

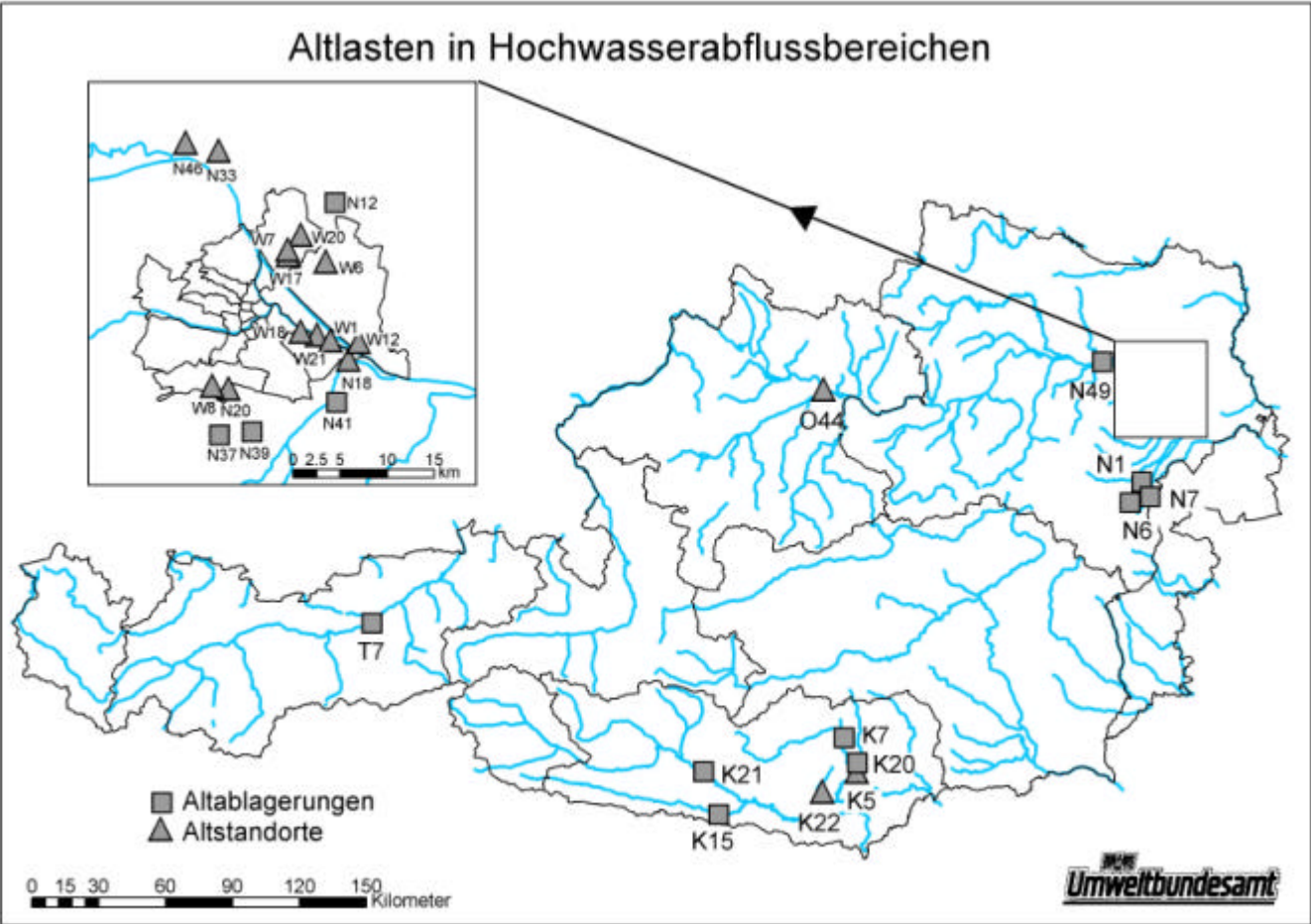
# **Annex 1**

## **National Inventory of February 2003**



Annex 1

A 1.1 OCS in Austria



### Result of the existing Federal Inventory of Contaminated Sites (FCSI) Austria

This inventory was compiled and managed by the Federal Environment Agency of Austria served as the basis for the closer definition of contaminated sites in flooding areas. By 1 July 2002 the FCSI included 164 sites. From these total number those sites were excluded which meet one of the defined exclusion criteria from the expert meeting in 2002.

As the result of this exclusion process 29 sites involving a significant high potential of contaminants were retained for the inventory of contaminated sites in flooding areas. However, it has to be taken into account that at some of these sites remediation measures have already been started and the contamination potential will hence decrease significantly in the future. Regular updating of the inventory for contaminated sites in flooding areas should therefore be introduced compulsorily.

Bundesland	Nummer	Bezeichnung	Bezirk	Gemeinde	Art der Altlast	Art der Ablagerungen	Schadstoffe	Fläche	Volumen	Branche	Ablagerungs-/Betriebszeitraum
Kärnten	K22	Lederfabrik Neuner	Klagenfurt	Klagenfurt	Altstandort		Chrom	120000		Lederverarbeitung	seit 1922
Kärnten	K7	Deponie Roßwiese	Sankt Veit an der Glan	Althofen	Altablagerung	Industriemüll	Metalle, Mineralisierung		500000		1950-1992
Kärnten	K20	Kalkdeponie Brückl I/II	Sankt Veit an der Glan	Brückl	Altablagerung	Industrieabfälle, Bauschutt, Aushubmaterial	CKW (Tetrachlorethen, Trichlorethen, Hexachlorbutadien)		250000		1926-1981
Kärnten	K5	Donau Chemie Brückl	Sankt Veit an der Glan	Brückl	Altstandort		CKW, Trichlorethen, Tetrachlorethen, Hexachlorbutadien	50000		Chemische Grundstoffindustrie	seit 1909
Kärnten	K21	Betriebsdeponie Heraklithwerke Ferndorf	Villach Land	Ferndorf	Altablagerung	Industrieabfälle	Magnesium, Sulfat		500000		seit 1961
Kärnten	K15	BBU Blei- und Zinkhütte Arnoldstein	Villach Land	Arnoldstein, Hohenthurn	Altstandort		Metalle	300000		Chemische Grundstoffindustrie, Metallherzeugung	seit 1882
Niederösterreich	N33	Werft Korneuburg	Korneuburg	Korneuburg	Altstandort		Metalle, Mineralöl	200000		Schiffbau	1845-1994
Niederösterreich	N46	Tanklager Mare	Korneuburg	Korneuburg	Altstandort		Mineralöl	10000		Mineralöllager	1930-1990
Niederösterreich	N39	Sportplatz Wiener Neudorf	Mödling	Wiener Neudorf	Altablagerung	Aushubmaterial, Bauschutt, Hausmüll	Deponiegas, erhöhte Mineralisation, reduzierende Verhältnisse		430000		1963-1970
Niederösterreich	N37	Deponie Wiener Neudorf	Mödling	Wiener Neudorf	Altablagerung	Aushubmaterial, Bauschutt, Hausmüll	erhöhte Mineralisation, reduzierende Verhältnisse		870000		1963-1970

Bundesland	Nummer	Bezeichnung	Bezirk	Gemeinde	Art der Altlast	Art der Ablagerungen	Schadstoffe	Fläche	Volumen	Branche	Ablagerungs- /Betriebszeitraum
Niederösterreich	N20	Raffinerie Vösendorf	Mödling	Vösendorf	Altstandort		Mineralöl, PAK	145000		Mineralöl-Raffinerie	1920-1960
Niederösterreich	N49	Deponie Tulln	Tulln	Tulln	Altablagerung	Hausmüll, Bauschutt, Industrie-/Gewerbemüll	reduzierende Verhältnisse, erhöhte Mineralisierung		200000		1972-1984
Niederösterreich	N12	Kapellerfeld	Wien Umgebung	Gerasdorf	Altablagerung	Hausmüll	erhöhte Mineralisierung, CKW		2000000		1966-1985
Niederösterreich	N41	Deponie MA 48 - Zwölfaxing	Wien Umgebung	Zwölfaxing	Altablagerung	Aushubmaterial, Bauschutt, Hausmüll	Deponiegas, erhöhte Mineralisation, reduzierende Verhältnisse		450000		1977-1980
Niederösterreich	N18	ÖMV-Raffinerie Schwechat	Wien Umgebung	Schwechat	Altstandort		Mineralöl	1500000		Mineralöl-Raffinerie	seit 1930
Niederösterreich	N6	Aluminiumschlackendeponie	Wiener Neustadt	Wiener Neustadt	Altablagerung	Bauschutt, Hausmüll, Industrie-/Gewerbemüll	erhöhte Mineralisierung, reduzierende Verhältnisse, Aluminium		360000		seit 1974
Niederösterreich	N1	Fischer-Deponie	Wiener Neustadt Land	Theresienfeld	Altablagerung	Hausmüll, Industrie-/Gewerbemüll	CKW		800000		1972-1987
Niederösterreich	N7	Mülldeponie S.A.D.	Wiener Neustadt Land	Lichtenwörth	Altablagerung	Industrie-/Gewerbemüll, gefährliche Abfälle	CKW		700000		1973-1989
Oberösterreich	N44	Chemiepark Linz	Linz	Linz	Altstandort		CKW, BTX	850000		Chemische Grundstoffindustrie	seit 1942
Tirol	T7	Rotteballendeponie Pill	Schwaz	Pill, Weer	Altablagerung	Hausmüll, Bauschutt, Industrie-/Gewerbemüll	erhöhte Mineralisierung, reduzierende Verhältnisse		1000000		1973-1990
Wien	W1	EBS-BP-TKV	11. Simmering	Wien	Altstandort		Mineralöl, CKW	200000		Mineralöllagerung, Tierkörperverwertung	
Wien	W18	Gaswerk Simmering	11. Simmering	Wien	Altstandort		PAK, Cyanid, Mineralöl, Phenole, Ammonium, Sulfat	325000		Gaswerk	1900-1975
Wien	W21	Teerag-Asdag-Simmering	11. Simmering	Wien	Altstandort		PAK, Phenole, BTX	130000		Teerverarbeitung	seit 1914
Wien	W7	SHELL - Pilzgasse	21. Floridsdorf	Wien	Altstandort		Mineralöl	100000		Raffinerie, Mineralöllager	1864-1970

Bundesland	Nummer	Bezeichnung	Bezirk	Gemeinde	Art der Altlast	Art der Ablagerungen	Schadstoffe	Fläche	Volumen	Branche	Ablagerungs- /Betriebszeitraum
Wien	W20	Gaswerk Leopoldau	21. Floridsdorf	Wien	Altstandort		PAK, Cyanid, Kohlenwasserstoffe	440000		Gaswerk	um 1911
Wien	W17	VCF-Perstorp	21. Floridsdorf	Wien	Altstandort		Phenol, reduzierende Verhältnisse	45000		Chemische Industrie	1894-1991
Wien	W12	Tanklager Lobau	22. Donaustadt	Wien	Altstandort		Mineralöl, Kohlenwasserstoffe	1000000		Tanklager für Mineralölprodukte	seit 1934
Wien	W6	Mobil	22. Donaustadt	Wien	Altstandort		Mineralölprodukte	120000		Mineralöl-Raffinerie	seit 19. Jhd
Wien	W8	Siebenhirten	23. Liesing	Wien	Altstandort		Cyanid, Kohlenwasserstoffe, Phenol, Ammonium, Nitrit, Sulfat	150000		Chemische Grundstoffindustrie	seit ca. 1828

Table 1.1-1: Results of the FCSI according to the defined criteria from 2002

## A 1.2 OCS in Czech Republic

**Table 1.2-1:**

### List of the water endangering old depositions in the Czech part of Morava river basin

Old deposition site	Location	Recipient river (length of stream in km)	Estimated Risk	Remark
Oil substances in the Velamos factory area	Loučna nad Desnou	Desna river (river km 26)	High	amount of several tons of oil substances affected by flood Q100
Sludge lagoons in the waste water treatment plant	Šumperk	Desna river (river km 6)	High	6 000 m <sup>3</sup> of sludge with heavy metals affected by flood Q100
Toluene in the Farmak factory area	Olomouc	Morava river (river km 233)	Low (core wall)	amount of several tons of toluene affected by flood Q100
Oil substances in the Magneton factory area	Kromerž	Morava river (river km 195)	Low (partial remedial works)	amount of several tons of oil substances affected by flood Q100
Oil substances in the Precheza factory area	Prerov	Becva river (river km 12)	Low (partial remedial works)	amount of several hundreds kg of oil substances affected by flood Q100
Oil substances, polycyclic aromatic hydrocarbons in the DEZA factory area	Valasské Meziříčí	Becva river (river km 60)	Low (hydraulic blanket)	amount of several tons affected by flood Q100

<b>Old deposition site</b>	<b>Location</b>	<b>Recipient river (length of stream in km)</b>	<b>Estimated Risk</b>	<b>Remark</b>
Aliphatic chlorohydrocarbons in the MEP factory area	Postrelmov	Morava river (river km 300)	Low (partial remedial works)	amount of several tens kg affected by flood Q100
Old industrial dump	Slapanice	Ricka river (river km 12)	Low	amount of 10 m3 of tar affected by flood Q100
Old plant for chlorohydrocarbon regeneration	Letovice	Svitava river (river km 62)	Low	amount of 1 ton of chlorohydrocarbons affected by flood Q100
Chlorohydrocarbons in the Magnetron factory area	Valasske Klobouky	Brumovka river (river km 9)	Low	amount of 500 kg of chlorohydrocarbons affected by flood Q100
Chlorohydrocarbons in the Mars factory area	Svratka	Svratka (river km 160)	Low	amount of 200 kg of chlorohydrocarbons affected by flood Q100
Old deposit	Pozdatky	local stream and Jihlava river (river km 90)	Low	unknown amount of sulphuric acid affected by flood Q100
Chlorohydrocarbons and heavy metals in the Zbrojovka factory area	Brno	Svitava river (river km 6)	Low	unknown amount affected by flood Q100
phosphates from fertilizer production in the Fosfa factory area	Postorna	Dyje river (river km 25)	Low	unknown amount affected by flood Q100



### A 1.3 OCS in Hungary

Old deposition type:

- . Contamination from old accidents
- . Industrial deposit
- . Old military site
- . Agricultural landfill
- . Old mining tailing
- . Communal organic dump wastestorage

Old deposition site			Grid-lines X= ; Y=;	Recipient river (length of stream in km)	Estimated Risk	Remark	
NAMING	LOCATION					Estimated amount of dangerous substances	Floods
. UPPER DANUBE ENVIRONMENTAL INSPECTORATES AREA							
. Old mining tailing							
1	1.	I-II Reservoir for red-dross	Almásfüzito 119/11 Hrsz X=590 327 Y=265 665	Danube 1749-1761 ( rkm)	Unknown	red-dross 450 000 m <sup>3</sup>	yes
2	2.	III. Reservoir for red-dross	Almásfüzito 118 X=590 300 Y=265 600		Unknown	1 000 000 m <sup>3</sup>	yes
3	3.	IV. Reservoir for red-dross	Almásfüzito 06/12		Unknown	600 000 m <sup>3</sup>	yes
4	4.	V. Reservoir for red-dross	Almásfüzito 06/10		Unknown	800 000 m <sup>3</sup>	yes
5	5.	VI. Reservoir for red-dross	Almásfüzito 06/8		Unknown	1 800 000 m <sup>3</sup>	yes
6	6.	VII. Reservoir for red-dross	Almásfüzito 03/29,30,31 X=592 500 Y=265 000		Unknown	3 250 000 m <sup>3</sup>	yes
7	7.	VIII. Reservoir for red-dross	Neszmély 0125 X=600 871 Y=264 058		Unknown	5 000 000 m <sup>3</sup>	yes
2. MIDDLE DANUBE ENVIRONMENTAL INSPECTORATES AREA							
. Industrial deposit							
8	1.	Hole for acid resin	Százhalombatta MOL Inc.	Danube	Low	acid resin 8.000 t	no

