



An EU funded project

Draft regulations on C&D waste management - Draft Waste Management Plan on Asbestos - By-Law on C&D waste

2nd Workshop

Aspects for WM Plan on Construction & Demolition Waste

17th of June 2016

Waste Management Plan on Asbestos Wastes

I. Role of waste management planning in general

- Expected types, quantities and origin of waste to be recovered, treated, deposited or exported for disposal.
- Goals for prevention, reduction and recovery of wastes.
- Capacities needed.
- Priorities, measures and waste management programs (including cost estimation).

II. Waste management plan for asbestos containing wastes

- Existing legal framework (compliance deficit)
- Legacy problem – assessment of asbestos in use, forecast of waste generation
- Assessment of capacities, disposal/treatment options
- Awareness raising, relevant standards, occupational health
- Implementation of collection and treatment system (measures)

All Sectoral WMP follow the same structure

Chapter 1

- Overall workplan

Chapter 2

- Legal Framework (EU and Serbia)

Chapter 3

- Consultation Process (workshops, information and data collection)

Chapter 4

- Qualitative characterisation of the waste stream - types of asbestos wastes (C&D wastes, end of life consumer articles), relevant waste codes
- Quantitative characterisation (historical asbestos consumption; estimated stockpile)

Chapter 4

- Treatment options
- Forecast of waste generation
- Collection system (requirements; waste from house-holds/waste from professional activities, C&D waste)

Chapter 5

- Institutional set-up (responsibilities)

Chapter 6

- Existing funding mechanism
- Operational cost, investments

Chapter 7

- Waste management options (how to do – part of awareness raising)

Chapter 7 (focus on C&D wastes)

- Technical details (identification, equipment, etc.)
- Work plan (safety measures, etc.)

Chapter 8 (focus on C&D waste, asbestos cement)

- Planning assumptions

Chapter 9

- Objectives
 - I. Identification, inventory, responsibilities
 - II. Forecast 5 – 10 – 15 years
 - III. Capacities and infrastructure
 - IV. Awareness raising
 - V. Prioritisation

Chapter 10

- Implementation (action plan and responsibilities)
 - i. Regulatory instruments – legal instruments (specific and non specific for asbestos)
 - ii. Operative instruments (register, collection system, etc.)
 - iii. Information and awareness raising

Necessary adaptation of the draft

- Legal framework
 - I. Ban on asbestos
 - II. Amendment of LWM
 - III. New regulations on occupational health (OG of RoS 108/2015)
- Technical framework
 - I. New CEN standards
 - II. Cost estimation

By-Law on C&D waste

I. European Union

- C&D Waste as a Priority Waste Stream (Directive 2008/98/EC: Article 11, 1, b – recovery of 70% by 2020; Article 6, 2 - end of waste for recovered aggregates)
- Construction material: technical requirements regulated by Regulation (EU) 305/2011 (effective since July 1st 2013) – harmonised CEN standards and CE certification (7 relevant).
 - i. EN 12620:2002+A1:2008 Aggregates for concrete
 - ii. EN 13043:2002 + EN 13043:2002/AC:2004 Aggregates for bituminous mixtures and surface treatments for roads, airfields and other trafficked areas

I. European Union

- Regulation (EU) 305/2011 (effective since July 1st 2013) – harmonised CEN standards and CE certification.
 - iii. EN 13055-1:2002 + EN 13055-1:2002/AC:2004
Lightweight aggregates - Part 1: Lightweight aggregates for concrete, mortar and grout
 - iv. EN 13055-2:2004 Lightweight aggregates - Part 2: Lightweight aggregates for bituminous mixtures and surface treatments and for unbound and bound applications excluding concrete, mortar and grout
 - v. EN 13139:2002 + EN 13139:2002/AC:2004 Aggregates for mortar

I. European Union

- Regulation (EU) 305/2011 (effective since July 1st 2013) – harmonised CEN standards and CE certification.
 - vi. EN 13242:2002+A1:2007 Aggregates for unbound and hydraulically bound materials for use in civil engineering work and road construction
 - vii. EN 13450:2002 Aggregates for railway ballast

These standards do not cover environmental performance.

(Remark: Environmental issues are covered by chemical legislation/REACH)

Regulatory Instruments

II. Draft By-law on C&D waste (recovery)

- Focus on mineral C&D waste (recovered as aggregates)
- System of
 - i. Quality classes (environmental performance; Annex, table 2) and
 - ii. Acceptable use (taking into account quality and possible environmental input; Annex, table 3)
- Recovery orientated dismantling (with pre-separation of hazardous substances and impurities reducing the quality of the recycled material)

By-law on C&D waste

Recycling incentives

- End-of-waste status for highest quality of recovered aggregates
- Obligatory recovery (trigger values in Annex, table 1)
- Other possible incentives (not in the by-law)
 - a) driving forces
 - i. Landfill tax for final disposal
 - ii. Tax depending on the quality of the landfill site (high quality landfill – lower tax; this would direct the disposed waste stream to better environmental performance)

By-law on C&D waste

Recycling incentives

- Other possible incentives (not in the by-law)
 - b) pulling forces
 - i. Mandatory percentage of recovered material in public tenders (Green Public Procurement)
 - ii. Subsidies for the use of recovered aggregates

What is not regulated?

- Performance as construction material (reference to applicable CEN standards/CE certification)

Limit Values

By-law on C&D waste (recovery)

Proposal derived from

- Eikmann/Klocke 1991/1993 BW I values (natural background levels)
- LAGA M20 (Requirements for the material recovery of mineral wastes; Länderarbeitsgemeinschaft Abfall, Germany)
- Austrian guideline for soil recovery (Federal Waste Management Plan 2006/2011)
- Austrian regulation on demolition waste recovery (BGBl. II 181/2015)

Limit Values

By-law on C&D waste (recovery)

Proposal derived from

- Schweizer „Richtlinie für die Verwertung mineralischer Bauabfälle“ (Swiss “Guideline for the recovery of mineral construction wastes”), BAFU 2006
- Background levels of heavy metals and PAHs in soil from Austria (Upper Austria, Tirol) and Germany (Bavaria, Baden-Württemberg)

Thank you!

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