



# EXPLORING NEW BUSINESS OPPORTUNITY IN CRUSHED REFINED SODA (CRS) - (Sodium Sesquicarbonate)

## Background

Crushed Refined Soda is a TCML product obtained from crushing and washing natural trona from Lake Magadi. Apart from it being used for production of natural Soda Ash, it has been traditionally used in many other applications such as;

- Manufacturing of Sodium silicate,
- Animal feed additive, Raw tobacco chewing,
- Mining applications,
- Effluent treatment,
- Flu gas treatment,
- Compost heap treatment.

Lately, there has been a positive growth in sales from the battery manufacturing Industry in Uganda, Kenya and South Africa.

Brochures and information on the TCML website outlining the various applications for CRS have been updated. This has continued to receive positive response as the potential customers engaged the TCLM team on technical data and specifications. Samples of product continue to be dispatched to potential customers who share feedback on product quality.

#### Growth strategy into new global markets

In Kenya CRS has been known to work well in livestock as a rumen buffer giving high production in dairy animals. It is on this back ground that we aimed to market the product to animal feed industries globally. Our Sales and Marketing team led by Frankline Mahaga, the Sales manager - CRS, embarked on a rigorous product marketing assignment aimed at building new markets for the product.

This was achieved through;

- 1. Potential customer emailing and product introduction
- 2. Product brochure circulation to potential customers
- 3. Potential customer visits
- 4. Collaborative marketing with TCL India and TC South Africa teams

The USA market has responded positively to the introduction of the

product, and through several engagements with the TCML sales, manufacturing and quality teams, agreed to run a trial project for production and dispatch of an initial quantity of 80 Metric tonnes of the product.

This being a new market and different from the traditional markets, it presented some challenges.

Challenges and dynamics

- 1. Challenges on adequate equipment to meet the required volumes in time for shipment.
- 2. Product quality requirements The US market specified low Flouride content CRS (NaF of 0.8%), much lower than the average NaF of 1.24% in the existing product.
- Challenges in modification of the process to include drying, crushing and screening of the product to attain the strict particle size requirements.
- 4. Logistical challenges of seamlessly moving product from Magadi factory to the Mombasa shipping shed without affecting the mainstream product transfers of salt and Soda Ash.

Since the TCML team was determined to get the market, they worked tirelessly to find solutions to these challenges," says- Frankline

# Solutions to challenges

- 1. A cross functional team comprising of the sales, manufacturing, engineering, quality and logistics team was formed to focus on an implementation plan of achieving the customer requirements.
- 2. Low fluorine content trona was achieved by implementing a shallow trona mining plan.
- Process was modified by resuscitating the mothballed PAM plant section 700 that has a conveyor system and introduction of a mill, screen and extra burner to ensure compliance to particle size specification.
- 4. Revamping the PAM silos and cleaning them to create adequate storage space at Magadi and therefore assure seamless dispatch of product as well as prevent product contamination.
- Revived the trans-shipment facility at Kajiado to allow for parallel transfer of product by both rail and trucks to Mombasa.
- 6. Created a dedicated storage place for product in Mombasa.

All these interventions were only possible through good team spirit within the TCML staff and collaboration with the customer, ultimately, this paid dividends!

#### Key Milestones and Achievements...

- Samples of shallow mined CRS were approved by the potential customer.
- The customer was satisfied after visiting Lake Magadi factory with their Agent, shipping line and Financier to carry out due diligence on the sustainability of supplies of the required quality.
- A break through to the USA market with an initial trial order of 80 Metric tonnes supplied.
- In February 2018, an order of 8,000 Metric tonnes shipped to customer.
- Plans to ship 45,000 tes by December 2018 awaiting confirmation of order.
- TCML certified for Good Manufacturing Practices (GMP) as a requirement for animal feed imports into Europe (Strategy for capturing potential European markets)

## **Business Impact on TCML and Future dimensions**

CRS sales grew upward from 19,813 tes prior year to 40,416 tes in FY 2017/18, representing a growth of 104%.

There is still potential for growth as we continue to market low NaF CRS (Max. 0.8%) to dairy industries in Africa, India, Europe and Far East.

Through integrity, dedication, commitment, hard work, prayer, honesty and determination by TCML team, the FY 2017/18 sales volume budget was surpassed and new market penetration was realised.

Bravo to the team that made this happen!!!

## Frankline Mahaga, Sales Manager- Tata Chemicals Magadi

# Photo Gallery



1. US customer accompanied with agent , financier and shipping agent on a tour of the Magadi factory



2. The customer on site inspecting production facility



3. Mr Greg E. Fallin, President of FP&S (customer) inspecting quality of CRS pile at Lake Magadi



6. MV TAI SHINE docking at Mombasa port to ship 8,000 Metric tonnes of CRS to USA



5. TCML management team with the visitors



4. TCML MD Eng, Jackson Mbui interacting with the team at Lake Magadi