Old deposition site			Recipient river (length of stream in km)	Estimated Risk	Remark		
NAMING	LOCATION	Grid-lines X= ; Y=;			Estimated amount of dangerous substances	Floods	
9	2. Hole for acid resin	Csepel MOL Inc.		Danube	Low	acid resin 55.000 t	no
10	3. Gas cleaning mass	Budapest, YYII. Park u.- Gádor u.	X=646 700 Y=229 400 X=648 400 Y=231 400	Danube	Low	high sulphur content (15-20 % ) cyaniduos iron-oxide 36 000 t	no
11	4. Gas cleaning mass	Üröm - Csókavár	X=647 800 Y=249 500			high sulphur content (15-20 % ) cyaniduos iron-oxide 62 000 t	no
12	5. Area of former Csepel's Auto-Works	Szigetszentmiklós		Danube	Unknown	possible toxic heavy metal and hydrocarbon (CH) polluted (reveal is under way)	no
13	6. Area of former Csepel's- Works	Budapest, XXI.		Danube	Low	possible toxic heavy metal and hydrocarbon (CH) polluted	no
14	7. Abandoned sewage sludge depots	Budapest, Csepel-island Nord		Danube	Low	heavy metal and hydrocarbon (CH) polluted organic compounds 300.000 m <sup>3</sup>	no
15	8. Late Koporc estate	Balassagyarmat	X=668 800 Y=303 100	Ipoly	Low	perchlorone-ethylene (OKKP's proposal)	no

Old deposition site			Recipient river (length of stream in km)	Estimated Risk	Remark		
NAMING	LOCATION	Grid-lines X= ; Y=;			Estimated amount of dangerous substances	Floods	
<b>. Old military site</b>							
16	9. Former Soviet military quarterage	Szentendre		Danube	Low	hydrocarbon (CH) polluted earth and earthwater (revelation is under way)	no
17	10. Former military Airport	Tököl		Danube	Low	hydrocarbon (CH) polluted earth: 308.000 m <sup>3</sup> hydrocarbon (CH) polluted earthwater: 209.900 m <sup>3</sup>	no
18	11. Former Soviet military Airport	Kiskunlacháza		Danube	Low	hydrocarbon (CH) aviation kerosene pollution 9.000 m <sup>3</sup>	no
19	12. Old military and MOL fuel depot	Ócsa		Danube	Low	hydrocarbon (CH) pollution	no
<b>. Old mining tailing</b>							
20	13. Fixon Bt. – Humiron Ltd Plant slag and dust-ash	Lorinci	X=697 50 Y=282 500	Zagyva	Low	slag and dust-ash 5 000 000 m <sup>3</sup>	no
21	14. SAC Inc. – Slag-hill	Salgótarján	X=707 500 Y=308 400	Tarján-Brook	Low	slag and dust-ash	no
22	15. Metallochemia – metallurgical slag	Budapest, XXII. Harangozó u.	X=644 200 Y=227 800	Danube	Low	metalslag (Pb, Zn, Cu, Cd) 650.000 t	no
<b>. LOWER DANUBE ENVIRONMENTAL INSPECTORATES AREA</b>							
<b>. Contamination from old accidents</b>							
23	1. Contamination from old accidents	Baja Danube-riverside	X=641 600 Y= 93 500	Danube (1479,4)	Low	hydrocarbon (CH) contamination 35 m <sup>3</sup>	yes

Old deposition site			Grid-lines X= ; Y=;	Recipient river (length of stream in km)	Estimated Risk	Remark	
NAMING	LOCATION	Estimated amount of dangerous substances				Floods	
. Industrial deposit							
24	2. Industrial deposit	Lajosmizse	X=687 900 Y=186 100	XX/d-1 (6); (8); XX (27) DVCS (130) Danube (1480)	Unknown	mix galvanic sludge	no
. Agricultural landfill							
25	3. Agricultural landfill	Soltvadkert	X=677 500 Y=135 800	VII/f (5) ; VII/ (19) DVCS (64) Danube (1480)	Unknown	cyanide blue-dregs 120 m <sup>3</sup>	no
. CENTRAL TRANSDANUBIAN ENVIRONMENTAL INSPECTORATES AREA							
. Industrial deposit							
26	1. MAL Inc. I-VIII. store, reclaimed	Ajka	X=534 000 Y=194 000	Torna (52) Marcal (97,8) Rába ( 204,6)	Low	red-dross settlement 29 000 000 t	no
27	2. Bakonyi Eromu Inc.	Ajka		Torna	Unknown	gray sludge 15 000 000 t	no
28	3. Dunaferri Inc.	Dunaújváros	X=642 735 Y=174 625	Danube	High	industry sewage sludge storage 1 500 000 t	yes
29	4. Dunapack Inc.	Dunaújváros	X=642 735 Y=174 625	Danube (1573)	High	mix sludge 212 000 t	yes
. SOUTH TRANSDANUBIAN ENVIRONMENTAL INSPECTORATES AREA							
. Agricultural landfill							
30	1. Bóly Inc.-hog-farm	Sátorhely –törökdomb	X=620 710 Y= 66 470	Bédai holtág Danube (1435)	High	ammonium ( NH <sub>4</sub> <sup>+</sup> ) 22,2 t	yes
31	2. Bóly Inc.- dairy-farm	Sátorhely	X=617 990 Y= 65 850	Bédai holtág Danube (1435)	Low	ammonium ( NH <sub>4</sub> <sup>+</sup> ) 2,5 t	no

Old deposition site				Recipient river (length of stream in km)	Estimated Risk	Remark		
NAMING	LOCATION	Grid-lines X= ; Y=;	Estimated amount of dangerous substances			Floods		
32	3.	Duna-gyöngye 2000 Mg. Inc.	Dunaszekcso	X=626 100 Y= 85 910	Danube (1460)	Low	ammonium ( NH <sub>4</sub> <sup>+</sup> ) 20 t	no
33	4.	ALM Ltd	Alsógyörgyös	X=524 700 Y= 77 900	Drava (165)	Low	ammonium ( NH <sub>4</sub> <sup>+</sup> ) 12 t	no
34	5.	Drava Coop Mg. Inc.	Komlósd	X=520 800 Y= 78 100	Drava (170)	Low	ammonium ( NH <sub>4</sub> <sup>+</sup> ) 3 t	no
35	6.	Drava Coop Mg. Inc.	Barcs	X=574 400 Y= 69 500	Drava (153)	Low	ammonium ( NH <sub>4</sub> <sup>+</sup> ) 7,5 t	no
36	7.	Hungaro-Seghers Hybrid Ltd	Mohács, Petofi major	X=621 355 Y= 69 762	Kölkedi focanal Danube (1440)	Low	ammonium ( NH <sub>4</sub> <sup>+</sup> ) 10,5 t	no
		. Communal organic dump						
37	8.	Settlement waste	Csurgó	X=501 000 Y=101 130	Drava (198)	Low	communal organic dump 36 000 m <sup>3</sup>	no
38	9.	Settlement waste	Barcs	X=529 650 Y= 70 890	Drava (153)	Low	communal organic dump 300 000 m <sup>3</sup>	no
39	10.	Settlement waste	Sellye	X=554 420 Y= 59 440	Drava (105)	Low	communal organic dump 74 000 m <sup>3</sup>	no
40	11.	Settlement waste	Siklós	X=590 640 Y= 53 770	Drava (65)	Low	communal organic dump 112 000 m <sup>3</sup>	no
41	12.	Settlement waste	Harkány	X=585 860 Y= 56 330	Drava (72)	Low	communal organic dump 114 000 m <sup>3</sup>	no
42	13.	Settlement waste	Mohács	X=622 150 Y= 74 880	Danube (1445)	Low	communal organic dump 370 000 m <sup>3</sup>	no
43	14.	Settlement waste	Dunaszekcso	X=627 010 Y= 85 180	Danube (1460)	Low	communal organic dump 20 000 m <sup>3</sup>	no

Old deposition site			Recipient river (length of stream in km)	Estimated Risk	Remark		
NAMING	LOCATION	Grid-lines X= ; Y=;			Estimated amount of dangerous substances	Floods	
<b>. NORTH HUNGARIAN ENVIRONMENTAL INSPECTORATES AREA</b>							
<b>. Industrial deposit</b>							
44	1. Tisa Chemical Self-contained plant	Tiszaújváros	x=798 042 Y=287 515	Tisa (484)	Low	industry sewage –earth dam 211.000 m <sup>3</sup>	yes
<b>3. Old military site</b>							
45	2. MH – Tarnaszentmária Fuel depot	Tarnaszentmária	x=736 250 Y=281 850	Tarna (49) Zagyva (58) Tisa (335)	Low	hydrocarbon (CH) polluted earth: 69.000 m <sup>3</sup> hydrocarbon (CH) polluted earthwater: 69.000 m <sup>3</sup>	no
46	3. MH – Mezőkövesd Fuel depot „K” area	Mezőkövesd Hrsz: 0456/2	x=762 425 Y=272 900	Kánya Brook (14) Rima Brook (8) Tisa (434)	Low	hydrocarbon (CH) polluted earth: 52.500 m <sup>3</sup> hydrocarbon (CH) polluted earthwater: 67.500 m <sup>3</sup>	no
47	4. MH – Setting Center Fuel depot	Recsk Hrsz. 0214.055	X=731 975 Y=286 950	Báj Brook (0,5) Parádi Tarna (7) Zagyva (58) Tisa (335)	Low	hydrocarbon (CH) free phase 280 m <sup>3</sup> hydrocarbon (CH) polluted earth: 15.700 m <sup>3</sup> hydrocarbon (CH) polluted earthwater: 4.710 m <sup>3</sup>	no
48	5. Mezőkövesd – „B” area Old Fuel depot	Mezőkövesd Airport	x=768 200 Y=274 000	Hór Brook (2) Kánya Brook (14) Rima Brook (8) Tisa (434)	Low	hydrocarbon (CH) polluted earth: 300.000 m <sup>3</sup> hydrocarbon (CH) polluted earthwater: 60.000 m <sup>3</sup>	no
49	6. Mezőkövesd - West area Airport runway	Mezőkövesd Airport	x=767 900 Y=274 000	Hór Brook (2) Kánya Brook (14) Rima Brook (8) Tisa (434)	Low	hydrocarbon (CH) polluted earth: 60.000 m <sup>3</sup> hydrocarbon (CH) polluted earthwater: 10.000 m <sup>3</sup>	no

Old deposition site			Grid-lines X= ; Y=;	Recipient river (length of stream in km)	Estimated Risk	Remark	
NAMING	LOCATION	Estimated amount of dangerous substances				Floods	
<b>. Old mining tailing</b>							
50	7. AES borsodi Energetikai Ltd Tiszapalkonyai Hoeromu	Tiszaújváros	X=800 150 Y=286 711	Tisa (483)	Low	sludgewater 800.000 t slag-dust-ash 1.400.000 t	yes
<b>. OVER THE TISA ENVIRONMENTAL INSPECTORATES AREA</b>							
<b>. Industrial deposit</b>							
51	1. Industrial deposit	Balmazújváros-Lászlóháza	X=815 500 Y=262 000	Magdolna ér (2), Kadarcs-Karácsonyfoki cs. (8), Hortobágy (41), Hortobágy-Berettyó (67), Körös (61), Tisa (243)	Unknown	1000 t	no
52	2. Industrial deposit	Debrecen-Szigát	X=841 823 Y=242 981	Tócó (11), Köseley (61), Hortobágy (67), Körös (61), Tisa (243)	Unknown	40000 t	no
53	3. Industrial deposit	Tiszavasvári	X=824 284 Y=290 432	Hortobágy (91), Hortobágy-Berettyó (67), Körös (61), Tisa (243)	Unknown	3000 t	Low
<b>. Old military site</b>							
54	4. Old military site	Berettyóújfalu	X=833 289 Y=213 923	Berettyó (43), Fast- Körös (14), Körös (90), Tisa (243)	Unknown	diesel oil	no
55	5. Old military site	Földes	X=828 200 Y=217 600	Sárréti canal (48), Hortobágy-Berettyó (43), Körös (61), Tisa (243)	Unknown	diesel oil	no

Old deposition site			Recipient river (length of stream in km)	Estimated Risk	Remark		
NAMING	LOCATION	Grid-lines X= ; Y=;			Estimated amount of dangerous substances	Floods	
<b>. Agricultural landfill</b>							
56	6. Agricultural landfill	Hosszúpályi-Fáy	X=856 089 Y=236 651	Pályi ér (4), Nagy ér (20), Kálló Focanal (29), Berettyó (23), Fast-Körös (14), Körös (90), Tisa (243)	Unknown	3000 t	no
<b>. MIDDLE TISA ENVIRONMENTAL INSPECTORATES AREA</b>							
<b>. Industrial deposit</b>							
57	1. ELEKTROLUX - LEHEL Ltd WDS-1 (waste of chemical industry)	Jászberény	X=711 216 Y=237 746	Zagyva (67) Tisa (336)	Low	polluted earth 155.000 m <sup>3</sup>	no
58	2. TVM Inc. (waste of chemical industry)	Szolnok	X=732 950 Y=199 716	Tisa (332)	Low	polluted earth 600.000 t	yes
59	3. Tisza Cipo Inc. estate (pollution and dangerous waste collecting)	Martfu	X=744 500 Y=186 800	Tisa (305)	High	chrom polluted earth 23 t and unknown volume earthwater	yes
60	4. Mechanikai Muvek Inc. ( chemical pollution )	Abony	X=723 630 Y=204 550	Dohányos-ér (3) Perje-focanal (5) Gerje-Perje (8) Tisa (328)	High	hydrocarbone polluted earth 1300 m <sup>3</sup>	yes
61	5. BERVA Inc. ( chemical pollution )	Heves	X=744 160 Y=251 350	Forrós-belwatercanal (8) Hanyi-ér (16) Tisa (388)	High	hydrocarbon polluted earth 10.500 m <sup>3</sup> earthwater 5000 m <sup>3</sup>	no
62	6. REWOS Ltd ( chemical pollution )	Törökszentmiklós	X=754 528 Y=203 598	Villogó (15) Tisa (343)	High	earthwater-pollution chlorinated hydrocarbans	no



