



UNCOVERING THE 7 HIDDEN COSTS OF IN-HOUSE PLANT SANITATION

*What food processors should consider
when evaluating and comparing plant
sanitation options*

Author
Amy Lowe
Executive Vice President, PSSI

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INTRODUCTION

UNCONSIDERED COSTS

The demands around food safety and plant sanitation continue to become more and more complex. So, the need to take the necessary steps to keep your plant clean and compliant are now more important than ever – especially when considering the significant financial impact a loss of production can have on your business.

To manage these risks, there are two options: contracting with a specialized food safety and sanitation partner or staffing or managing in-house sanitation employees. The cost for a contract sanitation partnership can seem cost prohibitive, especially when comparing

only to in-house labor and chemicals costs.

However, there are many other costs associated with keeping sanitation in house that are often overlooked or unconsidered. So, unraveling the true costs of keeping your plant clean and safe requires a deeper look.

This report uncovers and highlights seven true costs of an effective sanitation program that are frequently overlooked. In order to give a deeper understanding of important budget items these costs should be considered so that no matter how you choose to sanitize your plant, you can be informed and financially prepared.



THE CHALLENGE

ASSESSING THE TRUE PRICE OF STAYING COMPLIANT

You need a clean, compliant plant delivered on time with the least amount of disruption possible. But, the difficult reality is that there are a large number of variables that must line up just right during every sanitation shift in order to consistently achieve this.

That is why so many plant managers are turning to specialized contract sanitation and food safety partners. However, without all of facts, initial evaluation and comparison of a contract partner can sometimes lead a plant manager to sticker shock.

Managing in-house plant sanitation employees is perceived as being more cost effective. But in-house sanitation efforts have shown to cause plant managers high stress, high demand for constant oversight and significant safety and financial risk for their plant. It is difficult to accurately compare the value of both sanitation

options without looking at the greater food safety picture in order to assess the true cost of keeping your plant safe and compliant.

To do that, plant managers need to consider more than the obvious direct labor and chemical costs needed for plant sanitation efforts. They should also consider and quantify the costs of the associated risks of not delivering a clean, compliant plant on time, every time.

There are a number of direct and indirect costs related to ensuring food safety that can have significant negative impact on productivity and profitability for your business. The indirect costs that are often overlooked with in-house sanitation efforts are the ones that have the biggest financial impact to the plant and business.

TAKE A MOMENT AND ASK YOURSELF THESE QUESTIONS:

1. What happens when an individual or group from your in-house sanitation employees don't show up for work or abruptly quit?
2. What happens if you experience elevated or out of spec microbiological outbreak?
3. What happens when a piece of machinery won't turn on because of damage caused by your sanitation crew?
4. What happens when your plant gets temporarily shut down due to a compliance issue?



THE BREAKDOWN

7 INDIRECT SANITATION COSTS TO CONSIDER

Let's explore beyond just labor and chemical costs and uncover the variety of indirect costs related to sanitation. These are costs that play a vital role in your overall productivity, profitability and protection. While you may not consider these indirect costs on a daily or monthly basis, you should. Because they are potentially critical threats to your plant's overall financial performance and business reputation.



DOWNTIME



MACHINERY AND EQUIPMENT DAMAGE



WORKERS' COMPENSATION AND RISK MANAGEMENT



CHEMICAL COST FLUCTUATION



SANITIZATION AND SAFETY EQUIPMENT



TECHNOLOGY AND REPORTING TRENDS



EMPLOYEE RECRUITING AND SPECIALIZED SUPPORT



ONE

DOWNTIME

Production time is critical to the success of any food processing plant. Any issue that shuts down the ability to produce product equates to thousands of dollars in lost opportunity—being taken away by the minute.

Industry reports estimate that manufacturers experience more than 500 hours of downtime annually, leading to overall lost opportunity costs in the range of \$20,000 to \$30,000 per hour¹, which can translate to more than \$10 million annually. That exposure to cost attracts a lot of unnecessary attention and can put your job and business at risk.

