

**Attachment 10: Waste sampling and analysis**

<b>Parameter monitored</b>	<b>Standard methodology used (EN or ISO standards preferred)</b>	<b>Detection limit (include units)</b>	<b>Is this company accredited for this test?</b>
Sampling	UNI 10802:2013		Yes
<i>*Chemical Parameters</i>			
Lower calorific value	CNR IRSA 4 Q 64 Vol 2 1988	500Kcal/Kg	No
<i>*Metals</i>			
Antimony	UNI EN ISO 13657:2004 + APAT CNR IRSA 3020 Man 29 2003	0,1mg/kg	Yes
Arsenic	UNI EN ISO 13657:2004 + APAT CNR IRSA 3020 Man 29 2003	0,1mg/kg	Yes
Cadmium	UNI EN ISO 13657:2004 + APAT CNR IRSA 3020 Man 29 2003	0,1mg/kg	Yes
Hexavalent chromium (VI)	EPA 3060A 1996 + EPA 7196A 1992	0,1mg/kg	Yes
Iron	UNI EN ISO 13657:2004 + APAT CNR IRSA 3020 Man 29 2003	0,1mg/kg	Yes
Manganese	UNI EN ISO 13657:2004 + APAT CNR IRSA 3020 Man 29 2003	0,1mg/kg	Yes
Mercury	EPA 3051A 2007 + EPA 6010D 2014	0,1mg/kg	Yes
Nickel	UNI EN ISO 13657:2004 + APAT CNR IRSA 3020 Man 29 2003	0,1mg/kg	Yes
Lead	UNI EN ISO 13657:2004 + APAT CNR IRSA 3020 Man 29 2003	0,1mg/kg	Yes
Copper	UNI EN ISO 13657:2004 + APAT CNR IRSA 3020 Man 29 2003	0,1mg/kg	Yes
Selenium	UNI EN ISO 13657:2004 + APAT CNR IRSA 3020 Man 29 2003	0,1mg/kg	Yes
Tin	UNI EN ISO 13657:2004 + APAT CNR IRSA 3020 Man 29 2003	0,1mg/kg	Yes
Thallium	UNI EN ISO 13657:2004 + APAT CNR IRSA 3020 Man 29 2003	0,1mg/kg	Yes
Tellurium	UNI EN ISO 13657:2004 + APAT CNR IRSA 3020 Man 29 2003	0,1mg/kg	Yes
Vanadium	UNI EN ISO 13657:2004 + APAT CNR IRSA 3020	0,1mg/kg	Yes

	Man 29 2003		
Zinc	UNI EN ISO 13657:2004 + APAT CNR IRSA 3020 Man 29 2003	0,1mg/kg	Yes
Phenol	EPA 3541 1994 + EPA 3630C 1996 + EPA 8270D 2014	0,01mg/kg	Yes
Cyanides	EPA 9010C 2004 + EPA 9013A 2004 + EPA 9014 1996	0,1mg/kg	Yes
<b>*Organic Aromatic Compounds</b>			
Benzene	EPA 5021A 2003 + EPA 8260C 2006	0,01mg/kg	Yes
Ethylbenzene	EPA 5021A 2003 + EPA 8260C 2006	0,01mg/kg	Yes
Toluene	EPA 5021A 2003 + EPA 8260C 2006	0,01mg/kg	Yes
Styrene	EPA 5021A 2003 + EPA 8260C 2006	0,01mg/kg	Yes
Xylenes	EPA 5021A 2003 + EPA 8260C 2006	0,01mg/kg	Yes
BTEX (Total Organic Aromatic Compounds)	EPA 5021A 2003 + EPA 8260C 2006	0,01mg/kg	Yes
<b>PAHS</b>			
Benzo (a) anthracene	EPA 3541 1994 + EPA 3630C 1996 + EPA 8270D 2007	0,01mg/Kg SS	Yes
Benzo (a) pyrene	EPA 3541 1994 + EPA 3630C 1996 + EPA 8270D 2007	0,01mg/Kg SS	Yes
Benzo (b) fluoranthene	EPA 3541 1994 + EPA 3630C 1996 + EPA 8270D 2007	0,01mg/Kg SS	Yes
Benzo (k) fluoranthene	EPA 3541 1994 + EPA 3630C 1996 + EPA 8270D 2007	0,01mg/Kg SS	Yes
Benzo (g, h, i) perylene	EPA 3541 1994 + EPA 3630C 1996 + EPA 8270D 2007	0,01mg/kg	Yes
Chrysene	EPA 3541 1994 + EPA 3630C 1996 + EPA 8270D 2007	0,01mg/Kg SS	Yes
Dibenzo (a,e) pyrene	EPA 3541 1994 + EPA 3630C 1996 + EPA 8270D 2007	0,01mg/kg	Yes
Dibenzo (a,l) pyrene	EPA 3541 1994 + EPA 3630C 1996 + EPA 8270D 2007	0,01mg/kg	Yes
Dibenzo (a,i) pyrene	EPA 3541 1994 + EPA 3630C 1996 + EPA 8270D 2007	0,01mg/kg	Yes
Dibenzo(a,h)pyrene	EPA 3541 1994 + EPA 3630C 1996 + EPA 8270D 2007	0,01mg/kg	Yes