Old deposition site				Recipient river (length of stream in km)	Estimated Risk	Remark	
NAMING	LOCATION	Grid-lines X= ; Y=;	Estimated amount of dangerous substances			Floods	
63	7. TEGÉP Ltd ( chemical pollution )	Tiszafüred	X=777 000 Y=254 000	Tisa (426)	High	no estimate hydrocarbon pollution earth and earthwater	yes
64	8. ELEKTROLUX – LEHEL manufactory ( chemical pollution )	Jászberény	X=711 759 Y=239 395	Zagyva (67) Tisa (336)	High	no estimate earthwater pollution	no
65	9. Béghin-Say Cukorgyár Inc. (technology waste-water thickener)	Szolnok	X=734 750 Y=200 250	Tisa (330)	High	waste-water thickener in lake 1.300.000 m <sup>3</sup>	yes
66	10. Szászakku-Coop Ltd (dangerous waste collecting)	Szászberek	X=729 000 Y=220 000	Zagyva (27) Tisa (335)	Low	acid accumulator waste 55 t	yes
67	11. TERSZOL Szövetkezet (galvanic sludge siccative and dangerous waste collecting)	Szolnok	X=733 000 Y=201 000	Görbe-ér (1) Tisa (331)	Low	mix galvanic sludge and else dangerous waste 4000 t	yes
<b>. Old military site</b>							
68	12. Old Soviet Military Airport (chemical pollution)	Kunmadaras	X=781 755 Y=232 001	Üllo-Laposi (7) Német-éri (13) Hortobágy-Berettyó (82) Hármas-Körös (61) Tisa (243)	High	hydrocarbon polluted earth 14.500 m <sup>3</sup>	no
<b>. Agricultural landfill</b>							
69	13. ATEV animal debris waste deposit (dangerous waste deposit)	Tószeg	X=730 327 Y=196 049	Gerje-Perje (5) Tisa (328)	High	animal debris waste 10.596 t	yes

Old deposition site			Recipient river (length of stream in km)	Estimated Risk	Remark		
NAMING	LOCATION	Grid-lines X= ; Y=;			Estimated amount of dangerous substances	Floods	
<b>. LOWER TISA ENVIRONMENTAL INSPECTORATES AREA</b>							
<b>. Industrial deposit</b>							
70	1. Fémselekt	Algyo		Tisa	Unknown	Ni, NH <sub>4</sub> , NO <sub>3</sub> , Mo, Cu, Zn, Pb (post-controlling monitor- routine)	yes
71	2. KÖBÁL	Kecskemét		Tisa	Unknown	hydrocarbon (CH), heavy-metal ( technical manipulation liable)	no
72	3. MOL Inc.	Szeged-Tápé		Tisa	Unknown	hydrocarbon (CH) (experimental factra liable)	yes
73	4. Lawrence Inc.	Hódmezovásárhely		Tisa	Unknown	phosphate (experimental factra liable)	no
74	5. Budalakk Ltd	Szeged		Tisa	Unknown	total aliphatic hydrocarbon, benzene and alkyl-benzenes (BTEX), lead, (experimental factra liable)	yes
75	6. Silver-Szeged	Szeged		Tisa	Unknown	experimental factra liable	yes
<b>. Old military site</b>							
76	7. MH Fuel depot	Kecskemét			Unknown	total aliphatic hydrocarbon (TPH), benzene and alkyl- benzenes (BTEX), (technical manipulation liable)	no

Old deposition site			Grid-lines X= ; Y=;	Recipient river (length of stream in km)	Estimated Risk	Remark	
NAMING	LOCATION	Estimated amount of dangerous substances				Floods	
. Agricultural landfill							
77	8. Natura	Kecskemét			Unknown	total aliphatic hydrocarbon (TPH), Ba, free cyanide, all cyanide	no
78	9. Termál Kertészeti Szövetkezet	Szentés		Tisa	Unknown	total aliphatic hydrocarbon (TPH), chloro~, triasine~, carbamate derivatives (technical manipulation liable)	yes
. KÖRÖS ENVIRONMENTAL INSPECTORATES AREA							
. Industrial deposit							
79	1. Chrome leather waste	Körösladány		Fast Körös	Unknown	earth mix leather waste 70 t	no
80	2. Drilling und reservoir	Füzesgyarmat			Unknown	drilling sludge 106 000 t	no
. Communal waste storage							
81	3. Establishment organic waste	Békés	X=807 170 Y=160 480	Bofoki canal (8280) Körös	Unknown	20 500 t	yes
82	4. Establishmen organic waste	Békéscsaba	X=806 600 Y=148 550	Nádas canal	Low	reclaimed waste storage 780 000 m <sup>3</sup>	yes
83	5. Establishmen organic waste	Gyula	X=818 000 Y=146 100	White Körös	Low	273 773 t	yes

### A 1.4 OCS in Moldova

#### Inventory of the water endangering old depositions in the Prut River Basin 1/2

Old deposition site	Location	Recipient river (length of stream in km)	Estimated Risk	Remark
Agricultural landfill	Vil. Cahslita-Prut	Prut - 11,5 km	medium	Pesticides – 6 t Estimated vulnerability by floods - unknown
	Vil. Mereseni	Sarata – 57,5 km Prut – 187 km	low	Pesticides – 3 t Low
	Vil .Cneazevca	Sarata – 32 km Prut – 187 km	high	Pesticides – 11,5 t Low
	Town Leova	Prut – 246 km	high	Pesticides – 34,85 t unknown
	Vil. Filipeni	Sarata – 8 km Prut – 187 km	low	Pesticides - 2,7 Unknown
	Vil. Vozneseni	Sarata – 26 km Prut – 187 km	low	Pesticides - 2,4 t Unknown

**Inventory of the water endangering old depositions in the Prut River Basin 2/2**

<b>Old deposition site</b>	<b>Location</b>	<b>Recipient river (length of stream in km)</b>	<b>Estimated Risk</b>	<b>Remark</b>
	Vil. Jargara	Tigheci – 30 km Prut – 151 km	low	Pesticides – 3 t Unknown
	Vil. Sofia	Lapusna – 40 km Prut – 239 km	low	Pesticides – 4 t Unknown
	Vil. Pascani	Lapusna – 52 km Prut – 239 km	low	Pesticides – 3,6 t Unknown
	District Nisporeni	Narnova – 49 Prut – 278 km	high	Pesticides – 37,4 t Unknown
	District Briceni	Vilia – 50 km Prut – 637 km	high	Pesticides – 78,7 t Unknown
	District Ungheni	Delia – 30 km Prut – 385 km	high	Pesticides - 53,2 Unknown

### A 1.5 OCS in Slovenia/ Statement to the local status

Slovenia wrote the following statement to Mr. Liska from the ICPDR:

*“...regarding the preparation of the Inventory on old contaminated sites using the Austrian criteria I am informing you, that our experts from Ministry of Environment and Spatial Planning checked again Slovenian part of the Danube river basin. So far they didn't registered old contaminated sites with characteristic to fulfil the Austrian criteria, excluding two locations in Drava river basin, already included in ARS inventory. Taking in to account the Austrian criteria Slovenian experts are not able to fulfil the table in Annex 5: Format of the Inventory of the water endangering old depositions in the Danube River Basin....”*

### A 1.6 OCS in Slovakia

Old deposition site	Location	Recipient /r.km/	Estimated Risk	Remark
industrial waste deposit	Liptovský Mikuláš	Váh	medium	deposit of waste and sludge
deposit of fouling waste	Vrútky	Váh	low	closed deposit of fouling industrial sludge
deposit of fouling waste	Trstena	Oravica	low	closed deposit of fouling industrial sludge
industrial waste deposit	Nizna	Bezmenny creek	low	sludge deposit from operation of surface preparation
industrial waste deposit	Siroka	Bezmenny creek	low	deposit of industrial waste arsenical
deposit of common and industrial waste	Turzovka	Semetes /in tube/	medium	leaking tube line
deposit of common and industrial waste	Kysucké nové Mesto	Kysuca	medium	closed deposit of fouling industrial sludge
industrial waste deposit	Povážska Bystrica	Ziar /in tube/	low	closed deposit of fly-ash of refuse incinerating plant
deposit - industrial	Chemko Strážske	Ondava 16,2 rkm	high	leach out during flood
sludge deposit - sludge reservoir	Chemko Strážske	Ondava 43,2 rkm	high	leach out during flood
sludge deposit	Krompachy	Hornád 186,0 rkm	high	leach out during flood
sludge deposit - links bank meander	Vranov n. toplov	Ondava 48,7 rkm	high	leach out during flood
deposit of gudrons PETROCHEMA	Predajna	Hron 208 r.km	very high	cca 120000 m3, overspill by heavy raining
deposit of gudrons	PETROCHEMA area	Hron 206 r.km	very high	cca 50000 m3, washed up during flood
deposit of liqued waste, fenole, formaldehyde	Bucina, Horny Sturec	Zolna 1,5 r.km	very high	cca 20000 m3
red-sludge bed, danger waste deposit	ZSNP area, Ziar n./Hronom	Hron 125,3 r.km	very high	cca 1 million. m3 alkaline water
deposit of danger waste, oil waste	A.S.A. Zohor	Malina 6,0 r.km	high	deposit of cca 350000 tons
NCHZ Nováky	Nováky	Nitra 123 r.km	very high	deposit of calc-sludge
ENO Zemianske Kostolany	Zemianske Kostolany	Nitra 128 r.km	high	deposit of fly -ash
DUSLO Sala	Trnovec nad Vahom	Váh 54 r.km	high	sludge bed
Drotovná Hlohovec	Horné Zelenice	Váh 97 r.km	high	Fe- sludge bed
VAB Sipox	Bánovce nad Bebravou	Radisa 3,6 r.km	high	waste of galvanic salts, oil waste

## A 1.7 OCS in Romania

No.	County	Location site	Distance to receiver river (m)	Deposit type	Estimated risk*	Waste type	Waste code according European Catalogue of Wastes	Actual capacity (m3)
1	Dambovit a	Targoviste	Ilfov brook, 800	hazardous wastes	high	not specified (waste solutions and cyanuric muds (alkalines) with heavy metals others than chromium)	110101	6
2	Iasi	Blagesti	Siret River, 500	industrial wastes	low	wastes from sugar processing	020400	10000
3	Giurgiu	Giurgiu	Danube, 3000	industrial wastes	high	<b>organic solvents, washing liquids and mother solutions</b>	070104	3000
4	Dambovit a	Targoviste	not specified	hazardous wastes	high	not specified ( <b>waste solutions and cyanuric muds (alkalines) with heavy metals others than chromium, wastes solutions and muds containing chromium but without cyanides</b> )	110101, 110103	10.5
5	Vrancea	Nanesti	Siret River, 600	underground deposit	high	not specified (wastes from chemical treatments)	020703	160
6	Dambovit a	Gaesti	Arges River, 1100	hazardous wastes	high	not specified (muds from industrial waste water treatment)	190804	30.6
7	Vrancea	Focsani	not specified	underground deposit	high	not specified (wastes from chemical treatments)	020703	144
8	Dambovit a	Targoviste	Ilfov brook, 1500	hazardous wastes	high	not specified ( <b>waste solutions and muds containing chromium but without cyanides</b> )	110103	3028
9	Dambovit a	Fieni	Ialomita River, 180	hazardous wastes	high	not specified ( <b>waste solutions and muds containing chromium but without cyanides</b> )	110103	20
10	Vrancea	Odobesti	Milcov River, 1500	underground deposit	high	not specified (wastes from chemical treatments)	020703	468
11	Dolj	Calafat	Danube, 250	industrial wastes	low	Wastes from sugar beet processing		43500
12	Constanta	Medgidia	Danube-Black Sea Channel, 500	industrial wastes	unknown	Wastes from ligands manufacturing	101300	10000
13	Hunedoara	Mintia	Mures River, 500	slag and ash pond	unknown	fireplace ash	100101	97000
14	Dolj	Calafat	Danube, 3000	slag and ash pond	unknown	Slag, ashes from coal burning	100100	65500
15	Hunedoara	Calan	Strei River, 3500	slag and ash pond	high	not processed slag, lining and refractory waste materials, furnace slag, foundry shapes containing organic ligands, wastes from mixture preparation previously thermic processing, other tars	100202, 100206, 100903, 101003, 050603, 100901, 101001	13000
16	Teleorman	Turnu Magurele	Danube, 150	pyrite ash pond	high	not specified ( <b>wastes containing metals</b> )	060400	19000

No.	County	Location site	Distance to receiver river (m)	Deposit type	Estimated risk*	Waste type	Waste code according European Catalogue of Wastes	Actual capacity (m3)
17	Bacau	Bacau	Bistrita River, 3000	industrial wastes	low	wood processing	not specified	40000
18	Sibiu	Copsa Mica	Tarnava Mare River, 50; Visa brook, 2	industrial wastes	high	<b>slags from primary and secondary melting, other not specified inorganic wastes</b> , other inorganic matters from thermic processes as suspensions or dust, iron and steel)	100501, 060199, 100504, 170405, 170701	135000
19	Hunedoara	Pojoga	Mures River, 1000	sterile pond	low	Wastes from nonferrous ores processing	010102	32000
20	Tulcea	Turcoaia	Old Danube-Macin Arm, 5000	sterile pond	unknown	not specified	not specified	440000
21	Bacau	Letea Veche	Siret River, 1.5	slag and ash pond	unknown	fuel burning	100000	1315000
22	Dambovitza	Doicesti	Ialomita River, 50	slag and ash pond	unknown	not specified (fireplace ash)	100101	500000
23	Dambovitza	Targoviste	Ialomita River, 200	slag and ash pond	unknown	not specified (wastes from ferrous pieces foundry, some of them might be dangerous)	100900	12000

\* risk was estimated as being "low" or "high" considering European Catalogue of Wastes classification of as dangerous or not



**A 1.8 OCS in Ukraine**

The Data are taken from the head of Zakarpatian region authority of MENR - I. Rozsoxa. (Translated by Shmurak)

**Table 1.8-1: OCS in the upper part of Ukrainian Danuba basin**

No.	County	Location site	Distance to receiver river (m)	Recipient river (length of stream in km)	Deposit type	Estimated risk*	Waste type	Waste code according European Catalogue of Wastes	Actual capacity (m3)
1	Makarivskiy rajon, village Rakoshino	Rakoshinskiy administration	300	river Stara	wastes	Possibly in big water times	Solid wastes	1.48.21	2500
2	Mykachivskiy rajon, village Znjatsevo	Znjatsevsk administration	150	meliorate channel	wastes	Possibly in big water times	Solid wastes	1.48.21	2000
3	Mykachivskiy rajon, village Vilxovutsa	Bystritsa administration	150	river Latoritsa	wastes	Possibly in big water times	Solid wastes	1.48.21	2000
4	village of town type Perechin	the forest "Zatova", str/ Budivelnikov, 1	600	river Uzh	wastes	Possibly in big water times	Solid wastes	1.48.21	30000
5	Xystskiy rajon, village of town type Vyshkovo-Jablunivka	Road Vyshkovo-Jablunivka	800	river Tisa	surface wastes	Possibly in big water times on river Tisa	Solid wastes	1.48.21	1200