While the cause of downtime across the food processing industry varies, a primary contributor is due to inefficient and poorly executed sanitation programs. The checklist of sanitation program elements is important. All tasks must line up correctly and on time during and after every plant sanitation shift. This also

requires expert management, with a skilled workforce all having demonstrated attention to detail, to disassemble and reassemble large processing machinery properly.

Downtime not only results in direct costs from the obvious loss of production and product sales opportunities, but also the significant costs paid for idle labor.

Oftentimes, contract sanitation partners will offer reimbursement for direct idle labor costs related to any sanitation issue so make sure to ask and take that into consideration as part of your evaluation.

There are also several other indirect costs related to downtime such as lost production time, lost profits, failure to fill customer orders, and forced weekend production that can far exceed any direct costs.





TWO

MACHINERY AND EQUIPMENT DAMAGE

The risks and associated costs of damaged plant machinery caused during plant sanitation can be significant and should be considered and quantified as part of the overall evaluation. During any of the cleaning steps, water or chemical damage can occur to electrical components from inadvertently being applied to the wrong or unprotected surfaces. Additionally, costly damage can also occur from the incorrect disassembly or assembly of food processing machinery. A typical control panel (PLC) is approx. \$1,500-\$3,000 to replace.

The associated cost of any machinery issue that arises under the management of an in-house sanitation team is generally liability placed on the plant. On the other hand, best-in-class contract sanitation and food safety partners typically take full responsibility for

covering the related costs of any machinery and equipment if damaged by their workers during a sanitation shift.

In either case, it is gravely important to review sanitation policies and procedures frequently to ensure proper protection of your most valuable assets – your employees.

ADDITIONALLY, COSTLY DAMAGE CAN ALSO OCCUR FROM THE INCORRECT DISASSEMBLY OR ASSEMBLY OF FOOD PROCESSING MACHINERY. A TYPICAL CONTROL PANEL (PLC) IS APPROX. \$1,500-\$3,000 TO REPLACE.



THREE

WORKERS' COMPENSATION AND RISK MANAGEMENT

With a 60 percent higher rate of occupational injury and a lost-time injury rate more than twice as high², workplace injuries are one of the most concerning and costly issues inside a food processing facility. Sanitation work in particular has even higher figures, given the nature of the work with dangerous chemicals and large, complex equipment in wet environments.

Whether you have in-house sanitation employees or a contract sanitation partner, the safety of every individual who steps foot inside the processing facility is critically important. Because the success of a facility is due in large part to the safety of its operations. Whether it is a minor muscle strain, a lost limb or a death, any injury inside your facility can have a catastrophic financial impact. There are obvious direct costs like those related to downtime, insurance premiums and investigative resources. But there are also indirect costs related to decline in employee morale and negative brand exposure. According to the National Safety Council, the cost per medically consulted injury in 2017 was \$39,000, while the cost per death was

\$1,150,000³. These figures include estimates of wage losses, medical expenses, administrative expenses and employer costs.

The high-risk work related to sanitation is something that must be assessed when evaluating and comparing your plant sanitation options. When evaluating contract sanitation partners, dig deep to ask questions about safety programs, safety history and coverage related to potential injury.

WHETHER IT IS A MINOR MUSCLE STRAIN, A LOST LIMB OR A DEATH, ANY INJURY INSIDE YOUR FACILITY CAN HAVE A CATASTROPHIC FINANCIAL IMPACT.



FOUR

CHEMICAL COST FLUCTUATION

Chemical costs are a large element of any sanitation program, but what many plant managers don't account for are the common and substantial fluctuations in chemical pricing over the course of a budget period. Depending on market pressures, chemical costs can fluctuate as much as 20 percent.

