البراميل القريبة من المحرقة MG

M 156	INC	full —
M 157		full —
M 158		Liquid + Solid
M 159		solid
M 160		Liquid + Solid
M 161		empty ✗
M 162		empty ✗
M 163		28 cm —
M 164		empty
M 165		15 cm —
M 166		12 cm —
M 167		empty ✗
M 168		Liquid + Solid
M 169		empty ✗
M 170		empty ✗
M 171		empty ✗
M 172		full —
M 173		31 cm —
M 174		full —
M 175		full —
M 176		solid
M 177		solid + liquid
M 178		solid + liquid
M 179		28 cm —
M 180		full —
M 181		solid + liquid
M 182		solid

%

M 183	INC	23cm —
M 184		empty x
M 185		empty x
M 186		empty x
M 187		50 cm —

B

OPERATING PROTOCOL FOR INCINERATOR

DATE 28-29/8/1993 ~~30/8/1993~~

TIME	VOLUME OF MUSTARD	TEMPERATURE					CO BURNER ppm	SC1		DISCHARGE		SC2		WASTE GAS			CHANGE	
		T1	T2	T3	T4	T5		pH	MG	pH	MG	pH	MG	SO2	CO	MG	NaOH	WATER
	9500	104	>900	870	185	170												
	9250	104	>900	882	400	175												
12	9000	1000	>900															
	8750																	
	8500																	
15	8250						30											
	8000																	
	7750																	
18-00	7500																	
14-00	7250																	
20-00	7000																	
21-00	6750						25	12.8	zero	—	—	12.9	zero	1 mg/m³	—	zero		
2200	6500																	
23-00	6250																	
24-00	6000																	
1-00	5750																	

con xtinous

ZMB

B

2

OPERATING PROTOCOL FOR INCINERATOR

DATE 28-29-1993

TIME	VOLUME OF MUSTARD	TEMPERATURE					CO BURNER ppm	SC1		DISCHARGE		SC2		WASTE GAS			CHANGE	
		T1	T2	T3	T4	T5		pH	MG	pH	MG	pH	MG	SO2	CO	MG	NaOH	WATER
2-00	5500																	
3-00	5250						30	13.0	Zero	13.0	Zero	13.0	Zero	0-85	–	Zero		
4-00	5000					175												
5-00	4750					170												
6-00	4500					170												
700	4250					140												
800	4000					200											Continuous	
900	3750				470		25	13-1	Zero	–	–	13-0	Zero	1-23 mg/m3	–	Zero		
10-00	3500																	
11-00	3250																	
12-00	3000																	
13-00	2750																	
1400	2500																	
15-00	2250						28	13-0	Zero	–	–	13-0	Zero	1-13 mg/m3	–	Zero		
16-00	2000																	
17-00	1750																	

B

3

OPERATING PROTOCOL FOR INCINERATOR

DATE 23-24-1993

TIME	VOLUME OF MUSTARD	TEMPERATURE					CO BURNER ppm	SC1		DISCHARGE		SC2		WASTE GAS			CHANGE	
		T1	T2	T3	T4	T5		pH	MG	pH	MG	pH	MG	SO2	CO	MG	NaOH	WATER
18-00	1500	1040	900	875	380	170												
19-00	1250	1030	900	872	380	165												
20-00	1000	1040	900	870	370	165												
21-00	750	1060	900	870	400	195	3·2	13·0	2W3	—	—	13·1	2W6	1·1 mg/m3				
2200	500	1080	900	887	400	195												
2300	250	1090	900	900	400	190												
2400	Zero	1060	900	900	390	170												
		STOP																

Continuous

volume of mix (Burned) contain (70% mg) 4500 m³

: : mg = 770 · liter

S-ALAMMAR

30-8-1993

B

OPERATING PROTOCOL FOR INCINERATOR

DATE 1-1-1993

TIME	VOLUME OF MUSTARD	TEMPERATURE					CO BURNER ppm	SC1		DISCHARGE		SC2		WASTE GAS			CHANGE	
		T1	T2	T3	T4	T5		pH	MG	pH	MG	pH	MG	SO2	CO	MG	NaOH	WATER
219 →	100						299											
	200																	
	300						29											

2nd ←

B

OPERATING PROTOCOL FOR INCINERATOR

DATE 2-4-17-73

TIME	VOLUME OF MUSTARD	TEMPERATURE					CO BURNER ppm	SC1		DISCHARGE		SC2		WASTE GAS			CHANGE	
		T1	T2	T3	T4	T5		pH	MG	pH	MG	pH	MG	SO2	CO	MG	NaOH	WATER
8·00	11·324	175																
9·00							32											
10·00																		
11-00																		
12·00																		
13·00																		
14·00																		
15·00							30											
16·00																		
17·00																		
18·00																		
19·00																		
20·00																		
21·00							27											
2200																		
23·00																	-	

B

OPERATING PROTOCOL FOR INCINERATOR

DATE 3-7-1993

TIME	VOLUME OF MUSTARD	TEMPERATURE					CO BURNER ppm	SC1		DISCHARGE		SC2		WASTE GAS			CHANGE	
		T1	T2	T3	T4	T5		pH	MG	pH	MG	pH	MG	SO2	CO	MG	NaOH	WATER
3/9																		
							25											
							28											
							26											

B

OPERATING PROTOCOL FOR INCINERATOR

DATE 3-4-1115

TIME	VOLUME OF MUSTARD	TEMPERATURE					CO BURNER ppm	SC1		DISCHARGE		SC2		WASTE GAS			CHANGE	
		T1	T2	T3	T4	T5		pH	MG	pH	MG	pH	MG	SO2	CO	MG	NaOH	WATER
15-5c	3kg	17	1	72	11	11												

1B

OPERATING PROTOCOL INCINERATOR

DATE 26-9-1993

Time	Volume of Mustard	Temperature					CO Burner ppm	SC1		Discharge		SC2		WASTE GAS			CHANGE	
		T1	T2	T3	T4	T5		pH	MG	pH	MG	pH	MG	SO2	CO	MG	NaOH	WATER
1300	19000	1000	→900	658	380	185		12-0				13-						
1500		1020	→900	603	380	185		11.0				12-0						
1700		1080	→900	659	450	200		11-0				11-5						
1900		1060	→900	683	455	205		10-0				11-8						
2000		1090	→900	710	455	200												
2200		1120	→900	735	495	215												
2400		1120	→900	761	500	235												
200		1100	→900	750	500	220												
400		1100	→900	766	500	220												
600		1100	→900	786	500	295												
800		1100	→900	794	500	290		13				12						
1000	13200	1100	→900	794	350	180		13				13						

volume of mix-(Burne) cantain (58% mg) = 57 00 m^3

" " mg 3300 / Litter

S.-ALAMMAR

27-9-1993

1B

OPERATING PROTOCOL INCINERATOR

DATE 26-9-1993

Time	Volume of Mustard	Temperature					CO Burner ppm	SC1		Discharge		SC2		WASTE GAS			CHANGE	
		T1	T2	T3	T4	T5		pH	MG	pH	MG	pH	MG	SO2	CO	MG	NaOH	WATER
1300	1700	1[illegible]	9[illegible]	154	320	185		12.0				13-						
1500		1[illegible]	[illegible]	163	5[illegible]	185		[illegible].0				12.0						
1700		1[illegible]	[illegible]	154	450	200		11.0				11.5						
1900		1[illegible]	[illegible]	1[illegible]	455	205		10.0				11-[illegible]						
2000		1010	[illegible]	710	450	200												
2200		1120	[illegible]	725	405	215												
2400		1120	[illegible]	111	500	235												
200		1100	[illegible]	150	500	220												
400		1800	[illegible]	116	500	220												
600		1100	[illegible]	706	500	225												
800		110[illegible]	[illegible]	714	5[illegible]0	220		13				12						
1000	13-300	1100	[illegible]	714	350	1[illegible]0		13				13						

Volume of mustard (total) sustain (52 days) 27-

" " my 3300 (litres)

27-9-1993

1B

OPERATING PROTOCOL INCINERATOR

DATE

Time	Volume of Mustard	Temperature					CO Burner ppm	SC1		Discharge		SC2		WASTE GAS			CHANGE	
		T1	T2	T3	T4	T5		pH	MG	pH	MG	pH	MG	SO2	CO	MG	NaOH	WATER
	133																	

7

3500

B

OPERATING PROTOCOL FOR INCINERATOR

DATE 12-9-1993

TIME	VOLUME OF MUSTARD	TEMPERATURE					CO BURNER ppm	SC1		DISCHARGE		SC2		WASTE GAS			CHANGE	
		T1	T2	T3	T4	T5		pH	MG	pH	MG	pH	MG	SO2	CO	MG	NaOH	WATER
10.000	13-1	1020	900	770	450	200	6	12.7	2ab		2ab	12.5	2ab	mg/m³ 1.2	—	2ab		
1200		1120	900	777	500	230									—			
1400		1100	900	782	490	215												
1600		1115	900	743	500	220	6.0	12.6		~~12.6~~		10.0		mg/m³ 1.25				
1800		1120	900	792	495	215												
2000		1060		690	450	200	7	11.5		~~11.5~~		11.9		mg/m3 1.16				continuous
2300		1040		694	450	205		9.2				9.8						
2400																		
1.00		1100		754	490	2000												
300		1120		792	500	200	6	12.0				12		mg/m3 1-0				
700		1130		795	500	200	6	11.5				11		mg/m3 0.93				
900	8-7																	
810	STOP																	

volum of mix(burne) contain(7% mg) = 4 400 m³

" mg = 3120 litter

S. ALAMMAR

13-9-1993

B

OPERATING PROTOCOL FOR INCINERATOR

DATE 11-01-1443

TIME	VOLUME OF MUSTARD	TEMPERATURE					CO BURNER ppm	SC1		DISCHARGE		SC2		WASTE GAS			CHANGE	
		T1	T2	T3	T4	T5		pH	MG	pH	MG	pH	MG	SO2	CO	MG	NaOH	WATER
12.00	18.300	1080	900	670	450	215	7.0	12.9	20ر0		2ر6	13.2						
13-00	18064	1150	900	723	490	220	7											
1400	17828	1140	900	732	475	260	7											
15.00	17592	1140	900	744	495	218	7											
16.00	17356	1150	900	759	495	217	8											
17.00	17120	1140	900	769	480	215	8											
18-00	16884	1120	900	771	480	215	8	12.6	20ر0		20ر0	7.1						
19-00	16648	1120	900	773	490	220	9											
20-00	16412	1120	900	767	485	225	8											
21-00	16176	1100	900	780	490	220	8											
22-00	15940	1100	900	785	480	220	8											
23-00	15704	1100	900	786	480	215	8											
24-00	15468	1100	900	786	490	220	8											
1-00	15232	1100	900	787	490	220	8											
2-00	14996	1100	900	785	490	220	8											
3-00	14760	1100	900	788	490	205	8											

B

OPERATING PROTOCOL FOR INCINERATOR

DATE 11-9-1993

TIME	VOLUME OF MUSTARD	TEMPERATURE					CO BURNER ppm	SC1		DISCHARGE		SC2		WASTE GAS			CHANGE	
		T1	T2	T3	T4	T5		pH	MG	pH	MG	pH	MG	SO2	CO	MG	NaOH	WATER
4-00	14524	1100	900	772	490	195												
5-00	14298	1100	900	792	490	190												
6-00	14062	1100	900	797	490	200												
7-00	13826	1100	900	794	500	200												
8-00	13590	1040	900	791	490	205												
9-00	13354	1060	900	778	490	210												
10-00	13100	1020	900	770	450	200												

volume of mix (Burne) contain (71% mq) = 5200 m³

" " mq = 3690 litter

S-ALAMMAR

12-9-1993

B

OPERATING PROTOCOL FOR INCINERATOR

DATE 8-9-1993

TIME	VOLUME OF MUSTARD	TEMPERATURE					CO BURNER ppm	SC1		DISCHARGE		SC2		WASTE GAS			CHANGE	
		T1	T2	T3	T4	T5		pH	MG	pH	MG	pH	MG	SO2	CO	MG	NaOH	WATER
10-00	7200	1050	900	752	470	205												
11-00	6800	1140	900	780	455	220												
12-00	6400	1150	900	794	490	245												
13-00	6000	1150	900	804	500	245												
14-00	5600	1150	900	814	500	245												
15-00	5200	1150	900	820	500	255												
16-00	4800	1150	900	825	500	255												
17-00	4400	1150	900	830	500	255												
18-00	4000	1150	900	828	500	250												
19-00	3600	1150	900	825	500	240												

volum of mix (Burno) cantair (71% mg) = 3600 m³

" " mg = 2556 litter

S-ALAMMAR

11-9-1993

بسم الله الرحمن الرحيم

السيد مدير الاتصالات المتكامل

م/ تقرير عن مهمة وقية الاستطلاع الجوي
ليوم السبت ١٩٩٣/٧/١٠

١. الاقلاع من البريد الساعة ٠٩٤٠
٢. الهبوط في قاعدة جلي (الناصرية) الساعة ١٠٤٥ وتم الاقلاع الى البريد
٣. في الساعة ١٠٥٥ تم تحديد الاحداثيات الاتية :-

أ. مخازن عماد الثنية N. 30 47 E. 46 26
ب. الملاجئ الترابية بالثنية N. 30 44 E. 46 26

٤. الوصول للهدف الاول الساعة (١١٠٥) حيث تم تصوير المخازن المستهدفة والمخازن المجاورة لها وتقويمها فيديوياً لمدة (١٠) دقيقة
٥. مركز التصوير خال (مخابئ منتشرة بمعدل ١٠ مخابئ خارج الساحة الخارجي للمخازن المصنفة ولذلك عدد من المخابئ المنتشرة في داخل حدود المخازن المستهدفة).
٦. أتجه الطائرة الى الهدف الثاني وتم تصويره فيديوياً فقط لمدة (٢) دقيقة وكانت ضمن الملاجئ الترابية المجاورة
٧. غادر الطائرة الساحة التصوير والعودة للقاعدة جلي للدخول الى الفيديو والاستماع لشريط الساعة (١١٥٥) باذن من السيد الرئيس.
٨. في الساعة ١٢٤٥ الهبوط في البريد

٩. تم التوصل بالاستطلاع مع التقدير والاحترام

الملاحظات :-

١. ملاحظ يوضح امكانية المخابئ في الموقعين أعلاه
٢. طلب الاستطلاع

الرائد
محسن علوان
١٩٩٣/٧/١٠

تأشيرة الرئيس الأعلى

موقف الصور الكادية من صنع البترليبداريات / البصرة

ت	اسم الكاره	الكمية الوزن الصافي	التاريخ	قائمة البيع	قيمة الحمولة	نسبة الحمولة	سعر الطن
١-	صودا كاوية سائلة	٢٧,٥٠٠	٩٢/٤/٢٢	٤٧٠١	٤٦,٧٥٠	٤٦٨	١٧٠٠
		٢١,٨٤٠	٩٢/٥/٤	٢٢٤٢	٥٤,١٢٨	٥٤١	ك
		١٠,٧٢٠	١٩٩٢/٥/١١	٤٠٧٠	١٨,٢٢٤	١٨٢	ك
		١٣,٦٤٠	٩٢/٩/٦	٢٧٨٧	٢٧,١٨٨	٢٧١	ك
		١٩,٦٨٠	٩٢/٩/٨	٢٢٦٨	٢٢,٤٠٦	٢٢٥	ك
		١٩,٨٦٠	٩٢/٩/٢٢	٤٢٥٤	٤٢,٧٦٢	٢٢٨	ك
		١٤,٢٤٠	٩٢/٩/٢٠	٤٢٨١	٤٢,٢٧٨	٤٤٤	ك
		١٠,٩٨٠	٩٢/١٠/٩	٢٩٥٥	١٨,٢٢٢	١٨٧	ك
		٩,٤٠٠	٩٢/١٠/١٢	٢٩٧٢	١٥,٩٨٠	١٦٠	ك
	المجموع الكلي	٢٧١,٢١٨,٠٠٠	دينار				

Arab Tuwaijran
Mullā Salmān
Arab Aksībah
Nahr Karūn
Abū Tīnah
Ar Ramilāt
Karīm as Sud'ayr
An Nabī Dāniyāl
Nahr Qasab
Al ash Shatab
BA'QUBAH 12 km.
NĀṢIR AL ḤUSAYN 0.8 km.
'ABBĀS AS ṢĀLIH 1.0 km.

