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### ***Kaizen Goes Public***

by

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Steve Anderson worked for the Department of Air Quality since the early 1970's. He was known by his colleagues as a tireless worker and, as such, as his tenure grew so did his rank. In his younger years, when he had just completed college, he worked as a lab specialist and conducted air emissions tests throughout the state. Over three decades of working in the department, his responsibilities increased as his knowledge of air quality standards and regulations grew. He was fond of saying that he went to CHK for his education — the “College of Hard Knocks.” In instances where the tension would rise in important meetings, he was always quick to be self-deprecating when it came to his understanding of bureaucracy and public policy, and now, there was no one in the department who questioned his expert knowledge or authority in the field of air monitoring sciences. When asked to speak about air quality and environmental protection to business, industry, or manufacturing groups he did so eloquently; after all, no one in the state had a better grasp of the many standards associated with emission control and his knowledge was encyclopedic when it came to understanding the synergistic effects associated with combining different chemical emissions. He would often say to those he was meeting for the first time, “I’m in the air business and we all need clean air for healthy living!”

When Steve Anderson was earning his business degree, he never thought his professional life and career employment would be so inextricably connected with monitoring and improving the quality of life for the state. Earlier on in his academic studies, he was exposed to quality of life and social indicator research, and then, like now, found it to be an intriguing field of study. He loved the measurement side of the field, especially when it came to the operationalization of concepts, such as poverty, health, civic enhancement, crime, social disintegration, and air and water quality, and he kept a portfolio of indices, formulas, and equations that might prove to be useful in assessing quality of life in general. As an undergraduate student, he studied business administration and marketing and he did everything that he could to hone his administrative skills; now he had finally reached the position of supervisor for the air quality permitting program. His colleagues not only enjoyed working with him but among themselves they would frequently state that his “... knowledge and expertise are above reproach.”

Anderson had seen a lot of changes in state government and air quality regulations during his years of governmental service. One of the biggest changes he experienced in state government was the passage and implementation of the national

Clean Air Act. With the passage of the Clean Air Act, the state Department of Air Quality's work load increased tremendously. The number of companies needing air quality permits exploded from literally a handful to several thousand but Anderson's staff didn't expand with the growth. In commenting to those less experienced in the field, he would often say that, "New state rules had to be written and adopted, permitting procedures had to be developed and put into practice, and major industries with political clout wanted their permits yesterday." In a way, he wished he could have simply "boiler-plated the federal manuals," for the state. He often reminisced in public conversation, "At least the Clean Air Act came with a funding source. It was not one of those pesky unfunded mandates."

The funding necessary to hire qualified staff to implement the Clean Air Act in the states came from the regulated industries that required the state program services. In the world of public administration, then as now, the trend of charging user-fees made sense to many in the legislature and in the department. Some industries, as expected, wanted reasonable standards and a fair fee structure; others argued with passion that, "Everyone benefits from clean air so everyone should contribute to funding the program." Some industrial representatives conceded that industry would in the final analysis be obligated to pay, but that the fee structure should be fair and equitable across the playing field, regardless of the type, kind, size or location of the regulated organization.

The most risky political part of Anderson's job was to establish a fee structure that would be used by the state Department of Air Quality. Anderson and his staff had to determine a precise formula that could be used in its calculation. That is, they had to develop a high level of confidence in their expense and revenue estimates, and that would not be an easily accomplished task. Anderson, knew that if they estimated revenue that would be excessive, that the legislative "movers and shakers" would not be happy, and, conversely, if the permitting expenses were underestimated, they would have to go back to the industry for higher fees in the future. Anderson was politically astute and savvy enough to realize that those industries with political clout and acumen to leverage it, would not appreciate a ratcheting-up of the permitting fees for air quality monitoring. Anderson, when reflecting about the untenable position in which he found himself, would state, "It was if one was between the devil and a hard spot!"

As difficult as it might seem at first glance, the state and the regulated industries were able to reach agreement on a fee structure; however, along with industry payments came the corollary issue of industry expectations. In administrative parlance, Title V air permits were implemented as a function of the Clean Air Act, and these permits cost companies up to several thousands of dollars to obtain. In addition, in order to secure a permit, large amounts of paperwork had to be meticulously completed and this process was time consuming. Further, the permitting instructions were often confusing, filled with jargon and "bureaucratese," and difficult to follow. Some industries did not feel that they had the engineering expertise required to complete the application forms and, therefore, were required to

hire specialized consultants at an additional cost. As one industry CEO stated, "It cost us a tidy sum to have an outside engineer come in and serve as a consultant. We were required to fill out several thousand pages of documented material and translate the instructions into a common, understandable language. The instructions should have been written for the average consumer in the first place." Other industry spokespersons noted, and they were correct in their assertion, that an "...air permit was required even before a new industry could begin plant construction and that a new permit was even required prior to making any modifications in the operation of an existing plant."

