Plant Safety

Commentary:

Does safety really come first?

The following article was prepared by Harold J. Sandvig of Cargill Inc., Associate Editor for JAOCS News for Plant Safety.

Safety first. How many times have you heard that?

Or you're asked, "How's safety? Are we safe today? Have we got safety under control?'

Some of these rhetorical questions come from old-school managers who still believe the safety manager or safety supervisor is responsible for safety performance at his facility. We now know that's not true. Conventional wisdom teaches us that safety is a line responsibility, that safety and loss control are the responsibility of every person in the plant from the refinery operator to the plant manager and on up to the chief operating officer. But, some folks just don't get the picture. They are the same managers who say safety's first.

Safety is not first. Does that shock you?

If safety is first, then why is it that management screams when the deodorizer has to be shut down because the therminol pump isn't delivering the heat and the no-flow indicator (normally a pressure switch) has been "maxed out" and would have to be bypassed? Doesn't he know this is a potentially dangerous situation? It's the same person who has meal to deliver and a pin coming out of the extractor chain needs to be fixed. He knows what comes first: production. It's production that pays the bills; it's production that makes the profit. He tells you safety is first, but he doesn't really mean it. And do I, as an operator or shift supervisor, really believe safety is first? No way. I've been trained to know what side my bread is buttered on. Safety doesn't pay my wages; production does.

If safety isn't first and production is, then what is safety?

Safety, like quality, is a mind set. Safety is doing things the right way. Therefore, safety is the result of good management. Let me repeat that.

Safety is the result of managing the plant or department or job properly, just as you do production, quality and cost control. Safety is not some ethereal equation or mysterious substance; good safety performance or results come from managing your job, doing it the right way and staying in control.

Production, quality and safety can and must co-exist and be managed with the same commitment by every level of the workforce and management if our businesses are to be competitive, efficient, costeffective and successful.

I can't speak to the economics of the business, but all things being equal, the efficient plant that is not having the bottom line eroded by high workers' compensation costs, unnecessary property damage, absenteeism, turnover, offquality, waste or rework is in a better position to be more competitive and profitable.

If we can agree on this, let's go back to the question of which comes first, safety or production. When we conduct safety and loss control seminars for operating division supervision, some participants expect us to support the axiom that safety is first. They have difficulty dealing with our denial of safety in favor of production until we introduce the key ingredient: management control.

Control or lack of it can be the difference between a safe or unsafe condition, and I frequently use this example when explaining why safety doesn't have to be sacrificed for production. Years ago, we were extracting soybeans in a deep-bed belt extractor when the operator, while on his rounds one evening, observed through the sight glass in the screen wash area that the few pins in the main transport chain had sheared their cotter keys and were in danger of working their way out of the chain. The chain was

moving slowly, and the displacement of the pins, while imperceptible, could be visually measured over time. We also knew that if the chain separated, even partially, there was a risk that the extractor would bind and shut down under load. We were a week or so from an opportune time for a shutdown; the meal and oil were sold. We needed to run, we needed the production, and safety would have to take second place.

Or, would it? If we had to run the plant in that condition and experienced an emergency shutdown, the downtime for repair would be much longer because the extractor would be full of 80 tons of hexaneladen meal with the hazardous task of working on the chain in a hexane atmosphere. Even when we airand steam-purged, we could not get the environment as clear as we needed; this also assumes that if we did enter, we could pull the chain together enough to relocate the pins without emptying the extractor manually. Running a few more days was risky but would allow us to plan an orderly productive shutdown and defer or switch some oil and meal shipments, keeping our customers happy.

The decision was made to run, but it had to be done safely, only long enough to get our sales in order, and above all, we had to be in control. We set up a rotating crew (to avoid boredom) to monitor the bad links through sight glasses. We established the criteria for the program and communicated the maximum pin movement acceptable before we would shut down. It took a little extra manpower, but we stayed in control.

Now this was no big deal. Plant management of continuous processing plants make similar decisions frequently. The point is that on the one hand, production had certain requirements and would have liked to dictate the shutdown, when actually safety and a productive shutdown had to be the primary concern. Managing the crisis included

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working production and safety considerations together while staying in control.

In this example, we can see that management control was essential to the safety of the plant and personnel, but it's not as clear perhaps when we speak about personnel safety on a day-to-day basis. The philosophy is exactly the same. Without management control, we provide an opportunity for substandard conditions and substandard practices to creep into our businesses. This can result in accidents involving personnel or damage to property.

Substandard conditions can be inadequate guarding, defective tools or equipment, poor housekeeping or hazardous environmental conditions. Substandard practices include improper lifting, failure to lockout, removing safety devices or using equipment improperly. We can see these acts and conditions and recognize them as being the reasons for accidents. When a loss does occur, this is where we stop our investigation.

Unfortunately, only the immediate cause of the accident or symptom has been identified. Shouldn't we as managers look beyond the immediate cause to the substandard practice or condition that was allowed to exist? When the pin started sliding out of the extractor chain, we had a substandard condition that could even have begun with substandard materials of construction. In either case, had not some sort of management control been exercised, that substandard condition would have resulted in a serious accident.

When managers view personnel safety, it's often not seen the same way. Injuries are caused by poor attitudes, lack of awareness, not following instructions or using the wrong tool. At least, this is what the incident investigation reports frequently say. We tend to end the investigation there. We fail to ask other important questions: What was the employee's physical condition? Did he/she have the skill, the training, the job knowledge? Was that person under stress? Did

we provide the necessary leadership or supervision? Was the engineering or maintenance adequate? Did we develop and enforce work standards? We didn't manage nor were we in control if we didn't ask these questions and provided the employee only with the basic tools to do the job. We lacked a safety and loss control program, failed to establish standards and did not require compliance with those standards by employees, supervisors or managers.

I began by asking which comes first, production or safety? Does it have to be an either/or situation? No, and it shouldn't be.

When management defines the production or quality work to be done, it logically establishes standards of performance. The same should be done for safety. You expect compliance with production and quality standards, and you must expect compliance with safety standards. If not, you're not in control and you're not managing. Safety is the result of good management.

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