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Department:
Trade, Industry and Competition
REPUBLIC OF SOUTH AFRICA

THE NATIONAL ASSEMBLY

QUESTION FOR WRITTEN REPLY

QUESTION NO. 2933

2933. Mr N F Shivambu (EFF) to ask the Minister of Trade, Industry and Competition:

- (1) (a) What total number of ventilators for COVID-19 patients has the Republic produced in the year 2020, (b) who manufactured the ventilators, (c) on what date were the ventilators manufactured and (d) what was the total cost of each ventilator;
- (2) whether the ventilators were tested; if not, why not; if so, (a) on what date and (b) where were they tested?NW3758E

REPLY

A total of 20 000 CPAP ventilators have now been produced in South Africa, during the national state of disaster under the NVP. These ventilators have been produced by two local entities, namely the state-owned Council for Scientific and Industrial Research (CSIR) and the South African Ventilator Emergency Project (SAVE-P) – a consortium of companies.

Production began in July 2020 and the final units were completed during November 2020. The 20 000 units produced include the following:

- 18,000 Venturi-type CPAP devices manufactured through a contract with the CSIR, which is a state-owned science Council; and
- 2,000 blender-type CPAP devices manufactured by SAVE-P.

The CSIR ventilator systems were assembled and packaged by Akacia Medical in the Western Cape. Individual components for the CPAP-ventilator were manufactured by a consortium of industry partners in Gauteng, KwaZulu-Natal and Eastern Cape, including the Central University of Technology and firms such as Black Capital Systems, Andani Futuretech Manufacturing, UV Tooling, Sola Medical, Gabler Medical and Pitchline Engineering. All manufacturing was done for the CSIR.

The SAVE-P consortium incorporates manufacturers located in Cape Town, Pinetown, Durban, Midrand, and Alberton, consisting of MCR Manufacturing, Reef Engineering, Bosch, Executive Engineering, Rhomberg Instruments, Dowclay Products, ISO Health SA, Pegasus Steel, NAACAM, AFRIT, Corroseal, New Age Medical Supplies, Aveti and Non-Ferrous Metal Works.

The development, production and procurement cost for the 20 000 units were funded through a R250 million donation from the Solidarity Fund, at an average cost of R12 500 per unit.

The South African Radio Astronomy Observatory (SARAO) was appointed to manage the national effort to design, develop and produce the respiratory ventilators to support the government's response to combat the COVID-19 pandemic. Engineers at SARAO have experience and a track record in developing and execution of complex systems within short timeframes. They developed the MeerKAT radio telescope system in the Karoo, the precursor to the SKA.

SARAO performed an initial qualification review of both the CSIR and SAVE-P devices, to first determine whether they met the specifications of the NVP. Following this review, CSIR and SAVE-P was required to develop a industrialisation plan – to determine whether they had the manufacturing capacity to produce the units, including sourcing of components. – culminating in a Production Readiness Review conducted by SARAO. Following the Production Readiness Review, a technical dossier with a prototype of the device was provided to SAPHRA in order for the SAPHRA to perform the required inspections for licensing. Both devices were approved by SAHPRA on 26 June 2020. Clinical trials were conducted of both devices at Charlotte Maxeke Johannesburg Academic Hospital on behalf of the SARAO; with a further clinical trial conducted at Chris Hani Baragwanath Hospital under the supervision of the National Department of Health. Quality Control for each unit produced is performed by the final assemblers, under the supervision of the SARAO, who have conducted unit inspections to ensure that units produced meet approved specification.

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