

REPORT NO. 354

**Rebate of duty on solid sodium hydroxide for use in
the extraction of uranium oxide from uranium ore**

The International Trade Administration Commission of South Africa herewith presents its
Report No. 354: **Rebate of duty on solid sodium hydroxide for use in the extraction of
uranium oxide from uranium ore**



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Siyabulela Tsengiwe
CHIEF COMMISSIONER

PRETORIA

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REPUBLIC OF SOUTH AFRICA

INTERNATIONAL TRADE ADMINISTRATION COMMISSION OF SOUTH AFRICA

REPORT NO. 354

REBATE OF DUTY ON SOLID SODIUM HYDROXIDE FOR USE IN THE EXTRACTION OF URANIUM OXIDE FROM URANIUM ORE

Synopsis

Protea Mining Chemicals (Pty) Ltd applied for rebate of duty on solid sodium hydroxide (caustic soda) classifiable under tariff subheading 2815.11, for use in the extraction of uranium oxide classifiable under tariff subheading 2612.10 from uranium ore.

The Commission found that although the membrane cell grade of caustic soda required for the uranium extraction process is manufactured in the SACU, it is not yet manufactured in sufficient quantities to supply the industry using caustic soda for use in the extraction of uranium oxide from uranium ore. The Commission further found that the applicable rate of customs duty is an onerous burden on the uranium mining industry, as it has a substantive cost-raising effect.

The Commission therefore decided to recommend the creation of a rebate facility for caustic soda classifiable under tariff subheading 2815.11 for use in the extraction of uranium oxide from uranium ore, in such quantities and at such times as the International Trade Administration Commission of South Africa may allow by specific permit.

THE APPLICATION AND TARIFF POSITION

Protea Mining Chemicals (Pty) Ltd applied for rebate of duty on solid sodium hydroxide (caustic soda) classifiable under tariff subheading 2815.11, for use in the extraction of uranium oxide classifiable under tariff subheading 2612.10 from uranium ore.

Protea Mining Chemicals is a mining division of the Omnia Group (Pty) Ltd and provides an extensive range of specialty mining chemicals required in the mining industry on the continent of Africa.

As reasons for the application, the applicant stated that the annual SACU production volumes of the required membrane cell (MBC) grade of solid caustic soda is insufficient and that customs duty relief would assist in improving the sustainability of its operations. The membrane process of manufacturing technology is one among a number of technologies and produces the highest quality of caustic soda.

The uranium processing technique for which the MBC grade of caustic soda is required during the alkaline leaching process, entails crushing the uranium bearing ore to reduce it to a suitable size for grinding. Crushed ore mixed with water is grinded, to obtain a slurry. The slurry is then thickened and pumped into a leaching vessel. The alkaline leaching solution is then added to dissolve the uranium. The uranium solution is separated from the remaining solids (tailings), which are neutralized and pumped to a tailings dam. The uranium rich leach solution is then filtered. The uranium is separated and purified using a kerosene based solvent extraction process. Ammonia is added to the uranium solution to raise the pH level and to precipitate uranium in yellow powder form, referred to as yellowcake. The drying of the yellowcake slurry is put through a final heating process which separates the solid (powder) from the acid solution, and removes any remaining moisture from the solid product.

The application was published as follows in the Government Gazette on 23 September 2010 for interested parties to comment:

“Rebate of the full customs duty on sodium hydroxide (caustic soda), solid, classifiable in tariff subheading 2815.11, for use in the extraction of uranium oxide classifiable in tariff subheading 2612.10 from uranium ore”

The tariff position for solid caustic soda is as follows:

Heading	Sub-heading	Article Description	Rate of Duty			
			General	EU	EFTA	SADC
28.15		Sodium hydroxide (caustic soda); potassium hydroxide (caustic potash); peroxides of sodium or potassium:				
	2815.1	Sodium hydroxide (caustic soda)				
	2815.11	Solid	20%	20%	20%	free

The tariff position for uranium oxide as a concentrate and uranium ore, which are both classifiable in the same tariff subheading, is as follows:

Heading	Sub-heading	Article Description	Rate of Duty			
			General	EU	EFTA	SADC
26.12		Uranium or thorium ores and concentrates				
	2612.10	Uranium ores and concentrates	free	free	free	free

INDUSTRY AND MARKET

Caustic soda is manufactured in the SACU by three companies, namely: Mondi (Pty) Ltd (captive), Sasol Polymers (Pty) Ltd and NCP Chlorchem (Pty) Ltd (NCP). Caustic soda is produced as an aqueous solution containing approximately 50% caustic soda. NCP Chlorchem has the capacity to convert the liquid product form into the solid form, more specifically flakes or chips. The three SACU manufacturers have a market share of around 45%. The domestic manufacturers do not produce sufficient quantities for the SACU market requirement. Specifically, there is a shortage in the SACU of the MBC grade of caustic soda required by the applicant.

Protea Mining Chemicals supplies mining chemicals to companies in the SACU, including Langer Heinrich Uranium (Pty) Ltd (LHU) which mines uranium. LHU which started its operation in 2006, is based in Swakopmund, Namibia. LHU is currently planning an expansion at a cost of US\$60 million. It is expected that this expansion would increase the production of uranium at LHU by 40%. A further expansion at a cost of US\$250 million which is expected to be completed by 2010, is expected to increase production of uranium by a further 60%.

COMMENTS ON THE APPLICATION

Two objections were received from SACU manufacturers of caustic soda. NCP and Sasol objected to the rebate of duty on the basis that caustic soda is manufactured in the SACU. NCP indicated that it is currently in a process of expanding, in phases, its capacity to manufacture caustic soda. The first phase was completed in 2008 which led to an increase of 24 000 liquid metric tons of the membrane cell grade of caustic soda.

NCP further indicated that the second and third phases will yield a further 100 000 metric tons. However, this increase in capacity will be implemented once the expected market growth materialises.

FINDINGS

The Commission found that although caustic soda and specifically the membrane cell grade is manufactured in the SACU, it is not yet manufactured in sufficient quantities to fully supply the industry using caustic soda for use in the extraction of uranium oxide from uranium ore. The Commission further found that the applicable rate of customs duty is an onerous burden on the uranium mining industry, as it has a substantive cost-raising effect.

The Commission therefore decided to recommend the creation of a rebate facility for caustic soda classifiable under tariff subheading 2815.11 for use in the extraction of uranium oxide from uranium ore, in such quantities and at such times as the International Trade Administration Commission of South Africa may allow by specific permit.

In terms of the guidelines governing the recommended rebate provision, the industry choosing to utilize this rebate provision, would be required, among others, to first consult with the local manufacturers of caustic soda for confirmation of the ability to supply the required membrane cell grade of caustic soda. If such confirmation is not forthcoming, a permit will be issued for the additional quantity needed by the uranium mining industry for uranium oxide extraction.

The Commission further recommends that, in the event of the SACU manufacturers being able to supply the SACU market in the required quantities, a review for the withdrawal of this rebate provision be considered by the Commission.

RECOMMENDATION

The Commission recommends the creation of a rebate of the full duty provision on sodium hydroxide (caustic soda), solid, classifiable under tariff subheading 2815.11, for use in the extraction of uranium oxide classifiable under tariff subheading 2612.10 from uranium ore, in such quantities and at such times as the International Trade Administration Commission may allow by a specific permit.

(4/2010)