**A 1.9 CS in Bosnia, Bulgaria, Croatia, Germany and Serbia**

No data received in February 2003

## **Annex 2**

### **Results of the inventory end of May 2003 and Additional or Modified Lists of CS**



## 2.1 CS in Austria

### Results not considering the flood-proneness

location/ name	Registry No	Grid system (Gauß-Krüger)	river	old deposit or old industrial site	branch	deposit type	in use since/ in the timeframe	hazardous substances	r0/ estimated risk factor	area in sqm	capacity in m <sup>3</sup>	M1	Endangered by Floods, Flood frequency
Leather factory Neuner	K22	M31, x= 5166094, y= 75848	Glan	industrial site	Lederverarbeitung		1922-1989	Chrom	4.5	120,000		50	
Landfill Roßwiese	K7	M31, x= 5192050, y= 85950	Gurk	deposit		Industriemüll	1950-1992	Metalle, Mineralisierung	5.0		500,000	55	
lime dump site Brückl I/II	K20	M31, x= 5178385, y= 91658	Gurk	deposit		Industrieabfälle, Bauschutt, Aushubmaterial	1926-1981	CKW (Tetrachlorethen, Trichlorethen, Hexachlorbutadien)	4.5		250,000	50	
Donau Chemie Brückl	K5	M31, x= 5177850, y= 91450	Gurk	industrial site	Chemische Grundstoffindustrie		1909-1989	CKW, Trichlorethen, Tetrachlorethen, Hexachlorbutadien	6.0	50,000		50	
Industrial deposit Heraklithwerke Ferndorf	K21	M31, x= 5177019, y= 22827	Drau	deposit		Industrieabfälle	1961-1989	Magnesium, Sulfat	3.5		500,000	40	
BBU Metallurgy factory Arnoldstein	K15	M31, x= 5157750, y= 28166	Gailitz/ Gail	industrial site	Chemische Grundstoffindustrie, Metallherzeugung		1882-1989	Metalle	5.0	300,000		50	
refinery Tuttendorfer Breite	N16	M34, x= 5355250, y= 250	Danube	industrial site	Mineralöl-Raffinerie		1923-1960/61	Mineralöl, CKW	4.5	180,000		50	
Shipyard Korneuburg	N33	M34, x= 5356050, y= -1100	Danube	industrial site	Schiffbau		1845-1994	Metalle, Mineralöl	4.0	200,000		50	
Tankfarm Mare	N46	M34, x= 5328350, y= -1250	Danube	industrial site	Mineralöllager		1930-1990	Mineralöl	4.0	10,000		50	
sports field Wiener Neudorf	N39	M34, x= 5328350, y= -1200	Krottenbach	deposit		Aushubmaterial, Bauschutt, Hausmüll	1963-1970	Deponiegas, erhöhte Mineralisation, reduzierende Verhältnisse	2.5		430,000	28	
Landfill Wiener Neudorf	N37	M34, x= 5328350, y= -1200	Krottenbach	deposit		Aushubmaterial, Bauschutt, Hausmüll	1963-1970	erhöhte Mineralisation, reduzierende Verhältnisse	3.0		870,000	40	
refinery Vösendorf	N20	M34, x= 5331650, y= -1200	Petersbach	industrial site	Mineralöl-Raffinerie		1920-1960	Mineralöl, PAK	4.5	145,000		50	

location/ name	Registr y No	Grid system (Gauß-Krüger)	river	old deposit or old industrial site	branch	deposit type	in use since/ in the timeframe	hazardous substances	r0/ estimated risk factor	area in sqm	capacity in m <sup>3</sup>	MI	Endangere d by Floods, Flood frequency
Landfill Tulln	N49	M34, x= 5356960, y= -20420	Danube	deposit		Hausmüll, Bauschutt, Industrie-/Gewerbemüll	1972-1984	reduzierende Verhältnisse, erhöhte Mineralisierung	3.5		200,000	42	
Kapellerfeld	N12	M34, x= 5352100, y= 11100	Marchfeldkanal	deposit		Hausmüll	1966-1985	erhöhte Mineralisierung, CKW	4.0		2,000,000	49	
Landfill MA 48 - Zwölfaxing	N41	M34, x= 5330856, y= 10429	Mitterbach	deposit		Aushubmaterial, Bauschutt, Hausmüll	1977-1989	Deponiegas, erhöhte Mineralisation, reduzierende Verhältnisse	4.0		450,000	47	
ÖMV-refinery Schwechat	N18	M34, x= 5334000, y= 12000	Danube	industrial site	Mineralöl-Raffinerie		1930-1989	Mineralöl	5.0	1,500,000		50	
waste deposit S.A.D.	N7	M34, x= 5295000, y= -1200	Leitha	deposit		Industrie-/Gewerbemüll, gefährliche Abfälle	1973-1989	CKW	5.0		700,000	55	
Chemical site Linz	O44	M34, x= 5350500, y= 74000	Danube	industrial site	Chemische Grundstoffindustrie		1942-1989	CKW, BTX	5.0	850,000		55	
Landfill Pill	T7	M31, x= 5243100, y= 10100	Inn	deposit		Hausmüll, Bauschutt, Industrie-/Gewerbemüll	1973-1990	erhöhte Mineralisierung, reduzierende Verhältnisse	4.0		1,000,000	49	
EBS-BP-TKV	W1	M34, x= 5337400, y= 10000	Danube	industrial site	Mineralöllagerung, Tierkörperverwertung		end of 19th century-1989	Mineralöl, CKW	5.5	200,000		50	
Gas works Simmering	W18	M34, x= 5338402, y= 6854	Danube	industrial site	Gaswerk		1900-1975	PAK, Cyanid, Mineralöl, Phenole, Ammonium, Sulfat	5.5	325,000		50	
Teerag-Asdag-Simmering	W21	M34, x= 5338000, y= 8600	Danube	industrial site	Teerverarbeitung		1914-1989	PAK, Phenole, BTX	5.5	130,000		50	
Tankfarm Lobau	W12	M34, x= 5337100, y= 13000	Danube	industrial site	Tanklager für Mineralölprodukte		1934-1989	Mineralöl, Kohlenwasserstoffe	5.0	1,000,000		50	
Siebenhirten	W8	M34, x= 5333000, y= -2800	Liesing	industrial site	Chemische Grundstoffindustrie		ca. 1828-1989	Cyanid, Kohlenwasserstoffe, Phenol, Ammonium, Nitrit, Sulfat	5.0	150,000		50	

**Results considering the flood-proneness**

Country	Region	county	community	location/ name	Registry No	Grid system (Gauß-Krüger)	river	old deposit or old industrial site	branch	deposit type	in use since/ in the timeframe	hazardous substances	R/ estimated risk factor	area in sqm	capacity in m <sup>3</sup>	M1	Endangered by Floods, Flood frequency
Austria	Kärnten	Klagenfurt	Klagenfurt	Leather factory Neuner	K22	M31, x= 5165094, y= 75848	Glan	industrial site	Lederverarbeitung		1922-1989	Chrom	4,5	120.000		50	LOW
Austria	Kärnten	Sanikt Val an der Glan	Althofen	Landfill Rodwiese	K7	M31, x= 5192050, y= 85950	Gurk	deposit		Industriemüll	1950-1992	Metalle, Mineralisierung	5,0	500.000		55	LOW
Austria	Kärnten	Sanikt Val an der Glan	Brückl	lime dump site Brückl III	K20	M31, x= 5176365, y= 91698	Gurk	deposit		Industrieabfälle, Bauschutt, Aushubmaterial	1906-1981	CKW (Tetrachlorethen, Trichlorethen, Hexachlorbutadien)	4,5	250.000		50	LOW
Austria	Kärnten	Sanikt Val an der Glan	Brückl	Donau Chemie Brückl	K5	M31, x= 5177660, y= 91450	Gurk	industrial site	Chemische Grundstoffindustrie		1909-1989	CKW, Trichlorethen, Tetrachlorethen, Hexachlorbutadien	6,0	50.000		50	MIDDLE
Austria	Kärnten	Wöllach Land	Ferndorf	Industrial deposit Heraklithwerke Ferndorf	K21	M31, x= 5177019, y= 23827	Drau	deposit		Industrieabfälle	1961-1989	Magnesium, Sulfat	3,5	500.000		40	LOW
Austria	Niederösterreich	Korneuburg	Korneuburg	refinery Tuttendorfer Breite	N16	M34, x= 5355250, y= 250	Danube	industrial site	Mineralöl-Raffinerie		1923-1960/61	Mineralöl, CKW	4,5	180.000		50	LOW
Austria	Niederösterreich	Korneuburg	Korneuburg	Shipyard Korneuburg	N33	M34, x= 5399050, y= - 1100	Danube	industrial site	Schiffbau		1845-1994	Metalle, Mineralöl	4,0	200.000		50	LARGE
Austria	Niederösterreich	Korneuburg	Korneuburg	Tankfarm Miao	N45	M34, x= 5328350, y= - 1250	Danube	industrial site	Mineralöflager		1930-1990	Mineralöl	4,0	10.000		50	LARGE
Austria	Niederösterreich	Mödling	Vösendorf	refinery Vösendorf	N20	M34, x= 5331650, y= - 1200	Petersbach	industrial site	Mineralöl-Raffinerie		1920-1960	Mineralöl, PAK	4,5	145.000		50	LOW
Austria	Niederösterreich	Tulln	Tulln	Landfill Tulln	N49	M34, x= 5396960, y= - 20420	Danube	deposit		Hausmüll, Bauschutt, Industrie-/Gewerbemüll	1972-1984	erhöhte Mineralisierung	3,5	200.000		42	LARGE
Austria	Tirol	Schwarz	Pill, Weer	Landfill Pill	T7	M31, x= 5243100, y= 10100	Inn	deposit		Hausmüll, Bauschutt, Industrie-/Gewerbemüll	1973-1990	erhöhte Mineralisierung, reduzierende Verhältnisse	4,0	1.000.000		49	LOW
Austria	Wien	11. Simmering	Wien	EBS-EP-TKV	W1	M34, x= 5337400, y= 10000	Danube	industrial site	Mineralblagerung, Tierkörperverwertung		end of 19th century-1989	Mineralöl, CKW	5,5	200.000		50	LOW
Austria	Wien	11. Simmering	Wien	Gas works Simmering	W18	M34, x= 5339402, y= 8854	Danube	industrial site	Gaswerk		1900-1975	PAK, Cyanid, Mineralöl, Phenol, Ammonium, Sulfat	5,5	325.000		50	LOW
Austria	Wien	11. Simmering	Wien	Teerag-Asdag-Simmering	W21	M34, x= 5339000, y= 9600	Danube	industrial site	Teerverarbeitung		1914-1989	PAK, Phenol, BTX	5,5	130.000		50	LOW
Austria	Wien	22. Donaustadt	Wien	Tankfarm Lobau	W12	M34, x= 5337100, y= 13000	Danube	industrial site	Tanklager für Mineralölprodukte		1934-1989	Mineralöl, Kohlenwasserstoffe	5,0	1.000.000		50	LOW
Austria	Wien	23. Liesing	Wien	Siebenhirten	W6	M34, x= 5339000, y= - 2900	Liesing	industrial site	Chemische Grundstoffindustrie		ca. 1926-1989	Cyanid, Kohlenwasserstoffe, Phenol, Ammonium, Nitrit, Sulfat	5,0	150.000		50	LOW

**Results considering the modified m1-methodology**

Rank	Country	Region	county	communit	location/ name	Endangere d by Floods, Flood frequency	river	area in €	Risk value r0	Risk Potential according old m1	Risk Potential according new m1
1	Austria	Wien	22. Donaustadt	Wien	Tankfarm Lobau	1	Danube	1.000.000	5,0	50	59,00
2	Austria	Wien	11. Simmering	Wien	Gas works Simmering	1	Danube	325.000	5,0	50	58,00
3	Austria	Wien	11. Simmering	Wien	EBS-BP-TKV	1	Danube	200.000	5,0	50	58,00
4	Austria	Wien	23. Liesing	Wien	Siebenhirten	1	Liesing	150.000	5,0	50	58,00
5	Austria	Wien	11. Simmering	Wien	Teerag-Asdag- Simmering	1	Danube	130.000	5,0	50	58,00
6	Austria	Niederösterreich	Korneuburg	Korneuburg	refinery Tuttendorfer Breite	1	Danube	180.000	4,5	50	58,00
7	Austria	Niederösterreich	Korneuburg	Korneuburg	Shipyards Korneuburg	3	Danube	200.000	4,0	50	57,00
8	Austria	Niederösterreich	Mödling	Vösendorf	refinery Vösendorf	1	Petersbach	145.000	4,5	50	57,00
9	Austria	Kärnten	Klagenfurt	Klagenfurt	Leather factory Neuner	1	Glan	120.000	4,5	50	57,00
10	Austria	Kärnten	Sankt Veit an der Glan	Brückl	Donau Chemie Brückl	2	Gurk	50.000	5,0	50	56,00



## 2.2 CS in Bosnia

According to available data there are no heavy contaminated sites on the presented area, which could cause significant contamination of the water due to flood impact.

## 2.3 CS in Bulgaria

Bulgaria delivered a detailed description of the pollution situation caused by pesticides. Considering the exclusion criteria none of the listed sites have a relevant risk potential in case of flooding. The risk of flooding is low on every site, so the Bulgarian site will not come to the fore in our investigation. Nevertheless the high toxic potential of the substances and the high amount of identified hazardous substances calls for more attention with regard to the right disposal route.

More information is to be seen in the sequencing chapter.

### Stores for pesticides in the Danube River Basin- Bulgaria

Since 1990 in a result of changes in agricultural policy and land property cooperated unions had been dismissed. Stores for pesticides, in the past maintained within agricultural unions, had been left careless. Many of stores contain poisonous solid and liquid substances (also see Annex 2), some of them forbidden for further use with different rate of toxicity.

Status of buildings:

- unsafe (lack of guarding, which may create risk of fire and stealing of stored pesticides);
- unlocked doors and windows;
- damaged roof constructions (water endangering in rainy conditions).



Status of stored preparations:

- after expiry date (useless);
- damaged covers and packages;
- unknown substance;
- mixed pesticides;
- spilled substances around stores.

Since 1999 a method for insulated packaging and replacing of agrochemical pesticides has been implemented. The technology by "Balbok Engineering Co." offered disposal of agrochemical waste in "BB cube"® containers.

The technology includes six steps of ecological management.



#### **First step**

Estimation of the waste quantity according to BalBok's technology.



#### **Second step**

Re-packaging of solid waste.



#### **Third step**

Treating liquid waste according to the technology. The final product is solid.



#### **Fourth step**

Filling "BB cube"® containers with re-packaged and treated waste.



#### **Fifth step**

Disposal of full "BB cube"® containers according to legal requirements.



