

**Action Taken Note on Para No. 22 of Report No.21 of 2022 titled “Avoidable Investment of ₹ 28.09 crore”**

Para No.	Audit Observation	Reply of the Department
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2.2	<p><b>Avoidable Investment of Rs.28.09 crore</b></p> <p>Rule 160 of General Financial Rules 2005 (Rule 173 of GFR 2017) states that all government purchases should be made in transparent, competitive, and fair manner to secure best value for money. Contract should ordinarily be awarded to the lowest evaluated bidder whose bid has been found to be responsive and who is eligible and qualified to perform the contract satisfactorily as per the terms and conditions incorporated in the corresponding bidding document.</p> <p>Vikram Sarabhai Space Centre (VSSC), Thiruvananthapuram, a unit of Indian Space Research Organization of Department of Space (DoS) is responsible for the design and development of launch vehicle. VSSC procures Sodium Chlorate for its launch vehicles. VSSC, citing uncertainty involved in the import of the material and ambiguity in the domestic market as only one indigenous source was available, decided (March 2010) to establish a manufacturing plant for Sodium Chlorate in the campus of M/s Travancore Cochin Chemicals Limited (TCC), Kochi, a Government of Kerala Undertaking, at a cost of Rs.28.09 crore. After approval for setting up the plant by DoS, VSSC entered an MoU with TCC in March 2010 which provided that VSSC would buy Sodium Chlorate crystals of 1000 MT per annum</p>	<p>VSSC had three qualified sources for Pure Sodium Chlorate crystals including two indigenous vendors namely M/s Chemfab, Pondicherry, M/s Sree Chlorate, Indore and M/s Kemira, Finland. The manufacturing facility at M/s Sree Chlorates were partially closed in 2005. Therefore, during the period 2005-08, VSSC was forced to depend on only one indigenous source i.e, M/s Chemfab. A Limited Tender was floated in 2008 and only one offer from M/s Chemfab, Pondicherry was received. During the execution of this order, the industry was hampered by labour and power problems and they were unable to supply the raw material. To mitigate this crisis, VSSC was forced to import the material from M/s Kemira, Finland from 2009 onwards. In the meantime, the plant at M/s Sree Chlorate, Indore was totally shut and a situation arose where there was no indigenous source for this critical raw material. In view of the points stated, the Department is of the view that the audit observation that there was no uncertainty involved in obtaining this material is not in order. Sustained dependence on import source and closure of two existing qualified indigenous sources brought in a lot of uncertainty with regard to solid motors for ISRO programmes. In view of this uncertainty, the approach of the Department was justified in ensuring a reliable source of this critical item indigenously</p>

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	<p>at the rate of Rs.52587.25 per MT for 15 years from the date of commissioning of the plant (January 2014). In this regard, audit observed the following:</p> <ol style="list-style-type: none"> <li>a) There was no uncertainty involved in obtaining the material since there were identified Indigenous and foreign sources available in the market at the time. VSSC carried out a survey to identify a manufacturer from its known three firms only. Hence, its decision to set up the plant at the of Rs.28.09 crore was not based on facts about the supply of Sodium Chlorate crystals and was avoidable.</li> <li>b) VSSC neither factored its investment of Rs.28.09 crore at TCC while fixing the contract price of sodium chlorate crystals nor obtained any discount from TCC. The establishment of the plant at the premises of one vendor and purchase commitment of 15 years with assured procurement of 1000 MT annually when other identified suppliers were available was against the provisions of GFR that Government procurements shall be from the lowest evaluated bidder.</li> <li>c) The Member Finance of the Space Commission had pointed out to VSSC (July 2016) that the procurement of the launch vehicle consumables on single tender basis, when alternate vendors were available in the market, was against financial provisions of the GFR that government purchase are to be from the lowest evaluated bidder. Member Finance had further reiterated that using different vendors with different prices for the supply of the same</li> </ol>	<p>The plant capacity at M/s TCC was designed to meet the requirements of ISRO only and TCC is not selling this product to third parties. Price fixed for the sodium chlorate from TCC is based on the operational cost only that includes cost of raw materials, electricity charges to be paid to the Government of Kerala, charges for utilities and manpower charges prevailing in the state. Therefore, the need for factoring the investment does not arise and consequently there is no scope for any discount from TCC with regard to the capital investment made by the Department. The need of long term commitment of 15 years was absolutely essential in order to meet the requirement for as assured indigenous source for this vital product.</p> <p>After establishing sodium chlorate plant at TCC, Cochin and when there was a need to locate alternate source to overcome the shortfall in the requirement of sodium chlorate in excess of 1000 MT/year, public tendering was carried out in 2017 to locate additional sources. In this process, M/s Gujarat Alkalies and Chemicals Limited (GACL) was identified and accordingly an initial order of 500 MT and later 1000 MT was placed with GACL for qualifying the product. Therefore, Department has complied with the observation of Member (Finance), Space Commission for the requirements beyond the capacity of TCC. It may be noted that the plant at TCC is a strategic asset of the Department and the operational costs are only met by the Department.</p>

