

Is
Plant Management
a
Noble Endeavor?



Ken Allen, Jake Allen, Ed Gibson, Greg Gibson, Matt Gibson, Carl Green

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The Plant Managers Job

Very few positions have such grave responsibility. While maintaining energy supplies for a thirsty world, the Plant Manager wages a constant war to keep his workers safe. He is expected to cheaply produce his product, without impacting the environment and he is expected to do it safely. Some version of these expectations is contained in every plant mission statement. As challenging as this goal is, it seems straight forward enough.

The role is cloaked in personal responsibility. A Plant Manager is the embodiment of the facility to every interested party, both internally and externally. Like the captain of a ship, the manager is viewed as having the power to make decisions and direct work, such that he is personally responsible for everything that happens at the plant. Ultimately, the Plant Manager is culpable before the law for decisions that lead to environmental or safety incidents, of which there are too many.

The Contradiction In Balanced Objectives

Many have framed this management challenge as a balancing act. In fact, the concept of “balancing” signals inherent contradictions within these mission statements. The interests of plant stakeholders are diverse: the shareholders who want to make money, the extended community that expects to have reliable, affordable product available, the local community that expects well-paying, safe jobs, and the naturalist who expects product without environmental impact. Each group presses for its own agenda. The unspoken assumption of the “balancing” concept is that increasing production or lowering costs comes at the expense of safety or environmental consequence. “Balancing” these outcomes seems to mean reducing production or increasing costs to improve safety and/or environmental impact. The ethical inference is that reducing production and increasing costs is the only responsible thing to do for the sake of personnel safety and the environment. This subtle “balancing” philosophy produces the perception that the Plant Manager is not ethical if he pursues increased production and reduced costs. Within what context then, is Plant Management a noble endeavor?

Conflicting Perspectives

The plant owners, those who have hired the Plant Manager, demand production and cost management. As a consequence, the Plant Manager is viewed by the other stakeholders as the owner’s man, committed to a career that rewards production and cost management at the expense of more noble goals. The literature defines the safety challenge as one of combating plant management and the production imperative. It seems that the safety community would advocate that the only safe plant is one that is shut-down, producing nothing. The environmental lobby takes this position unabashedly.

There is ample argument for such shrill perspectives. In our consulting experience we routinely encounter the prevalent industrial view of this dilemma; leaks, incidents, accidents, and even deaths are part of the reality of industrial operations. This view suggests a working axiom: the balancing act will result in production as well as some accidents and, ultimately, deaths. By extension then, the only solution for eliminating deaths is to shutdown the plant. Frequently the operators expressing these views are persistent safety violators. Is the operator’s balance of production and safety appropriate? Once the accident occurs, the answer is emphatically: No!

Business As Usual

Several years back, one of our clients was promoted to a Plant Manager position. In his first review of the plant's performance he found chronic violation of environmental release regulations. His superior, the corporate VP, was also his predecessor as Plant Manager, and had achieved an impressive production record. The expectation was clear that these levels would be maintained. However, this performance apparently required numerous, albeit intermittent, violations. The plant was operated at a level such that any upset, no matter how minor, caused a "release excursion". The regulators were aware of the situation and had apparently elected to not penalize these past violations, with the clear expectation that the plant would improve its environmental performance going forward. Our new Plant Manager, who felt an ethical responsibility to eliminate the environmental violations, found his boss unsupportive because he assumed this commitment would reduce production and increase costs.

So it is not a surprise that management's "balancing" actions are viewed as pursuing production through increased safety risks and a compromised environment. This is not perceived as a particularly noble endeavor by anyone, including the owners. Rather, it is simply business-as-usual. In our client's situation, it is interesting to note that the boss did not say, go and intentionally violate the regulations. He said, whatever you do, don't lose production or increase the costs. The directive is communicated as a production imperative, inflexible enough to implicitly require safety and environment sacrifice. Thus, compromised safety and environment become the practical result of a "balancing" intention contained within the mission statements.

The Nature of Risk

This compromise mindset is derived from the nature of risk itself. Many times decisions are based on a poor understanding of the potential consequence of risks being taken, particularly the long term risks. It is likely that the call for risky action is being made to achieve short-term production benefits. The risk consequence is not a certain outcome, only a possibility, whereas the production benefit is real and certain. How do you balance a possibility against a reality? You don't. Reality will always trump possibility. The fact that the risk is usually enjoined without consequence and production is enhanced makes the decision an apparent easy victory, a risk worth taking. The reality of industry-life is that people routinely take risks. They do it where the probability of a negative consequence seems remote, the significance of the consequence seems minor, and the benefit is tangible and immediate. Risk-taking occurs so often that even great workers are culturally accustomed to the flawed pattern. It is the cultural norm to take these risks.

Risk-reward models permeate each organization, extending to the interface with the real work. Ultimately, the risky decisions are made by front-line employees. These workers do not comprehend the consequence that looms. They do know they will be culturally esteemed for successfully taking the risks and management will reward them for the extra production they generate. This process may cycle for years, reinforcing these cultural norms and organizational priorities. Finally the probability associated with the risk takes over, the luck runs out and disaster strikes. We know that the cause-analysis of significant incidents invariably leads back to management failure. The investigations show that the precarious "balancing" act has tipped again; management pursued production at the expense of safety or the environment.

