

Consortiums and regulatory agencies for basic sanitation services in Brazil: management of non-conformities in support of the General Sanitation Law

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Highlights:

- The non-conformity resolution tool is efficient and can be replicated by interested institutions;
- Technical solutions for approximately 92 % of nonconformities were proposed and/or developed;
- The flow of information between regulatory agencies and basic sanitation consortiums is an essential part of implementing the methodology.

Keywords: associated management; universalization; sustainability

INTRODUCTION

To ensure compliance with the universalization criteria established by the General Basic Sanitation Law in Brazil (Law No. 14,026/2020), sanitation regulatory agencies carry out diagnostic and inspection campaigns for non-conformities related to the provision of water supply and wastewater treatment services. Municipalities and service providers must resolve such non-conformities in order to comply with the relevant legislation and avoid sanctions provided for in legal instruments. Basic sanitation consortia, in turn, act as technical support to the consortium municipal providers, thus promoting associated management.

Among the main difficulties faced by consortia in offering technical support to municipalities in order to achieve the requirements established in the legislation is the inefficiency of this public entity in presenting demands in an objective and efficient manner. However, by having the technical report from the regulatory agency, the consortium has the possibility of obtaining clear information about the real needs of the municipality. Thus, the main gap to be overcome is the flow of information between consortia, providers and regulatory agencies.

This study aimed to develop a non-conformity management tool with joint efforts between the consortium and the basic sanitation regulatory agency. More specifically, it sought to identify: (i) a methodology for an efficient flow of information between the two institutions and the municipal sanitation service providers, following legal basis and (ii) an optimized methodology to support the resolution of non-conformities by the consortium.

METHODOLOGY

The methodology was developed within the scope of the activities of the Intermunicipal Consortium for Basic Sanitation of Zona da Mata (CISAB-ZM) and the Intermunicipal Regulatory Agency for Sanitation Services of Zona da Mata de Minas Gerais and Adjacencies (ARIS-ZM), both headquartered in Viçosa/MG and operating in municipalities in the Zona da Mata region, state of Minas Gerais, Brazil.

Technical inspection reports (2022 and 2023), publicly available through the website of the aforementioned regulatory agency, were used to compose a database with non-conformities related to water collection, treatment and supply services and sewage services in 21 municipalities, which in addition to being regulated by ARIS-ZM are consortium members of CISAB-ZM.

The CISAB-ZM technical team grouped, analyzed and proposed technical solutions for the nonconformities that were most common among the municipalities and that allowed for the adoption of shared solutions considering the sectors currently available in the consortium (Administrative, Engineering and Water Quality). The solutions included booklets, manuals, standard operating procedure models, sampling plan models and pilot projects. Furthermore, open price registration records were provided so that the municipalities could adhere to and acquire inputs that could be used to resolve nonconformities.

RESULTS AND CONCLUSIONS

In total, technical solutions were suggested and/or developed for approximately 5,907 nonconformities listed in the 21 municipalities studied, which represented 92% of the total number. These solutions were formulated in partnership between the engineering, administrative and quality sectors. Assuming that the nonconformities tend to be repeated among the other municipalities that are part of the consortium or that may join the consortium, the suggested solutions can be applied quickly and in an optimized manner to all of them (Figure 1).