#### **Sixth step**

Removing and neutralizing any harmful substances from the floor and walls of emptied stores and from polluted soil around the store according. Stores for pesticides in Bulgarian part of Danube River Basin are listed in the table beneath (Links: <http://www.balbok.com/English/PesticideStorageE>)

### List of water endangering old depositions sites of pesticides in the Danube River Basin- Bulgaria

?	Regional Center	Location	Recipient river (length of stream in km)	Estimated amounts of pesticides, kg			Estimated vulnerability by floods
				Generally	Unknown substance	Unknown substance (liquid)	
1	Sofia (capital)	Chepintzi	Stari Iskar	13 5432			Low
2	Sofia	Novachene	Malki Iskar	2 319	2319		Low
3		Samokov 1	Iskar	8 000	8 000		Low
4		Samokov 2	Iskar	2 000	2 000		Low
5		Gara BOV	Iskar	1 125	1 125		Low
6	Vratza	Galiche	Skat	6 722	6 722		Low
7		Kreta	Iskar	1 000	1 000		Low
8		Oryahovo	Danube	5 000	4 900	100	Low
9		Ostrov	Danube	1 500	1 500		Low
10		Miziya	Skat	8 000	8 000		Low
11		Krushovitza	Skat	1 500	1 500		Low
12		Hairedin	Ogosta	5 000	4 900	100	Low
13		Mihailovo	Ogosta	5 000	4 850	150	Low
14		Harletz	Ogosta	33 000	33 000		Low

?	Regional Center	Location	Recipient river (length of stream in km)	Estimated amounts of pesticides, kg			Estimated vulnerability by floods
				Generally	Unknown substance	Unknown substance (liquid)	
15	Montana	Zamfir	Lom	4 000	4 000		Low
16		Lom 1	Lom	1 300	1 300		Low
17		Lom 2	Lom	1 700	1 700		Low
18		Staliiska mahala	Lom	3 700	1 700		Low
19		Vasilovtzi	Lom	25 000	25 000		Low
20	Vidin	Novoseltzi	Topolovetz	10 000	10 000		Low
21		Gradetz	Topolovetz	5 000	5 000		Low
22		Dimovo	Archar	7 000	4 000		Low
23		Slanotran	Danube	4 000	4 000		Low
24	Lovech	Letnitza	Osam	3 500			Low
25		Aleksandrovo	Osam	6 000	6 000		Low
26		Lovech 1	Osam	4530			Low
27		Lovech 2	Osam	1 000			Low
28		Bezhanovo	Vit	4 576	600		Low
29		Dermantzi	Vit	2 000	600		Low

?	Regional Center	Location	Recipient river (length of stream in km)	Estimated amounts of pesticides, kg			Estimated vulnerability by floods
				Generally	Unknown substance	Unknown substance (liquid)	
30		Aglen	Vit	2 900		400	Low
31	Veliko Tarnovo	Dolna Oryahovitza	Jantra	21 180	16 900	4 280	Low
32		Svishtov	Danube	3 280	2 000	1280	Low
33		Vardim	Danube	1 380	1 200	180	Low
34	Ruse	Krasen	Russenski Lom	2 256			Low
35		Marten	Danube	4 000			Low
36		Ruse	Danube	5 000			Low
37		Sredna Kula	Danube	2 690			Low

## 2.4 CS in Croatia

### Inventory of the water endangering old depositions in the CROATIAN part Danube River BASIN

Old deposition type:

- . Contamination from old accidents
- . Industrial deposit
- . Old military site
- . Agricultural landfill
- . Old mining tailing
- . Communal organic dump wastestorage

Old deposition site			Recipient river (length of stream in km)	Estimated Risk	Remark	
NAMING	LOCATION	Grid-lines X= ; Y= ;			Estimated amount of dangerous substances	Floods
<b>SAVA RIVER BASIN</b>						
	. Industrial deposit					
1.	. Reservoir	PLASKI	Dretulja, cca 780 km from Danube	low	250 m <sup>3</sup> waste lye ( NaCa, pH 12.5)	no
2.	. Industrial deposit	LEMIC BRDO/ KARLOVAC	Kupa, cca 700 km from Danube	low	old oil waste and communal wasre	no
3.	. Old military site		DATA UNKNOWN			
<b>DRAVA AND DANUBE RIVER BASIN</b>						
4.	. Old military site		DATA UNKNOWN			

Note: Other sites are included in ARS inventory .

## 2.5 CS in Czech Republic

### List of the Water Endangering Old Depositions in the Czech Part of Morava River Basin

Old site	deposition	Location	Recipient river (length of stream in km)	Estimated Risk	Remark
Oil substances in the Velamos factory area		Loučna nad Desnou	Desna river (river km 26)	High	amount of several tons of oil substances affected by flood Q100
Sludge lagoons in the waste water treatment plant		Sumperk	Desna river (river km 6)	High	6 000 m3 of sludge with heavy metals affected by flood Q100
Toluene in the Farmak factory area		Olomouc	Morava river (river km 233)	Low (core wall)	amount of several tons of toluene affected by flood Q100
Oil substances in the Magneton factory area		Kromeríž	Morava river (river km 195)	Low (partial remedial works)	amount of several tons of oil substances affected by flood Q100
Oil substances in the Precheza factory area		Prerov	Becva river (river km 12)	Low (partial remedial works)	amount of several hundreds kg of oil substances affected by flood Q100
Oil substances, polycyclic aromatic hydrocarbons in the DEZA factory area		Valasske Mezirici	Becva river (river km 60)	Low (hydraulic blanket)	amount of several tons affected by flood Q100
Aliphatic chlorohydrocarbons in the MEP factory area		Postrelmov	Morava river (river km 300)	Low (partial remedial works)	amount of several tens kg affected by flood Q100
Old industrial dump		Slapanice	Ricka river (river km 12)	Low	amount of 10 m3 of tar affected by flood Q100

Old site	deposition	Location	Recipient river (length of stream in km)	Estimated Risk	Remark
Old plant for chlorohydrocarbon regeneration		Letovice	Svitava river (river km 62)	Low	amount of 1 ton of chlorohydrocarbons affected by flood Q100
Chlorohydrocarbons in the Magneton factory area		Valasske Klobouky	Brumovka river (river km 9)	Low	amount of 500 kg of chlorohydrocarbons affected by flood Q100
Chlorohydrocarbons in the Mars factory area		Svratka	Svratka (river km 160)	Low	amount of 200 kg of chlorohydrocarbons affected by flood Q100
Old deposit		Pozdatky	local stream and Jihlava river (river km 90)	Low	unknown amount of sulphuric acid affected by flood Q100
Chlorohydrocarbons and heavy metals in the Zbrojovka factory area		Brno	Svitava river (river km 6)	Low	unknown amount affected by flood Q100
phosphates from fertilizer production in the Fosfa factory area		Postorna	Dyje river (river km 25)	Low	unknown amount affected by flood Q100

## 2.6 CS in Germany

Considering the exclusion criteria Germany could deliver only two risk spots. But the risk potential of the Federal State of Baden Wuerttemberg was not taken into consideration.

Region	county	community	location/ name	Grid system [Gauss-Krüger]	Endangered by Floods, Flood frequency	distance in m	river	old deposit or old industrial site	in use since/ in the timeframe	waste	capacity in m <sup>3</sup>
Bavaria	Stadt Straubing	Stadt Straubing	Deponie Peterswöhrd	R: 4543249 H: 5417000	every 21 - 100 years	200	Danube	old deposit	1946 until 1977	municipal waste, accompanied by construction waste and industrial waste	ca. 1.45 Mio
Bavaria	Dillingen	Dillingen	Hühnerwörth	R: 4390858 H: 5382545	every 21 - 100 years	200	Danube	old deposit	1960 until 1977	municipal waste	ca. 470000



## 2.7 CS in Hungary

## INVENTORY OF WATER ENDANGERING OLD CONTAMINATED SITES IN THE HUNGARIAN PART OF THE DANUBE RIVER BASIN

Old deposition type:

. Industrial deposits

. Other old deposits

Old deposition site			Grid-lines X= ; Y=	Recipient river (length of stream in km)	Estimated Risk	Estimated amount of dangerous substances	Estimated flood risk	Remarks
NAME	LOCATION							
. INDUSTRIAL DEPOSITS								
1.	I-II Reservoir for red-dross	Almásfüzito 119/11 Hrsz	x=590 327 Y=265 665	Danube 1749-1761 ( rkm)	Unknown	red-dross 450 000 m <sup>3</sup>	yes	
2.	III. Reservoir for red-dross	Almásfüzito 118	x=590 300 Y=265 600	Danube 1749-1761 ( rkm)	Unknown	red-dross 1 000 000 m <sup>3</sup>	yes	
3.	IV. Reservoir for red-dross	Almásfüzito 06/12	x=590 300 Y=265 600	Danube 1749-1761 ( rkm)	Unknown	red-dross 600 000 m <sup>3</sup>	yes	
4.	V. Reservoir for red-dross	Almásfüzito 06/10	x=590 300 Y=265 600	Danube 1749-1761 ( rkm)	Unknown	red-dross 800 000 m <sup>3</sup>	yes	
5.	VI. Reservoir for red-dross	Almásfüzito 06/8	x=590 300 Y=265 600	Danube 1749-1761 ( rkm)	Unknown	red-dross 1 800 000 m <sup>3</sup>	yes	
6.	VII. Reservoir for red-dross	Almásfüzito 03/29,30,31	x=592 500 Y=265 000	Danube 1749-1761 ( rkm)	Unknown	red-dross 3 250 000 m <sup>3</sup>	yes	
7.	VIII. Reservoir for red-dross	Neszmély 0125	x=600 871 Y=264 058	Danube 1749-1761 ( rkm)	Unknown	red-dross 5 000 000 m <sup>3</sup>	yes	
8.	Fixon Bt. – Humiron Ltd. (power station)	Lorinci	x=697 50 Y=282 500	Zagyva	Low	slag and dust-ash deposit 5 000 000 m <sup>3</sup>	no	
9.	Metallochemia Inc.	Budapest, XXII. Harangozó u.	x=644 200 Y=227 800	Danube	Low	metallurgical slag (S, Cn, FeO) 650.000 t	no	
10.	Bakonyi Eromu Inc. (power station)	Ajka	x=539 238 Y=198 151	Torna	Unknown	gray sludge 15 000 000 t	no	
11.	Magyar Aluminium Inc.	Ajka	x=534 000	Torna (52)	Low	reclaimed red-dross	no	

Old deposition site				Recipient river (length of stream in km)	Estimated Risk	Estimated amount of dangerous substances	Estimated flood risk	Remarks
NAME	LOCATION	Grid-lines X= ; Y=						
	(aluminium industry)		Y=194 000	Marcal (97,8) Rába ( 204,6)		deposition (i.-VIII. dep.) 29 000 000 t		
12.	Dunaferr Inc. (metallurgical industry)	Dunaújváros	x=642 735 Y=174 625	Danube	High	industrial waste sludge 1 500 000 t	yes	
13.	Dunapack Inc. (paper industry)	Dunaújváros	x=642 735 Y=174 625	Danube (1573)	High	mixed industrial sludge 212 000 t	yes	
14.	ELEKTROLUX - LEHEL Ltd WDS-1 (machine industry)	Jászberény	x=711 216 Y=237 746	Zagyva (67) Tisa (336)	Low	polluted soil (chemical wastes) 155.000 m <sup>3</sup>	no	
15.	TVM Inc. (chemical industrial plant)	Szolnok	x=732 950 Y=199 716	Tisa (332)	Low	polluted soil (chemical wastes) 600.000 t	yes	
16.	Béghin-Say Cukorgyár Inc. (Sugar factory)	Szolnok	x=734 750 Y=200 250	Tisa (330)	High	waste-water sedimentation pond 1.300.000 m <sup>3</sup>	yes	
17.	Tisa Chemical Factory	Tiszaújváros	x=798 042 Y=287 515	Tisa (484)	Low	industrial waste deposit 211.000 m <sup>3</sup>	yes	
18.	AES borsodi Energetikai Ltd Tiszapalkonyai Hoeromu	Tiszaújváros (power station)	x=800 150 Y=286 711	Tisa (483)	Low	slurry 800.000 t lag-dust-ash 1.400.000 t	yes	
<b>OTHER OLD DEPOSITS</b>								
1.	Former military Airport	Tököl	x=644 156 Y=217 561	Danube	Low	hydrocarbon (CH) polluted soil: 308.000 m <sup>3</sup> hydrocarbon (CH) polluted groundwater: 209.900 m <sup>3</sup>	no	
2.	Abandoned sewage sludge deposits	Budapest, Csepel-island Nord	x=651 740 Y=234 600	Danube	Low	heavy metal and hydrocarbon (CH) pollution, organic compounds 300.000 m <sup>3</sup>	no	
3.	Dangerous mixed municipal waste deposition	Gyula	x=818 000 Y=146 100	White Körös	Low	mixed dangerous deposit 273 773 m <sup>3</sup>	yes	
4.	Municipal waste deposition	Mohács	x=622 150 Y= 74 880	Danube (1445)	Low	communal organic deposit 370 000 m <sup>3</sup>	no	

## 2.8 CS in Moldova

### Inventory of the water endangering old depositions in the Prut River Basin

Old deposition site	Location	Recipient river (length of stream in km)	Estimated Risk	Remark
➤ Agricultural landfill	Vil. Cahslita-Prut	Prut - 11,5 km	medium	➤ Pesticides – 6 t ➤ Estimated vulnerability by floods - unknown
	Vil. Mereseni	Sarata – 57,5 km Prut – 187 km	low	➤ Pesticides – 3 t ➤ Low
	Vil .Cneazevca	Sarata – 32 km Prut – 187 km	high	➤ Pesticides – 11,5 t ➤ Low
	Town Leova	Prut – 246 km	high	➤ Pesticides – 34,85 t ➤ unknown
	Vil. Filipeni	Sarata – 8 km Prut – 187 km	low	➤ Pesticides - 2,7 ➤ Unknown
	Vil. Vozneseni	Sarata – 26 km Prut – 187 km	low	➤ Pesticides - 2,4 t ➤ Unknown
	Vil. Jargara	Tigheci –30 km Prut – 151 km	low	➤ Pesticides – 3 t ➤ Unknown
	Vil. Sofia	Lapusna –40 km Prut – 239 km	low	➤ Pesticides – 4 t ➤ Unknown
	Vil. Pascani	Lapusna – 52 km Prut – 239 km	low	➤ Pesticides – 3,6 t ➤ Unknown
	District Nisporeni	Narnova – 49 Prut – 278 km	high	➤ Pesticides – 37,4 t ➤ Unknown
	District Briceni	Vilia –50 km Prut – 637 km	high	➤ Pesticides – 78,7 t ➤ Unknown
	District Ungheni	Delia – 30 km Prut – 385 km	high	➤ Pesticides - 53,2 ➤ Unknown

## 2.9 CS in Serbia

No data received

## 2.10 CS in Slovakia

Location	Estimated Risk	Storage time	Volume	Remark
Skladka odpadov OFZ, Siroka	low	since 1965	600000 m3	deposit of industrial arsenical waste
Skladka TKO, Turzovka	medium	1968-2000	105000 m3	leaking tube line
TKO, Kysucke Nove Mesto	medium	1960-1998	150000 m3	closed deposit of fouling industrial sludge
Teplaren, Povazska Bystrica	low	1978-2000	345000 m3	closed deposit of fly-ash of refuse incinerating plant
CHEMKO, Strazske	high	since 1955	800000 m3	leach out during flood
CHEMKO, Strazske	high	since 1959	600000 m3	leach out during flood
KOVOHUTY, Krompachy	high	since 1967	285000 m3	leach out during flood
BUKOCEL, Vranov n.Toplou	high	since 1983	153000 m3	leach out during flood
PETROCHEMA, Predajna	very high	since 1964	120000 m3	overspill by heavy raining
PETROCHEMA, Dubova	very high	since 1954	50000 m3	washed up during flood
BUCINA, Horny Sturec	very high	since 1950	20000 m3	industrial liquid waste
ZSNP, Ziar n./Hronom	very high	since 1957	1000000 m3	alkaline water
A.S.A. Zohor	high	since 1996	350000 m3	deposit of mixed danger waste
NCHZ, Novaky	very high	since 1968	12000000 m3	deposit of calc-sludge
ENO, Zemianske Kostolany	high	since 1965	300000 m3	deposit of fly-ash
DUSLO, Šala	high	since 1980	750000 m3	sludge bed
DROTOVNE, Hlohovec	high	since 1962	160000 m3	Fe- sludge bed
VAB SIPOX , Banovce n.Bebravou	high	since 1980		galvanic salts waste, oil waste

**2.11. CS in Ukraine**

Data from head of Zakarpatian region authority of MENR - I. Rozsoxa (Translated by Shmurak)i

**Table 2.11-1: (upper part of Ukrainian Danube basin)**

No.	County	Location site	Distance to receiver river (m)	Recipient river (length of stream in km)	Deposit type	Estimated risk*	Waste type	Waste code according European Catalogue of Wastes	Actual capacity (m3)
1	Makarivskiy rajon, village Rakoshino	Rakoshinskiy administration	300	river Stara	wastes	Possibly in big water times	Solid wastes	1.48.21	2500
	Mykachivskiy rajon, village Znjatsevo	Znjatsevskaya administration	150	meliorate channel	wastes	Possibly in big water times	Solid wastes	1.48.21	2000
	Mykachivskiy rajon, village Vilxovutsa	Bystritsa administration	150	river Latoritsa	wastes	Possibly in big water times	Solid wastes	1.48.21	2000
	village of town type Perechin	the forest "Zatova", str/ Budivelnikov, 1	600	river Uzh	wastes	Possibly in big water times	Solid wastes	1.48.21	30000
	Xystskiy rajon, village of town type Vyshkovo-Jablunitsa	Road Vyshkovo-Jablunivka	800	river Tisa	surface wastes	Possibly in big water times on river Tisa	Solid wastes	1.48.21	1200



## **Annex 3**

### **Results of the Ranking of CS in Flood Risk Areas with Regard to their Toxic Potential**

The table shows the identified sites with the most risk potential. The blue marked sites served as pilot sites for the first orientating visits, which were maintained in July. 2003. Through these visits the drafts of the recommendations and the checklist were proved with regard to their practicability for the further risk assessment.





