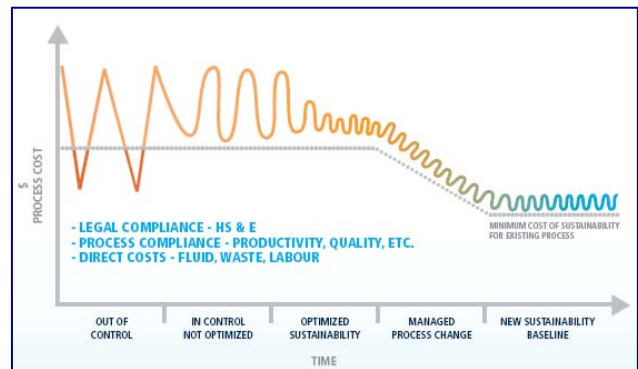


## 7 Reasons Why Chemical Management Alone can not deliver Sustainable Cost Savings and Continuous Improvement



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The Right Fluids, Managed the Right Way

## Introduction

In the current economy, cost reduction is important, sustainable cost reduction and continuous improvement however are vital if facilities are to not only survive but thrive in the new economy. Sloppy fluid maintenance practices, non-proceduralized business process and unmanaged risk cannot remain unchecked for the companies that are emerging from our most recent storm. Most manufacturers look at industrial fluids as a necessary evil to manufacture their products, not recognizing that the cost of these fluids represents a very small percentage of the overall impact their use truly represents. The wrong fluid managed the wrong way can be the cause of significant health and safety risk to workers, creating substantial liability for management. Daily production challenges where fluid condition is the root cause costs industry millions of dollars each day impacting plant productivity, product quality and reputation in the market place. Fluids represent a significant environmental impact risk not to mention a substantial direct cost for disposal. When **Fluid-Process Management** programs are correctly implemented, a company's total cost as well as the risk associated with fluid usage drops dramatically.

**When incorrectly implemented, total costs go up, with increased liability risk not far behind.**

Yet today, many manufacturers still look to "Chemical Management" as a means to manage fluid costs, not realizing that the cost of the fluid itself is less important than the choice of fluid and how it is managed and maintained on a daily basis.

If you look at the reasons why chemical management is not able to deliver sustainable cost savings and continuous improvement, one can identify 7 specific reasons why firms using chemical management continue to spend too much and expose themselves to unacceptable risk when it comes to industrial fluid usage.



The seven major factors limiting Chemical Management's ability to reduce the bottom line today include:

1. Focus on the unit cost of the fluid vs. determining which product delivers the Lowest Total Process Cost
2. \$/G savings are easy to quantify
3. Product Conversion is the primary strategy used to reduce cost
4. Guaranteed savings creates a non-sustainable strategy for cost reduction
5. Chemical Managers that profit from the sale of chemical
6. No Opportunity for innovation to drive continuous improvement
7. Limited scope to be able to truly impact costs

➤ **Factor One - Focus on the unit cost of the fluid vs. determining which product delivers the Lowest Total Process Cost**

In most cases, Chemical Management relies on product change to be able to deliver savings. If a less expensive product is able to perform a specific function, it is used for that application by justifying that on a per Gallon basis the fluid is cheaper. This however completely ignores the other factors that truly determine the total cost of the product. For example, the number of gallons consumed is directly related to the concentration that the chemical needs to be maintained at, the rate at which the product is being carried out of the application, its chemical compatibility with the other fluids it comes into contact with, how long it can be used before it needs to be changed out, its recyclability, its waste treatability, its impact on tooling, etc.

**A 5% unit cost reduction that requires 20% more chemical to provide the same process functionality, does not reduce the chemical spend.**

By focusing on the chemical cost only, a reduction in unit cost may appear to offer savings, when it fact it generates a net cost to the facility. Especially when you factor in the risk associated with any process change. Changing a process chemistry has inherent risk, unless there are net savings that can be identified and measured,



a change for the sake of a reduced unit cost alone does not support good business practice, where risk is determined and weighed against the overall benefit.