For the first two to three years of operation under the new federal law, the state Department of Air Quality issued air permits in approximately 120 days or four months. Thus, for one-third of a year, affected industries could not begin construction or make any plant modifications. As one might reasonably expect, the extensive waiting period became a very tense and stressful time for the applicants, as well as for Steve Anderson and his staff. As a new start-up program, Anderson and his staff had to learn the new program's requirements and, simultaneously, field questions and respond to pressures from the state legislators, various industries, environmental groups, residents and economic development officials. After a few years passed, Anderson told a colleague during a private conversation, "It was a most trying time for all parties concerned — I never realized what a steep learning curve the department and industries would have to ascend. It was hard for all parties concerned and I actually felt empathy for those firms that were trying to act in a legal and socially responsible manner!"

As the "...regulations, standards, and specifications matured," Anderson frequently noted, "... the department lowered the turn around time on air permits to only 65 to 80 days. This reduction in permitting time was largely associated with a larger staff that had eventually acquired the needed experience required to fully implement the law, augmented by a continuous quality improvement process that the department used." In the long journey to proficiency, the staff and the department felt reasonably good about their ability to cut the permitting time by almost fifty percent, while at the same time developing and maintaining a good working relationship with the regulated industries. Anderson, noted in his monthly staff meetings that the "...fee for permits had not gone up during the past few years and that monthly client meetings were essential to keeping industries informed on department activities and pending federal regulatory measures." It came as a surprise to Anderson, when several industry leaders approached the department and stated that "... much more process improvement was needed."

Henry Lopez, General Manager for Consolidated Energy the state's largest private utility, and Jill Evans, director of lobbying for the State Association of Businesses, approached the Department of Air Quality about assisting it in some process improvement initiatives. Lopez and Evans were vehement when they argued that the 65 to 80 day turn around for permits was too long. They stated that the delay in issuing permits was costing their companies money, put them at a competitive

disadvantage, and that it also placed the state at a disadvantage in attracting new businesses. They further asserted that the delay, especially in a couple of cases that they had first-hand knowledge of, "...caused some businesses to consider out-of-state relocations." Lopez and Evans further suggested to Steve Anderson that the air permitting staff go through a continuous quality improvement process called *Kaizen*. Evans and Lopez reported that the *Kaizen* process was used frequently in their companies and with great success.

Steve Anderson listened intently to what they had to say, but expressed reservations. He explained that he first learned of continuous quality improvement practices in his college days and that his staff had put some of these efforts to work, thus reducing the time it took to obtain a permit nearly in half. He expressed skepticism about how much more improvement would be possible. He said: "I think we have streamlined the permitting process and have removed nearly all bottle-necks and obstacles. I don't believe further improvement is possible at this time." He further informed Lopez and Evans that the members of his staff already had a full schedule trying to complete the permits in a timely fashion and that to implement the *Kaizen* process now would not only cost a lot of time and money, but it would negatively impact the timely response that industry had come to expect from his office.

Not to be dissuaded by obstacles to reform themselves, Lopez and Evans countered Anderson's objection by agreeing to fund the installation of the *Kaizen* process with private dollars. In addition, Lopez indicated that he knew about a change agent who was recognized internationally as a tremendous facilitator for the process, and Evans upped the already attractive proposal by offering to provide assistance from her own experienced staff who had successfully installed the *Kaizen* process in the business association. Anderson thought about the determined attitude of the two prominent members of the business community and said he needed time to think about the offer, to do some research and to talk to other members of the department. Anderson stated to Lopez and Evans, "Thanks for the generous offer. I know you are both convinced about the process and believe it will improve our operations as it has improved yours. I'll get back to you in two weeks."

Several weeks later, Steve Anderson invited Lopez and Evans to his office. He informed them that the Department of Air Quality would take them up on their generous offer and that the staff was eager to be briefed and acquire the needed training. Anderson also asked that Lopez and Evans notify the industrial community that this effort would take place and to ask them for their patience as some delays in permitting might be expected to occur, especially with the large amount of time needed to initially learn and use the *Kaizen* process.

