

Interoffice Communication

TO: Jim Lahey
FROM: Tom L. Roland
DATE: October 26, 1988
SUBJECT: SUPPLY AND TRANSPORTATION - BENZENE MONITORING REPORT

The report attached is a summary of the Time Weighted Average (TWA) and Short Term Limit (STEL) samples accomplished at the sites within Supply and Transportation.

Logan Statistical Analysis was utilized in assessing the results and conclusions. A summary is as follows:

* TWA SAMPLING

- o There were 715 TWA samples collected
- o 125 Sites monitored
- o 200 Tasks/Jobs monitored

Logan decisions on these Tasks/Jobs can be categorized as follows:

- o 35 are "OK" and no further action is required.
- o 5 are "UNACCEPTABLE" at the PEL of 1 ppm.
 - Semiannual monitoring
 - Annual medical surveillance
 - Written compliance plan
- o 2 are "UNACCEPTABLE" at the AL of 0.5 ppm.
 - Annual monitoring
 - Annual medical surveillance
- o 155 are "MORE SAMPLING REQUIRED".
 - 78 are leaning towards an "UNACCEPTABLE" and are High Priority and need further monitoring.
 - 77 are leaning towards "OK" and are Low Priority.

Submittal & Data.
- some have had programs, but most don't

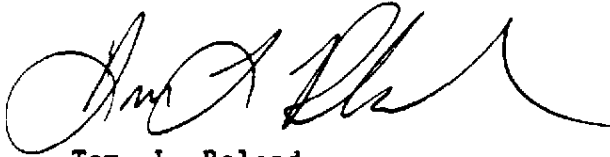
STEL SAMPLING

- 53 Sites require STEL monitoring (TWA's >0.156). This has been completed at 41 Sites.
- 8 STEL samples at 6 Sites were >5.000 ppm.

- Annual Medical Surveillance

If the decision is made to conduct additional monitoring of the 78 Tasks/Jobs that are High Priority, 283 badges and analysis at a cost of \$9,224 will be required. If the decision is made to not conduct additional monitoring of these Tasks/Jobs, then they must be placed in one of the "UNACCEPTABLE" categories as appropriate.

* This report however does not show the results and conclusions of those sites with uncompleted initial monitoring.



Tom. L. Roland

/cjs
Attach

cc: Rick Preston
Lou Legendre
Jim Matheson
Terry Thoem
File

MCD 000015897

25-Oct-88 DATE: SUPPLY & TRANSPORTATION BENZENE MONITORING

				TWA LOGAN DEC				TWA PRIORITY							
SITE CODE	DIV CODE	SITE NAME	TASK CODE TASK NAME	U				M W				STEL	RESULTS	REMARKS	
				S A M P T L W E A S	D O R P K E T	H I L C T O I E H W L M P S D	E R I T C T O A E M ' E								
P5504 MC		BETHANY	JBXX GAUGER	3		X			X				X	1.8	
P5504 MC		BETHANY	MAXX FACIL SUPVR	3		X				X					
P5506 MC		GRIFFITH	MAXX FACIL SUPVR	6	X										
P5508 MC		LINCOLN	MAXX FACIL SUPVR	7	X								X	0.7	
P5510 MC		BELLE	MBXX OPERATOR	6	X								X	0.72, 0.4, <0.2	
P5511 MC		GLENPOOL	MAXX FACIL SUPVR	3		X				X					
P5512 MC		MT. VERNON	MBXX OPERATOR	3		X				X			X		
P5513 MC		OK CITY	MBXX OPERATOR	3		X				X			X		
P5516 MC		WICHITA	MAXX FACIL SUPVR	3		X				X			X		
P5518 MC		WOOD RIVER	MBXX OPERATOR	3	X										
P5519 MC		NILES	MAXX FACIL SUPVR	4		X				X			X		
P5519 MC		NILES	MBXX OPERATOR	2		X				X					
P5521 MC		WRENSHALL	MAXX FACIL SUPVR	6	X										
P5531 WE		ALBUQUERQUE	MBXX OPERATOR	6	X										
P5535 WE		SHERIDAN	MAXX FACIL SUPVR	1		X			X						
P5536 WE		DENVER	MBXX OPERATOR	2		X			X				X		
P5540 EA		ALBANY	MAXX FACIL SUPVR	3		X				X					
P5540 EA		ALBANY	MBXX OPERATOR	3		X				X					
P5542 EA		BALTIMORE	MAXX FACIL SUPVR	1		X			X						
P5542 EA		BALTIMORE	MBXX OPERATOR	3				X			X	X	X	<0.03, 2.2	SEMI-ANW REMON
P5543 EA		BIRMINGHAM	MAXX FACIL SUPVR	6		X				X			X		
P5544 EA		CHARLOTTE	MAXX FACIL SUPVR	3		X				X					
P5544 EA		CHARLOTTE	MBXX OPERATOR	3		X			X				X		
P5545 EA		CHATTANOOGA	CC20 TECHNICIAN	2		X				X					
P5545 EA		CHATTANOOGA	MAXX FACIL SUPVR	4	X										
P5546 EA		DORAVILLE	MAXX FACIL SUPVR	1		X				X					
P5546 EA		DORAVILLE	MBXX OPERATOR	5		X				X			X		
P5548 EA		GREENSBORO	CC20 TECHNICIAN	3	X										
P5548 EA		GREENSBORO	MAXX FACIL SUPVR	1		X				X					
P5548 EA		GREENSBORO	MBXX OPERATOR	2		X				X					
P5549 EA		KNOXVILLE	JAXX OPERATOR	3		X				X					
P5549 EA		KNOXVILLE	MAXX FACIL SUPVR	3		X				X					
P5550 EA		MACON	MAXX FACIL SUPVR	3		X				X					
P5550 EA		MACON	MBXX OPERATOR	3		X				X					
P5551 EA		MONTGOMERY	MAXX FACIL SUPVR	2		X				X					
P5551 EA		MONTGOMERY	MBXX OPERATOR	2		X				X					
P5552 EA		MONTVALE	JAXX OPERATOR	1		X			X						