Prepared and published by the Defense Mapping Agency
Hydrographic/Topographic Center, Washington, D.C.

COMPILED IN 1985 FROM BEST AVAILABLE SOURCES

Meters 1000 500

1 ½

1 ½

LEGEND

areas
erately

surface
ft
nes wide
3 LANES
surface
nes wide
3 LANES
e surface
ather

OBSTRUCTIONS
Elevation of obstruction top above sea level — 430
Elevation of obstruction top above ground level — (70)
Single Group
High tension power transmission line
Telephone or telegraph line — Tel

STREAMS
Perennial Intermittent
Less than 18m. wide
18m. to 25m. wide
over 25m. wide
Wadi; Sabkha (kavir)
Spring: Perennial; Intermittent
Well: Perennial; Intermittent

NOTES

A LANE ON THIS MAP IS CONSIDERED TO BE 2.5 METERS (8 FEET) WIDE.

IN DEVELOPED AREAS ONLY THROUGH ROADS ARE CLASSIFIED.

CAUTION: NOT ALL TELEPHONE AND ELECTRIC SERVICE LINES ARE SHOWN.

SLOPES ON THIS MAP ARE LESS THAN 5%

UNITED NATIONS*NATIONS UNIES

Office of the Special Commission
(UNSCOM)
Baghdad,IRAQ.

CHEMICAL DESTRUCTION GROUP

TO: DR ALA'A MAHDI, HEAD OF MUTHANNA ESTABLISHMENT.

AL MUTHANNA, 04 November 1993.

Subject: Opening one tonne containers by explosive venting.

1. In discussions between the Iraqi authorities of the Muthanna establishment and the CDG, we agreed on the following:

2. One tonne mustard containers. For opening the mustard containers by explosive venting, two existing sites can be used, until completion of the construction of the new site. The two existing sites are:
a. the big concrete slab in the mustard pit area;
b. the new proposed site in the filling station area, approximately 450 metres behind the incinerator.
3. The agreed limitations are that a maximum of five containers will undergo explosive venting at one time and that the slabs will be cleared of containers, before another explosive venting can take place. Of course, all the other usual safety precautions conforming with normal CDG standards will be observed. When the new site in the accumulation area is ready to use, the amount of containers that will have to be opened by explosive venting can increase.
3. One tonne Tabun containers. For opening the Tabun containers, it has been agreed that an existing concrete slab, aproximately 10 meters wide by 10 meters in length, with an upstanding ramp of 1 meter, will be used for explosive venting.
This slab is located in the accumulation area, approximately one and a half kilometers from the incinerator. The maximum amount of the containers is five. All usual CDG safety standards concerning nerve agent destruction will be observed. We have also agreed that the Iraqi Authorities will carry out a reconnaissance in the downwind area, preferably an air reconnaissance, to clear the area of human life. This area should be a triangle with corners of 60 degrees and a depth of approximately 5 miles. The CDG Chief Inspector will ask the Iraqi Authorities if "The area is clear", before giving permission to proceed with the detonation.

Dr Cees WOLTERBEEK
Chief Inspector
Chemical Destruction Group.

UNITED NATIONS * NATIONS UNIES

Office of the Special Commission
(UNSCOM)
Baghdad

DR GHAZI FEISAL
DIRECTOR AL MUTHANA
STATE ESTABLISHMENT
MUTHANA

25 OCTOBER 93

REFERENCE: INCIDENT WITH HYDROLYSIS WASTE CONTAINER
4th OCTOBER 1993

SIR,

IN RESPONSE TO DRAGER TUBE TESTING OF THE EFFECTED AREA TO THE REAR OF THE HYDROLYSIS PLANT TODAY THE SOIL IS STILL CONTAMINATED. THIS IS DESPITE EFFORTS TO DECONTAMINATE WITH SURFACE BURNING.

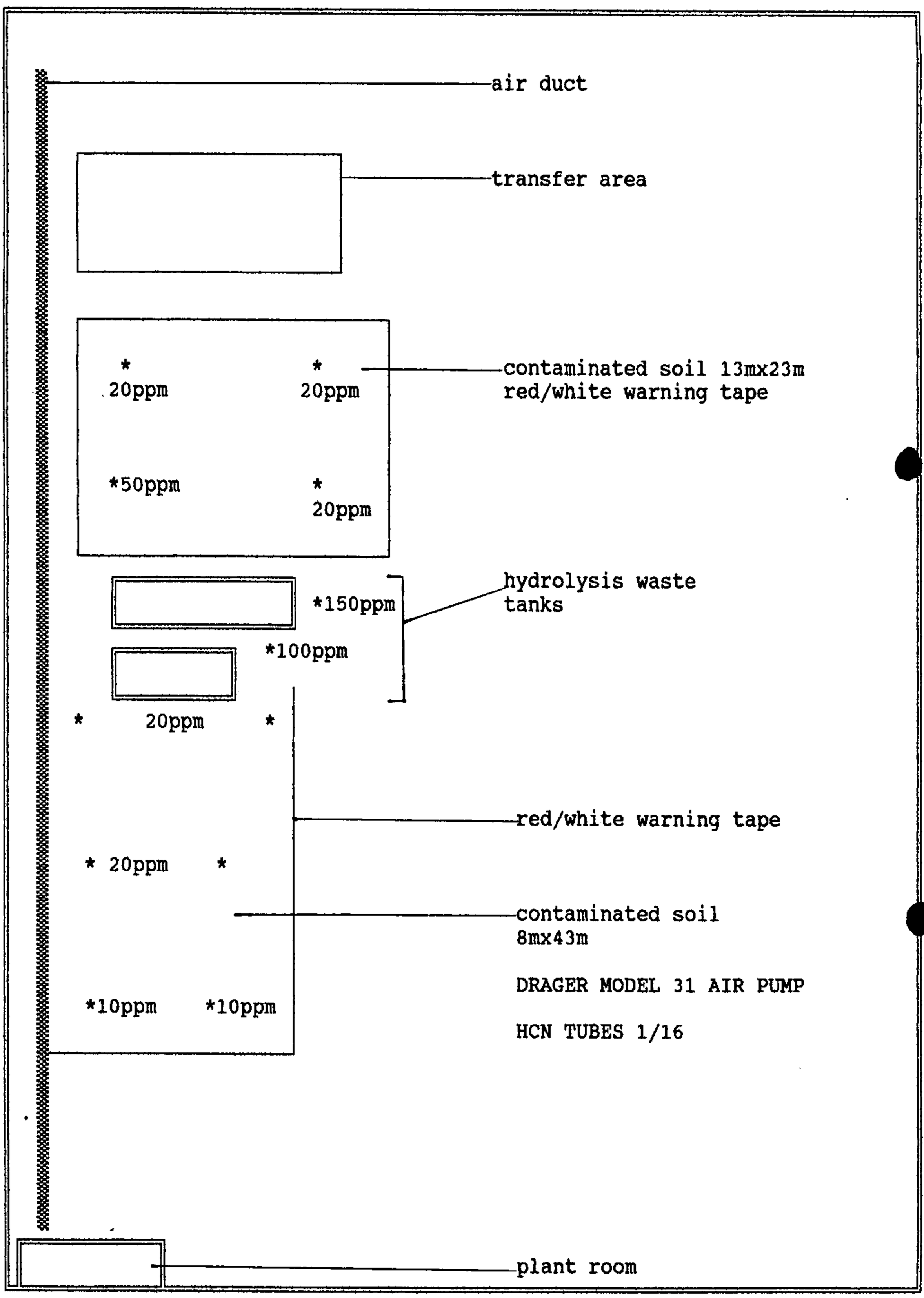
TODAY THE AREAS WITH THE READINGS ABOVE 10 ppm HCN HAVE BEEN IDENTIFIED WITH THE USE OF WARNING RED AND WHITE PLASTIC TAPE BORDERED BY STEEL MARKER POSTS.

IT IS MY RECOMMENDATION THAT THE SOIL IN THE CONTAINED AREA BE REMOVED.
UNTIL SUCH TIME THAT THE SOIL CAN BE REMOVED I SUGGEST THAT IT NOT BE WALKED ON OR DRIVEN ON WITH VEHICLE. AS CONCENTRATION OF HCN BELOW THE SURFACE IN SOME PLACES IS GREATER THAN 100ppm THIS MAY LEAD TO HARMFUL LEVELS OF HYDROGEN CYANIDE RELEASE.

THIS IS TO ENSURE THE SAFETY OF ALL WORKERS IN THE HYDROLYSIS AREA.

ENCLOSED IS A SKETCH MAP IDENTYFING THE AREA CONCERNED.
WEATHER WINDSPEED 7mph
TEMP DRY BULB 27 C
SOIL SAMPLE DEPTH 5CM BELOW SURFACE
SURFACE DRAGER READING 0 ppm

CLARENCE L BROWN
SENIOR MEDICAL OFFICER
UNSCOM.


air duct
transfer area
*
20ppm
*
20ppm
contaminated soil 13mx23m
red/white warning tape
*50ppm
*
20ppm
*150ppm
hydrolysis waste
tanks
*100ppm
*
20ppm
*
red/white warning tape
* 20ppm *
contaminated soil
8mx43m
DRAGER MODEL 31 AIR PUMP
*10ppm *10ppm
HCN TUBES 1/16
plant room

1B

OPERATING PROTOCOL INCINERATOR

DATE 4-10-1993

Time	Volume of Mustard	Temperature					CO Burner ppm	SC1		Discharge		SC2		WASTE GAS			CHANGE	
		T1	T2	T3	T4	T5		pH	MG	pH	MG	pH	MG	SO2	CO	MG	NaOH	WATER
1300	18.5	1020	900	601	300	145	-	13	2x			12	2x					
1500		1020	900	639	305	145	-	13				13	-					
1700		1100	1000	670	315	145	-	12	-			12	-					
1900		1100	900	700	320	155	-	13	-			13	-					
2000		1090	900	650	430	150	-	12	-			11	-					
2200		1100	900	715	415	185	-	11	-			10.5	-					
2400		1110	1000	700	450	185	-	11	-			11	-					
200		1140	900	720	450	190	-	13	-			13	-					
400		1130	900	720	450	185		13	-			12	-					
600		1130	900	720	450	185	-	12	-			11	-					
800		1130	900	720	450	185	-	12	-			12	-					
1000	10.5																	

volume of mix (burned) contains (5% mg) = 4000 l

: : mg = 2800 l

S. ALAMMAR

5-10-1993

1B

OPERATING PROTOCOL INCINERATOR

DATE 2-10-1993

Time	Volume of Mustard	Temperature					CO Burner ppm	SC1		Discharge		SC2		WASTE GAS			CHANGE	
		T1	T2	T3	T4	T5		pH	MG	pH	MG	pH	MG	SO2	CO	MG	NaOH	WATER
0800	6.6	1100	500	650	1150	705												
1000		1100		651	1150	700												
1200		1100		704	1150	710												
1400		1100		705	1175	700												
1600		1100		705	1170	710												
1800		1120		700	1150	705												
2000	3.3	1100		702	1170	710												
		1100																

Volume of mustard = 1960 lbs

2-3 hrs

S. ALAMMAR

3-10-1993

1B

OPERATING PROTOCOL INCINERATOR

DATE 30-10-1993

Time	Volume of Mustard	Temperature					CO Burner ppm	SC1		Discharge		SC2		WASTE GAS			CHANGE	
		T1	T2	T3	T4	T5		pH	MG	pH	MG	pH	MG	SO2	CO	MG	NaOH	WATER
1800																		
2000							-											
2200																		
2400																		
200																		
400																		
600																		
800																		
1000	6.6																	

Volume of mix - 11.8

mg - 8260 l./lit

S. PILLAIMAR

2-10-1993

1B

OPERATING PROTOCOL INCINERATOR

DATE 30-10-1993

Time	Volume of Mustard	Temperature					CO Burner ppm	SC1		Discharge		SC2		WASTE GAS			CHANGE	
		T1	T2	T3	T4	T5		pH	MG	pH	MG	pH	MG	SO2	CO	MG	NaOH	WATER
12000	18.4	1190	900	910	415	200	-	13	2.40			12	7.0					
1400		1120	100	735	415	215	-	12				17						
1600		1110	900	701	500	235	-	13				13						
1800		1100	900	75.	500	220			-									
2000		1120	900	730	350	155			-									
2200		1120	900	710	400	160	-	13	-			12						
2400		1050	900	755	420	150		12				12						
200		1040	100	74.	455	160		12				11						
400		1020	900	550	480	185		12				12						
600		1020	900	603	480	185		11	-			12						
800		1	1	551	4	1		11	-			11.5						
1000		1020	900	663	4	2		10	-			11.8						
1200		1040	900	710	4	25		13				12						
1400		12	1	1	445	1		13				1						
1600		1100	1	71	1	1		13				12						