➤ **Factor Two - \$/G savings are easy to quantify**

Production environments are extremely dynamic in nature, especially illustrated by the volatility in demand experienced recently. As complete product lines are introduced and removed from production floors and demand for specific products varies dramatically month-to-month, there is an inherent complexity in measuring savings as a function of production. Also, as we discussed, the fluid and how its maintained effects so many other costs that are also a challenge to quantify. For example the cost of an occurrence of rust in a machining facility that can be traced back to poor coolant condition can cost a facility tens of thousands of dollars depending on the steps that need to be taken to address the issue (quarantined parts, customer visits, increased audit frequencies, emergency system dumps, time spent addressing non-root issues, etc.)

**A \$/G savings is easy to measure and therefore presented as a bonified savings, even though it ignores all those other issues like increased tool life or increased waste volumes and fluid consumption.**

In the face of such dramatic changes in demand, total spend is not an effective means to measure savings, making the easiest way to measure savings an evaluation of the reduction in \$/G.

➤ **Factor Three - Product Conversion is the primary strategy to reduce costs**

When the primary means to generate “savings” is to focus on reducing the \$/G, Chemical managers typically use the following method to generate savings. Step 1 – negotiate very hard with the existing fluid suppliers to reduce their costs with the threat of loosing the business outright, Step 2 – convert to a new supplier or convert to one of their own products.



The fundamental issue with product conversion as the strategy to cost reduction is the inherent risk associated with change.

Plants are hesitant to make a change as they know they have to live with all the operating issues that come from a product conversion. No two products behave the same, and as a result there are inevitable changes that occur on the plant floor that the plant themselves have to deal with. When each plant is handed an agenda for change, the chances for success are lower since there is little buy-in that the new product will in fact save the facility money.

A Facility's resistance to change then impacts the Chemical Managers ability to implement their promised "savings", which then gives the Chemical Manager the justification needed when they are brought to task about not being able to reduce the Chemical Spend by the promised amount.

➤ **Factor Four – Year-over-year guaranteed savings creates a non-sustainable strategy for cost reduction**

Savings guarantees are an attractive and considered the safe choice for buyers. It allows for easy budgeting of fluid costs for the following year and would seem to provide assurances and confidence that the Chemical Manager is able to deliver on savings.

**Guaranteed savings however does not offer a sustainable solution for industry for 3 primary reasons:**

1. Savings guarantee takes the onus away from the client to help support cost reductions. Whether the client helps or not, they are guaranteed the savings. This takes the cooperative nature away from the relationship that needs to exist to truly implement sustainable long term solutions.
2. Cumulative year-over-year savings guarantees, creates the incentive for the chemical manager to "hold onto" cost reduction opportunities, since implementing all the changes at once would create contractual challenges for them moving forward. Wouldn't a 25% savings in year one, offer far better results to a facility, than stretching the savings out over several years?



3. Driving costs down, when your main strategy is to provide less expensive chemistries eventually puts the process into a serious danger zone, where the product and the condition it's maintained at can create serious Health and Safety risk for workers. There have been several documented cases where plants that have used conventional chemical management for several years eventually led to severe Health issues requiring millions of dollars in lost business, lost reputation and litigation costs to be paid out by corporations.

Truly sustainable cost savings are generated when the process itself is changed. Sometimes that change may be the introduction of a new product, but mostly it results from how the process itself is managed. This may require the addition of capital equipment, a change in management strategy, or change in day-to-day responsibility; however process change is essential to creating a new baseline. Real sustainable process change requires all parties to be on-board and supportive. The expertise to identify the process change is essential and then the on-going management practices need to be in place to continue to realize the benefits of that change. Change needs to be implemented quickly and efficiently, "holding on" to ideas for cost reduction is a luxury that can't be afforded in today's market place.

➤ **Factor Five - Chemical Managers that profit from the sale of chemical**

When product conversion becomes the primary means for cost reduction, often the Chemical Manager is replacing the existing products with products that they themselves manufacture. Since there is profit and margin associated with their product, they are able to adjust pricing to meet the cost reduction objective. The client "wins" in that they are paying less for the product, however it creates a serious conflict of interest since the manager is being paid to not only manage the unit cost, but also to reduce the rate of consumption.

When a manager converts a facility to one of their products, they have been able to quantify some degree of savings. However now a serious conflict of interest results as every Gallon reduction, negatively impacts their own bottom line. Their objectives are at odds with their client, creating a win-loose scenario in the long term.