000015898

MOB 000015898

25-Oct-88 DATE: SUPPLY & TRANSPORTATION BENZENE MONITORING

				TWA LOGAN DEC				TWA PRIORITY					
SITE CODE	DIV CODE	SITE NAME	TASK CODE TASK NAME	S	U	M	M	E	R	S	N	STEL RESULTS	REMARKS
				A	N								
				M	C			D	I	T	E		
				P	M	C	H	I	T	C	E		
				T	O	E	I	L	C	T	O		
				W	O	R	G	O	A	E	'		
				E	K	E	H	W	L	N	P		
				A	S	T					S	D	
PS552	EA	MONTVALE	MAXX FACIL SUPUR	5		X		X					
PS553	EA	NASHVILLE	MAXX FACIL SUPUR	3		X	X				X		
PS553	EA	NASHVILLE	MBXX OPERATOR	3		X	X				X		
PS554	EA	NORFOLK	MAXX FACIL SUPUR	2		X		X					
PS554	EA	NORFOLK	MBXX OPERATOR	4		X		X					
PS555	EA	AUGUSTA	MAXX FACIL SUPUR	3		X			X	X	X		SEMI-ANM REMON
PS555	EA	AUGUSTA	MBXX OPERATOR	3		X			X	X	X	2.2, 0.2, 0.2, 7.7, 0.3	SEMI-ANM REMON
PS556	EA	RICHMOND	JAXX OPERATOR	1		X		X					
PS556	EA	RICHMOND	MAXX FACIL SUPUR	5	X								
PS557	EA	SELMA	MAXX FACIL SUPUR	3		X		X					
PS557	EA	SELMA	MBXX OPERATOR	3		X		X					
PS558	EA	SPARTANBURG	MAXX FACIL SUPUR	6	X								
PS571	SO	WESTLAKE	MAXX FACIL SUPUR	2		X	X				X		LEAK
PS572	SO	SOUTHLAKE	MBXX OPERATOR	1		X	X						
PS573	SO	CLIFTON RIDGE	MAXX FACIL SUPUR	1		X		X				0.08	
PS573	SO	CLIFTON RIDGE	MBXX OPERATOR	3		X		X				0.020	
PS574	SO	LAKE CHARLES	MBXX OPERATOR	3		X		X					
PS575	SO	MT. PLEASANT	MAXX FACIL SUPUR	1		X	X						
PS591	WE	GREAT FALLS	MAXX FACIL SUPUR	2		X		X					
PS592	WE	HELENA	MAXX FACIL SUPUR	2		X		X					
PS593	WE	MOSES LAKE	MAXX FACIL SUPUR	2		X		X					
PS594	WE	SPOKANE	MBXX OPERATOR	4		X		X			X	0.5, 2.4, 0.6	
PS595	WE	BOZEMAN	MAXX FACIL SUPUR	2		X		X					
PS705	?	SAFETY	FBXX TECHNITIAN	2		X		X					
PS711	SO	MIDLAND	BAGO MAT HANDLR	1		X		X					
PS711	SO	MIDLAND	BCXX OPER SUPUR	1		X		X					
PS712	SO	GRAPEVINE	CE90 WAREHOUSEMAN	1		X		X			X	0.2, 0.2	
PS717	SO	HOUSTON	CE90 WAREHOUSEMAN	1		X		X					
PS738	MC	MINNEAPOLIS	DA10 SUPERVISOR	1		X		X					
PS738	MC	MINNEAPOLIS	DAXX TRUCK DRIVER	8	X						X	0.2, 0.04	
PS739	MC	WINONA	DAXX TRUCK DRIVER	2		X		X					
PS741	MC	WRENTHALL	DAXX TRUCK DRIVER	6	X								
PS759	EA	PAULSBORO	DA10 SUPERVISOR	3		X		X					
PS759	EA	PAULSBORO	DAXX TRUCK DRIVER	4		X		X			X		
PS775	EA	ROANOKE	DA10 SUPERVISOR	2		X		X			X		
PS775	EA	ROANOKE	DAXX TRUCK DRIVER	4		X			X				
PS802	SO	ABILENE	DAXX TRUCK DRIVER	7	X						X	0.040	
PS804	MC	DAVIS	CD10 MECHANIC	1		X		X					