Dibenzo (a, h) anthracene	EPA 3541 1994 + EPA 3630C 1996 + EPA 8270D 2007	0,01mg/Kg SS	Yes
Indeno (1,2,3-c,d) pyrene	EPA 3541 1994 + EPA 3630C 1996 + EPA 8270D 2007	0,01mg/kg	Yes
Pyrene	EPA 3541 1994 + EPA 3630C 1996 + EPA 8270D 2007	0,01mg/kg	Yes
PAHs	EPA 3541 1994 + EPA 3630C 1996 + EPA 8270D 2007	0,01mg/kg	Yes
<b>*Organohalogen Chemicals</b>			
Chloromethane	EPA 5021A 2003 + EPA 8260C 2006	0,01mg/kg	Yes
Dichloromethane	EPA 5021A 2003 + EPA 8260C 2006	0,01mg/kg	Yes
Tribromomethane (Bromoform)	EPA 5021A 2003 + EPA 8260C 2006	0,01mg/kg	Yes
Trichloromethane	EPA 5021A 2003 + EPA 8260C 2006	0,01mg/kg	Yes
Vinyl chloride	EPA 5021A 2003 + EPA 8260C 2006	0,01mg/kg	Yes
1,2-Dichloroethane	EPA 5021A 2003 + EPA 8260C 2006	0,01mg/kg	Yes
1,1-Dichloroethylene	EPA 5021A 2003 + EPA 8260C 2006	0,01mg/kg	Yes
1,2-Dichloropropane	EPA 5021A 2003 + EPA 8260C 2006	0,01mg/kg	Yes
1,1,2-Trichloroethane	EPA 5021A 2003 + EPA 8260C 2006	0,01mg/kg	Yes
Trichloroethylene	EPA 5021A 2003 + EPA 8260C 2006	0,01mg/kg	Yes
1,2,3-trichloropropane	EPA 5021A 2003 + EPA 8260C 2006	0,01mg/kg	Yes
1,1,2,2-tetrachlorine	EPA 5021A 2003 + EPA 8260C 2006	0,01mg/kg	Yes
Tetrachloroethylene	EPA 5021A 2003 + EPA 8260C 2006	0,01mg/kg	Yes
1,1-Dichloroethane	EPA 5021A 2003 + EPA 8260C 2006	0,01mg/kg	Yes
1,2-Dichloroethylene	EPA 5021A 2003 + EPA 8260C 2006	0,01mg/kg	Yes
1,1,1-Trichloroethane	EPA 5021A 2003 + EPA 8260C 2006	0,01mg/kg	Yes
Dibromochloromethane	EPA 5021A 2003 + EPA 8260C 2006	0,01mg/kg	Yes
Bromodichloromethane	EPA 5021A 2003 + EPA 8260C 2006	0,01mg/kg	Yes
Hexachlorobutadiene	EPA 5021A 2014 + EPA 8260C 2006	0,01mg/kg	Yes
<b>*Organic Nitrogen Solvents</b>			
2,4-Dinitrotoluene	EPA 3541 1994 + EPA	0,1mg/kg	No

