### **CONTINGECNCY PLAN**

# PROPOSED PROJECT: CRUSHING AND PACKAGING OF DECANNED CERAMIC AUTO CATALYST SCRAP

PROPONENT: ECOLUX TRADING (Pty) LTD

# ENVIRONMENTAL ASSESSMENT PRACTIONER: DELYT INVESTMENT CC

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#### 1. PURPOSE OF THIS DOCUMENT

- To provide an overview of the proposed project, involving the crushing of nonhazardous, scrap de-canned ceramic auto catalyst purchased from scrap yards locally in Namibia.
- To highlight the process that will be followed herein, as well possible environmental and socio-economic impacts of the proposed project.
- To provide possible mitigation measures for adverse environmental impacts

#### 2. BACKGROUND

Ecolux Trading (Pty) LTD is a Namibian registered company involved in the recycling of scrap automotive catalyst converters from wrecked vehicles. A catalytic converter is an exhaust emission control device, which converts toxic gases and pollutants in exhaust gas from an internal combustion engine, to less toxic pollutants by catalysing a redox reaction. Catalytic converters are usually used with internal combustion engines fuelled by either petrol or diesel.

### 3. NEED AND DESIRABILITY OF PROJECT

Catalytic converter recycling is a process that benefits the environment greatly. However, the positive impact it has on the planet is often overlooked, in the industry as the primary objective of the seller is to earn an income. This project would greatly reduce the amount of scarp ceramic catalytic convertors disposed at landfill sites and will also prevent mining metal ore and fabricating the metals as this is a labour and energy intensive process, requiring extensive mining, costly processes and harmful chemical treatments. This project is also desirable as it lowers the need to mine for new raw materials and keeps valuable resources in a closed-loop economy. Furthermore, this project is desirable as it prevents the mining process, which not only pollutes the environment but is also harmful to the mineworkers, who are often underpaid and forced to work in harsh conditions.

#### 4. PROJECT DESCRIPTION

The scrap ceramic catalytic converters will be purchased locally from scrap yards in Namibia, where they are removed from wrecked cars or car repair garages where they are removed/placed when repairing vehicles. This project therefore aims to re-use these waste ceramic catalytic convertors by crushing them into powder form by use of an electric powered crusher or mill with spinning blades and a motor. The crushed product will be packaged in dust proof bags for exportation. In essence, this project aims to recycle the spent/scrap ceramic catalytic converters which would otherwise end up at a landfill in the event that it is not sold, which is highly likely in the Namibian context. It is important to note that Ecolux Trading will not be involved in the transportation as they will enlist the

services of independent freight services such as Kuehne & Nagel Windhoek, Transworld and Worker Freight to transport the packaged crushed product for exportation. These service providers are well experienced in the transportation industry and are insured in the event of any unforeseen eventuality.

#### 5. RECEIVING ENVIRONMENT

The proposed project will be undertaken in a warehouse under a lease agreement, situated in the northern industrial area opposite the Ministry of Home Affairs offices. It is expected that as the proposed site falls within the industrial area where many industries are in operation rezoning will not be required. The warehouse is equipped with an open area where the crusher will be stationed and packaging will be done. There are also ablution facilities (male and female) and the three (3) employees are also provided with a kitchenette away from where the crushing will be conducted.



Figure 1 a) & b): Warehouse where the proposed project will be undertaken



Figure 2 a) & b): Ablution facilities for male and female



Figure 3: Kitchenette for employees

## **6. POTENTIAL IMPACTS**

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POSITIVE IMPACTS	NEGATIVE IMPACTS AND
	PROPOSED MITIGATION
<ul> <li>Preservation of finite resources as recycled components lowers burden of extracting new materials from the earth through exhaustive mining processes.</li> <li>Reduction in waste sent to landfills</li> <li>Job creation for locals who will be employed on the proposed project</li> <li>Help boost local/regional/international economic growth</li> <li>Open up other investment opportunities</li> </ul>	Possible creation of dust fumes. The Crusher to be used in operations is designed with hoovers to collect any fugitive dust fumes as an engineering control as mitigation measure, to ensure that possible dust fumes are absorbed. The employees will also be provided with the necessary personnel protective equipment including overalls, eye protection gear as well as face masks and respirators in an effort to curb inhalation of possible fugitive dust fumes.