MCD 0000158

Product
emitted →
program

MCD 000015899

25-Oct-88 DATE: SUPPLY & TRANSPORTATION BENZENE MONITORING

SITE CODE	DIV CODE	SITE NAME	TASK CODE	TASK NAME	TWA LOGAN DEC				TWA PRIORITY				STEL RESULTS	REMARKS
					U	S	A	M	H	M	W	E		
					P	C	H	I	L	C	T	O		
					T	L	D	E	I	L	C	T	O	
					M	E	O	R	P	G	O	A	E	
					A	S	K	E	T	H	M	L	N	P
PS804	MC	DAVIS	DAXX	TRUCK DRIVER	5		X			X				
PS805	SO	EGAN	CD10	MECHANIC	6		X			X				
PS805	SO	EGAN	DAXX	TRUCK DRIVER	14			X		X		X		ANNUAL MONITOR
PS806	SO	MARINE	DE10	DECK OFFICER	15			X		X	X	X	8 SAMPLES TAKEN	SEMI-ANN REMON
PS806	SO	MARINE	DE20	DECK HAND	14			X		X	X	X	0.3	SEMI-ANN REMON
PS807	SO	FALLS CITY	DAXX	TRUCK DRIVER	3		X							
PS808	MC	HENNESSEY	DAXX	TRUCK DRIVER	6		X							
PS811	SO	MIDLAND	BCXX	OPER SUPUR	1		X			X				
PS811	SO	MIDLAND	DAXX	TRUCK DRIVER	5		X							
PS814	MC	PONCA CITY	DAXX	TRUCK DRIVER	6			X		X		X		
PS815	SO	SMITHVILLE	DAXX	TRUCK DRIVER	1		X			X				
PS816	MC	TULSA	DAXX	TRUCK DRIVER	1		X			X				
PS816	MC	TULSA	JAXX	DELIU/OPER	1		X			X				
PS817	SO	VAN	DAXX	TRUCK DRIVER	2		X			X	X	X	0.05,0.08,12,14	STEL UNACCEPT
PS818	MC	WICHITA FALLS	CD10	MECHANIC	1		X			X				
PS818	MC	WICHITA FALLS	DAXX	TRUCK DRIVER	7		X			X				
PS822	SO	SABINE	8872	UTIL SERUMAN	11		X					X		
PS822	SO	SABINE	DAXX	TRUCK DRIVER	101			X		X	X	X		SEMI-ANN REMON
PS841	WE	BILLINGS	DAXX	TRUCK DRIVER	5		X			X		X	<0.02, 0.08	
PS842	WE	BLOOMFIELD	DAXX	TRUCK DRIVER	7			X		X	X	X	<.05,<.04,<.08,<.2	SEMI-ANN REMON
PS844	WE	DICKINSON	DAXX	TRUCK DRIVER	5		X							
PS845	WE	DOUGLAS	DA10	SUPERVISOR	3		X			X		X	0.09, <0.2	
PS845	WE	DOUGLAS	DAXX	TRUCK DRIVER	3		X			X				
PS846	MC	ELDORADO	DAXX	TRUCK DRIVER	5		X							
PS850	WE	HOBBS	DAXX	TRUCK DRIVER	9		X							
PS858	WE	ROUNDUP	DA10	SUPERVISOR	3		X			X		X	0.04	
PS858	WE	ROUNDUP	DAXX	TRUCK DRIVER	3		X			X		X		
PS862	WE	SANTA MARIA	AAXX	SUPUR/COORD	1		X			X				
PS862	WE	SANTA MARIA	DAXX	TRUCK DRIVER	4		X							
PS862	WE	SANTA MARIA	JBXX	GAUGER	1		X			X				
PS863	WE	SIDNEY	DAXX	TRUCK DRIVER	1		X			X				
PS865	WE	VENTURA	DA10	SUPERVISOR	1		X			X				
PS865	WE	VENTURA	DAXX	TRUCK DRIVER	2		X			X		X	<0.07,<0.05,<0.05	
PS865	WE	VENTURA	DAXX	BACKHOE OPER	2		X			X				
PS866	WE	WALDEN	DA10	SUPERVISOR	3		X			X				
PS866	WE	WALDEN	DAXX	TRUCK DRIVER	2		X			X				
PS868	WE	GRAND JUNCTION	BCXX	OPER SUPUR	1		X			X				

