

**INTERVIEW OF RAY HAWKINS
TAKEN ON JULY 11, 2006
LANCASTER HOTEL
HOUSTON, TEXAS**

Interviewers: Rudy Blyweert and Stephanie Moore

Introductory comments: Context, interview confidential, but not privileged

Career

- October 3, 1977: Began career with Amoco in Texas City as a process operator
- 1986 promoted to Supervisor
- 1996 promoted to Senior Supervisor
- 2000 promoted to Loss Control Analyst in Commercial
- July 2003 became Superintendent ARU in Chemicals Group. Reported to Rick Peltier. Had responsibilities for ARU; ISOM; AU2 (A and B); New NDU. Team included seven supervisors; two engineers; two reliability engineers; ~ thirty operators. Had five turnaround cycles.
- Summer 2004 – September 2004 – moved back to West Plant reporting to Willie Willis; had responsibility for Aromatics
- Most of his time has been spent in West Plant.
- November 2005 Project Manager for ABF project (focused around removal of flares, et al) and is the Operations representative on the new CCR project' also involved in Roles/Responsibilities work reporting to Dan Harris

How is TXC running today?

Running at around 50% capacity; just installed the new temporary flare. Still lots of integrity issues (we don't know what we don't know). Have staggered start up of Tier 1 (including such sub-installations as Tier 1.149), Tier 2

Views on Mogford Report and March 23 incident

Agree with most of the report (he has had experience as a Level A Incident Investigator)

Notable exception: report indicated that there had not been a RV study on the ISOM unit; the RV study had been started and was 50% completed.

Feels a bit like the 'swiss cheese' lining up'; very disturbing that the night operator had packed the tower with liquid and did not sign off on procedures.

He had been reassigned as SPA for the ARU turnaround in January 2005; scope had gradually increased from \$6 mm to \$8.4 mm to \$12.4 mm, primarily as a result of found corrosion. The interim superintendent was Charlie Logan. Charlie had not gone through formal superintendent training (which he felt was pretty lax and focused more on the soft skills; though he had sent Charlie to a budget class; Amoco did not have formal training programs either). Charlie was good on PSM and environmental issues.

TXC Work Environment

On working extended hours: Employees and contractors like to work really long work hours (months of 12 hour days without a day off). Turnaround schedules now include control of work into schedule.

On Step Up Process: Does serve as a way to go and pick up overtime meals since they are no longer delivered; also as a way to recognize and reward operators who lead a shift. Scott's (who was usually a stickler for adhering to policies and procedures) son had broken his arm the day before so not an emergency situation; should have had an opportunity for a proper hand off.

On Day of Incident: Tenhaaf (who was in a satellite room) and Briggs (who was in the control room) spoke by phone; rather than by radio. Had they communicated by radio, everyone would have heard them.

On Brigg's competence: Briggs had completed OSHA 190 regulatory training and computer based training, which was primarily centered on HSSE and compliance; not so much unit specific training; would have gone through orals with his supervisors. Briggs was allowed to complete the start up alone because in the late 1990's they had completed a MOC which now allowed for one board operator to start up the procedure.

On Blow-down Stacks: He was aware of other incidents around blow down and stacks; though aware of none involving Warren Briggs. Amazes him that many operators today still would have a blow down stack instead of flares.

On MOC for trailer siting: He did receive the request to approve for the start of the MOC process; though he did not think that the trailer was in his responsibility – more of 'no-man's land'; He did approve the MOC to begin, which signaled the start of the citing analysis. The MOC never came back to him for commissioning/approval. Thought somebody else had approved. Process was not clear. He could not see the consequences. There are apt to be more things that we are blind to. We don't have the time to think about what could happen and make timely interventions – we are just consumed with business.

On Process Safety: It has not been overlooked; compliance is embedded in how we operate; acknowledge that there is a disconnect with operators and PSM. PSM team has 4 employees and the Commercial team has 75 employees (perceived sign of placed emphasis). The understanding varies at levels.

On Personal Safety: More visible by the operators.

On Pre start ups: Not a clear policy; one was not done for the start up of the raffinate splitter, did not think one was required.

On Change in Relief Valves: MOC had been completed on raffinate when replacing the relief valves; request that the process be updated did not generate a hydraulic study.

On handover with Mark Risinger: Probably a few weeks; included talks about people, plans to bring over supervisors from Chemicals; did talk about a few problem employees – though not about Warren Briggs.

On Culture a year later: Really likes JMW training; what you say does matters; understand what it means to take a stand; enabled discussions around possibilities. People now see commitment to investment (unlike before when people did not see action).

On Working for Willie Willis: Could tell Willie was going to do the right thing.

Most compelling issues are around environmental compliance, not safety. Plant integrity would have improved – though just not as accelerated.