1-10-1993

→

1B

OPERATING PROTOCOL INCINERATOR

DATE 28-9-1993

Time	Volume of Mustard	Temperature					CO Burner ppm	SC1		Discharge		SC2		WASTE GAS			CHANGE	
		T1	T2	T3	T4	T5		pH	MG	pH	MG	pH	MG	SO2	CO	MG	NaOH	WATER
8·00	5900	110c	700	788	350	155												
1000		1020	700	790	300	160												
12·00		1020	700	735	300	150		13				12						
1400		1030	700	735	300	150		12				12						
1600	3·600	1090	700	740	310	160												

Volume of mix (Burno) contain (58% mg)³ = 2300 m³

" " mg = 1334 Liter

S. ALANMAR

28-9-1993

1B

OPERATING PROTOCOL INCINERATOR

DATE 26-7-1993

Time	Volume of Mustard	Temperature					CO Burner ppm	SC1		Discharge		SC2		WASTE GAS			CHANGE	
		T1	T2	T3	T4	T5		pH	MG	pH	MG	pH	MG	SO2	CO	MG	NaOH	WATER
13.00	19.000	1000	700	558	380	185		12	Zero			12	Zero					
15.00		1100	700	600	350	185		11	=			12	=					
17.00		1050	700	557	415	200		11	=			11.5	=					
19.00		1060	700	683	459	235		10	=			11.8	=					
20.00		1100	700	710	455	200		13	=			12	=					
22.00		1120	700	735	495	213		13	=			12	=					
24.00		1120	700	761	500	235		12	=			12	=					
27.9.1993 200		1100	700	700	500	220		11	=			11	=					
4.00		1100	700	660	500	230		12				13	=					
6.00		1100	700	650	500	235		12	=			12	=					
8.00		1100	900	700	500	240		13	=			12	=					
10.00	13.300	1100	700	681	350	180		13	=			12	=					

Volume of mix. (Burno) c.m.i.in (55%) mg 57oo litter

: : mg = 3.300 litter

S. ALAMMAR

27.9.1993

1B

OPERATING PROTOCOL INCINERATOR

DATE

Time	Volume of Mustard	Temperature					CO Burner ppm	SC1		Discharge		SC2		WASTE GAS			CHANGE	
		T1	T2	T3	T4	T5		pH	MG	pH	MG	pH	MG	SO2	CO	MG	NaOH	WATER
10.00	8.7	104	900	658	415	135	-	13	670			13	670					
12.00		1100	900	710	500	200	-	12	"	-		10	"					
14.00		1070	100	110	500	210	-	12	"	-		11	"					
16.00		1070	100	704	415	205	-	13	"	-		8	"					
18.00		1070	900	715	455	210	-	10	"	-		13	"					
20.00		1070	900	744	415	185	-	12	"	-		12	"					
22.00		1070	900	710	500	200	-	13	"			13	"					
24.00		1070	900	715	500	210		10	"	-		10	"					
2.00		1070	900	717	500	210	-	11	"	-		11	"					
4.00		1040	900	715	415	205	-	12	"			12	"					
6.00		1040	900	650	415	185	-	13	"	-		13	"					
18.00		1040	900	710	500	200	-	13	"	-		13	"					
10.00		1040	900	546	310	140		13	=	-		13	"					

23/9/1993

Volume of mix of (Survey) contain 71% and 5 100 liter

: : : 3620 liter

S. - ALAMIAR

23-9-1993

1B

OPERATING PROTOCOL INCINERATOR

DATE 21-9-1993

Time	Volume of Mustard	Temperature					CO Burner ppm	SC1		Discharge		SC2		WASTE GAS			CHANGE	
		T1	T2	T3	T4	T5		pH	MG	pH	MG	pH	MG	SO2	CO	MG	NaOH	WATER
11.00	13.8	1000	900	658	380	185	—	13.	Zero	—	Zero	10.	Zero					
13.00		1070	900	696	435	185	—	13.	〃	—		10						
15.00		1020	900	631	340	190		13.	〃	—		11						
17.00		1020	900	525	400	190		12.				11						
19.00		1020	900	630	410	195		11				11						
21.00		1020	900	680	410	195		11				11						
23.00		1030	900	670	430	210		12				12						
1.00		1040	900	680	410	215		10				10						
3.00		1010	900	690	410	210		10				10						
5.00		1000	900	645	415	215		9				8						
7.00		1060	900	710	420	230		13				13						
9.00		1040	900	682	430	180		13				13						
10.30	8-7	1040	900	658	415	185		13				13						

Volume vit content 71% mg = 5100 in

= = mg - 3620 litter

SOLVENTAIR

22-9-1993

1B

OPERATING PROTOCOL INCINERATOR

DATE 20-9-1993

Time	Volume of Mustard	Temperature					CO Burner ppm	SC1		Discharge		SC2		WASTE GAS			CHANGE	
		T1	T2	T3	T4	T5		pH	MG	pH	MG	pH	MG	SO2	CO	MG	NaOH	WATER
12.00	14.00	1000	900	652	405	200												
14-00		1020	900	660	410	205		13				7.0						
16.00		1020	900	700	410	205		10				11.0						
18.00		1020	900	720	410	205		11				13						
20.00		1040	900	750	400	215		10				11						
22.00		1030	900	760	400	220		11				12						
24.00		1020	900	750	405	225		11				12						
2.00		1000	900	740	390	220		10				11						
4.00		1010	900	730	380	200		8				9						
6.00		1030	900	760	390	210		11				12						
8.00		1020	900	673	430	190		13				11						
10.00	13.8	1020	900	673	410	180		13				10						
		STOP																

volum of mix(Burne) containing 71% m4) = 5200 m³

: : m4 = 3690 litter

S-PLANNIAR

22-9-1993

B

OPERATING PROTOCOL FOR INCINERATOR

DATE 14-9-1993

TIME	VOLUME OF MUSTARD	TEMPERATURE					CO BURNER ppm	SC1		DISCHARGE		SC2		WASTE GAS			CHANGE	
		T1	T2	T3	T4	T5		pH	MG	pH	MG	pH	MG	SO2	CO	MG	NaOH	WATER
1400	8:1	1070		611	450	210		12				12.2						
1600		1070		630	450	220												
1800		1070		677	450	220		10				11						
2000		1060		671	445	210		1.5				11						
2200		1070		680	450	200												
2400		1060		690	420	200		10.2				10.5						
200		1050		750	450	220												
400		1060		753	450	200		9				9						
600		1020		753	430	200												
800		1030		700	480	210		9.6				10						
10.00								1				9						
	3.6																	
	5:1 00																	

volum of mix (Burno) contain (719.mg) =

∴ : mg = 360 .. 1,16.1

S-ALAIMAR

15-9-1993

B

OPERATING PROTOCOL FOR INCINERATOR

DATE 12-9-1993

TIME	VOLUME OF MUSTARD	TEMPERATURE					CO BURNER ppm	SC1		DISCHARGE		SC2		WASTE GAS			CHANGE	
		T1	T2	T3	T4	T5		pH	MG	pH	MG	pH	MG	SO2	CO	MG	NaOH	WATER
10.000	13.1	1020	900	770	450	200	6	12.7	2000		2000	12.5	2000	mg/m3 1.2	—	2000		
1200		1120	900	777	500	230									—			
1400		1100	900	782	490	215												
1600		1115	900	743	500	220	6.0	12.6				10.0		mg/m3 1.25				
1800		1120	900	792	495	215												
2100		1060		690	450	200	7	11.5				11.9		mg/m3 1.16				
2300		1040		699	450	205		9.2				9.8					continuous	
2400																		
100		1100		754	440	200												
300		1120		792	500	200	6	12.0				12		mg/m3 1.0				
700		1130		795	500	200	6	11.5				11		mg/m3 0.78				
800	8.7																	
810	STOP																	

volume of mix (burno) contain (71% mg) = 4400 m³

∴ mg = 3120 litter

S. ALAmmAR

13-9-1993

B

OPERATING PROTOCOL FOR INCINERATOR

DATE 11-9-1443

TIME	VOLUME OF MUSTARD	TEMPERATURE					CO BURNER ppm	SC1		DISCHARGE		SC2		WASTE GAS			CHANGE	
		T1	T2	T3	T4	T5		pH	MG	pH	MG	pH	MG	SO2	CO	MG	NaOH	WATER
12.00	18.3[illegible]	108[illegible]	900	670	450	215		12.9				13.2						
13-00	18014	1150	900	723	490	220												
14.00	17828	1140	900	732	475	260												
15.00	17592	1140	900	744	495	218												
16.00	17356	1150	900	759	495	217												
17.00	17120	1140	900	769	480	215												
18-00	16884	1120	900	771	480	215		12.6				7.1						
19-00	16648	1120	900	773	470	220												
20-00	16412	1120	900	767	485	225												
21-00	16176	1100	900	780	470	220												
22-00	15940	1100	900	785	480	220												
23-00	15704	1100	900	780	480	215												
24-00	15468	1100	900	780	490	220												
1-00	15232	1100	900	787	490	220												
2-00	14996	1100	900	795	490	220												
3-00	14760	1100	900	788	490	205												

B

OPERATING PROTOCOL FOR INCINERATOR

DATE 1- -1993

TIME	VOLUME OF MUSTARD	TEMPERATURE					CO BURNER ppm	SC1		DISCHARGE		SC2		WASTE GAS			CHANGE	
		T1	T2	T3	T4	T5		pH	MG	pH	MG	pH	MG	SO2	CO	MG	NaOH	WATER
4-00	14524	11oo	2o	772	42	1??												
5-o-	14212	11·	2..	772	42	1?o												
6-o-	14 .2.	11.	2.	7??	?1	2.												
7-oo	13 .2?	11	2	7?1	5??	2??												
8-o-	1321.	1..	1	7?1	41	2.5												
9-o-	13354	1?	2	1?	?	?-												
1..	131..			7??	??	2												

volume of mix (Burner) containing 71% mq) 5200 m^3

: : mq = 3690 litter

S-ALAMMAR

12-9-1993

B

OPERATING PROTOCOL FOR INCINERATOR

DATE 8-9-1993

TIME	VOLUME OF MUSTARD	TEMPERATURE					CO BURNER ppm	SC1		DISCHARGE		SC2		WASTE GAS			CHANGE	
		T1	T2	T3	T4	T5		pH	MG	pH	MG	pH	MG	SO2	CO	MG	NaOH	WATER
10:00	1	1.8	"	"		-												
11:00	1	1.0																
12:00		115																
13:00		115	"	"	"	"												
14:00		115	"	"	"	"												
15:00		115	"	"	"	"												
16:00		115	"	"	"	"												
17:00		115	"	"	"	"												
18:00		115	"	"	"	"												
19:00		115	"	"														

B

OPERATING PROTOCOL FOR INCINERATOR

DATE 8-9-1993

TIME	VOLUME OF MUSTARD	TEMPERATURE					CO BURNER ppm	SC1		DISCHARGE		SC2		WASTE GAS			CHANGE	
		T1	T2	T3	T4	T5		pH	MG	pH	MG	pH	MG	SO2	CO	MG	NaOH	WATER
200	9200	1070	300	721	450	220												
300	8950	1110	900	752	470	220	5	12-4				12-5		1<2 mg/m³				
400	8700	1110	900	764	470	215												
500	8450	1110	900	770	470	215												
600	8200	1110	900	770	470	210												
700	7950	1110	900	783	475	210												
800	7700	1110	900	770	460	205												
900	7450	1070	900	784	470	210												
1000	7200	1050	900	752	455	205												

Volum of mix (Burno) contion (71.% mg) = 6000 m³
- 5 mg = 4260 Litter

S. ALAMMAR
8.9.1993

B

OPERATING PROTOCOL FOR INCINERATOR

DATE 7-9-1993

TIME	VOLUME OF MUSTARD	TEMPERATURE					CO BURNER ppm	SC1		DISCHARGE		SC2		WASTE GAS			CHANGE	
		T1	T2	T3	T4	T5		pH	MG	pH	MG	pH	MG	SO2	CO	MG	NaOH	WATER
10.00	13-2	1050	900	605	420	175												
11-00	12950	1060	900	630	404	170	5	12.5				12.5		2-3 mg/m³				
12-00	12700	1080	900	670	400	190												
1.00	12450	1080	900	700	400	200												
2.00	12200	1080	900	713	400	200												
3-00	11950	1080	900	722	400	200	6	11.8				12.0		2-0 mg/m³				
4-00	11700	1080	900	718	400	230												
5-00	11450	1100	900	757	500	245												
6-00	11200	1110	900	759	500	240												
7.00	10950	1120	900	765	500	240												
8-00	10700	1080	900	763	400	225												
9-00	10450	1090	900	750	500	235	4	10.7				11.0		1-5 mg/m³				
10.00	10200	1130	900	779	490	225												
11-00	9950	1100	900	750	460	200												
12-00	9700	1060	900	700	404	190												
1.00	9450	1000	900	711	410	185												

B

OPERATING PROTOCOL FOR INCINERATOR

DATE 26-27/8/1993

TIME	VOLUME OF MUSTARD	TEMPERATURE					CO BURNER ppm	SC1		DISCHARGE		SC2		WASTE GAS			CHANGE	
		T1	T2	T3	T4	T5		pH	MG	pH	MG	pH	MG	SO2	CO	MG	NaOH	WATER
900	15.752	1050	900	870	400	170	27	13.0	Zero	13.1	Zero	13.1	Zero	1.30 mg/m3	27	Zero		
1000	15.518	1050	900	870	400	175												
1100	15.284	1050	900	866	375	180												
1200	15.050	1020	900	855	380	180												
1300	14.816	1020	900	860	380	180												
1400	14.582	1010	900	850	375	170												
1500	14.348	1015	900	860	375	180	20	12.9	Zero	13.0	Zero	13.0	Zero	1.29 mg/m3	20	Zero		
1600	14.114	1020	900	865	380	185												
1700	13.880	1030	900	865	385	185												
1800	13.646	1030	900	860	380	180												
1900	13.412	1010	900	855	365	180												
2000	13.178	1005	900	850	360	175												
2100	12.944	1005	900	855	365	175	25	13.1	Zero	13.1	Zero	13.1	Zero	135 mg/m3	25	Zero		
2200	12.710	1005	900	850	370	180												
2300	12.576	1010	900	870	385	185												
2400	12.342	1020	900	865	380	180												

