



SAFETY ASPECTS

ECRAN TFS WORKSHOP

Izmir, Turkey
25-26 May 2016

Huib van Westen



This Project is funded by the European Union



Project implemented by Human Dynamics Consortium

Basic safety equipment



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Old drums



Dangerous goods mark



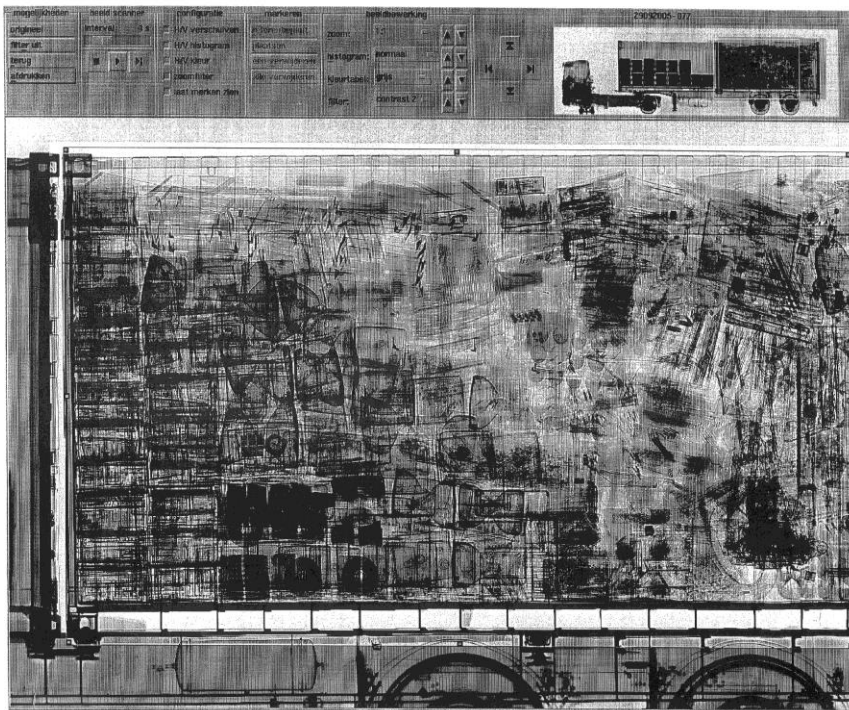
BOTH



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Environment and Climate
Regional Accession Network **ECRAN**



This Project is funded by the European Union



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OPEN TOP CONTAINERS



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RESULTS OF MEASUREMENTS

Containering SL Measurement 803
(Form for Measurement Report)

Certificate of Gasmeasurement

Client: Maersk Line
Contact: Dhr. B. vd. Torre
Address / place: _____
Phone number: _____
Container number: BMOU 246910-7
Contents container: Metal scrap
Location of measurement: Inspection area
Gas warning label: No
Date / time of measurement: 16-03-2012 / 12:25 p.m.
Outside temp. during measurement: 16 °C

Measurement results		outside the container	inside the container	inside the cargo	used limits according to (MAC/TWA & hours)			above limits
					ppm	mg/m3	% vol	
Oxygen	O ₂		18.1%				19-21%	YES
Lower explosion limit	LEL		18%				max 10%	YES
Carbon Monoxide	CO		1067		25	29		YES
Hydrogen Sulfide	H ₂ S		0		1.6	2.3		NO
Hydrogen Cyanide	HCN		20		0.9	1		YES
Phosphine	PH ₃		0.14		0.1	0.14		YES
Ammonia	NH ₃		0		20	14		NO
Carbon Dioxide	CO ₂		2080		5000	9000		NO
VOC			1.8					yes / no
Benzene (2 tubes)	C ₆ H ₆				1	3.25		yes / no
Methyl Bromide (2 tubes)	CH ₃ Br				0.25	1		yes / no
Formaldehyde	CH ₂ O				0.1	0.15		yes / no
Chloropicrin	CCl ₃ NO ₂				0.1	0.68		yes / no
1,2 Dichloro Ethane	C ₂ H ₄ Cl ₂				1.5	7		yes / no
Radioactivity (measured 1 mtr. of the container)			Limits mentioned on cargo-documents					yes / no

Conclusion

Container contents dangerous (gases which are above the limits)
Container is not released for entry
Container safe to use (after analysis) unless in limits mentioned on enclosed cargo-documents

Advice

There is a explosive atmosphere inside the container

Data Summary

Name expert: _____ At of Mark: _____ Valid until: 13
Certificate of expertise: 202545
Signature expert: _____ At of Mark: _____

**the results of this measurement are valid until 2 hours after this measurement*

This measurement was accomplished with the following equipment: *Exometer gas analyser*



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Radioactivity (measured 1 mtr. of the container)			Limits mentioned on cargo-documents					yes / no



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Conclusion:		
<ul style="list-style-type: none">▶ Container contents dangerous gasses which are above the limits.▶ Container is not released for entering.▶ Container has a / no higher radiation pattern as limits mentioned on enclosed cargo-documents.		
Advice:		
There is a explosive atmosphere inside the container		
Data Gasexpert:		
Name expert	:M. vd. Mark	
Certificate of expertise	202345	Valid until mei-13
Signature expert	<div style="border: 1px solid black; width: 150px; height: 40px; display: flex; align-items: center; justify-content: center;">M. vd. Mark</div>	

*** the results of this measurement are valid until 2 hours after this measurement.**

This measurement was accomplished with the following equipment: - MultiRAE+ gasmonitor(PGM50) serial nr: 427103 - MultiRAE gasmonitor(IR) serial nr.:901606 - GammaRAE II R serial nr.:148-011530



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Protection



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Please wear no.....



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Thank you



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