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LATIN AMERICA REGIONAL SESSIONS BACKGROUND PAPER

REGIONAL REGULATIONS

AND

CERTIFICATIONS

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REGIONAL REGULATIONS AND CERTIFICATIONS

BACKGROUND

Production, purification and distribution facilities for potable water and for gathering, treating and disposal of used waters have undergone severe deterioration due to non-compliance with standards of design, construction, operation, maintenance and materials utilized in the facilities.

The design of facilities without bearing in mind the parameters and necessary and sufficient conditions in order that constructions, materials and equipment utilized be capable of functioning as expected and/or withstand the working conditions to which they will be subject to, is one of the causes that result in damage of the systems.

Construction of facilities disregarding set standards and criteria for the correct installation, execution and application of materials therein, and/or disregarding quality requirements of materials that should be used, is also part of the problem.

The incorrect operation of the systems (high pressures, incorrect valve handling, discharges, pumping equipment, etc.) also causes damage and/or failure in the facilities, and thus reduces their useful life and deteriorates the service offered.

The untimely and/or inadequate maintenance is also a predecessor of faults and/or impairment of the service quality.

The use of materials which have not been manufactured or installed in accordance with the quality standards specifically established for such purposes becomes, therefore, one of the causes for faults in the supply systems of potable water and of disposal of used waters in addition to the loss of potable water through leaks and during the emptying of pipes for repairs.

The building of facilities under political and/or social pressure without any control nor compliance with the standards, is another cause for problems.

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**WHAT PROBLEMS DO THESE SITUATIONS
CAUSE IN POTABLE WATER AND USED
WATER SYSTEMS?**

- Leaks, interruptions and failures in the service.
- Increase of water loss in leaks and seepages.
- Loss of water during the emptying of the water systems in order to carry out repairs.
- Frequent service interruptions causing great trouble to customers.
- Consumer dissatisfaction and increased number of complaints regarding the quality of the service.
- Increase in maintenance and operating costs due to more than normal failures.
- Economic loss due to the no sale of water during the service interruption and cost of repairs.
- Danger to customers' health and safety.
- Exaggerated exploitation of river basins and pollution of water resources.
- Pollution in water systems due to intake of surrounding elements or polluted waters during the time they remain without pressure or when empty.

STRATEGIES TO AVOID DETERIORATION OF SYSTEMS

Establishing a Regional Standardization System

The strategy for Regional Standardization consists of the harmonizing by all countries of the Region of standards used in the selection, acquisition and installation of all products and materials utilized in facilities for potable waters and used waters, based on national and international standards recognized by them, for example: ISO, AWWA, ASTM, etc.

Establishing a Regional Certification System

The strategy for Regional Standardization for the potable and used waters sector is based on ISO procedures and recommendations and it consists, fundamentally, of requiring certificates in accordance with standards and/or requiring permanent production certification and/or compliance with ISO 9000 standards or equal.

APPLIED ACTIONS IN THE REGION

Up to now, 33 standards have been harmonized in the region -those regarding chemical products, meters, pipes, valves, hydrants, coatings, artifacts, etc.- at the level of Coordinating Committees of Potable Water and Sanitation Institutions of Central America, Panama and the Dominican Republic "CAPRE", and of the Andean Association of Institutions of Potable Water and Used Water Systems "ANDESAPA", which have been submitted to approval on the part of the Panamerican Commission of Technical Standards "COPANT", to be used by all member countries of said organization.

Potable water and used water companies have become morally aware of the need, importance and benefits of requiring products and materials certified in accordance with acceptable standards.

In 1994, member companies of "CAPRE" and "ANDESAPA" decided to utilize only materials that meet regional standards.

The industry in the region has actively participated in the harmonizing process. They have joined the national standardization institutions through consulting, on the job training and participation in forums and conferences.

Participation of all those involved in the design, selection, handling, installation and use of materials and equipment -in the process of their acquisition- has been encouraged.

A special strategy has been proposed to prove the quality of materials in countries where certification systems are not available. Such consists of verifying -during the production process- as much as possible, by the control elements available to the manufacturer, the compliance with established requirements of standards in order to grant the manufacturer the acceptance that his product is reliable.

EXPERIENCES IN THE REGION

THE CASE OF VENEZUELA

The Compañía Anónima Hidrológica Venezolana "HIDROVEN" parent company of the "Empresas Hidrológicas Regionales de Venezuela", has implemented through its Technical Department a Quality Assurance System of all materials used in the potable water and sanitation sector.

For this purpose, it has received the official authorization from the entity competent in the field within the Venezuelan Legal framework, represented by the Autonomous Service Department of Standardization and Quality Certification of the Ministry of Commerce and Industry of the Republic of Venezuela "SENORCA", to grant the quality awards "HIDROVEN APPROVED SUPPLIER" and the product identification "HIDROVEN APPROVED".

In order to obtain the authorization to grant quality awards, HIDROVEN had to meet a series of requirements from "SENORCA", among which stand out the verification of HIDROVEN's technical capacity to handle the Quality Assurance System, plus the Regulations, Manual, evaluation criteria, qualification instructions and the Logo or Model of the Award or Certificate.

Upon being awarded the **CERTIFICATE OF AUTHORIZATION FOR THE GRANTING OF QUALITY AWARDS** on the part of "SENORCA", HIDROVEN initiates the application of this system which is carried out in two stages:

The First Stage is based on the technical evaluation of the quality of the suppliers in the sector, be they manufacturers or distributors, according to a Revised Manual and approved by "SENORCA". Once it has been evaluated and the allowed minimum number of points is obtained, the acceptance or Product Quality Award "HIDROVEN APPROVED SUPPLIER" is then granted.

The Second Stage is based on the technical evaluation of the Product Quality itself, for which the product manufactured or distributed by a previously qualified supplier, is submitted to verification tests for compliance with standards and performance. Once compliance is verified, then the product is granted the identification "HIDROVEN APPROVED".

The submitting to this Quality Assurance System is required from all manufacturing or distributing companies by the "Empresas Hidrológicas Regionales" and entities connected with the sector, in order to guarantee the uniform quality of all materials utilized in the Aqueducts and Sewage Systems.

The following are the objectives pursued by this Materials Quality Assurance System:

- To establish mechanisms in the market that guarantee the availability of materials in acceptable quality conditions, duly supported by their manufacturers and distributors, for all and each one of the Empresas Hidrológicas in the country and for the different entities connected with the sector as end consumers, which in fact they are.
- To establish, in this way, the mechanisms that allow the existence of a market governed by loyal competition among suppliers that guarantee high efficiency and productivity.
- To create a data bank regarding the quality of materials being produced in Venezuela for the sector and the standardization and certification of same. Each and every one of the product consuming companies and entities, may access their Data Bank for information.
- To establish through the system a mechanism of effective communication concerning all quality aspects, between manufacturers and distributors of products and the consumers.