MCD 000015900

25-Oct-88 DATE: SUPPLY & TRANSPORTATION BENZENE MONITORING

				TWA LOGAN DEC				TWA PRIORITY					
				S				U					
				A				N		M	W		
				M				A		E	R	S	N
				P				C		D	I	T	E
				T	L			H		I	T	C	E
				W	E	O	R	P	G	O	A	E	'
				A	S	K	E	T	H	W	L	N	P
SITE	DIV		TASK										
CODE	CODE	SITE NAME	CODE TASK NAME										
PS868	WE	GRAND JUNCTION	NBXX TERM/OPER	6	X								
PS903	WE	BILLINGS	CC20 INSTRMAN	1		X		X				X	
PS903	WE	BILLINGS	JAXX DELIV/OPER	4		X		X				X	0.3, 0.2
PS904	WE	BELFIELD	JCXX FACIL SUPUR	6	X							X	0.03, 0.04
PS905	WE	CASPER	BCXX OPER SUPUR	1		X		X					
PS905	WE	CASPER	CC20 INSTRMAN	1		X		X					
PS905	WE	CASPER	JOXX INSPECTOR	1		X		X					
PS906	WE	CHEYENNE	JAXX DELIV/OPER	1		X		X					
PS906	WE	CHEYENNE	JCXX FACIL SUPUR	7	X								
PS907	WE	CIRCLE RIDGE	JCXX FACIL SUPUR	6	X								
PS908	WE	COMMERCE CITY	JAXX DELIV/OPER	5	X								.3,<0.2,<0.07,0.23
PS908	WE	COMMERCE CITY	JCXX FACIL SUPUR	1		X		X				X	
PS908	WE	COMMERCE CITY	JOXX INSPECTOR	1		X		X				X	
PS909	WE	CUT BANK	JAXX DELIV/OPER	1		X			X				
PS909	WE	CUT BANK	JCXX FACIL SUPUR	4		X			X				
PS910	WE	DOUGLAS	JBXX GAUGER	9	X								
PS913	WE	FT LUPTON	CC20 INSTRMAN	1		X		X					
PS913	WE	FT LUPTON	CO30 MECHANIC	1		X		X					
PS913	WE	FT LUPTON	JAXX DELIV/OPER	1		X		X				X	SPILL
PS913	WE	FT LUPTON	JBXX GAUGER	3		X			X				
PS913	WE	FT LUPTON	JCXX FACIL SUPUR	1		X		X				X	
PS914	WE	GUERNSEY	BCXX OPER SUPUR	1		X			X				
PS914	WE	GUERNSEY	CC20 INSTRMAN	2		X			X				
PS914	WE	GUERNSEY	JAXX DELIV/OPER	2		X			X				
PS915	WE	GLENROCK	JCXX FACIL SUPUR	3	X								
PS916	WE	LANCE CREEK	JAXX DELIV/OPER	5		X			X				
PS916	WE	LANCE CREEK	JCXX FACIL SUPUR	1		X			X				
PS918	WE	ORLA	JCXX FACIL SUPUR	3		X			X				
PS920	WE	ROUNDUP	JBXX GAUGER	6	X							X	0.35,<0.2,<0.2
PS922	WE	SHERIDAN	JBXX GAUGER	1		X		X					
PS923	WE	SIDNEY	JAXX DELIV/OPER	6	X							X	<.04,<.04,<.04,<.2
PS925	NC	CUSHING	CC20 INSTRMAN	1		X		X					
PS925	NC	CUSHING	JAXX DELIV/OPER	5		X			X			X	
PS927	NC	MAYSVILLE	CB70 METERMAN	1		X		X					
PS927	NC	MAYSVILLE	CO30 MECHANIC	1		X		X					
PS927	NC	MAYSVILLE	JBXX GAUGER	3		X			X				
PS929	NC	WILSON	CC20 INSTRMAN	1		X		X					
PS929	NC	WILSON	CO30 MECHANIC	1		X		X					