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	<p>item is against the provisions of GFR and DoS was instructed to float limited tenders from the identified vendors with standard procurement conditions, subject to lowest prices being matched.</p> <p>d) While the plant at TCC was operational in January 2014, the plant at Gujarat Alkalies and Chemicals Limited (GACL), a state PSU of the Government of Gujarat was also operational from March 2014 from which VSSC could have sourced the sodium chlorate at lower prices. Audit observed that during the period March 2014 to March 2021, sodium chlorate was available from the alternate vendors in price range of Rs.39800 per MT to Rs.48500 per MT. However, due to its decision to set up the manufacturing plant, VSSC had to buy a total of 7900 MT from TCC at a much higher rate of Rs.52587.25 thereby incurring avoidable excess expenditure of Rs.3.23 crore.</p> <p>VSSC replied (Sept 2021) that in terms of MoU, VSSC is bound to buy 1000 MT annually from TCC. The reply of VSSC is not acceptable. Establishment of the plant was without following due process and did not ensure purchase at lowest price, which was contrary to the GFR provisions. Thus, even after investing Rs.28.09 crore in the establishment of the plant, VSSC had to buy the material at a much higher cost from TCC.</p> <p>DOS stated (Feb 2022) that a national survey was conducted in</p>	<p>In view of the uncertainty in the supply of sodium chlorate owing to the closure of indigenous sources around 2008-09 timeframe, the Department had to adopt a strategy to ensure a reliable and assured supply to safeguard the launch vehicle programmes. In this regard, an empowered committee was constituted in 2009, which analysed the information available in the public domain including the internet to locate alternate indigenous sources for sodium chlorate to mitigate dependence on single foreign vendor. The Committee discovered that only M/s Travancore Cochin Chemicals (TCC), Cochin was having expertise in the required Electrochemical process at that time other than M/s Chemfab and M/s Sree Chlorate, from where regular supply was not forthcoming. Therefore, taking into account the prevailing market situation, the Committee recommended M/s TCC as the potential source to produce and supply this material on long term basis due to the following reasons:</p> <ul style="list-style-type: none"> <li>(i) M/s TCC had the expertise and experience in the field of electrolysis using membrane technology</li> <li>(ii) M/s TCC had existing land, building &amp; brine purification plant that could be directly utilised</li> <li>(iii) No additional investment was needed with respect to the infrastructure</li> <li>(iv) M/s TCC was geographically near (15 kms) to the Department's Ammonium Perchlorate Plant which requires sodium chlorate, thereby saving on transportation costs</li> <li>(v) M/s TCC is a PSU under the Government of Kerala\</li> </ul>

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	<p>2009 to find potential industries from three manufacturers. The committee assessed the potential and selected TCC as a long-term source. The reply is not acceptable as the National Survey conducted by VSSC was a limited one since the survey was from the three known sources only, out of which one (TCC) was selected. DOS further stated (Feb 2022) that TCC was the only available flight qualified indigenous assured source for the procurements done during the cited period (2014-21). The reply is not acceptable as TCC was not the only indigenous source during the period 2014-21. While the plant at TCC was operational in January 2014, the plant at GACL was also operational from March 2014 from which VSSC could have sourced the sodium chlorate. Further, VSSC was already procuring sodium chlorate from GACL also for the same purpose.</p> <p>Although the establishment of plant at the cost, 28.09 crore was avoidable however, VSSC should have sought discounted rate from TCC instead of paying of much higher rate than prevailing market rate which resulted in avoidable excess payment of Rs.3.23 crore by VSSC in the procurement of sodium chlorate crystals.</p>	<p>In order to ensure reliable supply over a long term without supply disruptions, commitments over the long term was a necessity. It may be noted that any supply disruption necessitating a change in the vendor results in a long cycle of trial production and qualification, which can have a direct impact on the space programmes. Therefore, the approach of the Department in proceeding with the incremental investment of ₹28.09 crore required to enable M/s TCC to supply sodium chlorate was fully justified and consequently, no disruption has been faced so far due to this strategy.</p> <p>The information on M/s Gujarat Alkalies and Chemicals Limited (GACL) as a potential supplier of the product was not available in public domain in 2009, and hence it was not considered. However, during 2017, when an additional source was required for sodium chlorate, GACL was identified through Public Tender and from 2020 GACL is an alternate vendor for the product.</p> <p>It is reiterated that the information on GACL was not available in the public domain and TCC emerged as the most potential source in view of its expertise, infrastructure availability and geographical proximity. Even though audit has observed that GACL became operational in 2014 and also was identified by the Department and given contracts during the 2017 timeframe, the vendor cannot be considered as a flight qualified source for this material during the timeframe 2014-2020. The orders placed on GACL so far constituted the initial requirement for the Department to qualify the product as an acceptable raw material for producing Ammonium Perchlorate</p>

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