Rather than attempting to budget for unanticipated fluctuations in pricing, chemical bundling with contract sanitation and food safety partners has proven to be extremely beneficial for plant managers. Bundling offers plant managers the advantage of combining set chemical costs within the overall sanitation program budget, resulting in a more consistent 'no surprises' sanitation budgeting approach.

Additionally, when buying direct from a chemical company there is very little room for price negotiation. Most contract sanitation providers are able to extend plant managers with much better chemical pricing than buying direct, because of overall chemical volume and established partnerships.

CHEMICAL BUNDLING HAS SHOWN TO SAVE FOOD PROCESSORS AN AVERAGE OF 10-15 PERCENT OFF THEIR TOTAL PROJECTED ANNUAL CHEMICAL COSTS.

Having an expert team in place to track the proper use of chemicals can help save costs as well. Incorrect mixtures or overuse of chemicals can result in significant wasteful expenses and using too few chemicals can lead to even more costly microbial issues down the road.

Lastly, if an urgent microbial issue or need for other specific chemicals arises during a sanitation process, having a trusted contract sanitation partner with access to a wide range of chemicals and on-hand expert resources can be extremely valuable to avoid downtime.



FIVE

SANITIZATION AND SAFETY EQUIPMENT

Plant sanitation programs require a wide range of specific cleaning and personal protective equipment, commonly referred to as “PPE.” This PPE includes safety gear mandated by the Occupational Safety and Health Administration (OSHA) and by individual company policies. Specific examples of the cleaning and protective equipment range from uniforms and smocks, eye and ear protection, hair nets, gloves, steel toe boots, hand tools, buckets, brushes, scrub pads, ladders, fall arrest equipment, foamers and chemical dispensing equipment. They are all necessary to conduct the safest and most effective plant sanitation. However, the associated costs for this equipment is rarely quantified for consideration when making an evaluation and comparison of sanitation options.

Additionally, OSHA requires a specific PPE support program. Through the program plants must demonstrate the evaluation of hazards; the selection, maintenance and use of PPE; the training of employees; and the monitoring of the program to ensure its ongoing effectiveness. This requires additional and usually unplanned labor costs to ensure that someone is managing the PPE program and checking equipment in and out on a nightly basis for OSHA compliance.





SIX

TECHNOLOGY AND REPORTING TRENDS

In this new and demanding era for food safety, the need for more detailed documentation is an essential requirement of any plant sanitation program. It is critical that your plant be able to quickly trace sanitation issues from a regulatory standpoint, as well as proactively respond to issues in real time

In taking stronger preventative measures, FSMA is leading more of a science and risk-aversion approach. This requires processors to conduct detailed documentation of their food safety plan and be able to produce supporting data that proves their plant's adherence to that plan during a plant inspection. It is required that processors also show that best-practices are being established and followed. In instances where concerns may arise, follow through must be demonstrated. Otherwise, plants could face fines or even be shut down. This makes reporting a daunting process for any plant manager without the right experience, platforms and technology in place.

The right technology can help you and your sanitation employees improve the overall effectiveness of the sanitation program by tracking Key Performance Indicators (KPI's) with data visualization and reporting able to be accessed in real time. Enhanced visibility to data including things like time, water temperature, chemical titration (concentration of cleaning agents) and mechanical force (i.e. water pressure) throughout the process is critical. If any one variable is off during the sanitation process, it can impact the overall effectiveness of the cleaning.

THE ABILITY TO TRACK KPI'S AND RESPOND IN REAL-TIME DRASTICALLY IMPROVES THE EFFECTIVENESS OF EACH CLEANING AND IMPACTS FOOD SAFETY AS A WHOLE.



That digital transformation, however, can be extremely costly, time consuming and disruptive to your business. Also, without the right experience or specific microbiological training, it is extremely difficult to know what needs documented, how to document it and why it matters. That's why it is important now, more than ever, to think about how your plant will adapt to the increasing pressures.