B

OPERATING PROTOCOL FOR INCINERATOR

DATE 26-27-8-1993

TIME	VOLUME OF MUSTARD	TEMPERATURE					CO BURNER ppm	SC1		DISCHARGE		SC2		WASTE GAS			CHANGE	
		T1	T2	T3	T4	T5		pH	MG	pH	MG	pH	MG	SO2	CO	MG	NaOH	WATER
17-00	18.100	1010	900	840	380	120	40	13.0	Zero	13.0	Zero	13.1	Zero	Zero	40	Zero		
18-00	19-142	1030	900	840	380	185												
19-00	18.608	1030	900	850	370	115												
20.00	18674	1040	900	850	375	195												
21-00	18-440	1050	900	858	395	195	34	13.1	Zero	13.1	Zero	13.1	Zero	1.4 mg/m³	34	Zero		
22.00	18-206	1050	900	860	395	190												
23.00	17.972	1050	900	860	395	190												
24-00	17-748	1050	900	865	390	180												
1-000	17-514	1050	900	865	390	180												
2-00	17.380	1050	900	870	395	185												
3.00	17-146	1050	900	875	395	185	30	12.5	Zero	13.0	Zero	13.0	Zero	1.25 mg/m³	30	Zero		
4.00	16-921	1050	900	875	400	185												
5-00	16-678	1050	900	875	400	190												
6-00	16-444	1050	900	875	400	190												
7.00	16-210	1050	900	880	400	195												
9.00	15.986	1050	900	880	400	190												

B

OPERATING PROTOCOL FOR INCINERATOR

DATE 26-27/8/1993

TIME	VOLUME OF MUSTARD	TEMPERATURE					CO BURNER ppm	SC1		DISCHARGE		SC2		WASTE GAS			CHANGE	
		T1	T2	T3	T4	T5		pH	MG	pH	MG	pH	MG	SO2	CO	MG	NaOH	WATER
100	12.108	1020	900	861	400	185												
200	11.874	1020	900	865	400	180												
300	11.640	1010	900	860	395	185												
400	11.406	1020	900	865	400	185												
500	11.272	1030	900	870	405	185												
600	11.038	1040	900	872	405	185												
700	10.804	1040	900	872	405	185												
800	10.386	1030	900	876	400	180												
900	9.908	1040	900	818	385	175												
1000	9.500	1040	900	870	385	170												

Volum of mix (Br.hr) cantair (70% Mg) = 9600 m³

% % Mg = 6720 l.Hr

S. ALAMMAR

28/8/1993

سيد رئيس اللجنة الموقرة المحترم

يرجى التفضل بالموافقة على صرف بدلات عمل عدد ٢
سادة، لمدرجة أسمائهم أدناه وذلك لقيامهم في سيارة
الفايات .. وتنسيبهم مع المقدر .

١- حميد كريم فرحان
٢- ابراهيم محمد خليوي

جواد
٦/٧

جاسم لطيف طاهر
٢/١ المطعم

OPERATING PROTOCOL FOR INCINERATOR DATE 24-8-1983

TIME	VOLUME OF MUSTARD	TEMPERATURE T1	T2	T3	T4	T5	CO BURNER ppm	SC1 pH	SC1 MG	DISCHARGE pH	DISCHARGE MG	SC2 pH	SC2 MG	WASTE GAS SO2	WASTE GAS CO	WASTE GAS MG	CHANGE NaOH	CHANGE WATER
10.00	7.80	1.2			7	329												
11.00	7.52	1.0½		11		320	21											
12.00	7.24	1.20		2	1	32	17											
13.00	6.96	1.1			7	330	11											
14.00	6.68	1.1				320	11											
15.00	6.40	1.1		08	7	3	17											
16.00	6.12	1.2		07		3	17											
17.00	5.84	1.2		07		3	11											
18.00	5.56	1.2		07		31	16											
19.00	5.28	1.3		08		31	10											
20.00	5.00	1.1		08		30	10											
21.00	4.72	1.0		07		33	10											
22.00	4.44	1.0		07		33	10											
23.00	4.16	1.1		07		32	12											
24.00	3.88	1.5		07		32	10											
25.00	3.60	1.0		07		32	10											

OPERATING PROTOCOL FOR INCINERATOR — DATE 23-8-1993

TIME	VOLUME OF MUSTARD	TEMPERATURE T1	T2	T3	T4	T5	CO BURNER ppm	SC1 pH	SC1 MG	DISCHARGE pH	DISCHARGE MG	SC2 pH	SC2 MG	WASTE GAS SO2	WASTE GAS CO	WASTE GAS MG	CHANGE NaOH	CHANGE WATER
2.00	9.833.4	104	900	701	340	185												
3-00	9.789.3	1050	900	913	340	185												
4.00	9.325.2	1050	900	910	340	185												
5-00	9.071.1	1040	900	909	320	180												
6-00	8.817.0	1040	900	908	320	175												
7.00	8562.9	1050	900	910	330	180												
8.00	8.308.8	1040	900	911	325	180												
9-00	8.054.7	1060	900	910	320	180		13-0	ZnO	—	ZnO	B.O	ZnO	0.2	—	ZnO		
10.00	7.800	1020	900	887	320	190												

continuous

Volume of Mix (Burned) contain (pH, MG) = 6l-c

" " MG = 4270 litter

AR

B

OPERATING PROTOCOL FOR INCINERATOR

DATE 23-8-1993

TIME	VOLUME OF MUSTARD	TEMPERATURE					CO BURNER ppm	SC1		DISCHARGE		SC2		WASTE GAS			CHANGE	
		T1	T2	T3	T4	T5		pH	MG	pH	MG	pH	MG	SO2	CO	MG	NaOH	WATER
10-00	13-900	1040	900	889	400	205												
11-00	13.645.9	1030	900	873	375	203												
12-00	13-391-8	1010	900	879	350	200												
13-00	13-137.7	1020	900	879	375	205												
14-00	12-883-6	1030	900	882	370	200												
15-00	12-629-5	1020	900	875	350	200	50	13.0	2NO	--	2NO	13.1	2NO	0.12				
16-00	12-375.4	1020	900	873	360	205												
17-00	12-121-3	1000	900	857	340	200												
18-00	11-867-2	1080	900	916	320	190												
19-00	11-613-1	1030	900	913	310	190												
20-00	11-359-0	1040	900	919	311	190												
21-00	11-104-9	1050	900	912	320	190	50	13.0	2NO	--	2NO	13-8	2NO	0.2				
22-00	10-850.8	1040	900	908	320	190												
23-00	10-596-7	1040	900	903	320	190												
24.00	10-341-6	1030	900	900	320	180												
-00	10-087-5	1030	900	901	320	180												

Continued

B

OPERATING PROTOCOL FOR INCINERATOR

DATE 22-8-1993

TIME	VOLUME OF MUSTARD	TEMPERATURE					CO BURNER ppm	SC1		DISCHARGE		SC2		WASTE GAS			CHANGE	
		T1	T2	T3	T4	T5		pH	MG	pH	MG	pH	MG	SO2	CO	MG	NaOH	WATER
2.00	15.772	105°	900	820	390	200												
3.00	15.538	105°	900	875	396	200		12.9	Zero	13.2	Zero	13.0	Zero	1.0		Zero		
4.00	15.304	105°	900	874	395	200												
5.00	15.070	104°	900	879	400	200												
6.00	14.836	104°	900	878	400	200												
7.00	14.602	104°	900	878	400	200												
8.00	14.368	104°	900	876	400	200												
9.00	14.134	104°	900	894	400	205		13.0	Zero	13.0	Zero	13.1	Zero	0.95		Zero		
10.00	13.900	104°	900	884	400	205												
		STOP																

CONTINUOUS

Volum of mix (burno) contain (71% nd) = 5400 m³

" " MG = 3830 litter

S. ALAMMAR

23-8-1993

B

OPERATING PROTOCOL FOR INCINERATOR

DATE 22-R-1993

TIME	VOLUME OF MUSTARD	TEMPERATURE					CO BURNER ppm	SC1		DISCHARGE		SC2		WASTE GAS			CHANGE	
		T1	T2	T3	T4	T5		pH	MG	pH	MG	pH	MG	SO2	CO	MG	NaOH	WATER
10.40	19.300	1100	→900	877	440	245		14.0	Zero	14.0	Zero	13.5	Zero	Zero		Zero		
11.00	19.282	1050	→900	882	360	240												
12.00	19.048	1150	→900	988	480	250												
13.00	18.814	1050	→900	846	450	250												
14.00	18.580	1040	→900	895	350	220												
15.00	18.346	1050	→900	900	350	215		12.7	Zero	13.0	Zero	13.1	Zero	1.1		Zero		
16.00	18.112	1020	→900	881	350	210												
17.00	17.878	1100	→900	922	400	210												
18.00	17.644	1100	→900	915	400	210												
19.00	17.410	1090	→900	914	400	210												
2000	17.176	1080	→900	913	400	210												
2100	16.940	1060	→900	892	400	205		13.0	Zero	13.1	Zero	13.0	Zero	1.1		Zero		
2200	16.708	1050	→900	882	400	205												
2300	16.474	1040	→900	876	400	195												
2400	16.240	1040	→900	876	396	195												
1.00	16.006	1050	→900	876	400	200												

Continues

B

OPERATING PROTOCOL FOR INCINERATOR

DATE 28-6-1993

TIME	VOLUME OF MUSTARD	TEMPERATURE					CO BURNER ppm	SC1		DISCHARGE		SC2		WASTE GAS			CHANGE	
		T1	T2	T3	T4	T5		pH	MG	pH	MG	pH	MG	SO2	CO	MG	NaOH	WATER
3.00	4200	1090	900	824	340	205												
4.00	3850	1090	900	840	340	175												
4.30	3600	1090	900	835	340	188												
			STOP															

volum of mix (Burna) contain (610 mg) = 6200 liter

mg = 4300

S. ALAMMAR

29-6-1993

B

OPERATING PROTOCOL FOR INCINERATOR

DATE 28-6-1943

TIME	VOLUME OF MUSTARD	TEMPERATURE					CO BURNER ppm	SC1		DISCHARGE		SC2		WASTE GAS			CHANGE	
		T1	T2	T3	T4	T5		pH	MG	pH	MG	pH	MG	SO2	CO	MG	NaOH	WATER
10.50	9800	1080	900	800	310	205												
12.00	9450	1080	900	798	310	210												
1.00	9100	1080	900	798	310	210												
2.00	8750	1080	900	804	310	210												
3.00	8400	1080	900	806	310	200												
4.00	8050	1080	900	808	310	200												
5.00	7700	1080	900	813	310	190												
6.00	7350	1070	900	812	310	185												
7.00	7000	1080	900	820	320	185												
8.00	6650	1070	900	817	310	180												
9.00	6300	1080	900	823	305	175												
10.00	5950	1080	900	824	310	180												
11.00	5600	1080	900	833	310	180												
12.00	5250	1090	900	834	330	200												
1.00	4900	1090	900	828	330	215												
2.00	4550	1090	900	825	310	220												

B

OPERATING PROTOCOL FOR INCINERATOR

DATE 26-6-1993

TIME	VOLUME OF MUSTARD	TEMPERATURE					CO BURNER ppm	SC1		DISCHARGE		SC2		WASTE GAS			CHANGE	
		T1	T2	T3	T4	T5		pH	MG	pH	MG	pH	MG	SO2	CO	MG	NaOH	WATER
10.00	11-800	1100	830	727	295	210												
11.00	11-400	1080	→900	791	300	215												
12.00	11-000	1100	→900	804	310	220												
1.00	10.600	1110	→900	830	310	230												
2.00	10-200	1110	→900	837	310	230												
3.00	9-800	1120	→900	840	310	220												
		STOP																

Volum of mix-(Burne) contain 10% = 2000 litter

" " mg " = 1400 litter

S. AL-AMMAR

28-6-1993

B

OPERATING PROTOCOL FOR INCINERATOR

DATE 23/24-6-1993

TIME	VOLUME OF MUSTARD	TEMPERATURE					CO BURNER ppm	SC1		DISCHARGE		SC2		WASTE GAS			CHANGE	
		T1	T2	T3	T4	T5		pH	MG	pH	MG	pH	MG	SO2	CO	MG	NaOH	WATER
4.00	14.560	1100	400	901	375	255												
5.00	14.284	1100	400	906	375	255												
6.00	14.008	1100	400	909	375	260												
7.00	13.732	1100	400	913	375	260												
8.00	13.456	1100	400	911	375	255												
9.00	13.180	1100	400	892	360	270												
10.00	12.904	1100	400	894	360	275												
11.00	12.628	1100	400	897	360	275												
12.00	12.352	1100	400	897	360	275												
1.00	12.076	1130	400	941	375	285												
1.45	11.800	1130	400	941	375	289												

volum of mix (Burne) contain 70%mg = 7200 litter

" " mg = 5400 litter

S. AL. AMMAR

28-6-1993

B

OPERATING PROTOCOL FOR INCINERATOR DATE _____

TIME	VOLUME OF MUSTARD	TEMPERATURE					CO BURNER ppm	SC1		DISCHARGE		SC2		WASTE GAS			CHANGE	
		T1	T2	T3	T4	T5		pH	MG	pH	MG	pH	MG	SO2	CO	MG	NaOH	WATER
11.45	19.000	1060	900	849	350	250												
1.00	18.724	1040	900	849	350	260												
2.00	18.448	1110	900	903	370	270												
3.00	18.172	1120	900	920	370	270												
4.00	17.888	1140	900	939	380	280												
5.00	17.604	1140	900	935	380	280												
6.00	17.320	1140	900	927	380	280												
7.00	17.044	1140	900	929	380	280												
8.00	16.768	1150	900	950	380	280												
9.00	16.492	1120	900	903	370	55												
10.00	16.216	1100	900	903	370	350												
11.00	15.940	1100	900	913	370	260												
12.00	15.664	1100	900	913	370	255												
1.00	15.388	1100	900	913	370	255												
2.00	15.112	1100	900	913	370	250												
3.00	14.836	1100	900	909	375	255												

B

OPERATING PROTOCOL FOR INCINERATOR

DATE 17.5.1995

TIME	VOLUME OF MUSTARD	TEMPERATURE					CO BURNER ppm	SC1		DISCHARGE		SC2		WASTE GAS			CHANGE	
		T1	T2	T3	T4	T5		pH	MG	pH	MG	pH	MG	SO2	CO	MG	NaOH	WATER

volume of mix. (Durile + reaction 40% mg) = 3000

" " mg 2520 litter

B

OPERATING PROTOCOL FOR INCINERATOR

DATE [illegible]

TIME	VOLUME OF MUSTARD	TEMPERATURE					CO BURNER ppm	SC1		DISCHARGE		SC2		WASTE GAS			CHANGE	
		T1	T2	T3	T4	T5		pH	MG	pH	MG	pH	MG	SO2	CO	MG	NaOH	WATER
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]												
[illegible]	[illegible]	[illegible]			[illegible]	[illegible]												
[illegible]	[illegible]	[illegible]	[illegible]		[illegible]	[illegible]												
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]												
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]												
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[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]												
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[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]												
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]												
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]												

Volume of mix - (Burno) cantion (10% mg = [illegible] li

[illegible] = 2200 Litre.