	3630C 1996 + EPA 8270D 2007		
2,6-Dinitrotoluene	EPA 3541 1994 + EPA 3620C 2007 + EPA 8270D 2007	0,01mg/kg	No
2,4-Dinitrophenol	EPA 3550C 2007 + EPA 3630C 1996 + EPA 8270D 2007	0,001mg/kg	No
2-Methyl 4,6-dinitrophenol	EPA 3550C 2007 + EPA 3630C 1996 + EPA 8270D 2007	0,001mg/kg	No
2-Nitrophenol	EPA 3550C 2007 + EPA 3630C 1996 + EPA 8270D 2007	0,001mg/kg	No
4-Nitrophenol	EPA 3550C 2007 + EPA 3630C 1996 + EPA 8270D 2007	0,001mg/kg	No
Chlorinated pesticides	EPA 3541 1994 + EPA 3630C 1996 + EPA 8081B 2007	0,001mg/kg	Yes
Phosphorus pesticides	EPA 3541 1994 + EPA 3630C 1996 + EPA 8270D 2007	0,001mg/kg	No
<b>*Hydrocarb</b>			
Heavy hydrocarbons (C10-C40)	UNI EN 14039:2005	1mg/Kg S.S.	Yes
<b>*Phytochemicals</b>			
Aldrin	EPA 3541 1994 + EPA 3630C 1996 + EPA 8081B 2007	0,001mg/kg	Yes
Chlordane	EPA 3541 1994 + EPA 3630C 1996 + EPA 8081B 2007	0,001mg/kg	Yes
DDT	EPA 3541 1994 + EPA 3630C 1996 + EPA 8081B 2007	0,001mg/kg	Yes
Lindane	EPA 3541 1994 + EPA 3630C 1996 + EPA 8081B 2007	0,001mg/kg	Yes
Dieldrin	EPA 3541 1994 + EPA 3630C 1996 + EPA 8081B 2007	0,001mg/kg	Yes
Endrin	EPA 3541 1994 + EPA 3630C 1996 + EPA 8081B 2007	0,001mg/kg	Yes
Heptachlor	EPA 3541 1994 + EPA 3630C 1996 + EPA 8081B 2007	0,001mg/kg	Yes
Endosulfan	EPA 3541 1994 + EPA 3630C 1996 + EPA 8081B 2007	0,001mg/kg	Yes
Hexachlorobenzene	EPA 3541 1994 + EPA 3630C 1996 + EPA 8081B 2007	0,001mg/kg	Yes
Pentachlorobenzene	EPA 3541 1994 + EPA	0,01mg/kg	Yes