Keeping up with technology and being proactive in your efforts to document and respond is not only necessary, it will set your plant and business apart during the sales process. Your business customers want to be highly confident in their decision to hire a processor they can trust to provide quality and safe food products on a consistent basis.





SEVEN

EMPLOYEE RECRUITING AND SPECIALIZED SUPPORT

Above all, staffing is one of the most time-consuming and costly areas for plant managers. High turnover and unreliable employees cause unnecessary disruptions, downtime and high stress for plant managers and other employees. It is one of the top reasons many plant managers opt to outsource sanitation.

Particularly in a tight labor market, it is difficult to find qualified, reliable employees. Recruiting and training costs add up quickly and take away from the core focus of the food processing business. Inconsistency in sanitation management and staff also puts processors and its consumers at risk for potential food safety issues without the right experts and trained professionals overseeing daily operations. Losing a large customer from a failed audit can also have a significant financial impact.

Proper food safety and plant sanitation require experts across a variety of specialized areas (chemistry, engineering, microbiology, technical design, etc.). Specific expertise and skills are not only required to manage the day-to-day sanitation operations and regulatory compliance, but also to lead emergency food safety situations, like a potentially deadly listeria outbreak.

Many plant managers don't have these kind of specialized sanitation workers on staff full-time. So they end up outsourcing a significant amount of work to various consultants across different areas including mitigation of specific microbial issues, training, FSMA compliance, third-party audit prep, safety, as well as other technical design issues.



The costs for these specialized consultants come at a premium. Depending on the need or complexity of the issue, they can range from \$150 to more than \$500 per hour. This includes the labor and materials for common third-party swab testing which can typically cost \$2,500 – \$3,000 per event.

Larger contract sanitation and food safety partners typically have expert resources on staff across a variety of areas that are able to mobilize and respond to specific situations as part of a comprehensive partner contract. This can help save plant managers a significant amount of time, money and stress around the constant internal needs for recruiting, training and costly consultant fees. They can also help processors earn certain certifications that can help grow the business as well.

THE COSTS FOR THESE SPECIALIZED CONSULTANTS COME AT A PREMIUM. DEPENDING ON THE NEED OR COMPLEXITY OF THE ISSUE, THEY CAN RANGE FROM \$150 TO MORE THAN \$500 PER HOUR. THIS INCLUDES THE LABOR AND MATERIALS FOR COMMON THIRD-PARTY SWAB TESTING WHICH CAN TYPICALLY COST \$2,500 – \$3,000 PER EVENT.





CONCLUSION

Your plant sanitation and food safety efforts are extremely vital to the overall success of your plant. As such, the success of your plant has impact on the overall financial health of your business.

Whether you staff in-house sanitation employees or partner with a contract sanitation and food safety expert, it's so important to fully understand and assess all the costs, both direct and indirect, that will be required to keeping your plant operating with the highest safety and compliance. While hiring a contract sanitation partner may initially seem more costly, the reality is that the total and true costs of an in-house sanitation effort should be quantified and considered during the evaluation for an informed comparison.

After all, there is always an issue lurking around the corner. It could be a compliance issue, a serious microbial issue, worker safety or injury, or significant damage to your vital processing equipment that erodes your profitability. So, take the time to look deeper and uncover the true costs of sanitation.

It will not only save you time and headache, but the future of your company relies on it.



ABOUT



PSSI is North America's leading provider of food safety and contract sanitation services for food processing facilities, supporting more than 500 partner plants every day. Its team of more than 17,000 skilled sanitors, microbiologists, technical design experts, and safety specialists are committed to protecting people and brands by keeping USDA, FDA and CFIA processing facilities clean, safe and audit-ready.

The PSSI team has a breadth of resources ready to lead sanitization and food safety for any size facility. With 45+ years of experience and one of the highest retention rates in the industry, PSSI is the most trusted sanitation partner dedicated to helping advance food safety.

For more information or to schedule a free plant sanitation assessment visit www.pssi.com.



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