Date 15-5-1993

Time	Volume	T_1	T_2	T_3	T_4	T_5
10.30	12.40	113	39	36	34
11.30	12.10	112	39	36	34
11.30	11.85	110	39	36	34
12.30	11.85	112	39	36	315
13.30	11.70	113	39	36	35
14.30	10.90	113	39	36	34
15.30	10.60	112	39	36	33
16.30	10.50	113	39	37	345
17.30	10.10	113	39	36	355

10.%

Volume of mix (Diluent) containing = 2300 litres.

= 1610 litres

S. AL Amin

16.5.1993

OPERATIONAL PROTOCOL Incinerator

DATE 12-5-1985

Time	Volume	T_1	T_2	T_3	T_4	T_5
9:40	14,200	1170	940	915	300	300
10:40	14,325	1140	940	870	300	295
11:40	14,450	1110	940	870	300	300
12:40	14,575	1110	940	910	305	301
1:40	13,500	1130	940	961	305	310
2:40	13,625	1130	900	945	305	305
3:40	13,750	1130	900	942	305	305
4:40	12,625	1130	900	928	305	300
5:30	12,400	1130	900	930	300	300

Volume of mix (Burner) contains 1% = 64.4 = 15 to boiler

Operating Engineer Date 11-5-1993

Time	Volume Lit.	T_1	T_2	T_3	T_4	T_5
9.30	14200	1100	1100	850	580	235
10.30	14425	1070	1100	865	360	225
11.30	14550	1070	1100	855	360	225
12.30	14375	1100	1100	860	320	250
13.30	14150	1100	90-120	3-0	200	

Volume of the maximum temperature = 1100 Lit.

" " " = 250 Lit.

S. N. Bhosale

15-5-1993

10-5-1993

12.45	16400	1030	400	350	370	260
13.45	16160	1120	400	350	350	265
14.45	15920	1100	400	330	345	260
15.45	15680	1100	400	310	330	285
16.45	15440	1100	400	404	350	305
17.45	15200	1100	400	405	350	305

Volume of air - Blower) constant (350 x 1) = 1200 Litres

" " air = 816 Litres

15.5

1B

OPERATING PROTOCOL INCINERATOR

Date: 4-5-1993

Time	Volume of Mustard	Temperature					CO Burner ppm	SC1		Discharge		SC2		Waste Gas			Change	
		T1	T2	T3	T4	T5		pH	MG	pH	MG	pH	MG	SO2	CO	MG	NaOH	Water
940	5800	1110	850	791		290												
1040	5385	1100	880	835		310												
1140	4970	1100	880	835		310												
1240	4555	1110	900	828		315												
1340	4140	1110	900	830		315												
1440	3725	1110	900	832		315												
1500	3600	1100	900	830		315												

Volume of mix. (Burney contain (70% mg) = 2200 litter S. ALAmmar

" " mg " " 1540 litter 5-5-1993

1B

OPERATING PROTOCOL INCINERATOR

Date: 3-5-1993

Time	Volume of Mustard	Temperature					CO Burner ppm	SC1		Discharge		SC2		Waste Gas			Change	
		T1	T2	T3	T4	T5		pH	MG	pH	MG	pH	MG	SO2	CO	MG	NaOH	Water
930	8700	1100	>900	835		270												
1030	8338	1100	>900	336		270												
1130	7978	1100	>900	332		270												
1230	7614	1130	>900	876		275												
1330	7252	1120	>900	870		270												
1430	6340	1130	>900	893		300												
1530	6528	1160	>900	905		320												
1630	1162	1140	>900	897		310												
1730	5800	1130	>900	890		310												

Volum of mix-(Burner) contain 10.1b = 2900 litter

" " mg " = 2030 litter

S ALAmmar

4-5-1993

1B

OPERATING PROTOCOL INCINERATOR

Date: 2-5-1993

Time	Volume of Mustard	Temperature					CO Burner ppm	SC1		Discharge		SC2		Waste Gas			Change	
		T1	T2	T3	T4	T5		pH	MG	pH	MG	pH	MG	SO2	CO	MG	NaOH	Water
1030	11000	1100	>900	770		260												
1130	10672	1110	>900	835		285												
1230	10344	1120	>900	651		285												
1330	10016	1140	>900	875		290												
1430	9686	1140	>900	870		290												
1530	9356	1130	>900	871		290												
1630	9028	1130	>900	866		285												
1730	8700	1125	>900	864		285												

Volume of mix-(Burna) contain 10-1% = 2300 liter

" " mg " = 1600 liter

S. Al Ammar

3-5-1993

1B

OPERATING PROTOCOL INCINERATOR

Date: 29-4-1993

Time	Volume of Mustard	Temperature					CO Burner ppm	SC1		Discharge		SC2		Waste Gas			Change	
		T1	T2	T3	T4	T5		pH	MG	pH	MG	pH	MG	SO2	CO	MG	NaOH	Water
930	12300	1080	900	364		265												
1030	12025	1030	900	309		280												
1130	11750	100	900	318		230												
1230	11475	1100	900	324		230												
1330	11200	1100	900	326		285												
1430	1100	1100	900	325		280												

Volume of M.S. required 70.1 = 1300 l

" " M.J = 910 l

S. Al Amoudi

2-5-1993

1B

OPERATING PROTOCOL INCINERATOR

Date: 28.4.1995

Time	Volume of Mustard	Temperature					CO Burner ppm	SC1		Discharge		SC2		Waste Gas			Change	
		T1	T2	T3	T4	T5		pH	MG	pH	MG	pH	MG	SO2	CO	MG	NaOH	Water
	14.42	100	900	818		270												
	14.12	100	900	798		250												
	13.84	100	900	811		250												
	13.26	100	900	773		250												
	13.28	100	900	810		260												
	13.000	100	900	811		260												
	12.720	100	900	793		260												
	12.44	100	900	810		270												
	12.50	100	900	810		270												

Volume of mix (burned) contain 2ml = 2100 Liter

2100 Liter

S.A.

29.4.1995

OPERATING PROTOCOL INCINERATOR

Date: 27-4-1993

Time	Volume of Mustard	Temperature					CO Burner ppm	SC1		Discharge		SC2		Waste Gas			Change	
		T1	T2	T3	T4	T5		pH	MG	pH	MG	pH	MG	SO2	CO	MG	NaOH	Water
10.40	15.100	1080	820	818		270												
11.40	15.600	1040	870	776		285												
12.40	15.300	1050	880	813		285												
13.40	15.000	1080	900	776		285												
14.40	14.700	1100	900	820		285												
15.40	14.900	1070	900	853		280												

Volume of MIX (BURNED) CONTAIN Vol = 1500 LITRS

MG = 1050 LITRS

S. Alamma
28.4.1993

1B

OPERATING PROTOCOL INCINERATOR

Date: 26-4-199-

Time	Volume of Mustard	Temperature					CO Burner ppm	SC1		Discharge		SC2		Waste Gas			Change	
		T1	T2	T3	T4	T5		pH	MG	pH	MG	pH	MG	SO2	CO	MG	NaOH	Water
	16.9		>9															
	16.2		9															
	15.9																	

= 70, Latter

27-4-

1B

OPERATING PROTOCOL INCINERATOR

Date: 25/4/1993

Time	Volume of Mustard	Temperature					CO Burner ppm	SC1		Discharge		SC2		Waste Gas			Change	
		T1	T2	T3	T4	T5		pH	MG	pH	MG	pH	MG	SO2	CO	MG	NaOH	Water
10:00	16.0	1:50	2:00	772	39	97												
11:00	17.7	1:00	2:00	769	36	94												
12:00	17.45	1:50	2:00	766	22	245												
13:00	17.2	1:00	2:00	816	316	256												
14:00	16.9	1:00	2:00	9:00	27	25												
			STOP															

Volume of mix (Burned) 80.1 % = Nine Litres

77 Litres

S. A. Pearce

26-4-1993

1B

OPERATING PROTOCOL INCINERATOR

Date: 14-4-1992

Time	Volume of Mustard	Temperature					CO Burner ppm	SC1		Discharge		SC2		Waste Gas			Change	
		T1	T2	T3	T4	T5		pH	MG	pH	MG	pH	MG	SO2	CO	MG	NaOH	Water
9	6-7	1	3	10	2	3	25											
10	9	11		7		5	235											
11	7			4			245											
12	7.400	11																
13	7.000			6	6	34												
1400	6.700			7		34	240											
15	6.900	11				2	235											
16	5.900	11					240											
17	5.600	11		7	12	3	245											
175	5.4	11				3	240											

Volume of mix (Burned) 73% = 290 Litter

= 212 Litter

S-ALA

14-4-1992

1B

OPERATING PROTOCOL INCINERATOR

Date: 13/4/1993

Time	Volume of Mustard	Temperature					CO Burner ppm	SC1		Discharge		SC2		Waste Gas			Change	
		T1	T2	T3	T4	T5		pH	MG	pH	MG	pH	MG	SO2	CO	MG	NaOH	Water
945	11.800	1060	850	662	280	210												
1045	11-300	1140	>900	732	300	225												
1145	10-700	1150	>900	749	320	230												
1245	10-150	1170	>900	787	350	235												
1345	9-800	1140	>900	772	330	235												
1445	9-300	1140	>900	791	340	245												
1545	8-950	1140	7900	795	330	230												
1645	8-650	1140	7900	795	330	230												
1745	8-300	1130	7900	789	310	225												
		S	T	O	P													

Volume of Mix (Burner) 73% = 3500 litter

" " NG = 2560 litter

S. Al Ammar

14-4-1993

1B

OPERATING PROTOCOL INCINERATOR

Date: 10/11/14

Time	Volume of Mustard	Temperature					CO Burner ppm	SC1		Discharge		SC2		Waste Gas			Change	
		T1	T2	T3	T4	T5		pH	MG	pH	MG	pH	MG	SO2	CO	MG	NaOH	Water
10-45	13,800	140	200	365	340	240												
11-45	13-250	150	>900	702	330	230												
2-45	13-000	160	>900	747	340	235												
3345	12-900	120	>900	746	340	230												
4-45	12600	130	>900	761	340	239												
5-45	12-300	100	>900	761	300	225												
6-45	12-000	150	>900	735	320	225												
7-45	11.800	170	>900	300	340	235												
		S	T	U	P													

Volume 1 Mix (Burner 73% =

MG =

M Ammon

14-4-2015

1B

OPERATING PROTOCOL INCINERATOR

Date: 11/4/1993

Time	Volume of Mustard	Temperature					CO Burner ppm	SC1		Discharge		SC2		Waste Gas			Change	
		T1	T2	T3	T4	T5		pH	MG	pH	MG	pH	MG	SO2	CO	MG	NaOH	Water
1100	17000	1100	3000	631	300	205												
1100	15000	1170	3110	746	320	225												
1150	13200	1160	3100	762	350	240												
1200	11900	1160	3100	758	320	220												
1300	10100	1170	3100	763	370	230												
1400	9000	1170	3100	750	330	220												
1500	7400	1160	3100	750	340	240												
1600	6400	1150	3100	745	350	235												
1700	13800	S	T	O	P													

Volume of MIX-(Burne) contain 73% = 3200 liter

" " MG " = 2300 liter

S-Alammar

12-4-1993

1B

OPERATING PROTOCOL INCINERATOR

Date: 10/4/1993

Time	Volume of Mustard	Temperature					CO Burner ppm	SC1		Discharge		SC2		Waste Gas			Change	
		T1	T2	T3	T4	T5		pH	MG	pH	MG	pH	MG	SO2	CO	MG	NaOH	Water
1000	19300	1030	>900	730	420	230												
1100	19000	1060	>900	760	350	225												
1200	18500	1080	>900	760	350	230												
1300	18000	1090	>900	750	360	2110												
1400	17800	1120	>900	805	360	245												
1500	17500	1110	>900	810	370	260												
1600	17250	1160	>900	730	390	200												
1700	1700	1130	>900	730	290	185												
1800		S	T	O	P													

Volume of Mix (Burne) contain 73% = 2300 litres
" " MJ " = 1680 litres

S. Al Ammar
12-4-1993

1B

OPERATING PROTOCOL INCINERATOR

Date: 6-4-1993

Time	Volume of Mustard	Temperature T1	T2	T3	T4	T5	CO Burner ppm	SC1 pH	SC1 MG	Discharge pH	Discharge MG	SC2 pH	SC2 MG	Waste Gas SO2	Waste Gas CO	Waste Gas MG	Change NaOH	Change Water
900	6600	1120	900	772	390	245	/	10	/		/	12	/	/	/	/		
1000	6360	1120	900	742	370	220		11				11						
1100	6040	1140	900	782	390	235		11				11						
1200	5720	1140	900	796	390	230		10				10						
1300	5400	1130	900	789	360	235		10				12						
1400	5080	1140	900	791	370	340		11				11						
1500	4760	1140	900	800	390	335		10				11						
1600	4440	1140	900	811	330	340		10				12						
1700	4120	1140	900	800	380	340		11				10						
1800	3800	1140	900	800	370	335		12				10						

Total volume of mixture Brum is 2800 l. Hw containing 60% mg

Volume of mg Brum is 1700 l. Hw

S. AlAmmar

7-4-1993

1B

OPERATING PROTOCOL INCINERATOR

Date: 5/4/1993

Time	Volume of Mustard	Temperature					CO Burner ppm	SC1		Discharge		SC2		Waste Gas			Change	
		T1	T2	T3	T4	T5		pH	MG	pH	MG	pH	MG	SO2	CO	MG	NaOH	Water
900	8900	1100	900	778	390	240	/	12	/		/	12	/	/	/	/		
1000	8680	1130	900	818	400	250		11				11						
1100	8440	1140	900	807	400	240		10				10						
1200	8160	1140	900	770	460	250		10				10						
1300	7900	1120	900	774	450	250		10				10						
1400	7650	1170	900	795	450	265		10				11						
1500	7390	1130	900	780	460	255		11				10						
1600	7120	1120	900	772	470	255		11				11						
1700	6860	1110	900	762	470	255		10				11						
1800	6600	1110	900	762	470	255		11				11						
	STOP																	

Total volume of mixture Brun.is 2300 liter containing 60% my
volume of my Brun.is 1400 liter