**Table 3-1: Ranked CS Considering the Estimated Risk Potential according to the old m1-methodology (List of 67 priority sites with contaminated volume > 100.000 m<sup>3</sup>)**

Rank	Country	Region	county	community	location/ name	deposit type	capacity in m <sup>3</sup>	Risk value r0	Risk Potential according old m1
1	Hungary	Central Transdanubian Environmental Inspectorates Area		Dunaújváros	Dunaferr Inc.	industrial sewage sludge	1,500,000	5	55
2	Germany		Stadt Straubing	Stadt Straubing	Deponie Peterswöhrd		1,450,000	5.0	55
3	Romania		Sibiu		Copsa Mica	industrial waste	1,350,000	5	55
4	Romania		Hunedoara		Calan	slag and ash pond	1,300,000	5	55
5	Romania		Hunedoara		Calan	slag and ash pond	1300000	5	55
6	Slovakia				ZSNP, Ziar n./Hronom	alkaline water	1000000	5	55
7	Slovakia				A.S.A. Zohor	deposit of mixed dangerous waste	350000	5	55
8	Slovakia				Skladka odpadov OFZ, Siroka	deposit of industrial arsenical waste	600000	5	55
9	Ukraine				The Odessa area Izmail Cellulose cardboard combine		200,000	5	55
10	Ukraine				The Odessa area Izmail Cellulose cardboard combine		23300 per day	4	55
11	Austria	Kärnten	Sankt Veit an der Glan	Althofen	Landfill Roßwiese	Industriemüll	500,000	5.0	50
12	Austria	Kärnten	Sankt Veit an der Glan	Brückl	lime dump site Brückl I/II	Industrieabfälle, Bauschutt, Aushubmaterial	250,000	4.5	50
13	Austria	Tirol	Schwaz	Pill, Weer	Landfill Pill	Hausmüll, Bauschutt, Industrie-/Gewerbemüll	1,000,000	4.0	50
14	Austria	Niederösterreich	Tulln	Tulln	Landfill Tulln	Hausmüll, Bauschutt, Industrie-/Gewerbemüll	200,000	3.5	50
15	Hungary	Central Transdanubian Environmental Inspectorates Area		Ajka	Bakonyi Eromu Inc.	gray sludge	15,000,000	4	49
16	Romania		Bacau		Letea Veche	slag and ash pond	13,150,000	4	49
17	Hungary	Middle Danube Environmental Inspectorates area		Lorinci	Fixon Bt- Humiron Ltd.	slag and dust ash	5,000,000	4	49

Rank	Country	Region	county	community	location/ name	deposit type	capacity in m <sup>3</sup>	Risk value r0	Risk Potential according old m1
18	Hungary	North Hungarian Environmental Inspectorate Area		Tiszaújváros	AES borsodi Energetikai Ltd Tiszapalkonyai Hoeromu		1,400,000	4	49
18	Hungary	Middle Tisa Environmental Inspectorates Area		Szolnok	Béghin-Say Cukorgyár Inc.(technology waste-water thickener)	waste water sludge in lake	1,300,000	4	49
20	Romania		Teleorman		Tumu Magurele	pyrite ash pond	1,900,000	4	49
21	Romania		Sibiu		Copsa Mica	industrial wastes	1350000	4	49
22	Slovakia				CHEMKO, Strazske	leach out during flood	800000	4	49
23	Slovakia				DUSLO, Šala	sludge bed	750000	4	49
24	Slovakia				CHEMKO, Strazske	leach out during flood	600000	4	49
25	Romania		Dolj		Calafat	slag and ash pond	655,000	4	49
26	Slovakia				PETROCHEMA, Predajna	overspill by heavy raining	120000	4	47
27	Slovakia				ENO, Zemianske Kostolany	deposit of fly - ash	300000	4	47
28	Slovakia				KOVOHUTY, Krompachy	leach out during flood	285000	4	47
29	Slovakia				BUKOCEL, Vranov n.Toplou	leach out during flood	153000	4	47
30	Germany		Dillingen	Dillingen	Hühnerwörth		470,000	4.0	47
31	Hungary	Central Transdanubian Environmental Inspectorates Area		Dunaújváros	Dunapack Inc.	mix sludge	212,000	4	47
32	Hungary	North Hungarian Environmental Inspectorate Area		Tiszaújváros	Tisa Chemical Self-contained plant		211,000	4	47
33	Slovakia				Skladka TKO, Turzovka	leaking tube line	105000	4	47
34	Slovakia				Teplaren, Povazska Bystrica	closed deposit of fly -ash of refuse incinerating plant	345000	4	47
35	Romania		Dolj		Calafat	industrial waste	435,000	4	47
36	Hungary	North Hungarian Environmental Inspectorate Area		Mezőkövesd Airport	Mezőkövesd „B” area Old Fuel depot		300.000 and 60.000	4	47
37	Hungary	Middle Danube Environmental Inspectorates area			Budapest, Csepel-island Nord	Abandon sewage sludge depots	300,000	4	47
38	Slovakia			A.S.A. Zohor	deposit of danger waste, oil waste		350,000	4	47

Rank	Country	Region	county	community	location/ name	deposit type	capacity in m <sup>3</sup>	Risk value r0	Risk Potential according old m1
39	Slovakia			Predajna	deposit of gudrons PETROCHEMA		120,000	4	47
40	Austria	Kärnten	Villach Land	Ferndorf	Industrial deposit Heraklithwerke Ferndorf	Industrieabfälle	500,000	3.5	42
41	Slovakia				NCHZ, Novaky	deposit of calc-sludge	12000000	3	40
42	Hungary	Upper Danube Environmental Inspectorates area			Almásfüzito 03/29,30,31	VII. Reservoir for red-dross	3,250,000	3	40
43	Hungary	Central Transdanubian Environmental Inspectorates Area		Ajka	MAL Inc. FVIII store, reclaimed	red dross settlements	29,000,000	3	40
44	Romania		Hunedoara		Mintia	slag and ash pond	9700000	3	40
45	Hungary	Upper Danube Environmental Inspectorates area			Almásfüzito 06/8	VI. Reservoir for red-dross	1,800,000	3	40
46	Hungary	Upper Danube Environmental Inspectorates area			Neszmély 0125	VIII. Reservoir for red-dross	5,000,000	3	40
47	Hungary	Upper Danube Environmental Inspectorates area			Almásfüzito 118	III. Reservoir for red-dross	1,000,000	3	40
48	Hungary	Upper Danube Environmental Inspectorates area			Almásfüzito 06/10	V. Reservoir for red-dross	800,000	3	40
49	Hungary	Upper Danube Environmental Inspectorates area			Almásfüzito 06/12	IV. Reservoir for red-dross	600,000	3	40
50	Hungary	Middle Tisa Environmental Inspectorates Area		Szolnok	TVM Inc. (waste of chemical industry)	polluted earth	600,000	3	40.0
51	Hungary	Körös Environmental Inspectorates Area		Békéscsaba	Establishmen organic waste	reclaimed waste storage	780,000	3	40
52	Hungary	Middle Danube Environmental Inspectorates area		Budapest, XXII. Harangozó u.	Metallochemia	metalslag	650,000	3	40
53	Slovakia				DROTOVNE, Hlohovec	Fe- sludge bed	160000	3	37
54	Hungary	Upper Danube Environmental Inspectorates area			Almásfüzito 119/11 Hrsz	I-II Reservoir for red-dross	450,000	3	37
55	Slovakia				TKO, Kysucke Nove Mesto	closed deposit of fouling industrial sludge	150000	3	37
56	Hungary	North Hungarian Environmental Inspectorate Area		Tarnaszentmária	MH Tarnaszentmária Fuel depot		69.000 and 69.000	4	37

Rank	Country	Region	county	community	location/ name	deposit type	capacity in m <sup>3</sup>	Risk value r0	Risk Potential according old m1
57	Hungary	North Hungarian Environmental Inspectorate Area		Mezőkövesd Hrsz: 0456/2	MH Mezőkövesd Fuel depot „K” area		52.500 and 67.500	4	37
58	Hungary	Middle Danube Environmental Inspectorates area			Tököl		308000 and 209.900	3	37
59	Romania		Dambovită		Doicești	slag and ash pond	500,000	3	37
60	Romania		Tulcea		Turcoaia	sterile pond	440000	3	37
61	Romania		Dolj		Calafat	industrial wastes	435000	3	37
62	Hungary	South Transdanubian Environmental Inspectorates Area		Mohács		settlement waste	370,000	3	37
63	Hungary	South Transdanubian Environmental Inspectorates Area		Barcs		settlement waste	300,000	3	37
64	Hungary	Körös Environmental Inspectorates Area		Gyula	Establishmen organic waste		273,773	3	37
65	Hungary	Middle Tisa Environmental Inspectorates Area		Jászberény	ELEKTROLUX - LEHEL Ltd WDS-1 (waste of chemical industry)	polluted earth	155,000	3	37.0
66	Hungary	South Transdanubian Environmental Inspectorates Area		Harkány		settlement waste	114,000	3	37
67	Hungary	South Transdanubian Environmental Inspectorates Area		Siklós		settlement waste	112,000	3	37

Rank	Country	Region	county	communit	location/ name	deposit type	capacity in m <sup>3</sup>	Risk value r	Risk Potential according old m1
1	Hungary	Central Transdanubian Environmental Inspectorates Area		Dunaújváros	Dunaferr Inc.	industrial sewage sludge	1.500.000	5	55
2	Germany		Stadt Straubing	Stadt Straubing	Deponie Peterswöhrd		1.450.000	5,0	55
3	Romania		Sibiu		Copsa Mica	industrial waste	1.350.000	5	55
4	Romania		Hunedoara		Calan	slag and ash pond	1.300.000	5	55
5	Romania		Hunedoara		Calan	slag and ash pond	1300000	5	55
6	Slovakia				ZSNP, Ziar n./Hronom	alkaline water	1000000	5	55
7	Slovakia				A.S.A. Zohor	deposit of mixed danger waste	350000	5	55
8	Slovakia				Skladka odpadov OFZ, Siroka	deposit of industrial arsenical waste	600000	5	55
9	Ukraine				The Odessa area Izmail Cellulose cardboard combine		200.000	5	55
10	Ukraine				The Odessa area Izmail Cellulose cardboard combine		23300 per day	4	55
11	Austria	Kärnten	Sankt Veit an der Glan	Althofen	Landfill Roßwiese	Industriemüll	500.000	5,0	50
12	Austria	Kärnten	Sankt Veit an der Glan	Brückl	lime dump site Brückl Wl	Industrieabfälle, Bauschutt, Aushubmaterial	250.000	4,5	50
13	Austria	Tirol	Schwaz	Pill, Weer	Landfill Pill	Hausmüll, Bauschutt, Industrie-/Gewerbemüll	1.000.000	4,0	50
14	Austria	Niederösterreich	Tulln	Tulln	Landfill Tulln	Hausmüll, Bauschutt, Industrie-/Gewerbemüll	200.000	3,5	50

Rank	Country	Region	county	community	location/ name	deposit type	capacity in m <sup>3</sup>	Risk value r0	Risk Potential according old m1
15	Hungary	Central Transdanubian Environmental Inspectorates Area		Ajka	Bakonyi Erőmű Inc.	gray sludge	15.000.000	4	49
16	Romania		Bacau		Letea Veche	slag and ash pond	13.150.000	4	49
17	Hungary	Middle Danube Environmental Inspectorates area		Lőrinci	Fixon Bt.-Humiron Ltd.	slag and dust ash	5.000.000	4	49
18	Hungary	North Hungarian Environmental Inspectorate Area		Tiszaújváros	AES borsodi Energetikai Ltd Tiszapalkonyai Hőerőmű		1.400.000	4	49
18	Hungary	Middle Tisa Environmental Inspectorates Area		Szolnok	Béghin-Say Cukorgyár Inc.(technology waste-water thickener)	waste water sludge in lake	1.300.000	4	49
20	Romania		Teleorman		Tumu Magurele	pyrite ash pond	1.900.000	4	49
21	Romania		Sibiu		Copsa Mica	industrial wastes	1350000	4	49
22	Slovakia				CHEMKO, Strazske	leach out during flood	800000	4	49
23	Slovakia				DUSLO, Šala	sludge bed	750000	4	49
24	Slovakia				CHEMKO, Strazske	leach out during	600000	4	49
25	Romania		Dolj		Calafat	slag and ash pond	665.000	4	49
26	Slovakia				PETROCHEMA, Predajna	overspill by heavy raining	120000	4	47
27	Slovakia				ENO, Zemianske Kostolany	deposit of fly-ash	300000	4	47
28	Slovakia				KOVOHUTY, Krompachy	leach out during flood	285000	4	47
29	Slovakia				BUKOCEL, Vranov n.Toplou	leach out during flood	153000	4	47
30	Germany		Dillingen	Dillingen	Hühnerwörth		470.000	4,0	47