➤ **Factor Six – No Opportunity for Innovation to drive continuous improvement**

When the Chemical Manager profits from the products they are hired to manage, there are two issues that stifle innovation and continuous improvement. The first issue stems from a reluctance of any **Best-in-Class** product supplier from working with the Chemical Manager. Because the Chemical Manager manufactures their own product, or has commercial agreements with specific vendors, the **Best-in-Class** companies know that either their product will not be fairly represented to the end user, or they are putting their innovative product into the hands of a competitor. This would severely shorten the amount of time they had in the market place to enjoy their competitive advantage due to product innovation.

The end user suffers, because **Best-In-Class** vendors are not anxious to introduce innovative technologies to facilities that use **Vendor based Chemical Management**.

This stifles the innovative opportunities that do exist when an unbiased **fluid-process** manager is able to evaluate product alternatives from a total product cost perspective and their objectives are clearly aligned with the best interests of the customer.

➤ **Factor Seven – Limited Scope to be able to truly impact costs**

Managing the supply side of fluids, means that Chemical Management is only impacting one cost center, fluid cost (\$/G plus product on-site). Real sustainable savings come from managing the usage and disposal of the fluids once they hit the plant floor, and minimizing the net process costs. Typically the scope of Chemical management ends at the supply of product, the managing of inventory and the testing of some of larger systems. Often Chemical Management makes recommendations on things the end user could or should be doing to drive costs down, but typically their scope is so limited, they are not able to implement, let alone manage the day-to-day responsibility required to ensure any recommended initiative is in fact saving the facility money.





This limited scope also means that Chemical management companies have not typically developed the in-house expertise and business process necessary to identify and implement process change other than product conversion.

Chemical Management expertise and core competence tends to revolve around the procurement and inventory management process. They rely heavily on third parties for expertise in the other areas that make up the whole **fluid-use** process. Since significant sustainable savings is available by implementing total process change, typically chemical managers lack the experience and necessary business process to identify, quality and then implement and manage the types of changes that can have a dramatic impact on a facility. There is so much overlap between product choice and overall process cost, that managing the entire fluid use process as a whole is the most effective way to drive improvement and reduce net costs.

## Conclusion

The Key to substantial and sustainable cost optimization lies in utilizing a proven methodology that manages the entire **fluid-use process**. The Right Product, managed the Right Way, reduces costs and manages the risk associated with industrial fluid usage and disposal. Chemical management's focus on delivering cost savings through unit cost reductions offers neither a sustainable model, nor employs the necessary expertise and business process to truly impact the Net Cost. Though every chemical manager professes to deliver process savings, one must evaluate how they are compensated, their demonstrated expertise and history to truly understand their ability to deliver.

By managing the process as a whole, the facility is able to continue to adjust the **fluid-use process** to optimize costs over time, without crossing the threshold to where fluid choice or fluid condition is creating unnecessary risk for the facility.

For plants to remain competitive and thrive in this economy, a focus on fluid cost alone is not enough. The fluids impact on productivity, equipment availability, product quality, HS&E as well as disposal cost/liability needs to be managed as well. That's the key to optimization and sustainability.





## About Zimmark Inc.

Zimmark Inc. began providing its clients fluid performance management services in 1984. An on-site technical services company focused on reducing fluid and waste costs for Industry, Zimmark has developed a series of Best Practices methodologies that systematically drives the cost of sustainability down. A series of stand alone services that when combined, provide a turn-key solution that manages the Entire Fluid Use process, Zimmark is able to significantly reduce the management burden and minimize the risk associated with fluid usage and disposal.

Services include:

- On-site Fluid Sampling Services and Compliance Reporting
- Condition Based Fluid Maintenance Program
- On-line Fluid Condition Management Services
- On-site Fluid Decontamination Services
- On-site Fluid Recycling
- On-site Waste Treatment
- On-line Process Data System
- On-line MSDS Services
- On-line Health and Safety Training and Training Management Program
- Remote Tank Monitoring and Alarming with Emergency Response
- Liquid Waste Stream Management and Reporting
- Waste Manifesting, and Compliance Reporting
- Competitive Fluid Bidding Process to determine the Lowest Total Cost Product
- Open Book Pass through Fluid Procurement Services

## Contact Information.

For more information about Zimmark's programs and services, please contact:

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