



**forestry, fisheries
& the environment**

Department:
Forestry, Fisheries and the Environment
REPUBLIC OF SOUTH AFRICA

Ref: O2/1/5/2

NATIONAL ASSEMBLY

(For written reply)

QUESTION NO. 99 {NW103E}

INTERNAL QUESTION PAPER NO. 1 of 2022

DATE OF PUBLICATION: 10 February 2022

Mrs C Phillips (DA) to ask the Minister of Forestry, Fisheries and the Environment:

In light of the apparent dumping of 1 500 tons of toxic chemicals off St Helena Bay by the vessel NS Qingdao, what (a) are the names of the chemicals that have been dumped and (b) measures is her department taking to reduce the toxicity of the dumped chemicals?

99. THE MINISTER OF FORESTRY, FISHERIES AND THE ENVIRONMENT REPLIES:

(a) The constituents of the chemicals disposed of to avert a serious environmental disaster are listed below.

CARGO DESTINED FOR DURBAN & REMAINING ON BOARD AFTER DEPARTURE FROM DURBAN							
CHEMICALS (In 1 cubic meter bulk bags)							
ON ARRIVAL AT DURBAN				AFTER DEPARTURE FROM DURBAN		REMARKS	
Product	Number of Bags	Total Cargo Weight (kg)	Bag Weight (kg)	BAGS NOT DISCHARGED	REMAINING ON BOARD in TONS		
1	Sodium metabisulphite	1,000	1,004,000	1,004	161	161	• A reducing agent, sensitive to water and air,

							and should be kept away from oxidisers, e.g. nitrates.
2	Ammonium Sulphate	300	376,125	1,254	296	371	<ul style="list-style-type: none"> Generates fumes if in contact with acids. Incompatible with oxidizing agents, Nitrates, Chlorates, Copper & Zinc. Generates Ammonia, Nitrogen oxides (NOx) and Sulphur oxides on decomposition
3	Sodium carboxymethyl cellulose	314	220,742	703	314	221	<ul style="list-style-type: none"> A combustible material, to be kept away from oxidisers, e.g. nitrates. Produces CO and CO2 on decomposition
4	Calcium formate	300	302,400	1,008	200	202	<ul style="list-style-type: none"> A combustible material. Produces CO, keep away from Oxidizers,
5	Electrode Paste	180	200,200	1,112	133	148	<ul style="list-style-type: none"> This material is combustible, but will not ignite readily. Burning produces heavy smoke. Generates NOx; SOx & Cox.
6	Magnesium Nitrate Hexahydrate	560	617,680	1,103	326	360	<ul style="list-style-type: none"> An oxidiser, kept away from combustible materials and reducing

							agents.
7	Caustic Calcinated Magnesite	96	120,480	1,255	96	121	<ul style="list-style-type: none"> • Non-combustible. • Reacts with acids. • Water will react with magnesium oxide to form magnesium hydroxide and release heat and steam.
TOTALS		2,750	2,841.6T		1,626	1,684	

(b) In order to reduce the concentration of the chemicals, the following methodology was implemented:

- (i) The material was disposed of, in small quantities at a time and over a few weeks, to substantially reduce the toxicity levels.
- (ii) The vessel was traveling at a speed of 2 knots whilst the disposal was conducted to further facilitate rapid dispersion of the material.
- (iii) The material was disposed of some 250km offshore, at 3000-meter depth of water, to prevent immediate coastal impacts.

The following monitoring was conducted:

- Photographs and videos were taken during and after the disposal operations and were provided by the permit holder.
- Satellite imagery of potential algal blooms were sourced by the department.
- Aerial surveillance (using drone technology) of the disposal activity was conducted over the period of the disposal and was continually reviewed and assessed by the department.

Regards



MS B D CREECY, MP
MINISTER OF FORESTRY, FISHERIES AND THE ENVIRONMENT

DATE: 24/2/2022