MCD 000015901

25-Oct-88 DATE: SUPPLY & TRANSPORTATION BENZENE MONITORING

			TWA LOGAN DEC				TWA PRIORITY				STEL RESULTS	REMARKS
SITE CODE	DIV CODE	SITE NAME	TASK CODE	TASK NAME	W E A S	D R P K	U N C M C E T	M W E R D I T C L C T O A E M L N P S D				
PS929 MC		WILSON	JBXX GAUGER	3		X		X			X	
PS929 MC		WILSON	JCXX FACIL SUPUR	1		X		X				
PS936 MC		GLENPOOL	JAXX DELIV/OPER	1		X		X				
PS937 MC		MEDFORD	JAXX DELIV/OPER	12		X		X			X	
PS938 MC		MT. VERNON	CC20 INSTRMAN	2		X		X			X	
PS938 MC		MT. VERNON	JAXX DELIV/OPER	1		X		X	X		13.0	STEL UNACCEPT
PS939 MC		OK CITY	CC20 INSTRMAN	3		X		X				
PS939 MC		OK CITY	JCXX FACIL SUPUR	1		X		X				
PS940 MC		PONCA CITY	JAXX DELIV/OPER	6	X						X	1.7
PS941 SD		LAKE CHARLES	BCXX OPER SUPUR	1		X		X				6.7, 0.52
PS941 SD		LAKE CHARLES	CC20 INSTRMAN	1		X		X				
PS941 SD		LAKE CHARLES	JAXX DELIV/OPER	1		X		X				
PS942 MC		ST. CHARLES	JCXX FACIL SUPUR	6		X	X		X		X	ANNUAL MONITOR
PS945 MC		WICHITA	JCXX FACIL SUPUR	4		X		X			X	5.3
PS946 MC		WOOD RIVER	JAXX DELIV/OPER	3		X		X	X			
PS954 MC		BURRTON	JBXX GAUGER	2		X					X	0.91, 0.1
PS956 MC		GENESEO	CD30 MECHANIC	1		X		X				
PS956 MC		GENESEO	JBXX GAUGER	1		X		X				
PS957 MC		HENRIETTA	JBXX GAUGER	1		X		X			X	
PS958 MC		HOLLIDAY	JBXX GAUGER	1		X		X				
PS959 MC		KINGFISHER	CB70 METERMAN	2		X		X				
PS959 MC		KINGFISHER	CD30 MECHANIC	1		X		X				
PS959 MC		KINGFISHER	JBXX GAUGER	3		X		X			X	0.1, 0.07, 0.1
PS960 MC		LETSCH	JBXX GAUGER	1		X		X				
PS961 ME		ROCKY MT DIST	JAXX DELIV/OPER	7	X						X	
PS963 MC		MCPHERSON	JBXX GAUGER	1		X		X			X	
PS965 MC		PONCA CITY	JAXX DELIV/OPER	1		X		X				
PS965 MC		PONCA CITY	JBXX GAUGER	2		X		X				
PS965 MC		PONCA CITY	JCXX INSPECTOR	1		X		X				
PS966 MC		PERRY	JBXX GAUGER	2		X		X				
PS967 MC		WICHITA	JCXX FACIL SUPUR	7	X							
PS968 MC		WICHITA FALLS	BCXX OPER SUPUR	1		X		X			X	
PS968 MC		WICHITA FALLS	CD30 MECHANIC	1		X		X				
PS968 MC		WICHITA FALLS	JBXX GAUGER	2		X		X				
PS968 MC		WICHITA FALLS	JCXX FACIL SUPUR	2		X		X				
PS984 SD		GREENSBORO	JCXX FACIL SUPUR	1		X		X				
PS984 SD		GREENSBORO	MAXX TERM SUPUR	1		X		X				

MCD 000015902

25-Oct-88 DATE: SUPPLY & TRANSPORTATION BENZENE MONITORING

				TWA LGAN DEC		TWA PRIORITY											