**End of Part One**

### Questions and Instructions:

1. Does a 65 to 80 day permit turn-around time seem like an acceptable length of time for this governmental service? What about other types of governmental services?
2. Is an industry-based fee or "polluter pays" fee system appropriate for this example? Why or why not?
3. How much more influence on the Department of Air Quality do you think the user pays fee system provides the industry? Why?
4. What other kinds of funding mechanisms could be used instead of the industry paid permitting fee? What are the advantages and disadvantages of these other mechanisms?
5. Is it ethically responsible for the applicant industry to pay for the *Kaizen* process? Why or why not?
6. Does your answer to question No. 5 change depending on whether just a few industry members provide the funding versus an industry association? If a donation or sponsorship is in order, should it be anonymous for the industry donors? Please explain.

### Part Two

The big week has arrived! Steve Anderson has gathered his staff along with Henry Lopez, Jill Evans, and her staff and the *Kaizen* consultant. For the last month, Steve Anderson's staff has been closely scrutinizing the current operations for opportunities for improvement. Also, job related tasks and responsibilities have been reviewed and time and motion studies completed. Some members of the staff have researched the *Kaizen* process and Anderson attended a *Kaizen* process improvement program at a local industry.

During the span of a week, participants in the *Kaizen* process put in more than 60 hours. On the first day they learned about the *Kaizen* process and how and why it works. They also learned what was expected of them individually; as a group; and how the process would have to be fully embraced on an everyday basis, now and in the future, if dividends were to be expected on their investment.

The second day was spent analyzing the current permitting process step-by-step, from the moment the application entered the building to the moment it left. "No stone or cubicle was left unturned," as one staff assistant explained. Additional time and motion studies were done. All members of the staff were interviewed, including engineers, permit writers, administrative support staff, custodial staff, information

technology staff, and industry members. At the end of day two, it was determined that: "...of the 65 to 80 days it takes to issue a completed permit, only five (5) hours was actually spent working on each permit from beginning to end." This was an astonishing revelation to the training participants. As iterated and reiterated, "Only five hours per permit! Unbelievable!"

On the third and fourth days, the participants were still somewhat stunned and amazed that only five hours went into each permit. The facilitator inspired and challenged them to work together and further identify ways to improve the process. He said, "We have tasted success already and the process has only begun. We can do better and we will! We must now savor the success associated with the use of this powerful process." Smiling and nodding toward the participants with an accepting approval, he asked them to fully explore and use the data collected on day two. The participants then began their journey of examining everything possible that would enhance the speed and accuracy of the permitting process. They constructed a document checklist that would be provided to the applicant and would insure that a fully completed permit had been submitted; they designed a new electronic database and process tracking system; and they reassigned staff responsibilities in the permitting process that they now found to have caused delays. In the final analysis, they had been able to shorten the 65 to 80 day permitting process to only eight days.

On the fifth day, the process of implementing the recommended process improvements began in earnest along with a celebration of their accomplishments. They laughed with one another as the facilitator asked them to burn the outdated rules and regulations in a Weber Kettle that he had prepared for this purpose. The steps and obstacles that had impeded effective permitting were now gone forever and there was reason to celebrate! They could have rested, but as one member noted, "They had experienced joy in improving the efficiency, and the effectiveness of the permitting process; their journey had just begun and they were going to enjoy the ride."

## **End of Part Two**

### **Questions and Instructions:**

7. Knowing now that the permitting process was reduced from as much as 80 days down to eight days, does this change any of your answers to questions 1, 5 and 6? In what ways? Please explain.
8. What, if anything, do you believe will need to be addressed before the Department of Air Quality will be able to fully implement all the necessary changes and lessen the permitting turn-around time to eight days? Keep in mind such issues as staff reassignment, office space configuration, and union contract issues. Please explain.
9. Name three or more additional continuous quality improvement processes or strategies and at least one of their strengths and weaknesses.

10. Knowing the dramatic turnaround that the department realized when it implemented the *Kaizen* process, would you recommend the process be tried on other public programs? Why or why not?
11. Are there any other ways to get workers involved in continuous quality improvement processes, especially since some employees and unions may fear loss of jobs if the process gets too efficient and if all redundancy is eliminated? Please explain.
12. Can you think of any advantage to building in a slight delay in the permit granting process? Please elaborate.

