. 125 of 2001; and,
 - e) The Pesticides and Toxic Substances Regulations, 1994.
- 3.1.23 Neelkanth Lime Zambia Limited shall undertake an environmental audit of the project within a period of **not less than twelve months** and **not more than thirty six months** after completion of the project or commencement of its operations, whichever shall come first.
- 3.1.24 Neelkanth Lime Zambia Limited shall prepare a closure report outlining implementation of all the environmental management commitments presented in the EIS at the end of the project for verification by the Zambia Environmental Management Agency.
- 3.2 The Agency **advises** Neelkanth Lime Zambia Limited:
- 3.2.1 To obtain any other relevant authorizations such as but not limited to:
- a) The Workers Compensation Act;
 - b) The Public Health Act;
 - c) The Town and Country Planning Act;
 - d) The Water Resources Management Act;
 - e) National Heritage Conservation Act;
 - f) The Mines and Minerals Development Act, and
 - g) The Employment Act.
- 3.2.2 To make available information on safety, health and environment to employees before commencement of the project.
- 3.3 Neelkanth Lime Zambia Limited shall comply with environmental standards and/or specific limits of particular pollutants as its responsibility. Thus, compliance with Zambia Environmental Management Agency recommended measures **does not** exempt the developer from its responsibility if such measures do not achieve compliance with environmental control standards.