S. AL Ammar
5/4/1993

01B

MUSTARD INCINERATOR

Date: 4/4/1993

Fuel Time	900	1000	1100	1200	1300	1400	1500	1600	1700			
CO												
✓ O2												
✓ Atomizing Air Pressure - BARS	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5			
✓ Combustion Air Dampers - Position Left	/	/	/	/	/	/	/	/	/			
Right												
✓ Fuel Firing Rate - Kgs/Hr (Liter/hr)	250	250	250	250	250	250	250	250	250			
Induced Draft Fan 40 000 Cubic Metres	/	/	/	/	/	/	/	/	/			
80 000 Cubic Metres												
Temperatures T1	1100	1160	1140	1120	1130	1130	1140	1140	1140			
T2	7900	7900	7900	7900	7900	790	790	790	790			
T3	716	737	778	776	779	791	799	814	802			
T4	300	310	310	310	310	310	320	320	320			
T5	235	255	270	270	270	270	275	275	275			
pH Values Quench	13	13	13	11	11	10	10	11	10			
Scrubber	13	12	10	10	10	11	11	10	10			
Condensate	7.0	7.0	6.0	6.0	6.0	5.0	5.0	4.0	4.0			

Amount of mixture Brun is 2000 Liter containing 60.6 g/ml
Amount of Mg [redacted] Brun is 1200 Liter

S. AL Ammar

6-4-1993

01B

MUSTARD INCINERATOR

Date: 3/4/1993

Fuel	1040	140	240	1340	1440	1540	1640	1730				
CO												
O2												
Atomizing Air Pressure - BARS	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5				
Combustion Air Dampers - Position Left												
Right	/	/	/	/	/	/	/	/				
Fuel Firing Rate - Kgs/Hr	315	315	315	315	315	315	315	315				
Induced Draft Fan 40 000 Cubic Metres												
80 000 Cubic Metres	/	/	/	/	/	/	/	/				
Temperatures T1	120	110	1110	1110	1110	120	1100	1100				
T2	100	100	100	100	900	900	100	900				
T3	140	800	763	164	771	470	125	25				
T4	450	40	450	450	450	450	430	430				
T5	80	50	60	55	950	250	250	950				
pH Values Quench	13	13	0	10	12	3	2	0				
Scrubber	3	13	11	10	0	13	3	1				
Condensate	7	7	6	6	5	5	5	4				

Amount of mixture Brun is 4500 litter containing 60 % of

Amount of my Brun is 2700 litter

S-AL Ammar

6-4-1993

01B

MUSTARD INCINERATOR

Date: 30/3/1993

Fuel Type	900	1000	1100	1200	1300						
CO											
✓ O2											
✓ Atomizing Air Pressure - BARS	3.5	3.5	3.5	3.5	3.5						
Combustion Air Dampers - Position Left	/	/	/	/	/	/	/	/			
Right											
✓ Fuel Firing Rate - Kgs/Hr	320	320	320	320	320						
Induced Draft Fan 40 000 Cubic Metres	/	/	/	/	/						●
80 000 Cubic Metres											
Temperatures T1	100	130	140	1120	1100						
T2	890	760	700	900	900						
T3	347	411	210	310	310						
T4	320	350	340	340	340						
T5	225	225	230	230	230						
pH Values Quench	3	12	10	0	12						
Scrubber	13	13	10	12	13						●
Condensate	8	7	7	6	5						

Volume of mixture Brum is 1500 litres containing 12.2c/cm.

Volume of Mg Brum is 1155 litres

S. AlAmmar

6-4-1993

EPA

01B

MUSTARD INCINERATOR

Date: 29/3/1993

Fuel												
CO												
O2												
Atomizing Air Pressure - BARS	3	3	3	3	3	3	3	3	3			
Combustion Air Dampers - Position Left												
Right	/	/	/	/	/	/	/	/	/			
Fuel Firing Rate - Kgs/Hr	275	275	275	275	275	275	275	275	275			
Induced Draft Fan 40 000 Cubic Metres	/	/	/	/	/	/	/	/	/			
80 000 Cubic Metres												
Temperatures T1	1100	1100	1100	1100	1100	1120	1100	1120	1120			
T2	900	900	900	900	900	920	920	900	900			
T3	775	837	868	824	770	813	810	815	830			
T4	300	300	300	310	310	310	310	310	310			
T5	240	250	255	240	275	260	230	230	235			
pH Values Quench												
Scrubber	10	10	10	13	13	12	11	13	12			
Condensate	13	9	11	11	11	11	15	15	15			

Volume of Nitric Brown is 2500 litres containing 72.2% mg

Volume of mg Brown is 1800 litres

S-ALAmmar

6-4-1993

01B

MUSTARD INCINERATOR

Date: 28/3/1993

Fuel Type	1100	1200	1100	1300	1400	1500	1200	1300			
CO											
O2											
Atomizing Air Pressure - BARS	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5		
Combustion Air Dampers - Position Left	/	/	/	/	/	/	/	/	/		
Right											
Fuel Firing Rate - Kgs/Hr	265	265	265	265	265	265	265	265	265		
Induced Draft Fan 40 000 Cubic Metres	/	/	/	/	/	/	/	/	/		
80 000 Cubic Metres											
Temperatures T1	1170	1160	1060	1090	1100	1010	1120	1120	1100		
T2	930	900	900	900	900	910	900	900	900		
T3	789	762	765	792	806	811	834	813	817		
T4	340	320	330	330	340	340	340	340	340		
T5	250	250	245	250	255	250	250	250	245		
pH Values Quench	12	10	9	11	12	10	10	12	12		
Scrubber	12	12	10	10	12	12	11	10	10		
Condensate	8	7	7	6	6	5	5	4	4		

Volume of mixture Burnt is 2400 litres Containing 72.2% n

Volume of Hyd. Burnt is 1732 litres

S. ALAmmar

6-4-1993

1B

OPERATING PROTOCOL INCINERATOR

Date: 27-3-1993

Time	Volume of Mustard	Temperature					CO Burner ppm	SC1		Discharge		SC2		Waste Gas			Change	
		T1	T2	T3	T4	T5		pH	MG	pH	MG	pH	MG	SO2	CO	MG	NaOH	Water
910	11000					210	/		/		/		/	/	/	/		
1510	10000					310												
1610	10000				335	210												
1710	10000			740	335	210												
1750	1000		T	C	P													

Volum =/- Mixture (Burner) contain 72.2% MJ = 11000 f
" " MJ (Burne) = 7992.1

S. Allmuir
29-3-1993

1B

OPERATING PROTOCOL INCINERATOR

Date: 2-3-1993

Time	Volume of Mustard	Temperature					CO Burner ppm	SC1		Discharge		SC2		Waste Gas			Change	
		T1	T2	T3	T4	T5		pH	MG	pH	MG	pH	MG	SO2	CO	MG	NaOH	Water
935	5600	1100	860	800	435	260	/		/		/		/	/	/	/		
1030	5400	1120	810	763	410	265												
1130	5200	1120	840	745	400	260												
1230	5000	1100	7900	741	380	240												
1315	4800	1100	7900	745	390	250												
1345	4500	1080	7900	750	350	230												
1415	4500	1020	7900	751	370	220												
1500	4500	S	T	O	P													

Volume of Mixture (Burner) contain 66% MG = 1100 l 5-Aluminium

" " MG (Burner) = 730 l 22-3-1993

50-3-1d23

1B

OPERATING PROTOCOL INCINERATOR

Date: 18-3-1993

Time	Volume of Mustard	Temperature					CO Burner ppm	SC1		Discharge		SC2		Waste Gas			Change	
		T1	T2	T3	T4	T5		pH	MG	pH	MG	pH	MG	SO2	CO	MG	NaOH	Water
1130	7600	1140	7900	740	260	370	✓		✓		✓		✓	✓	✓	✓		
1230	6600	1130	7900	841	380	240												
1330	6100	1135	7900	851	380	235												
1430	5600	1110	7900	842	370	237												
1515	5600	S	T	O	P													

Volume of Mixture (Burner) contain 66% MG = 1500 l

" " MG (Burner) = 1000 l

S. Al Ammar
22-3-1993

1B

OPERATING PROTOCOL INCINERATOR

Date: ~~17-3-1993~~

Time	Volume of Mustard	Temperature					CO Burner ppm	SC1		Discharge		SC2		Waste Gas			Change	
		T1	T2	T3	T4	T5		pH	MG	pH	MG	pH	MG	SO2	CO	MG	NaOH	Water
1215	7200	1110	7900	815	490	300	/		/		/		/	/	/	/		
1330	7100	1130	7900	813	470	275												
1335	7100	S	C	O	P													

Volume of Mixture (Burner) contain 66% MG = 100 l

" " MG (Burner) = 66 l

S. Al Ammar

22-3-1993

1B

OPERATING PROTOCOL INCINERATOR

Date: 16-3-1993

Time	Volume of Mustard	Temperature					CO Burner ppm	SC1		Discharge		SC2		Waste Gas			Change	
		T1	T2	T3	T4	T5		pH	MG	pH	MG	pH	MG	SO2	CO	MG	NaOH	Water
1130	8500	1120	>900	710	485	295	/		/		/		/	/	/	/		
1230	8175	1120	>900	850	>500	295												
1330	7850	1140	>900	360	>500	290												
1430	7525	1120	>900	850	490	285												
1530	7200	1130	>900	840	>500	290												
1535		S		T		D	P											

Volume of Mixture = ...

S-Al Ammar
17-3-1993

1B

OPERATING PROTOCOL INCINERATOR

Date: 15-3-1995

Time	Volume of Mustard	Temperature					CO Burner ppm	SC1		Discharge		SC2		Waste Gas			Change	
		T1	T2	T3	T4	T5		pH	MG	pH	MG	pH	MG	SO2	CO	MG	NaOH	Water
8.50	0	1015		120	300	320	40	40	✓		✓		✓		✓	✓	✓	✓	
9.50	0	1070	0	110	300	320	40	70											
10.50	0	1030	0	170	300	320	40	70											
11.50	0	980	0	110	300	320	40	70											
12.50	0	940	0	110	300	320	40	70											
13	0	910	0	130	300	320	40	70											
14.50	0	880	0	150	300	320	40	70											
15.50	0	850	0	160	300	320	40	70											
15.55				S		T		O	P										

Volume of mix (Burne) contain 66% M = 2100 P

= = M) (Burne) = 1400

S- Al-Ammar

1B

OPERATING PROTOCOL INCINERATOR

Date: 13/3/1993

Time	Volume of Mustard	Temperature					CO Burner ppm	SC1		Discharge		SC2		Waste Gas			Change	
		T1	T2	T3	T4	T5		pH	MG	pH	MG	pH	MG	SO2	CO	MG	NaOH	Water
0700	12400	840	9..	7..	3..	1..		1..	1..	1..	.	11	1	2..		..	—	
1000	12175	11..	2..	7..	..	.30		13	.	1	.	11	.					
1100	11950	1..	9..	8..	35.	1..		12	.	1	.	12	.					
1200	11725	1..	9..	8..	1..	235		11	.	2	.	13	.	.		.		
1300	11500	1..	9..	8..	1..	23		10	.	2	.	13	.	.		.		
1400	11275	1..	9..	8..		23		9	.	1	.	12	.	.		.		
1500	11050	1..	9..	8..	1..	23		14	<	2	<	12	.	<		<	—	
1600	10825	1..	9..	8..	1..	23		13	<	2	<	11	.	<		<	—	
1700	10600	1..	9..	8..	1..	23		12	.	2	<	11	.	<		<	—	
	ST-0																	

Volume of mix (Burner) contains 1% MJ = 1800 Litres

Volume of MJ (Burner) = 1200 Litres

14/3/1993

1B

OPERATING PROTOCOL INCINERATOR

Date: 12/-/1994

Time	Volume of Mustard	Temperature					CO Burner ppm	SC1		Discharge		SC2		Waste Gas			Change	
		T1	T2	T3	T4	T5		pH	MG	pH	MG	pH	MG	SO2	CO	MG	NaOH	Water
1:	131 ltrs							14									✓	
1:30									210	0	0	14	210			=		
11:30	23000							13	=	5	4	11	=			=		
1:30								12	=	2	4	13	=			=		
		116			116	130		11	=	2	4	13	=			=		
13:30	12400			830				10	=	2	4	12	=					
	STOP																	

Volume of MIX (Burnt) Contain 65% My = 200 litres

Volume of My (burnt) = 130 Litres

5-12-1994

13-3-1995

1B

OPERATING PROTOCOL INCINERATOR

Date: 11-3-1993

Time	Volume of Mustard	Temperature					CO Burner ppm	SC1		Discharge		SC2		Waste Gas			Change	
		T1	T2	T3	T4	T5		pH	MG	pH	MG	pH	MG	SO2	CO	MG	NaOH	Water
900	15600	1020	790	750	1140	215	/	14	Low	6	Low	14	Low		/	Low	/	
1000	15320	1110	"	772	1160	270	/	14	"	5	"	14	"	"	/	"		
1100	15040	1100	"	755	1150	272	/	13	"	3	"	13	"	"	/	"		
1200	14760	1120	"	812	1165	282	/	12	"	2	"	13	"	"	/	"		
1300	14480	1120	"	821	1140	275	/	11	"	2	"	12	"	"	/	"		1M NaOH
1400	14200	1100	"	809	1140	273	/	10	"	2		12	"	"	/	"		
1500	13920	1100	"	813	1135	275	/	9	"	2		11	"	"	/	"		2 NaOH
1600	13640	1100	"	811	1130	272	/	8	"	2		11	"	"	/	"		C
1700	13360	1100	"	810	1120	270	/	8	"	2		10	"	"	/	"		
1730	13200	1100	"	820	1120	270	/	10	"	2		10	"	"	/	"	/	
	S T E P																	

volume of Mix-(Bulk) Contain 66% M·g = 2400 litter

" " Mg = = 1580 litter

S-AL-Mix

12-3-1993

1B

OPERATING PROTOCOL INCINERATOR

Date: 10-3-1993

Time	Volume of Mustard	Temperature					CO Burner ppm	SC1		Discharge		SC2		Waste Gas			Change	
		T1	T2	T3	T4	T5		pH	MG	pH	MG	pH	MG	SO2	CO	MG	NaOH	Water
1145	17700	113	>900	850	1100	775		14	200	6	200	14	200	200	✓	200	✓	✓
1045	17140	112	>900	850	1100	775		13	"	5	"	14	"	"	"	"		
1145	17120	111	>900	830	1080	775		12	"	4	"	13	"	"	"	"		
1245	16720	114	>900	850	1080	775		11	"	3	"	13	"	"	"	"		
1345	16660	112	>900	840	1100	775		10	"	2	"	12	"	"	"	"		
1445	16400	111	>900	830	1100	775		10	"	2	"	12	"	"	"	"		
1545	16140	110	>900	850	1100	775		9	"	2	"	11	"	"	"	"		
1645	15830	110	>900	850	1100	775		9	"	2	"	11	"	"	"	"		
1730	15600	110	>900	845	1100	775		8	"	2	"	10	"	"	"	"		
1735		STOP																

