

# **VERIFICATION INSPECTION OF REFRIGERANTS CONTAINING BANNED CONTROLLED SUBSTANCES IN MOMBASA, MAY 2012**

## **Introduction**

The National Environment Management Authority (NEMA) is charged with the responsibility of enforcing Environment Management and Coordination (Controlled Substances) Regulations, 2007 in liaison with the relevant Lead Agencies.

These regulations require that any person dealing (trading) in ODS must obtain a import/export license or permit from NEMA. The license shall specify among other details quantities of substances imported, the type of substances to be imported as well as name and address of the importer/exporter (the trader). NEMA has been working in collaboration with the Customs Services Department of Kenya Revenue Authority (KRA) to ensure compliance to these Regulations.

Following a routine analysis of refrigerants by Customs officials for the cargo imported by the trader vide license number NEMA/CODS/MKL/0016 into the country through random sampling, it was found that the sampled cylinders (R410A and R404A) contained banned Chlorofluorocarbons (CFCs). This prompted Customs to pick another sample, which also failed to pass the test.

As part of their procedures, Customs had given the trader a provisional release meaning that in case of any anomaly, the goods could be seized. The goods were cleared and taken to Mishkat's premises. During that period, out of 25 cylinders for R410A, 2 had been sold and out of 30 cylinders of R 404A, 2 had also been sold out.

The Customs through their liaison Officer, Mr. Bernard Oyicho alerted NEMA on 27<sup>th</sup> April 2012 of those developments which prompted a verification exercise to be held between 2<sup>nd</sup> and 5<sup>th</sup> May 2012 at the premises of the trader in Mombasa.

## **1.1 Objective**

The key objective of the exercise was to ascertain the purity of the imported refrigerants

It was also important to understand whether illegalities had been committed or not

## **2.0 Methodology**

- On day one, preliminaries were done which included meeting the Customs Officers, Scenes of Crime Police and the owners of the controversial shipment, where a programme was arranged on how analysis was to be conducted. In addition, the cylinders were marked to avoid interference with the scheduled work until the following day when it commenced.

- Analysis was done and the results showed that all the cylinders for R404A and R410A had reasonable percentages of R12, which was banned in 2010.
- Finally the findings were shared with the representative of the trader and next actions to be taken were given during the meeting.

Team Members were;

1. Selelah Okoth-NEMA (team leader)
2. Molu Huqa-NEMA
3. Oceanic Sakwa-NEMA
4. Harriet Gikonyo- Customs, KRA
5. Winrose Gituto-NEMA Police Officer
6. Michael Kandie-NEMA Police Officer

### 3.0 Findings

The findings were that;

1. All the cylinders for R404A and R410A had varying compositions between 11.5-12.9% and 1.2-1.4% respectively of R12
2. The trader did not comply with the provisions of Environmental Management and Coordination (Controlled Substances) Regulations, 2007. The issues of failure to comply were as follows;
  - a) The consignment of the imported refrigerants had been adulterated and mis-declared;
  - b) Importing refrigerants without an import permit; and
  - c) Trading in phased out ODS contrary to Environmental Management and Coordination (Controlled Substances) Regulations, 2007

#### 3.1 Photos taken during the Verification Process



Fig. 1: Photo of the ODS Identifier



Fig.2: Inspection team setting up the ODS identifier for analysis



Fig.3: The analysis results on the screen of the ODS identifier from R134a-The results confirm that the cylinder has 100% R134a (R12-0%, R22-0%, HC-0% and Air-0%)



Fig. 4: The analysis results on the screen of the ODS identifier from R410A-The results confirm that the cylinder has 98.7% R134a and R12- 1.3% (R22-0%, HC-0% and Air-0%)