A New Formula

So how can we resolve this dilemma? How can the Plant Manager, with a clear eye and a clean conscience, declare that the plant mission is a noble endeavor? The answer lies in redefining the mission and eliminating the concept of a balanced agenda. Plant Management truly serves only one stakeholder – society. Management should provide a clear, unambiguous proclamation: “We will embrace society’s mandates. We will embrace regulation.”

Make no mistake. This is very different than the old balancing formula. Although unique, it is simple, really. You begin with the rules, and produce as much as you can, as cheaply as possible within those limitations. There is no compromise, no trade-off to regulation. There is no balancing. This new vision pursues production only within safety and environmental boundaries. There is no wink-and-nod; there is only noble intent: compliance... then production. We call it Noble Production.

The fundamental thing to understand about this new decision-making model is that the debate over the merit of specific regulation is not the Plant Manager’s responsibility, nor his bosses. Society decides these important issues. Plant stakeholders have one single demand that must be honored. They require that the Plant Manager embrace rules and regulations. He must diligently work to produce his product, but only so long as he can conform to both the intent and the purpose of such rules and guidelines.

About Rules and Risk

Rules represent the level playing field on which society establishes its free market, allowing competitors to succeed or fail on the basis of product availability and cost. This is not an easy game, and society is not an easy commissioner. But society is not an ambiguous, multi-headed master either. Society simply wants the Plant Manager to produce his products at the lowest cost possible, strictly within the rules. Noble competitors should have the right to expect everyone to play by these rules.

Society incorporates into the rules and regulations what it collectively believes is the acceptable cost of the risk inherent in producing vital resources. Not denying the danger, safety and environmental regulations clearly demonstrate society’s intent to identify and understand the plant’s risk, and ensure that appropriate mitigation measures are taken. It is acceptable, for example, to work at heights if appropriate fall-protection is engaged to lessen the risk. What the employee does not understand is the likelihood and collective cost of all falls. The regulator is privy to industry research and understands that society believes the extra cost required to implement fall-protection is worth the decrease in worker injuries and associated costs. Does it completely eliminate the risk? No, but it significantly reduces the risk for a relatively small cost.

Regulations factor the cost into systems that are intended to mitigate risk to a level acceptable to society. They intend to increase the routine cost in such a way as to decrease the unexpected cost of disaster, so that society benefits as a whole. The whole point of this argument is that regulatory-required systems, whether we agree with them or not, incorporate society’s view of the acceptable risk, such that the balancing question is no longer necessary. If a decision is made to violate a required rule or system for the sake of production, it is an unacceptable risk decision. It will be indefensible in the event of a safety or environmental incident.

A New Path To Success

One aspect of this better-way is that it creates a clear basis for the Plant Manager to be legitimately accountable for plant performance. In the “balancing” paradigm, the Plant Manager could not possibly participate in every risk-based decision that is undertaken every moment throughout the plant. Under the noble paradigm, the Plant Manager can legitimately establish both the expectation and the systems to ensure compliance with the intent of all of society’s regulations. At the heart of this expectation, it is a risk-management decision that can now be directed throughout the organization. It is also a risk management decision that can be defended to superiors in the organization. It removes the unspoken assumptions in the “balancing” philosophy and replaces them with clear commitments for regulatory compliance.

Maybe the most important facet to this new model is that it releases the talent of the organization to pursue technical opportunities to increase production and reduce costs within the regulatory boundaries. The problem solving debate moves from the balancing question to a question of innovation. How can we find new solutions? How can we ensure compliance? How can we increase production? How can we reduce costs? This creates a clear and exciting leadership opportunity for the Plant Management. This is a new way to challenge the organization to improve and achieve its goals, to find a way to win, playing by the rules. It embraces the challenge; it does not argue against it, or compromise it.

Returning to the story of our Plant Manager Client, despite a lack of support, he persisted in his commitment to comply with regulatory release-rules. He worked with his operation team to redefine the plant control philosophy and ensure release limits were never exceeded. He tells the story of waking up each night to verify that the control philosophy was being maintained. Calling the control room and asking questions became a nocturnal ritual. Once the team mastered the new control philosophy, they pursued increasing production. The result: no violations and a new annual production record. Coincidentally, the state EPA began an environmental crack-down that year and started levying fines for releases. The savings from avoided fines was in the millions of dollars. Our client’s boss thanked him for the stellar plant performance and his commitment to the release regulation.

The Right Time For Change

As consultants, our pan-industry experience affords us the ability to observe trends and prepare for them. In the last decade we have heard our customers speak in increasingly combative terms about the frustrations borne of regulation and increased demand for their vital products. The real-world Plant Manager vignette we have used is occurring today in small ways, and in many segments of the heavy-industry and energy business. We believe that this time, the winter of 2010, is unique. This year we have experienced both the Deepwater Horizon oil spill in the Gulf of Mexico and the deaths of scores of miners in the Upper Big Branch coal mine in West Virginia.

We believe our industry sees the wisdom in a new management paradigm, maximizing production within regulatory constraints. This model reframes the challenge from one of balancing contradictory demands, to a clear, unambiguous objective. It is defensible for all interested and concerned parties. It is fair and competitive. It satisfies society’s intent and expectations ... and it is good business. One of our colleagues has referred to this paradigm as “new capitalism”. Regardless of what it will ultimately be called, now is the time for Plant Management to embrace this Noble Endeavor.

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