volume of Mix (Burned) contain 65% MG = 2100 Liter

" " MG (Burned) = 1380 Liter

S. AL-AMMAR
10-3-1993

1B

OPERATING PROTOCOL INCINERATOR

Date: 8-3-1993

Time	Volume of Mustard	Temperature					CO Burner ppm	SC1		Discharge		SC2		Waste Gas			Change	
		T1	T2	T3	T4	T5		pH	MG	pH	MG	pH	MG	SO2	CO	MG	NaOH	Water
1000	19000	1120	900	840	390	250	/	12	/	6	/	14	/	/	/	/	✓	✓
1100	18740	1120	900	850	400	290		12		5		14						
1200	18480	1120	900	845	400	300		14		3		14						
1300	18220	1100	900	835	410	295		14		2		14						
1400	17960	1120	900	850	410	295		13		3		14						
1500	17700	1100	900	835	420	275		13		3		14						
1505		STOP																

quantity of mixture = ~~1300~~ 1300 liter 66% MJ

quantity of MJ (Burne) = 858 liter

S- Al Ammar

1B

OPERATING PROTOCOL INCINERATOR

Date: 7/3/1993

Time	Volume of Mustard	Temperature					CO Burner ppm	SC1		Discharge		SC2		Waste Gas			Change	
		T1	T2	T3	T4	T5		pH	MG	pH	MG	pH	MG	SO2	CO	MG	NaOH	Water
11.00	20000	1100	900	800	400	250		14	✓	6	✓	14	✓	✓	✓	✓	✓	✓
1200	19750	1100	900	830	400	250		13		5		14						
1300	19500	1120	900	843	400	260		12		2		13						
1400	19250	1130	900	830	400	250		10		2		13						
1500	19000	1100	900	820	400	250		10		2		13						
1505	STOP																	

Volume of Mixture (Burne) = 1000 Litre (66% mj)

" " M.J (Burne) = 660 Litre

S - AL-RAMIR
8-3-1993

1B

OPERATING PROTOCOL INCINERATOR

Date: ~~22/2/1993~~

Time	Volume of Mustard	Temperature					CO Burner ppm	SC1		Discharge		SC2		Waste Gas			Change	
		T1	T2	T3	T4	T5		pH	MG	pH	MG	pH	MG	SO2	CO	MG	NaOH	Water
500	5225	1100	>900	838	460	270		11				13						
600	5006	1160	>900	837	460	270		11				12						
700	4775	1100	>900	839	455	275		10				14						
800	4550	1100	>900	839	450	275		10				14					✓	
900	4225	1080	>900	831	450	275		9				13						
1000	4000	1070	>900	824	450	275		9				13						
11000	3775	1060	>900	820	440	285		8.5				12						
1200	3600	1160	>900	902	470	325		8				12						
		STOP																

sum of Mixture (Burne) 50% Mg = 5000 litter

S-AL AMMAR
23-2-1993

1B

OPERATING PROTOCOL INCINERATOR

Date: 21/2/1993

Time	Volume of Mustard	Temperature					CO Burner ppm	SC1		Discharge		SC2		Waste Gas			Change	
		T1	T2	T3	T4	T5		pH	MG	pH	MG	pH	MG	SO2	CO	MG	NaOH	Water
1500	8375	1010	7900	791	430	290		13				11						
1600	8150	1120	>900	795	440	300		13	/			11						
1700	7925	1140	>900	785	470	300		13				11						
1800	7700	1100	>900	810	490	280		12				11						
1900	7475	1100	>900	815	495	290		12				10						
2000	7250	1120	7100	840	480	300		11				10						
2100	7025	1100	7900	835	450	285		11				10						
2200	6800	1100	7900	835	450	280		11				10						
2300	6575	1100	7900	835	450	275		10				10						
2400	6350	1100	7900	855	450	275		10				9						
22/2/93																		
100	6125	1100	7900	835	450	275		9				9						
200	5900	1100	7900	835	450	270		9				9						
300	5675	1100	>900	840	460	275		9				9						
400	5450	1100	7900	840	460	275		8				9						

S. AL-AMMAR
23/2/1991

1B

OPERATING PROTOCOL INCINERATOR

Date: 21/2/1993

Time	Volume of Mustard	Temperature					CO Burner ppm	SC1		Discharge		SC2		Waste Gas			Change	
		T1	T2	T3	T4	T5		pH	MG	pH	MG	pH	MG	SO2	CO	MG	NaOH	Water
100	11525	1100	>900	843	410	280		13				14					✓	
200	11300	1100	>900	860	420	280		13				14						
300	11075	1100	>900	860	420	280		12				13						
400	10850	1100	>900	860	420	280		12				13						
500	10625	1100	>900	860	420	280		11				13						
600	10400	1100	7400	865	430	280		11				13						
700	10175	1100	>900	870	430	285		11				13						
800	9950	1100	>900	884	430	275		10				12						
900	9725	1110	7900	885	430	280		10				12						CONTINUOUS
1000	9500	1100	>900	868	430	285		9				12						
1100	9275	1040	7900	786	440	285		9				12						
1200	9050	1120	7900	786	460	305		9				12						
1300	8825	1140	7900	877	450	295		8				12						
1400	8600	1140	7900	902	470	315		8				12						
1500	8375																	

Quan - of mixture (Burnt) with MJ = 6000 Litres

S. AL-AMMAR
23-2-1993

1B

OPERATING PROTOCOL INCINERATOR

Date: 20/2/1993

Time	Volume of Mustard	Temperature					CO Burner ppm	SC1		Discharge		SC2		Waste Gas			Change	
		T1	T2	T3	T4	T5		pH	MG	pH	MG	pH	MG	SO2	CO	MG	NaOH	Water
1200	14600	1100	>900	820	405	275		13				14					✓	
1300	14300	1110	>900	839	405	275		13				14						
1400	14000	1140	>900	842	480	305		12				13						
1500	13775	1150	>900	794	460	305		12				13						
1600	13550	1140	>900	787	440	305		11				12						
1700	13325	1070	900	797	400	215		11				12						
1800	13100	1070	>900	797	400	295		10				12						
1900	12875	1100	>900	818	430	290		10				14					✓	
2000	12650	1090	>900	837	420	280		9				14						
2100	12425	1080	900	846	420	280		9				14						
2200	12200	1090	>900	846	420	285		8				13						
2300	11975	1090	>900	845	420	283		8				13						
2400	11750	1100	>900	853	420	290		13				14					✓	

CONTINUED

S. AL-AMMAR
23-2-1993

OPERATING PROTOCOL INCINERATOR

Date: 17/ [illegible]

Time	Volume of Mustard	Temperature					CO Burner ppm	SC1		Discharge		SC2		Waste Gas			Change	
		T1	T2	T3	T4	T5		pH	MG	pH	MG	pH	MG	SO2	CO	MG	NaOH	Water
8:00	0	1100	7100	700	1100	200	—	11	—	—	—	11	—	—	—	—	/	/
9:00		1100	7900	700	5:00	210	—	11	—	—	—	11	—	—	—	—	—	—
10:00		1100	7900	—	5:00	210	—	11	—	—	—	11	—	—	—	—	—	—
11:00	0	1100	7100	—	5:00	210	—	11	—	—	—	11	—	—	—	—	/	/
12:00	X	1100	7100	—	5:00	210	—	11	—	—	—	11	—	—	—	—	—	—
1:00		1100	7100	—	5:00	210	—	11	—	—	—	11	—	—	—	—	—	—
2:00		1100	7100	—	5:00	210	—	11	—	—	—	11	—	—	—	—	—	—
3:00		1100	7100	—	5:00	210	—	11	—	—	—	11	—	—	—	—	—	—
4:00		1100	7100	—	5:00	210	—	11	—	—	—	11	—	—	—	—	/	/
5:00		1100	7100	—	5:00	210	—	11	—	—	—	11	—	—	—	—	—	—
6:00		1100	7100	—	5:00	210	—	11	—	—	—	11	—	—	—	—	—	—
7:00		1100	7100	—	5:00	210	—	11	—	—	—	11	—	—	—	—	—	—
8:00		1100	7100	—	5:00	210	—	11	—	—	—	11	—	—	—	—	/	/
9:00		1100	7100	—	5:00	210	—	11	—	—	—	11	—	—	—	—	—	—
10:00		1100	7100	—	5:00	210	—	11	—	—	—	11	—	—	—	—	—	—
11:00		1100	7100	—	5:00	210	—	11	—	—	—	11	—	—	—	—	—	—
12:00		1100	7100	—	5:00	210	—	11	—	—	—	11	—	—	—	—	/	/
1:00		1100	7100	—	5:00	210	—	11	—	—	—	11	—	—	—	—	—	—
2:00		1100	7100	—	5:00	210	—	11	—	—	—	11	—	—	—	—	—	—
3:00		1100	7100	—	5:00	210	—	11	—	—	—	11	—	—	—	—	—	—
4:00		1100	7100	—	5:00	210	—	11	—	—	—	11	—	—	—	—	/	/
5:00		1100	7100	—	5:00	210	—	11	—	—	—	11	—	—	—	—	—	—
6:00		1100	7100	—	5:00	210	—	11	—	—	—	11	—	—	—	—	—	—
7:00		1100	7100	—	5:00	210	—	11	—	—	—	11	—	—	—	—	—	—
8:00		1100	7100	—	5:00	210	—	11	—	—	—	11	—	—	—	—	/	/
9:00		1100	7100	—	5:00	210	—	11	—	—	—	11	—	—	—	—	—	—
10:00		1100	7100	—	5:00	210	—	11	—	—	—	11	—	—	—	—	—	—
11:00		1100	7100	—	5:00	210	—	11	—	—	—	11	—	—	—	—	—	—
12:00		1100	7100	—	5:00	210	—	11	—	—	—	11	—	—	—	—	/	/
1:00																		

900 of Mixture 50% Mg. (Burne) = 1200 Litter

153

OPERATING PROTOCOL INCINERATOR

Date: 16/2/1993

Time	Volume of Mustard	Temperature					CO Burner ppm	SC1		Discharge		SC2		Waste Gas			Change	
		T1	T2	T3	T4	T5		pH	MG	pH	MG	pH	MG	SO2	CO	MG	NaOH	Water
		1100	1200	700	300	210	—	11	—	—	—	11	—	—	—	—	/	/
		1110	1200	700	300	230	—	11	—	—	—	11	—	—	—	—	—	—
							—	11	—	—	—	11	—	—	—	—	—	—
		1110	1200	700	300	210	—	11	—	—	—	11	—	—	—	—	/	/
		1110	1200	750	360	240	—	11	—	—	—	11	—	—	—	—	—	—
		1200	1300	760	1110	780	—	11	—	—	—	11	—	—	—	—	—	—
		1080	1300	730	420	730	—	11	—	—	—	11	—	—	—	—	/	/
		1100	980	730	420	250	—	11	—	—	—	11	—	—	—	—	—	—
		1100	980	730	1110	230	—	11	—	—	—	11	—	—	—	—	—	—
		1110	1200	750	1110	240	—	11	—	—	—	11	—	—	—	—	—	—
		1100	1190	760	1110	240	—	11	—	—	—	14	—	—	—	—	/	/
		1100	1200	760	415	140	—	11	—	—	—	14	—	—	—	—	—	—
		1100	1200	700	360	240	—	11	—	—	—	11	—	—	—	—	/	/

9un of Mixture 50% MG (Burnes) = 2200 litter

1B

OPERATING PROTOCOL INCINERATOR

Date: ~~14/2/1995~~

Time	Volume of Mustard	Temperature					CO Burner ppm	SC1		Discharge		SC2		Waste Gas			Change	
		T1	T2	T3	T4	T5		pH	MG	pH	MG	pH	MG	SO2	CO	MG	NaOH	Water
2400	4800	1110	780	123	420	230		6				13						
100	4500	1140	770	130	410	230		14				14					✓	
200	4200	1150	760	140	420	130		14				14						
300	3900	1150	760	134	410	180		14				14						
400	3600	1150	760	135	410	230		13				14						5
405		1	0	1														

Sum of Mix (Iscrete) = 1200 Liter

S. AL AMMAR

14/2/1993

1B

OPERATING PROTOCOL INCINERATOR

Date: 13/6/1943

Time	Volume of Mustard	Temperature					CO Burner ppm	SC1		Discharge		SC2		Waste Gas			Change	
		T1	T2	T3	T4	T5		pH	MG	pH	MG	pH	MG	SO2	CO	MG	NaOH	Water
1400	7	300	80	1[illegible]	70	170	70		14				14				—	
1500	7	500	40	100	70	160	60		12				14					
1600	7	200	170	200	516	100	70		12				14					
1700	19	500	140	200	315	100	15		11				13					
1800	6	600	140	200	113	100	80		10				3					
1900	6	300	140	200	105	100	80		14				14				—	
2000	6	000	140	200	14	100	85		5				15					
2100	5	700	140	200	110	100	80		12				13					
2200	5	400	140	200	113	110	80		11				13					
2300	5	100	140	200	120	110	80		10				5					
2400	4	800	140	200	121	110	80		10				5					

Run of mixture (Burnie) = 3000 gallons

S Bell Smith
14/6/1943

13

OPERATING PROTOCOL INCINERATOR

Date: 12/12

Time	Volume of Mustard	Temperature T1	T2	T3	T4	T5	CO Burner ppm	SC1 pH	SC1 MG	Discharge pH	Discharge MG	SC2 pH	SC2 MG	Waste Gas SO2	Waste Gas CO	Waste Gas MG	Change NaOH	Change Water
1100	01100	1100	1300	775	470	1300		11				11					✓	
1200	10111	1300	1400	1400	950	1300		13				12						
1300	9725	1300	1400	1400	1700	1175		10				12						
1400	11139	1300	1400	1250	1300	1100		12				14					✓	✓
1500	11193	1300	1400	1365	1375	1300		12				14						✓
1600	8867	1300	1400	1365	1375	1300		12				14						✓
1700	8581	1100	1400	1395	1400	1300		12				13					✓	✓
1800	8295	1100	1400	1350	1350	1300		11				14						✓
1900	8009	1100	1400	1385	1400	1295		11				14						
2000	7900	1100	1400	1350	1400	1295		11				14					✓	
2100	7800	1100	1400	1360	1400	1285		10				13						
		~~1100~~		~~1350~~														

