

JOHN A. JURGIEL & ASSOCIATES, INC.

*Occupational Health and Safety Consultants*2092 CONCOURSE DRIVE
ST. LOUIS, MISSOURI 63146
(314) 567-7488

December 30, 1985

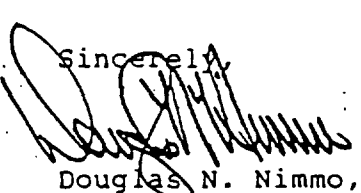
Mr. Jim Grizzle
Safety Supervisor
Shell Oil Company
Post Office Box 262
Wood River, Illinois 62095

Dear Jim:

Bill Cunningham has pointed out a calculation error in my December 17, 1985, summary of the CCU-2 shutdown. The error was in the calculation of the TLV for Quartz (silica) during sandblasting operations in the regenerator. Enclosed is my corrected report reflecting table and narrative changes.

I am sorry for any inconvenience the December 17 report may have caused.

Sincerely,


Douglas N. Nimmo, CIH

cc: Bill Cunningham [Shell Oil]

Enclosure

DNN/kn

LAM 023922

ABS-007104

CCU-2
INDUSTRIAL HYGIENE PROJECT SUMMARY

December 30, 1985

By
John A. Jurgiel & Associates
2092 Concourse Drive
St. Louis, Missouri 63146

LAM 023923

ABS-007105

RESULTS
OF AIR MONITORING DURING CCU-2 TURNAROUND

SAMPLE NO. " TIME		LOCATION	CONTAMINANT/UNITS	RESULTS	TLV
ON	OFF				
<u>Removal of refractory from Regenerator, September 29, 1985.</u>					
CCU2-1 0820-1354		Downwind of 'Super Sucker'	Asbestos f/cc	N.D.	2.0
CCU2-2 0825-1354		Next to conex box	Asbestos f/cc	0.013	"
CCU2-3 0831-1350		Outside of 60" manway	Asbestos f/cc	0.0092	"
CCU2-4 0834-1349		Inside 'Regen' under ladder at 60" manway	Asbestos f/cc	0.782	"
CCU2-5 1157-1349		Inside 'Regen' on work platform	Asbestos f/cc	1.77	"
<u>Removal of refractory from Regenerator, October 1, 1985.</u>					
CCU2-6 0941-1358		Downwind from super sucker.	Asbestos f/cc	N.D.	2.0
CCU2-7 0943-1357		Next to conex box	Asbestos f/cc	0.015	"
CCU2-8 0946-1354		Outside 60" manway	Asbestos f/cc	0.006	"
CCU2-9 0949-1347		Inside 'regen' under ladder at 60" manway	Asbestos f/cc	2.99	"
CCU2-10 0949-1347		Inside 'regen' on operator platform	Asbestos f/cc	3.05	"
<u>Manual removal of refractory from Regenerator with air movers on, October 10, 1985.</u>					
CCU2-11		Outside area sample at outlet to air mover on level 13	Asbestos f/cc	0.118	"

LAM 023924

ABS-007106

RESULTS
OF AIR MONITORING DURING CCU-2 TURNAROUND
continued

SAMPLE NO. TIME ON - OFF	LOCATION	CONTAMINANT/UNITS	RESULTS	TLV
CCU2-12	Outside area sample downwind of air mover on level 13	Asbestos f/cc	0.031	"
CCU2-13 1414-1543	Personal sample on Louis Finley	Asbestos f/cc	1.28	2.0
CCU2-14 1418-1543	Area sample in bottom of 'regen'	Asbestos f/cc	1.05	"
<u>Manual removal of refractory from Regenerator with air movers on, October 11, 1985.</u>				
CCU2-15 1947-2150	Personal sample on Don Chappell	Asbestos f/cc	2.12	"
CCU2-16 1949-2150	Area sample in bottom of 'regen'	Asbestos f/cc	3.23	"
Sandblasting in Regenerator with air movers on, October 14, 1985.				
CCU2-18 1356-1545	Outside 60" manway of 'regen'	Asbestos f/cc	0.02	2.0

- 1 Less than (<) values indicated that contaminant concentrations were below the reliable level of quantification of the method of analysis.
- 2 The TLV for Dust that contains >1% quartz is calculated as follows:
TLV for Total Dust = $(30 \text{ mg/M}^3) / (\% \text{ quartz} + 3)$
- 3 This TLV is recommended by the ACGIH in their Documentation for Threshold Limit Values for total dust samples containing Quartz.

LAM 023925

ABS-007107