Rank	Country	Region	county	community	location/ name	deposit type	capacity in m <sup>3</sup>	Risk value r0	Risk Potential according old m1
31	Hungary	Central Transdanubian Environmental Inspectorates Area		Dunaújváros	Dunapack Inc.	mix sludge	212.000	4	47
32	Hungary	North Hungarian Environmental Inspectorate Area		Tiszaújváros	Tisa Chemical Self-contained plant		211.000	4	47
33	Slovakia				Skladka TKO, Turzovka	leaking tube line	105000	4	47
34	Slovakia				Teplaren, Povazska Bystrica	closed deposit of fly-ash of refuse incinerating plant	345000	4	47
35	Romania		Dolj		Calafat	industrial waste	435.000	4	47
36	Hungary	North Hungarian Environmental Inspectorate Area		Mezőkövesd Air	Mezőkövesd – „B” area Old Fuel depot		300.000 and 60.000	4	47
37	Hungary	Middle Danube Environmental Inspectorates area			Budapest, Csepel-island Nord	Abandon sewage sludge depots	300.000	4	47
38	Slovakia			A.S.A. Zohor	deposit of danger waste, oil waste		350.000	4	47
39	Slovakia			Predajna	deposit of gudrons PETROCHEMA		120.000	4	47
40	Austria	Kärnten	Villach Land	Ferndorf	Industrial deposit Heraklithwerke Ferndorf	Industrieabfälle	500.000	3,5	42
41	Slovakia				NCHZ, Novaky	deposit of calc-sludge	12000000	3	40
42	Hungary	Upper Danube Environmental Inspectorates area			Almásfüzitő 03/29,30,31	VII. Reservoir for red-dross	3.250.000	3	40
43	Hungary	Central Transdanubian Environmental Inspectorates Area		Ajka	MAL Inc. I-VIII. store, reclaimed	red dross settlements	29.000.000	3	40
44	Romania		Hunedoara		Mintia	slag and ash pond	9700000	3	40
45	Hungary	Upper Danube Environmental Inspectorates area			Almásfüzitő 06/8	VI. Reservoir for red-dross	1.800.000	3	40

Rank	Country	Region	county	community	location/ name	deposit type	capacity in m <sup>3</sup>	Risk value r0	Risk Potential according old m1
46	Hungary	Upper Danube Environmental Inspectorates area			Neszmély 0125	VIII. Reservoir for red-dross	5.000.000	3	40
47	Hungary	Upper Danube Environmental Inspectorates area			Almásfüzitő 118	III. Reservoir for red-dross	1.000.000	3	40
48	Hungary	Upper Danube Environmental Inspectorates area			Almásfüzitő 06/10	V. Reservoir for red-dross	800.000	3	40
49	Hungary	Upper Danube Environmental Inspectorates area			Almásfüzitő 06/12	IV. Reservoir for red-dross	600.000	3	40
50	Hungary	Middle Tisa Environmental Inspectorates Area		Szolnok	TVM Inc. (waste of chemical industry)	polluted earth	600.000	3	40,0
51	Hungary	Körös Environmental Inspectorates Area		Békéscsaba	Establishmen organic waste	reclaimed waste storage	780.000	3	40
52	Hungary	Middle Danube Environmental Inspectorates area		Budapest, XXII. Harangozó u.	Metallochemia	metalslag	650.000	3	40
53	Slovakia				DROTOVNE, Hlohovec	Fe- sludge bed	160000	3	37
54	Hungary	Environmental Inspectorates			Almásfüzitő 119/11 Hrsz	III Reservoir for red-dross	450.000	3	37
55	Slovakia				TKO, Kysucke Nove Mesto	closed deposit of fouling industrial sludge	150000	3	37
56	Hungary	North Hungarian Environmental Inspectorate Area		Tamaszentmária	MH – Tarnaszentmária Fuel depot		69.000 and 69.000	4	37
57	Hungary	North Hungarian Environmental Inspectorate Area		Mezőkövesd Hrs	MH – Mezőkövesd Fuel depot „K” area		52.500 and 67.500	4	37
58	Hungary	Middle Danube Environmental Inspectorates area			Tököl		308000 and 209.900	3	37
59	Romania		Dambovita		Doicesti	slag and ash pond	500.000	3	37
60	Romania		Tulcea		Turcoaia	sterile pond	440000	3	37



Rank	Country	Region	county	community	location/ name	deposit type	capacity in m <sup>3</sup>	Risk value r0	Risk Potential according old m1
61	Romania		Doj		Calafat	industrial wastes	435000	3	37
62	Hungary	South Transdanubian Environmental Inspectorates Area		Mohács		settlement waste	370.000	3	37
63	Hungary	South Transdanubian Environmental Inspectorates Area		Barcs		settlement waste	300.000	3	37
64	Hungary	Kőrös Environmental Inspectorates Area		Gyula	Establishmen organic waste		273.773	3	37
65	Hungary	Middle Tisa Environmental Inspectorates Area		Jászberény	ELEKTROLUX - LEHEL Ltd WDS-1 (waste of chemical industry )	polluted earth	155.000	3	37,0
66	Hungary	South Transdanubian Environmental Inspectorates Area		Harkány		settlement waste	114.000	3	37
67	Hungary	South Transdanubian Environmental Inspectorates Area		Siklós		settlement waste	112.000	3	37

**Table 3-2: Ranked CS Considering the Estimated Risk Potential according to the modified m1-methodology (List priority sites)**

**3.2.1: Result of the ranking of the Austrian sites classified by surface area using the adapted methodology**

Rank	Country	Region	county	community	location/ name	Endangered by Floods, Flood frequency	river	area in sqm	Risk value r0	Risk Potential according old m1	Risk Potential according new m1
1	Austria	Wien	22. Donaustadt	Wien	Tankfarm Lobau	1	Danube	1,000,000	5.0	50	59.00
2	Austria	Wien	11. Simmering	Wien	Gas works Simmering	1	Danube	325,000	5.0	50	58.00
3	Austria	Wien	11. Simmering	Wien	EBS-BP-TKV	1	Danube	200,000	5.0	50	58.00
4	Austria	Wien	23. Liesing	Wien	Siebenhirten	1	Liesing	150,000	5.0	50	58.00
5	Austria	Wien	11. Simmering	Wien	Teerag-Asdag-Simmering	1	Danube	130,000	5.0	50	58.00
6	Austria	Niederösterreich	Korneuburg	Korneuburg	refinery Tuttendorfer Breite	1	Danube	180,000	4.5	50	58.00
7	Austria	Niederösterreich	Korneuburg	Korneuburg	Shipyard Korneuburg	3	Danube	200,000	4.0	50	57.00
8	Austria	Niederösterreich	Mödling	Vösendorf	refinery Vösendorf	1	Petersbach	145,000	4.5	50	57.00
9	Austria	Kärnten	Klagenfurt	Klagenfurt	Leather factory Neuner	1	Glan	120,000	4.5	50	57.00
10	Austria	Kärnten	Sankt Veit an der Glan	Brückl	Donau Chemie Brückl	2	Gurk	50,000	5.0	50	56.00
11	Austria	Niederösterreich	Korneuburg	Korneuburg	Tankfarm Mare	3	Danube	10,000	4.0	50	51.00

Rank	Country	Region	County	Location/ Name	Flood Frequency	River	Area in m <sup>2</sup>	Risk Value r	Risk Potential old m	Risk Potential new m
	Austria	Wien	. Donaustadt	Tankfarm Lobau	low	Danube	.	.	.	.
	Austria	Wien	. Simmering	Gas works Simmering	low	Danube	.	.	.	.
	Austria	Wien	. Simmering	EBS-BP-TKV	low	Danube	.	.	.	.
	Austria	Wien	. Liesing	Siebenhirten	low	Liesing	.	.	.	.
	Austria	Wien	. Simmering	Teerag-Asdag-Simmering	low	Danube	.	.	.	.
	Austria	Niederösterreich	Korneuburg	refinery Tuttendorfer Breite	low	Danube	.	.	.	.
	Austria	Niederösterreich	Korneuburg	Shipyards Korneuburg	high	Danube	.	.	.	.
	Austria	Niederösterreich	Mödling	refinery Vösendorf	low	Petersbach	.	.	.	.
	Austria	Kärnten	Klagenfurt	Leather factory Neuner	low	Glan	.	.	.	.
	Austria	Kärnten	Sankt Veit an der Glan	Donau Chemie Brückl	middle	Gurk	.	.	.	.
	Austria	Niederösterreich	Korneuburg	Tankfarm Mare	high	Danube	.	.	.	.

### **3.2.2 Result of the ranking of the sites classified by volume using the adapted methodology**

Rank	Country	Region	county	communi ty	location/ name	deposit type	capacity in m <sup>3</sup>	Risk value r0	Risk Potential according old m1	Risk Potential according new m1
1	Hungary	Central Transdanubian Environmental Inspectorates Area		Dunaújvár os	Dunaferr Inc.	industrial sewage sludge	1,500,000	5	55	57
2	Germany		Stadt Straubing	Stadt Straubing	Deponie Peterswöhrd		1,450,000	5.0	55	57
3	Romania		Sibiu		Copsa Mica	industrial waste	1,350,000	5	55	57
4	Romania		Hunedoar a		Calan	slag and ash pond	1,300,000	5	55	57
5	Romania		Hunedoar a		Calan	slag and ash pond	1300000	5	55	57
6	Slovakia				ZSNP, Ziar n./Hronom	alkaline water	1000000	5	55	55
7	Slovakia				A.S.A. Zohor	deposit of mixed danger waste	350000	5	55	55
8	Slovakia				Skladka odpadov OFZ, Siroka	deposit of industrial arsenical waste	600000	5	55	55
9	Austria	Kärnten	Sankt Veit an der Glan	Althofen	Landfill Roßwiese	Industrie müll	500,000	5.0	50	55
10	Ukraine				The Odessa area Izmail Cellulose cardboard combine		200,000	5	55	55
11	Hungary	Central Transdanubian Environmental Inspectorates Area		Ajka	Bakonyi Eromu Inc.	gray sludge	15,000,00 0	4	49	53
12	Romania		Bacau		Letea Veche	slag and ash pond	13,150,00 0	4	49	53
13	Hungary	Middle Danube Environmental Inspectorates area		Lorinci	Fixon Bt.- Humiron Ltd.	slag and dust ash	5,000,000	4	49	53
14	Ukraine				The Odessa area Izmail Cellulose cardboard combine		23300 per day	4	55	53

Rank	Country	Region	county	communi ty	location/ name	deposit type	capacity in m <sup>3</sup>	Risk value r0	Risk Potential according old m1	Risk Potential according new m1
15	Austria	Kärnten	Sankt Veit an der Glan	Brückl	lime dump site Brückl I/II	Industrieabfälle, Bauschutt, Aushubmaterial	250,000	4.5	50	51
16	Hungary	North Hungarian Environmental Inspectorate Area		Tiszaújváros	AES borsodi Energetikai Ltd Tiszapalkonya i Hoeromu		1,400,000	4	49	50
17	Hungary	Middle Tisa Environmental Inspectorates Area		Szolnok	Béghin-Say Cukorgyár Inc.(technology waste-water thickerer)	waste water sludge in lake	1,300,000	4	49	50
18	Austria	Tirol	Schwaz	Pill, Weer	Landfill Pill	Hausmüll, Bauschutt, Industrie- /Gewerbe müll	1,000,000	4.0	50	50
19	Romania		Teleorman		Tumu Magurele	pyrite ash pond	1,900,000	4	49	50
20	Romania		Sibiu		Copsa Mica	industrial wastes	1350000	4	49	50
21	Slovakia				CHEMKO, Strazske	leach out during flood	800000	4	49	49
22	Slovakia				DUSLO, Šala	sludge bed	750000	4	49	49
23	Slovakia				CHEMKO, Strazske	leach out during flood	600000	4	49	49
24	Romania		Dolj		Calafat	slag and ash pond	655,000	4	49	49
25	Slovakia				PETROCHE MA, Predajna	overspill by heavy raining	120000	4	47	47
26	Slovakia				ENO, Zemianske Kostolany	deposit of fly-ash	300000	4	47	47
27	Slovakia				KOVOHUTY , Krompachy	leach out during flood	285000	4	47	47
28	Slovakia				BUKOCEL, Vranov n.Toplou	leach out during flood	153000	4	47	47
29	Germany		Dillingen	Dillingen	Hühnerwörth		470,000	4.0	47	47
30	Hungary	Central Transdanubian Environmental Inspectorates Area		Dunaújváros	Dunapack Inc.	mix sludge	212,000	4	47	47
31	Hungary	North Hungarian Environmental		Tiszaújváros	Tisa Chemical Self-contained plant		211,000	4	47	47

Rank	Country	Region	county	communi ty	location/ name	deposit type	capacity in m <sup>3</sup>	Risk value r0	Risk Potential according old m1	Risk Potential according new m1
		Inspectorate Area								
32	Slovakia				Skladka TKO, Turzovka	leaking tube line	105000	4	47	47
33	Slovakia				Teplaren, Povazska Bystrica	closed deposit of fly-ash of refuse inicinerati ng plant	345000	4	47	47
34	Romania		Dolj		Calafat	slag and ash pond	655000	4	47	47
35	Hungary	North Hungarian Environmental Inspectorate Area		Mezoköve sd Airport	Mezokövesd – „B” area Old Fuel depot		300.000 and 60.000	4	47	47
36	Hungary	Middle Danube Environmental Inspectorates area			Budapest, Csepel-island Nord	Abandon sewage sludge depots	300,000	4	47	47
37	Slovakia			A.S.A. Zohor	deposit of danger waste, oil waste		350,000	4	47	47
38	Slovakia			Predajna	deposit of gudrons PETROCHE MA		120,000	4	47	47

Rank	Country	Region	county	community	location/ name	deposit type	capacity in m <sup>3</sup>	Risk value r0	Risk Potential according old m1	Risk Potential according new m1
1	Hungary	Central Transdanubian Environmental Inspectorates Area		Dunaújváros	Dunafeir Inc.	industrial sewage sludge	1.500.000	5	56	57
2	Germany		Stadt Straubing	Stadt Straubing	Deponie Petersewöhrd		1.450.000	5,0	56	57
3	Romania		Sibiu		Copsa Mica	industrial waste	1.350.000	5	56	57
4	Romania		Hunedoara		Calan	slag and ash pond	1.300.000	5	56	57
5	Romania		Hunedoara		Calan	slag and ash pond	1300000	5	56	57
6	Slovakia				ZSNP, Ziar nuhtrom	alkaline water	1000000	5	56	56
7	Slovakia				A.S.A. Zohar	deposit of mixed danger waste	390000	5	56	56
8	Slovakia				Skladka odpadov OFZ, Siroka	deposit of industrial arsenical waste	600000	5	56	56
9	Austria	Kärnten	Sankt Veit an der Glan	Athofen	Landfill Roßwiese	Industriemöl	600.000	5,0	50	55
10	Ukraine				The Odessa area Izmail Cellulose cardboard combine		200.000	5	56	56
11	Hungary	Central Transdanubian Environmental Inspectorates Area		Ajka	Bakenyi Erömü Inc.	gray sludge	15.000.000	4	49	53
12	Romania		Bacau		Letea Veche	slag and ash pond	13.150.000	4	49	53
13	Hungary	Middle Danube Environmental Inspectorates area		Láninci	Fixon Bt.-Humiton Ltd.	slag and dust ash	5.000.000	4	49	53
14	Ukraine				The Odessa area Izmail Cellulose cardboard combine		29300 per day	4	56	53

