



# CASE STUDY 001

A Project's  
Missteps and  
Recovery

**"An ounce of prevention is worth a pound of cure."**

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## Abstract

This case study examines challenges experienced by a project team and the effective solutions provided by an experienced supplier quality surveillance (SQS) coordinator who joined the project about twelve months after it started. Specifically, this case study:

- Demonstrates some of the challenges that occur when a project involves SQS too little, too late, or not at all; and,
- Describes the solutions deployed by the SQS coordinator that addressed project challenges.

## What is SQS?

*Supplier quality surveillance* is the selective audit, evaluation, inspection, observation, and review, of engineering and procurement processes, fabrication and manufacturing operations, and quality management systems to determine a supplier's compliance with purchase order requirements. These activities may be conducted before and after the award of a purchase order.

## The Challenge

In 2017, using a siloed decision-making process, the project team approved and deployed the inspection budget and plan – which was prepared by engineering and project controls without consulting SQS. This was a serious error with cascading deleterious effects (see *Workflow*). Worse, these missteps were *not* made by inexperienced personnel; instead, they were made by experienced personnel *who should have known better*. How did this happen? Why did this happen? What is stopping this from happening again on a future project? The SQS coordinator identified two culprits:

1. The project team had an ineffective SQS program

The correct path forward was to address project challenges proactively by implementing an effective SQS program from project outset. SQS is the critical prevention needed to address project risks.

2. Knowledge gaps in project leadership

Hiring personnel and *hoping they will somehow* learn the ropes is an ineffective strategy and prone to missteps described in the *Workflow*.

## The Summarized Solution

The project team's challenges were overcome when an experienced SQS coordinator revised the inspection budget and validated the plan. See the *Workflow* for details. These solutions *are* Knowledge Transfer (KT) Project (KT Project) recommended best practices for project success.

# WORKFLOW

This Workflow identifies the sequence of events and cascading effects of project decisions, and solutions deployed by the SQS coordinator (KT Project recommended best practices).

1. A new project is sanctioned and contract awarded!		
Project investors approved the final investment decision for construction of a new facility. Project owners awarded an engineering and procurement contract for CAD\$300 M.		
2. The project team's costly missteps.		
A. No Engineering input	B. No SQS consultation	C. No Project Controls input
Project controls established an inspection budget of CAD\$250 K <i>without engineering input.</i>	SQS <i>was not consulted</i> by engineering or project controls about the inspection budget or plan.	Engineering specified inspection requirements <i>without project controls input.</i>
3. Because of missteps in Step 2, the next steps are unclear.		
Missteps caused frustration, generated confusion, and prompted questions about the following:		
A. Questions about project overruns and future funding	B. Questions about inspection costs and needs vs. wants	C. Questions about inspection requirements
When procurement was 20% completed the inspection budget was 50% consumed!	Should inspection be decreased, funds increased, or a combination? The clock was ticking...	100% inspection was specified for all equipment and materials before shipment! Was this necessary? What is appropriate?
4. Who can help correct the missteps in Step 2?		
Even more questions ...		
A. Who can or will pay more for inspection?	B. A revised inspection budget is required. How will this be arranged?	C. What type of inspection is really required?

## THE CRITICAL TURNING POINT

5. SQS Coordinator Deploys Solution 1 of 2: Rework to Revise the Budget		
A. Cost	B. Budget	C. Inspection
SQS estimated costs for each assignment and included an additional 25% contingency.	SQS prepared a realistic inspection budget based on project specific needs, which was approved.	SQS validated 100% inspection including witnessed testing for all equipment.
6. SQS Coordinator Deploys Solution 2 of 2: Recovery With a Validated Plan		
A. Acquisition of needed funds	B. Monitor budget closely	C. Reduce delivery risk
SQS acquired an additional CAD\$500 K or +300% from the current (or a future) project.	SQS closely-monitored all inspection assignments for the draw down of hours (dollars).	Inspection addresses the risk of equipment and materials being delivered incomplete, incorrect, or late.
7. Outcome Achieved: Current and Future Project Success!		
A. Best practice established	B. Inspection completed	C. Lesson learned
SQS shall establish an inspection budget with a contingency and validate inspection requirements, with project team input!	SQS ensured all inspection was completed per project requirements and under budget. Hence, CAD\$30 K was returned to the project.	SQS shall be included with project planning in future projects from the start. <i>Do it right the first time!</i>

The project in this case study ended well but could easily have ended very differently. The KT Project provides best practices and essential guidelines to support successful project execution by leveraging expert knowledge transfer. We help eliminate, minimize, and mitigate project challenges caused by knowledge gaps to drive your business forward. Can your projects tolerate the risk of overruns? Most cannot.

**The Key to Project Success expands on this infographic.**



# CONTACT

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