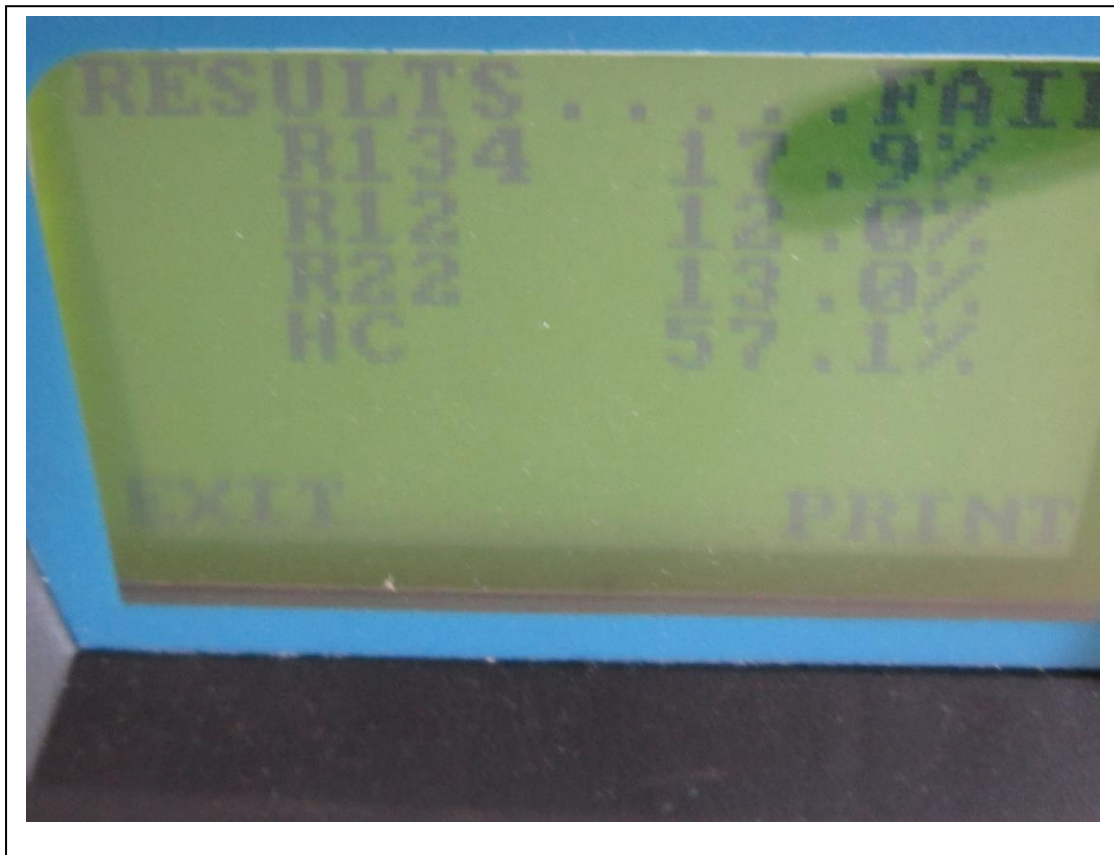


Fig. 5: The analysis results on the screen of the ODS identifier from R404A-The results confirm that the cylinder has R134a-17.9% and R12- 12%, R22-13.0%, HC-57.1



Fig. 6: Some of the labeled R410A cylinders (Pink in colour)



Fig. 7: Some of the labeled R404A cylinders (Orange in colour)



Fig 8: Team of inspectors after labeling the cylinders R410A (Pink) and R404A (orange)



Fig. 9: ODS Desk Officer flushing out the gas for analysis



#### 4.0 Actions Taken

The trader was informed that the consignment that has been analyzed had been found to contain R12 and would be confiscated and a notice of seizure vide D No 127756 was issued by the Customs Officer for repossession of the goods which were to be returned to Customs Warehouse at the Kilindini Port, Mombasa.

The trader was therefore to meet the expenses of transporting the consignment back to the Port.

NEMA communicated to the trader ordering him to reshipe the consignment at their own cost. Customs and NEMA ensured that reshipment is done back to country of origin.

NEMA revoked the license of the trader for two consecutive years and suspend them from trading in refrigerants until the Authority found it appropriate to lift the suspension.

#### 5.0 Recommendations

A follow up inspection was done to ensure that the goods were returned to Customs Warehouse awaiting reshipment. A reshipment order was served to the trader on 10<sup>th</sup> May 2012.

The goods were finally transported back to the warehouse



Fig 10: NEMA officers verifying the cylinders at the Customs Warehouse, Mombasa



The recommendations proposed were that;

1. NEMA to liaise with relevant institutions such as the Ozone Secretariat and National Ozone Unit to ensure that suppliers involved in production of banned ODS are punished in any possible manner. In this case, NEMA needs to liaise with these institutions to punish Harp International based in United Kingdom and has a franchise in Dubai (UK has signed and ratified the Montreal Protocol) which is the frequent supplier of refrigerants to the trader.
2. Placement of a NEMA officer at the Port where it will be compulsory to check all consignments into the country controlled under EMCA, 1999.
3. NEMA needs to urgently acquire ODS identifier and train inspectors to enhance compliance and enforcement work for officers at border points. The starting point should be at the Port of Kilindini.
4. The adulterated refrigerants might affect performance of the compressors that may use them and must not be resold and if possible should be disposed of after reshipment.