

CONTRACT OPERATIONS AND MAINTENANCE – A BRIEF HISTORY OF THE INDUSTRY

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ABSTRACT

Contract operations and maintenance for municipal water and wastewater treatment facilities have been widely practiced in the US for almost four decades. During the tumultuous 1970's when many utilities were challenged with the requirements of the Clean Water Act, these services were generally accepted by municipal leaders and employees as a viable option for improved staffing and technical know how. During the 1980's the popularity of contract O&M services continued to grow with increased interest in project financing assistance, including larger facilities that were represented by labor unions. Throughout the 1990's additional facilities were contracted through traditional service agreements, full privatization agreements or design build, operate projects.

Today contract O&M services have appeared to reach a pinnacle as fewer municipalities are being faced with the many challenges of the past. However, are there similar challenges and problems emerging on the horizon that may call to order the services of the private sector? These challenges may include significant staff shortages resulting from planned retirements, increased regulatory pressure directed at buried infrastructure improvements and stormwater abatement programs and the financial wherewithal associated with these burdens. .

KEYWORDS

Contract operations, private sector services, public operations, privatization, regulatory compliance

INTRODUCTION

For nearly four decades privatization of water and wastewater utilities has been a viable option for many municipalities across the nation. It has also been widely practiced internationally for more than 100 years. For the purpose of this discussion, the term "Privatization" is defined as full or partial contract operations and maintenance (O&M) services of municipal water and wastewater facilities or some form of private ownership of facilities. This may include private funds associated with design, build, own and operate projects or other renditions of private financing that are coupled with long term O&M service agreements. Regardless of the level of operational or financial participation, the private company usually assumes significant risk associated with the guarantee of operational performance, asset protection and service cost over a specific contract period. Depending upon the complexity and financial commitment of the project, contract terms can vary from one to 20 years or more.

THE SEVENTIES – A TIME TURMOIL AND OPPORTUNITY

The impetus behind private sector services in the US was primarily the result of the many challenges and turmoil associated with the implementation of the Clean Water Act of 1972 (CWA). The foundation of this Act, which initially required municipal wastewater facilities to add secondary treatment, put in motion an aggressive engineering and construction effort not previously experienced since the 1935 Works Progress Administration (WPA). As a result, more than \$100 billion was invested by the federal and local governments over a period covering less than two decades.

This aggressive ramping up of enhanced, and sometimes experimental, technology together with major construction efforts also exposed a serious shortage of qualified design engineers, construction contractors and operation and maintenance personnel. As a result, errors were committed in many aspects of design, construction and operations which in turn led to wide spread process failures. What followed was the proverbial finger pointing, protests and ultimately lengthy legal action between all entities including federal and state regulators, construction contractors, design engineers, organized citizens groups and the facility owner. These were interesting times.

As with most “trouble mode” situations there often comes a corresponding opportunity for others. In this particular case where the tagging of responsibility for failure was complicated and difficult, the owner of the utilities (public entity) decided in some cases to solicit the services of experienced, private O&M companies to further lessen their overall risk and liability. The first major community to contract the O&M of its wastewater treatment plant to a private company was Burlingame, CA in 1972. Contract O&M services were initially engaged for a one year term to assist in performance testing and startup of expanded and updated facilities. The Burlingame plant remains under an O&M services agreement to this day.

During this decade it is estimated that approximately 80 – 100 municipalities acquired contract O&M services under similar circumstances; i.e., shortage of qualified and experienced O&M staff, need for improved management systems and procedures, need for support services related to training and safety programs and O&M cost instability. Most facilities contracted were in the small to medium range with capacities of one to 20 million gallons per day (mgd). There were also situations where the public entity would combine its water facility operations along with its wastewater agreement

Contract services were generally viewed in a positive vein by municipal management as performance and cost guarantees were provided by the private firm. It got them out of the hole. Also, existing municipal employees who chose to join the contract company often benefited from increased training, and in some cases, additional compensation and advancement opportunities.

THE EIGHTIES - AN ERA OF GROWTH AND OPTIONS

As the 1980's rolled in, the mandates of the CWA became even more stringent in some regions requiring advanced treatment processes. This placed an additional burden on an already strained operator talent pool. In addition, the availability of federal grants began to subside which placed more financial responsibility on local communities. To help offset this burden, the federal government established certain financial incentives (accelerated depreciation) for the private sector to participate in the full or partial ownership of public water and wastewater facilities. Under these situations, the private investor almost always assumed full O&M of the facilities as a way to ensure cost containment and asset protection and to also benefit from long term operating profits. During this decade it is estimated that more than 200 additional major municipal facilities were privatized in some fashion, including large facilities with capacities greater than 100 mgd. However, the contracting of larger facilities, of which some were represented by labor unions, also opened the door to greater political involvement and scrutiny. In these situations private sector services (now termed "outsourcing") were viewed more as a threat by municipal employees rather than a benefit or opportunity.

At this point there were more than 6 major companies and several dozen regional firms providing varying levels of municipal privatization services.

THE NINTIES – A TIME OF MATURING AND STABILITY

During the later part of the 1990's most of the new facility construction and upgrade needs were met and operations were becoming stabilized. With more than two challenging decades of ballooned user fees, complex troubleshooting, finger pointing, intense training, and in some cases, redesign and reconstruction, many publicly owned and operated utilities were operating with a higher level of confidence and overall improved performance. Although there were some additional longer term contract operations resulting from IRS 97-13 guidance, increased Design/Build (D-B) initiatives and landmark transactions, such as the sale of the Franklin Wastewater Plant to the private sector under Executive Order 12803, the pace of new contracted facilities appears to have slowed. As a result, many service providers began to refocus their marketing strategies on some form of domestic D-B projects and overseas markets.

WHERE WE ARE TODAY

After more than 34 from the first major O&M contract in Burlingame, CA, there are an estimated 1800 government facilities under contract operations today (PW Financing). However, we have not realized a resurgence of municipal privatization over the past several years. On the other hand, we are beginning to experience some of the issues and opportunities that boldly surfaced in the early years. These include new and aggressive regulations, but this time, they are pointed at storm water abatement. We are also embarking upon a return cycle of professional and technical staffing shortages due to massive retirements in the wastewater industry. Finally, there is an expanded need for project funding, including both wastewater and water projects, and associated user rate hikes due to the high cost of unplanned repair and replacement of neglected buried

infrastructure (water and sewer lines) coupled with planned life cycle cost replacement of aging treatment facilities. The answers to many of these issues are addressed in the subsequent presentation entitled: “Changing Issues & Drivers for Contract Operations”.

REFERENCES

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