### **Part Three**

The Department of Air Quality's *Kaizen* process received substantial positive attention in the state's major newspaper and it even garnered several awards nationally and internationally. Within a year, the department had completed more than a dozen additional *Kaizens* covering several air quality programs, as well as programs in land quality and water and solid waste. The proof of the *Kaizen* process success was evident by the facts of the 60% reduction in the time required for permit processing and in the financial and technical assistance required, while simultaneously protecting the environment. As a result of the successful *Kaizens*, many additional staff members of the department were trained to facilitate future *Kaizen* processes. In addition, *Kaizens* were also conducted to improve internal departmental operations.

The adage that "...nothing sells like success," was most apropos and the reputation of the department rapidly spread to many other state agencies. In turn, the department became ever more entrepreneurial and began to "sell" its *Kaizen* facilitators to other state bureaus, commissions and agencies who in turn became valuable "home grown" specialists on the process.

Although the *Kaizen* process was initially approached with suspicion and measured acceptance, its successful implementation went well beyond anyone's wildest imagination. Today, the department and its programs are more efficient, customers report a higher level of satisfaction with the permitting process; and the department has objectively demonstrated an increase in effectiveness without increasing the cost of its operations. Of course, the department rightfully promotes, with pride, the many productivity improvements it has achieved. Indeed, as if fate would have its own revenge, perhaps it celebrated its many accomplishments too vigorously! Anderson was a cautious administrator, but he had enough administrative and political savvy to know that with "...successful ventures, there is a strange irony that often accompanies them."

As the "...rest of the story" is now revealed, the legislators showed how much they valued the *Kaizen* success in the department when they singled it out for even greater financial scrutiny. The state's Legislative Audit Service was charged with the task of closely examining and auditing the department's operational budget. The completed audit report revealed no major operational deficiencies, and their analysis demonstrated that the "...department had realized substantial improvements in efficiency and productivity," over the previous fiscal year. With the audit in hand, the legislators argued that the department did not require the previous higher level of funding due to their efficient and effective operations, and, therefore, reduced the departments appropriated budget by \$700,000 for the next fiscal year.

The departmental administrators and staff faced this "twisted turn of fate" with a feeling of "disbelief." They could not fathom what had just transpired before them and they let their "raw feelings" gush out concerning the fairness of the legislative process. In short, their "... hard-work, innovativeness and success had been rewarded with punishment," and that made no sense at all.

### **End of Part Three**

### **Questions and Instructions:**

13. What are your thoughts about the legislative cut to the agency's budget for becoming more efficient? Elaborate.
14. Does it make any political or administrative sense to reduce the department's budget as its level of efficiency and effectiveness improved? Please justify your response.
15. Who should decide how savings accrued from increased productivity or improved efficiency should be invested or utilized? Would "gainsharing" be an appropriate administrative technique to be used in this instance? If yes, why? If no, why not?
16. What impact will the legislature's decision have on future *Kaizen* events and process improvement efforts? Please explain.
17. Do you think the department or other state agencies will be prone to use the *Kaizen* processes in the future given the legislature's action?
18. Should the agency have expected a reduction in its budget as its efficiency increased? Explain.





## Case 22: Kaizen Goes Public

**Name:**

### **Case Log and Administrative Journal Entry**

*This case analysis and learning assessment is printed on perforated pages and may be removed from the book for evaluation purposes.*

### **Case Analysis:**

Major case concepts and theories identified:

What is the relevance of the concepts, theories, ideas, and techniques presented in the case to that of public management?

Facts — what do we know *for sure* about the case? Please list.

Who is involved in the case? (people, departments, agencies, units, etc.) Were the problems of an “intra/interagency” nature? Be specific.

Are there any rules, laws, regulations, or SOPs identified in the case study that might limit decision-making? If so, what are they?

Are there any clues presented in the case as to the major actor's interests, needs, motivations, and personalities? If so, please list them.

**Learning Assessment:**

What do the administrative theories presented in this case mean to you as an administrator?

How can this learning be put to use outside the classroom? Are there any problems you envision during the implementation phase?

Several possible courses of action were identified during the class discussion. Which action was considered to be *most practical* by the group? Which was deemed *most feasible*? Based on your personal experience, did the group reach a conclusion that was desirable, feasible, and practical? Please explain why or why not.

Did the group reach a decision that would solve the problem on a short-term or long-term basis? Please explain.

What could you have done to receive more learning value from this case?