QUANTITY MIXTURE (BURNE) = 2600 Litres

T. GLANNAR
14/2/1993

OPERATING PROTOCOL INCINERATOR

Date: 11/21/93

Time	Volume of Mustard	Temperature					CO Burner ppm	SC1		Discharge		SC2		Waste Gas			Change	
		T1	T2	T3	T4	T5		pH	MG	pH	MG	pH	MG	SO2	CO	MG	NaOH	Water
2400	13700	1130	>700	386	>500	305		14				8						
100	13430	1170	>700	382	>500	300		13				13					✓	✓
200	13160	1170	>700	381	>500	295		13				14						
300	12890	1170	>700	384	>500	305		13				14						
400	12620	1170	>700	383	>500	305		12				12						✓
500	12350	1170	>700	384	>500	300		9				12						✓
600	12080	1175	>700	384	>500	305		14				12					✓	✓
700	11810	1170	>700	390	>500	310		12				12						✓
800	11540	1170	>700	391	>500	315		9				13						✓
900	11270	1170	>700	390	>500	315		14				14						✓
1000	11160	1100	>700	360	>500	315		14				14						✓
1100	10970	1150	>700	380	>500	315		14				14					✓	✓
1200	10780	1160	>700	380	>500	300		14				14						
1300	10590	1160	>700	380	>500	300		14				14						
1400	10400	1170	>700	370	>500	295		14				14						

RUN P-MIXture (Burne) = 3300 Liters

S. ALDAMAR
11/21/1993

1B

OPERATING PROTOCOL INCINERATOR

Date: 6/2/1993

Time	Volume of Mustard	Temperature					CO Burner ppm	SC1		Discharge		SC2		Waste Gas			Change	
		T1	T2	T3	T4	T5		pH	MG	pH	MG	pH	MG	SO2	CO	MG	NaOH	Water
1400	16400	1110	7900	890	490	280	—	14	—	—	—	14	—	—	—	—	—	
1500	16130	1120	7900	855	480	295	—	12	—	—	—	14	—	—	—	—	—	
1600	15860	1120	7900	850	7500	285	—	14	—	—	—	14	—	—	—	—		
1700	15590	1150	7900	900	>500	295	—	14	—	—	—	14	—	—	—	—	—	
1800	15320	1130	7900	905	>500	300	—	14	—	—	—	14	—	—	—	—	—	
1900	15050	1110	7900	890	>500	300	—	13	—	—	—	12	—	—	—	—	—	
2000	14780	1120	7900	885	>500	305	—	12	—	—	—	12	—	—	—	—	—	
2100	14510	120	>900	885	>500	305	—	14	—	—	—	14	—	—	—	—		
2200	14240	1120	>900	880	>500	305	—	12	—	—	—	12	—	—	—	—	—	
2300	13970	1120	>900	880	>500	305	—		—	—	—		—	—	—	—	—	
2400	13700	1130	>900	885	>500	305	—		—	—	—		—	—	—	—	—	

Qun-of Mixtur (Burne) = 2700 Liter

S-ALAMMAR

6/2/1993

1B

OPERATING PROTOCOL INCINERATOR

Date: 10/2/1993

Time	Volume of Mustard	Temperature					CO Burner ppm	SC1		Discharge		SC2		Waste Gas			Change	
		T1	T2	T3	T4	T5		pH	MG	pH	MG	pH	MG	SO2	CO	MG	NaOH	Water
930	17800	1080	860	770	420	220	—	14	—	—	—	14	—	—	—	—	/	/
1030	17550	1120	>900	860	410	225	—	14	—	—	—	14	—	—	—	—	—	/
1130	17200	1110	900	850	400	235	—	13	—	—	—	14	—	—	—	—	—	/
1230	16850	1100	>900	855	430	260	—	13	—	—	—	13	—	—	—	—	—	/
1330	16500	1140	>900	890	490	285	—	14	—	—	—	14	—	—	—	—	/	/
1400	16400	1140	900	890	490	280												
14	—	—	—	—														

Qun. of Mixture (Burne) = 14000 liter

S. ALAMMAR

11/2/1993

1B

OPERATING PROTOCOL INCINERATOR

Date: 9/2/1993

Time	Volume of Mustard	Temperature					CO Burner ppm	SC1		Discharge		SC2		Waste Gas			Change	
		T1	T2	T3	T4	T5		pH	MG	pH	MG	pH	MG	SO2	CO	MG	NaOH	Water
1145	19-000	1100	880	845	450	225	—	14	—	—	—	14	—	—	—	—	/	/
1230	18-800	1100	880	845	450	225	—	14	—	—	—	14	—	—	—	—	—	—
1300	18-600	1110	>900	860	450	230	—	13	—	—	—	13	—	—	—	—	—	—
1330	18-400	1115	>900	870	440	240	—	13	—	—	—	12	—	—	—	—	/	/
1400	18-300	1120	900	865	430	245	—	13	—	—	—	12	—	—	—	—	—	—
1430	18-150	1110	900	870	440	245	—	13	—	—	—	12	—	—	—	—	/	/
1500	18-00	1110	900	870	435	240	—	13	—	—	—	11	—	—	—	—	—	—
1530	17-900	1080	880	855	430	240	—	13	—	—	—	11	—	—	—	—	—	—
1600	17-800	1060	850	840	410	230	—	13	—	—	—	11	—	—	—	—	/	/
1605		STOP											—	—	—	—		

gun of Mixture (Burnes) = 1200 liters

S-ALAMMAR

1B

OPERATING PROTOCOL INCINERATOR

Date: 7/12/1113

Time	Volume of Mustard	Temperature					CO Burner ppm	SC1		Discharge		SC2		Waste Gas			Change	
		T1	T2	T3	T4	T5		pH	MG	pH	MG	pH	MG	SO2	CO	MG	NaOH	Water
11 30	20-00	1110	710	750	410	230		114	—	—	-	114	—	—	—	—	~	~
12-00	11-100	1050	300	715	450	250	—	111	—	—	—	121	—	—	—	—	—	—
12-30	14-700	1060	810	810	465	250	—	111	—	—	—	121	—	—	—	-	~	—
13:00	11-540	1030	850	710	1150	240	—	111	—	—	—	114	—	—	—	—	—	—
13-30	11-100	1020	830	770	1140	240	—	111	—	—	—	121	—	—	—	-	~	~
111-00	11-2..	1030	850	710	1150	240	—	111	—	—	—	111	—	—	—	-	—	—
111 30	1.1 -00	1010	850	730	1150	240	—	114	—	—	—	111	—	—	—	—	~	~
111-115	1.1-000	1020	860	830	1150	240	—	111	—	—	—	111	—	—	—	-	—	—
14-50	ST	0	0															

tun. of mixture (Dimin) = 100 litt...

REMARK T...

1B

OPERATING PROTOCOL INCINERATOR

Date: ~~25/1/1993~~

Time	Volume of ~~Mustard~~ T-Q	Temperature					CO Burner ppm	SC1		Discharge		SC2		Waste Gas			Change	
		T1	T2	T3	T4	T5		pH	MG	pH	MG	pH	MG	SO2	CO	MG	NaOH	Water
950	10.200	1080	840	630	>500	300		14		3		14					✓	✓
1100	9.800	1000	830	670	>500	280		14		3		14						
1200	9.400	1000	900	764	470	265		14		3		14						
1300	9000	1080	>900	780	435	255		14		3		14					✓	✓
1400	8600	1090	>900	840	>500	290		14		3		14						
1500	8.300	1050	>900	840	450	295		13		3-5		13						
1600	7.950	1000	900	765	420	275											✓	✓
1700	7.800																	
1800	7.200																	
1900	6.800																	
2000	6.400																	
2100	6.000																	
2200	5.600																	
2300	5.200																	
2400	4.800																	

SAADOON K.

13

OPERATING PROTOCOL INCINERATOR

Date: Thursday / 22/04/1992

Time	Volume of Mustard	Temperature					CO Burner ppm	SC1		Discharge		SC2		Waste Gas			Change	
		T1	T2	T3	T4	T5		pH	~~MG~~ TDG	pH	~~MG~~ TDG	pH	~~MG~~ TDG	SO2	CO	~~MG~~ TDG	NaOH	Water
100	7·400	1010	850	670	290	220		2·3	2NO	2·8	2NO	12·3	2NO					
200	7·200	1020	855	690	320	230												Count Hours
300	7·000	1050	870	690	350	245												
400	6·800	1070	900	700	370	245		2·3	2NO	2·3	2NO	12·3	2NO					
500	6·600	1070	850	660	310	225												
5·300	6·500	1000	850	665	345	235												
			STOP			VOID												

Volume of TDG (Burnt) = 1200 Litter

OPERATING PROTOCOL INCINERATOR

Date: 21/10/1992

Time	Volume of Mustard	Temperature					CO Burner ppm	SC1		Discharge		SC2		Waste Gas			Change	
		T1	T2	T3	T4	T5		pH	~~MG~~	pH	~~MG~~	pH	~~MG~~	SO2	CO	MG	NaOH	Water
1.00	6.380	1030	900	735	390	275		2.3	zero	2.3	zero	7	zero					
200	6.160	1030	900	735	390	275												
300	5.940	1030	900	735	390	280												
400	5.720	1030	900	735	390	285		2.3	zero	2.3	zero	4.0	zero					
500	5.500	1030	900	735	390	283												
600	5.280	1030	900	740	420	300											X	
700	5.060	1040	900	760	410	280		2.5	zero	2.5	zero	2.5	zero					
800	4.840	1030	900	740	410	300												
900	4.620	970	890	690	360	280	60	2.8	zero	2.6	zero	1.4	zero	zero	zero	zero	X	
1000	4.400	1050	900	730	435	320		2.5		2.5		2.6						
1100-1500			STOP															
1600	9.250	950	800	530	330	270												
1700	9030	950	830	660	350	275	75	2.5	zero	2.7	zero	2.6	zero	zero	zero	zero		
1800	8.810	950	820	680	330	270												
1900	8.590	950	830	680	350	265		2.5	zero	2.7	zero	2.5	zero					

CONTINUOUS

1B

OPERATING PROTOCOL INCINERATOR

Date: ~~21/10/1992~~

Time	Volume of Mustard	Temperature					CO Burner ppm	SC1		Discharge		SC2		Waste Gas			Change	
		T1	T2	T3	T4	T5		pH	T.D.G MG	pH	T.D.G MG	pH	T.D.G MG	SO2	CO	MG TOL	NaOH	Water
2000	8.340	940	800	680	350	260						2-	~~2000~~					
2100	8.190	940	840	670	355	260											X	
2200	8.000	700	650	510	300	200		2-3	~~2000~~	2-3	2000	1.25	~~1000~~	2000	2000	2000		
2300	7.800	710	670	520	270	210												
2400	7-800	940	730	590	310	230												
	Volume of TD-G (Burne) = 3630 litres																	

T. P. 9. 3630

(2-2)

OPERATING PROTOCOL INCINERATOR

Date: 20/10/1992

Time	Volume of Mustard T.D.G	Temperature					CO Burner ppm	SC1		Discharge		SC2		Waste Gas			Change	
		T1	T2	T3	T4	T5		pH	MG T.D.G	pH	MG T.D.G	pH	MG T.D.G	SO2	CO	MG T.D.G	NaOH	Water
100		1030	900	780	370	230												continuous
200		1030	850	725	375	260		2-4	ZERO	2-5	ZERO	7.2	ZERO	ZERO	ZERO	ZERO		continuous
300		1030	875	725	330	260												s
400		1030	875	730	330	260		2-5	ZERO	2-5	ZERO	7.0	ZERO	ZERO	ZERO	ZERO		s
500		STOP																
600		"																
700		"																
800		"																
900		"																
1000		"																
1100		"																
1200		"																
1300		"																
1400		"																
1500		"																

OPERATING PROTOCOL INCINERATOR

Date: ~~20/10/1992~~

Time	Volume of Mustard	Temperature					CO Burner ppm	SC1		Discharge		SC2		Waste Gas			Change	
		T1	T2	T3	T4	T5		pH	~~MG~~ T.D.G	pH	~~MG~~ T.D.G	pH	~~MG~~ T.D.G	SO2	CO	MG TDG	NaOH	Water
1600		720	740	610	380	270											X	X
1700		730	740	600	345	265		2·8	zero	2·9	zero	12·5	zero	zero	zero	zero		
1800		940	800	620	340	270												
1900		1020	850	670	390	285		2·5	zero	2·8	zero	6·5	zero					
2000		1050	890	730	350	280											X	X
2100		1000	870	720	370	270												
2200		1010	870	740	380	270		2·3	zero	2·3	zero	6·7	zero					
2300		1020	890	750	380	280												
2400		1030	900	735	390	275												

volume of T-D. G = 2000 ~~litres~~

OPERATING PROTOCOL INCINERATOR

Date: ~~14/10/1992~~

Time	Volume of Mustard	Temperature					CO Burner ppm	SC1		Discharge		SC2		Waste Gas			Change	
		T1	T2	T3	T4	T5		pH	~~MG~~ TDG	pH	~~MG~~ TDG	pH	~~MG~~ TDG	SO2	~~CO~~	~~MG~~ OG	NaOH	Water
		940	780	630	580	280	80											
		1010	840	700	310	220												
		1040	860	730	310	220											X	(continued)
		1060	870	720	330	220	95	3.5	zero	3.6	zero	12.3	zero	zero	zero	zero		
			STOP															
			STOP															
		300	700	540	300	220		2.7	0.00	2.8	0.00	11.3	0.00	zero	zero	zero	X	X
		840	710	620	310	230												
		820	690	610	310	225												
		770	670	565	310	220		2.6	zero	2.5	zero	12.5	zero	zero	zero	zero		
		760	670	580	320	215												
		940	780	630	350	225												
		1000	800	725	365	250		2.4	zero	2.5	zero	7.8	zero				X	
																	X	X

-3400

١- كبيت TDC الحرونة ليبيا	٩٤/١٠/١٧	٦٠٠ لتر
٢- " " "	٩٤/١٠/١٨	٥٤٠٠ لتر
٣- " " "	٩٤/١٠/١٩	٢٤٠٠ لتر

ملاحظة رقم (١) لم ينظم نموذج بها وذلك لكون النماذج كانت غير موجودة

ملاحظة رقم (٢) تم تأشير الكميات المذكورة في (U.N)