Rank	Country	Region	county	community	location/ name	deposit type	capacity in m <sup>3</sup>	Risk value r0	Risk Potential according old m1	Risk Potential according new m1
15	Austria	Kärnten	Sankt Veit an der Glan	Brückl	lime dump site Brückl MI	Industrieabfälle, Bauschutt, Aushubmaterial	250.000	4,5	50	51
16	Hungary	North Hungarian Environmental Inspectorate Area		Tiszalújváros	AES borsodi Energetikai Ltd Tiszapalkonyai Hőerőmű		1.400.000	4	49	50
17	Hungary	Middle Tisa Environmental Inspectorates Area		Szohak	Béghin-Say Cukorgyár Inc. (technology waste-water thickener)	waste water sludge in lake	1.300.000	4	49	50
18	Austria	Tirol	Schwarz	Pill, Weer	Landfill Pill	Hausmüll, Bauschutt, Industrie-/Gewerbetüll	1.000.000	4,0	50	50
19	Romania		Teleorman		Tumu Magureala	pyrite ash pond	1.900.000	4	49	50
20	Romania		Sibiu		Copsa Mica	industrial wastes	1350000	4	49	50
21	Slovakia				CHEMKO, Strazske	leach out during flood	800000	4	49	49
22	Slovakia				DUSLO, Šala	sludge bed	750000	4	49	49
23	Slovakia				CHEMKO, Strazske	leach out during	600000	4	49	49
24	Romania		Doj		Calafat	slag and ash pond	655.000	4	49	49



Rank	Country	Region	county	community	location/ name	deposit type	capacity in m³	Risk value r0	Risk Potential according old m1	Risk Potential according new m1
25	Slovakia				PETROCHEMA, Predajna	overspill by heavy raining	120000	4	47	47
26	Slovakia				ENO, Zemianske Kostelany	deposit of fly-ash	300000	4	47	47
27	Slovakia				KOYDHUTY, Krompachy	leach out during flood	266000	4	47	47
28	Slovakia				BUKOCEL, Vranov n.Topľou	leach out during flood	153000	4	47	47
29	Germany		Dillingen	Dillingen	Hohmerwerth		470.000	4,0	47	47
30	Hungary	Central Transdanubian Environmental Inspectorate Area		Dunaújváros	Dunapack Inc.	mix sludge	212.000	4	47	47
31	Hungary	North Hungarian Environmental Inspectorate Area		Tiszaujváros	Tisa Chemical Self-contained plant		211.000	4	47	47
32	Slovakia				Skladka TKO, Turzovka	leaking tube line	106000	4	47	47
33	Slovakia				Teplaren, Povazska Bystrica	closed deposit of fly-ash of refuse incinerating plant	346000	4	47	47
34	Romania		Doj		Calafat	slag and ash pond	666000	4	47	47
35	Hungary	North Hungarian Environmental Inspectorate Area		Mezőkövesd Árt	Mezőkövesd – „B” area Old Fuel depot		300.000 and 60.000	4	47	47
36	Hungary	Middle Danube Environmental Inspectorates area			Budapest, Csepel-island Nord	Abandon sewage sludge depots	300.000	4	47	47
37	Slovakia			A.S.A. Zohor	deposit of danger waste, oil waste		350.000	4	47	47
38	Slovakia			Predajna	deposit of gudrons PETROCHEMA		120.000	4	47	47

## Annex 4

### Results of the ARS inventory of Austria in 2003



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Fld.Nr	Betrieb Name	Ort	Zweck des Betriebes	Kategorie Stoffmenge/Lager	Art des wassergefährdenden Stoffes	WGK	GSI	Gewässer
1	Agrolinz Melamin Ges.m.b.H	Linz	Chemie	11284	Kohlenmonoxid (0,4 to)	1	6,1	Donau
					Ammoniak (11210 to), Natriumnitrit (65 to), Formaldehyd (Konz. >=90 %) (7,5 to)	2		
					Hydrazin (1,2 to)	3		
					105	Kaliumnitrat (105 to)		
3	Avanti International AG Zentraltanklager Lobau	Wien	Tanklager	61420	Diesel / Ofenöl (74.000 m3)	2	6,8	Donau
					1057	Ammoncarbonatlaugen (320 to), Ammoniakwasser (677 to), Diphenyl (40 to), Nickelverbindungen (19,6 to)		
4	Biochemie Ges.m.b.H	Kundl	Chemie	>50000	Mengenschwellen überschreitung nach der Additionsregel	2	6,7	Wild schönauer Ache/Inn
				20	u.a. Bortrifluorid (17 to)	3		
				576	Methanol	1		
				>200	Mengenschwellen überschreitung nach der Additionsregel	2		
				>200	Mengenschwellen überschreitung nach der Additionsregel	2		
				>200	Mengenschwellen überschreitung nach der Additionsregel	2		
5	Chem. Farbenfabrik H.M.Habich GmbH	Weitenegg	Chemie/Farben	225	Diverse Stoffe R50/53	2	1,4	Donau
6	Chemson Polymer-Additive AG	Arnoldstein	Chemie	2300	Bleiverbindungen 2.300 t	2	5,4	Gailitz
7	Donau Chemie AG, Brückl	Brückl	Chemie	263	Chlor	2	4,4	Gurk
8	Donau Chemie AG, Pischelsdorf	Pischelsdorf	Chemie	4500	Schwefeldioxid	1	4,7	Perschling
9	Donauchem Handelsges.m.b.H, Lobgrundstraße	Wien	Chemikalienhandel	900	Methanol	1	5,4	Donau
				4200	Testbenzin, Shellsol, Kristallöl, Petroleum (total 2.400 to)	1		
					Kristallöl, Shellsol H, Shellsol A (total 1.800 to)	2		
			500	Shellsol AB (lt. Betrieb in Kat. 8)	2			

Flid.Nr	Betrieb Name	Ort	Zweck des Betriebes	Kategorie Stoffmenge/Lager	Art des wassergefährdenden Stoffes	WGK	GSI	Gewässer
10	DSM Fine Chemicals Austria Ges.m.b.H	Linz	Chemie	>200	giftige Stoffe	2	4.3	Donau
11	Dynea Austria Ges.m.b.H (vorm. Krems Chemie)	Krems	Chemie	15335	Methanol (10100 to) Phenol (315 to), Formalin (4920 to)	1 2	5.8	Donau
12	Esso Austria Ges.m.b.H Zentraltanklager Lobau	Wien	Tanklager	50000	Erdölprodukte	2	6.7	Donau
13	Eurofoam Ges.m.b.H Kremsmünster	Kremsmünster	Chemie	336	Toluylendiisocyanat	2	4.5	Krems
14	Eurofoam Ges.m.b.H.Linz	Linz	Chemie	152	Toluylendiisocyanat	2	4.2	Donau
15	Erdöllager Ges.m.b.H	Lannach	Tanklager	430000	Rohöl	3	8.6	Kainach
16	Furtenbach Ges.m.b.H	Wiener Neustadt	Giessereichemikalien	>200	Phenol (>200 to)	2	4.3	Leitha**)
17	Glanzstoff Austria Ges.m.b.H&Co KG	St. Pölten Wiener Neustadt	Chemie	227	Schwefelkohlenstoff	2	4.4	Mühlbach Traisen
18	JLC-Chemie Handels Ges. m.b.H	St. Pölten Wiener Neustadt	Chemie	>200	Methanol	1	3.3	Leitha
19	Infineon Technologies Villach AG		Halbleiterfertigung	55	FluBsäure (7,6 to) und -zubereitungen (4,63 to) und weitere Stoffe. Aus Einzelstoffliste: Fluorwasserstoff und -zubereitungen (42 to) Diverse Stoffe (0,6 to)	1 2	2.8	Drau
20	Isovolta Österreichische Isolierstoffwerke AG	Wr.Neudorf	Chemie	1481	Methanol (126 to), Phenolharz (460 to) Formalin (400 to), Phenol (490 to), IPDI (3 to), Anilin (2 to)	1 2	5.0	Mödling bach
21	Johnson Controls Austria Ges.m.b.H	Mandling	Petrochemie	60	Desmodur (= TDI)	2	3.8	Enns
22	KCC Krems Chemie Chemical Services GmbH	Krems	Chemie	120 1489	giftige und sehr giftige Stoffe zB.: Xylol (1731 m3).	2 2	5.2	Donau
23	Lenzing AG	Lenzing	Papier	2660 920	CS2 (Schwefelkohlenstoff) Schwefeldioxid (320 t) Furfural (600 to)	2 1 2	5.5	Ager

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Flfd.Nr	Betrieb Name	Ort	Zweck des Betriebes	Kategorie Stoffmenge/Lager	Art des wassergefährdenden Stoffes	WGK	GSI	Gewässer
24	LLT Lannacher Lager-und Transport Ges.m.b.H	Korneuburg	Pflanzenschutzmittel	>20	Pflanzenschutzmittel	3	4,3	Donau
25	M-Real (MODO PAPER)	Hallein	Papier	212	Schwefeldioxid	1	3,3	Salzach
26	Neuber Ges.m.b.H	Guntramsdorf	Chemie	43	Flusssäurelösung (40 to)	1	2,8	Mödlingbach
27	Nufarm Pflanzenschutz Ges.m.b.H & Co AG	Linz	Chemie	64	Toluoldiisocyanat (3 to) 3,4-Dichlorphenylisocyanat (64,1 to). Anmerkung: nur einer dieser Stoffe gleichzeitig in der Anlage	2	5,1	Donau
				573	Schwefeldioxid (14,3 to)	1		
					Phenol (159 to), Monochloressigsäure, Schmelze (178,1 to), Monochloressigsäure, wässrige Lösung (164,4 to)	2		
					1,2-Dichlorethan(57,6 to)	3		
28	ÖCW Zweigniederlassung der Degussa CEE GmbH	Weißenstein o.d. Drau	Chemie	60	Naphthochinon (30 to)	2	5,0	Drau
					Acrolein (30 to)	3		
				1700	H2O2 (Wasserstoffperoxid) 1.500 to Peressigsäure (200 to)	1 2		
				600	Acrylsäure (200 to)	1		
					Thioharnstoff (400 to)	2		
29	OMV Zentraltanklager St. Valentin	St. Valentin	Petrochemie/Tanklager	514000	Diverse Erdölprodukte	2	7,7	Donau
30	OMV Zentraltanklager Lobau	Wien	Petrochemie/Tanklager	800000	Diverse Erdölprodukte	2	7,9	Donau
31	Österreichische Novopan-Holzindustrie Ges.m.b.H	Leoben	Holzindustrie	1890	Methanol (1230 to)	1	4,9	Mur
					Formaldehyd (660 to)	2		

Fld.Nr	Betrieb Name	Ort	Zweck des Betriebes	Kategorie Stoffmenge/Lager	Art des wassergefährdenden Stoffes	WGK	GS1	Gewässer
32	Philips Components Lebring Ges.m.b.H	Lebring-St.Margarethen	Elektronik	32	Flußsäure 75% (31,98 to) Ammoniumdichromat (0,05 to)	1 3	2,6	Mur
33	OMV, Raffinerie Schwechat	Schwechat	Petrochemie	343500 1045 67000	R11 und R12 Methanol (902 to) 49 + 94 to T, Anmerkung: T = giftig R50 o. 50/53	2 1 2 2	7,6	Schwechat
34	Reichhold Chemie Ges.m.b.H	Wien	Chemie	400 1700 >200	Phenol, Formaldehyd, Kresole, Xylenole entzündliche und leicht entzündliche Flüssigkeiten umweltgefährliche Stoffe (Heizöl) ca. 200 to	2 2 2	5,4	Donau
35	Schoeller-Bleckmann Edelstahlrohr AG	Ternitz	Metallindustrie	20 70 25 150	Flußsäure; Additionsregel Kolenesalz, Bonder 72F, KMnO4; Additionsregel Schmiere, Hydrauliköle, Petroleum; Additionsregel HCl (Salzsäure), HNO3 (Salpetersäure), H2SO4 (Schwefelsäure) (130 to), Dowclene (20 to); Additionsregel	3 2 2 1	4,5	Schwarza/ Leitha
36	Solutia Austria Ges. m.b.H	Werdorf	Chemie/Lacke	90	TDI (= Toluylendiisocyanat)	2	4,0	Mur
37	Sunpor Kunststoff Ges.m.b.H	St. Pölten	Kunststoffindustrie	75 658	Pentan - hochentzündlich gem. Seveso 2 Richtlinie Methylstyrol (2,5 to), Styrol Monomer (655 to)	1 2	4,8	Traisen
38	Swarovski D&Co	Wattens	Glasindustrie	>50000 42	Mengenschwellen überschreitung Additionsregel Flusssäure (42 to)	2 1	6,7	Inn
39	TBF Tanklager Betriebsführungsges.m.b.H	Linz	Tanklager	8300	Mitteldestillate (10.000 m3)	2	5,9	Donau

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Ffd.Nr	Betrieb Name	Ort	Zweck des Betriebes	Kategorie Stoff menge/Lager	Art des wassergefährdenden Stoffes	WGK	GSI	Gewässer
40	Vantico	Wien	Chemie/Kunstharz	600	Kunstharze	2	4,8	Liesing/Schwechat Donau
41	Wienstrom Ges.m.b.H	Wien	Energie	>200	Ammoniak (200 to)	2	4,3	(kanal)
Anmerkung:						<b>GSI insgesamt</b>	8,798	

Alle Betriebe mit Stoffen der Kategorien 2,3,4,5,7,8 wurden in die Berechnung ohne spezifische Betrachtung der Einzelstoffe einbezogen; damit sind vereinzelt auch Stoffe mit Stoffzustand gasförmig, die diesen Kat. zuzuordnen waren, mitgerechnet

Kategorien mit WGK 0 wurden nicht aufgenommen

Kategorien 1 und 6 nicht relevant

\*) km bis zum grenzüberschreitenden Gewässer

\*\*) Bei Furtenbach, ILC und Schöller-Bleckmann auch Donaugebiet betroffen (Leitha durch Ausleitungen beeinflusst)



## Annex 5

### Results of the ARS inventory of Bosnia in 2003

# Bosnia and Herzegovina

## Federation of Bosnia and Herzegovina

### Watershed of the river Danube/ Coordinates of the Potential Accident Risks Spots

No.	Sub River Basin	Location	Source of Potential Accident Risks	Coordinates	
				X	Y
1.	River Una	Bihac	Oils tanks	5 573 500	4 961 600
	River Una	Pokoj	Oil tanks	5 570 400	4 967 700
2.	River Vrbas	Jajce	Ferro silicon factory	6 441 800	4 910 300
	River Vrbas	Jajce	Aluminums factory	6 443 600	4 911 200
	River Vrbas	Jajce	Old dump of track battery	6 443 800	4 911 700
3.	River Bosna	Vares	Old open iron mine, filled with atmospheric water	6 525 500	4 890 200
	River Bosnia	Breza	Oil tanks	6 521 000	4 873 000
	River Bosna	Blazuj	Oil tanks	6 520 600	4 856 500
	River Bosna	Lukavac	Chemical factory – caustic soda	6 550 100	4 931 700
	River Bosna	Tuzla	Salt mines / salt water reservoirs	6 553 400	4 934 200
	River Bosna	Lukavac	Coke factory / out of operation at present time	6 549 400	4 931 500
	River Bosna	Tuzla	Chemical factory / out of operation at present time	6 550 500	4 931 600
	River Bosna	Zivinice	Oil tanks	6 552 800	4 920 900
4.	River Drina	Vitkovici	Nitogen composition factory	6 578 300	4 832 100