	3620C 2007 + EPA 8270D 2007		
alpha-hexachlorocyclohexane	EPA 3541 1994 + EPA 3630C 1996 + EPA 8081B 2007	0,001mg/kg	Yes
beta-hexachlorocyclohexane	EPA 3541 1994 + EPA 3630C 1996 + EPA 8081B 2007	0,001mg/kg	Yes
gamma-hexachlorocyclohexane	EPA 3541 1994 + EPA 3630C 1996 + EPA 8081B 2007	0,001mg/kg	Yes
delta-hexachlorocyclohexane	EPA 3541 1994 + EPA 3630C 1996 + EPA 8081B 2007	0,001mg/kg	Yes
Mirex	EPA 3541 1994 + EPA 3630C 1996 + EPA 8081B 2007	0,001mg/kg	Yes
Toxaphene	EPA 3541 1994 + EPA 3620C 2007 + EPA 8081B 2007	0,001mg/kg	Yes
Chlordecone	EPA 3541 1994 + EPA 3630C 1996 + EPA 8270D 2007	0,001mg/kg	Yes
<i>Other substance</i>	-		
Hexabromodiphenyl	EPA 3541 1994 + EPA 3630C 1996 + EPA 8270D 2007	0,01mg/kg	No
Tetrabromodiphenyl ether	EPA 3541 1994 + EPA 3630C 1996 + EPA 8270D 2007	0,01mg/kg	No
Pentabromodiphenyl	EPA 3541 1994 + EPA 3630C 1996 + EPA 8270D 2007	0,01mg/kg	No
Hexabromodiphenyl ether	EPA 3541 1994 + EPA 3630C 1996 + EPA 8270D 2007	0,01mg/kg	No
Eptabromodifeniletere	EPA 3541 1994 + EPA 3630C 1996 + EPA 8270D 2007	0,01mg/kg	No
polychlorinated naphthalenes	EPA 3541 1994 + EPA 3630C 1996 + EPA 8082A 2007	1mg/kg	No
Chloroalkanes (C10-13)	EPA 3541 1994 + EPA 3620C 2007 + EPA 8270D 2007	0,1mg/kg	No
PCB	EPA 3541 1994 + EPA 3630C 1996 + EPA 8082A 2007	0,005mg/kg	Yes
<i>*Dioxins and Furans</i>			
Summation PCDD + PCDF I-TEQ (WHO)	EPA 3545A 2007 + EPA 1613B 1994 + UNEP/POPS/COP.3/I NF/27 11/04/2007 WHO 2005 TEF	0,1ng/Kg	Yes

<b><i>*Test for Waste Characterization - Leaching</i></b>			
pH	CNR IRSA 1 Q 64 Vol 3 1985	unità	Yes
Dry Residue at 105°C	CNR IRSA 2 Q 64 Vol 2 1984	%	Yes
Residue at 600° C	CNR IRSA 2 Q 64 Vol 2 1984	%	Yes
TOC	UNI EN 13137:2002	0,01mg/kg	Yes
<b><i>Other Chemicals</i></b>	-		
Asbestos	DM 06/09/1994 SO n°129 GU n°220 20/09/1994 + DGR 12/02/2008 n°8/677 BURL n°73 08/04/2008 I° suppl. straordinario	1000mg/kg	Yes
<b><i>*Parameters for leaching test - UNI EN 12457-2:2004</i></b>	-		
Antimony LT	UNI EN ISO 17294- 02:2005	0,0001mg/l	Yes
Arsenic LT	UNI EN ISO 17294- 02:2005	0,0001mg/l	Yes
Barium LT	UNI EN ISO 17294- 02:2005	0,0001mg/l	Yes
Cadmium LT	UNI EN ISO 17294- 02:2005	0,0001mg/l	Yes
Chromium LT	UNI EN ISO 17294- 02:2005	0,0001mg/l	Yes
Copper LT	UNI EN ISO 17294- 02:2005	0,0001mg/l	Yes
Mercury LT	UNI EN ISO 17294- 02:2005	0,00005mg/l	Yes
Molybdenum LT	UNI EN ISO 17294- 02:2005	0,0001mg/l	Yes
Nickel LT	UNI EN ISO 17294- 02:2005	0,0001mg/l	Yes
Lead LT	UNI EN ISO 17294- 02:2005	0,0001mg/l	Yes
Selenium LT	UNI EN ISO 17294- 02:2005	0,0001mg/l	Yes
Zinc LT	UNI EN ISO 17294- 02:2005	0,0001mg/l	Yes
Chloride LT	UNI EN ISO 10304:2009	0,1mg/l	Yes
Fluoride LT	APAT CNR IRSA 4100 B Man 29 2003	0,05mg/l	Yes
Sulphate LT	UNI EN ISO 10304:2009	0,1mg/l	Yes
DOC LT	UNI EN 1484:1999	0,1mg/l	Yes

**\*subcontracted**