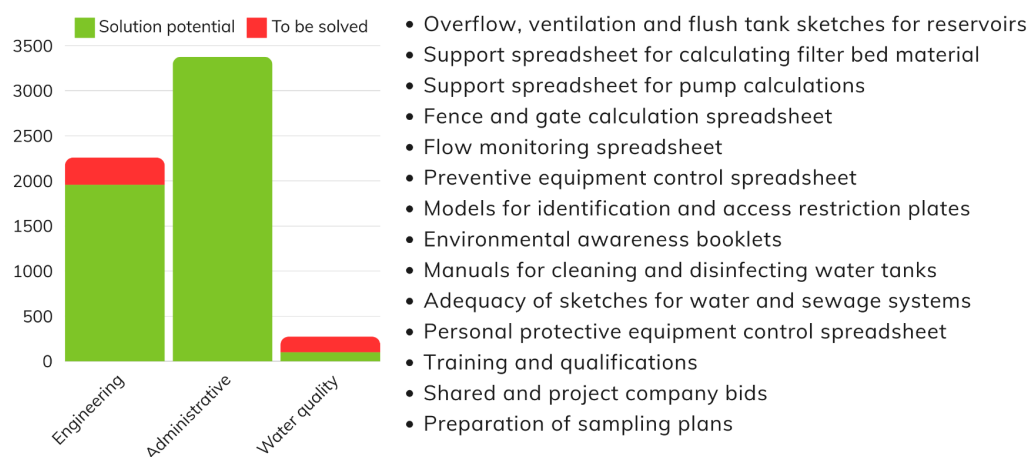


Figure 1. Main suggested solutions and their distribution among CISAB-ZM sectors.

Currently, in order to maintain a standard flow of information, as soon as the municipality receives its inspection report from ARIS-ZM, the latter notifies CISAB-ZM of such action. CISAB then, in its role as a supporter of the municipality, contacts the municipality and provides it with information and documents so that it can prepare an action plan to be sent to the regulatory agency 30 days after receiving the technical report of non-conformities, in addition to acting assertively to resolve these non-conformities within a 3-year horizon (Figure 2).

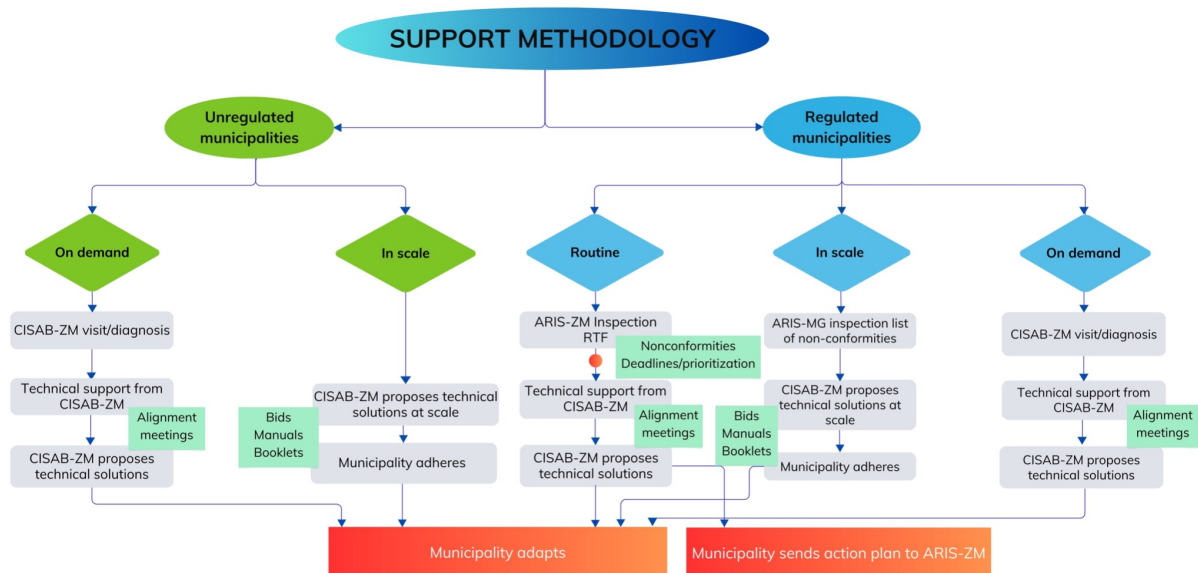


Figure 2. Information flow pattern proposed through the methodology described.

According to Piterman, Rezende and Heller (2016) there are multiple benefits due to the existence of the consortium to the municipalities: potentiation of socioeconomic, technological and human resources; rationalization and greater transparency in resources application; greater legal certainty to the consortium cooperation agreement and political empowerment.

In our case, addition to greater effectiveness in resolving nonconformities and consequent progress towards the goals of the Legal Framework for Sanitation, it is expected that, with the adoption of the methodology described, municipal providers will position themselves in a more participatory manner in the process of adapting their structures, will have more opportunities to add knowledge to their technical staff and will increasingly recognize themselves as responsible for the health and quality of life of the population.



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