

The EBV principle

HOW THE GERMAN SECONDARY AGGREGATE DIRECTIVE (EBV) WORKS

After more than 20 years, with the introduction of the Secondary Aggregate Directive (EBV) this year, the specifications for the use of secondary aggregates (MEB) in technical structures in Germany has changed. What was previously regulated by federal states, for example in the form of utilisation decrees and in leaflet 20 of the LAGA (i. e. the federal working group for waste), was replaced by a nationwide directive on 1 August 2023 when the EBV came into force.

Mandatory adaptation of new requirements

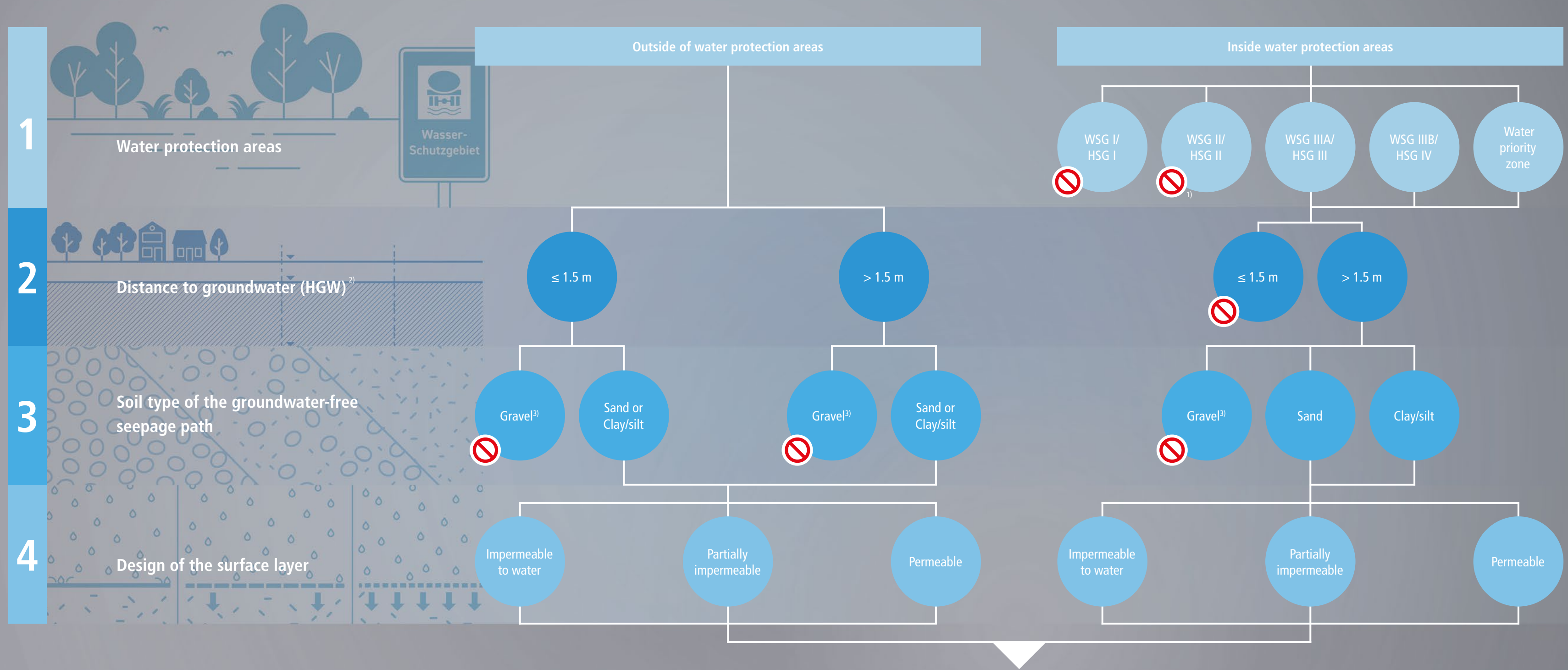
The EBV was ratified in July 2021. After a two-year transition period, all construction measures with secondary aggregates must now be planned and executed in accordance with the EBV. The underlying principle has remained the same – the protection of soil and groundwater as top priority. In the practical implementation, however, there are many changes. Most important for users are the application tables and the input parameters that are needed for their use.

Local conditions define possibilities

Decisive for the possible use of secondary aggregates are the location of the construction project in relation to water protection areas, a sufficient distance to the groundwater level and the soil classification of the groundwater-free seepage path. With these data, the EBV application tables can be used to determine whether a MEB is permissible for the planned measure.



Our German background video conveys the requirements of EBV with animated graphics. You can watch it at grundlagen.meb-services.de



Application acc. to EBV

The tables show the areas of application in the form of a traffic light system:

- permitted
- not permitted
- conditionally permitted
- not relevant

Einbauweise	Eigenschaft der Grundwasserdeckschicht außerhalb von Wasserschutzbereichen				Eigenschaft der Grundwasserdeckschicht innerhalb von Wasserschutzbereichen			
	ungünstig	gut	gut	schlecht	ungünstig	gut	gut	schlecht
1. Decke bitumen- oder hydraulisch gebunden, Tag-schicht bitumengebunden	●	●	●	●	●	●	●	●
2. Bitumen unter Fundament- oder Bodenplatten, Bodenfestigung unter gebundener Deckschicht	●	●	●	●	●	●	●	●
3. Tag-schicht mit hydraulischen Bindemitteln unter gebundener Deckschicht	●	●	●	●	●	●	●	●
4. Verfüllung von Bagruben und Leitungsgräben unter gebundener Deckschicht	●	●	●	●	●	●	●	●
5. Asphalttrag-schicht (bellwasserundurchlässig) unter Pflastersteinen und Pflasterbelägen, Tag-schicht hydraulisch gebunden (Diabebeton) unter Pflaster und Platten	●	●	●	●	●	●	●	●
6. oder Platten, jeweils mit wasserundurchlässiger Fugeabdichtung	●	●	●	●	●	●	●	●
7. Schutzschicht (Dtl) unter gebundener Deck-schicht	●	●	●	●	●	●	●	●
8. Asphalttrag-schicht (bellwasserundurchlässig) unter Pflastersteinen und Pflasterbelägen, Tag-schicht hydraulisch gebunden (Diabebeton) unter Pflaster und Platten	●	●	●	●	●	●	●	●
9. MTS sowie Hinterfüllung von Bauwerken im Bereich des Fundaments	●	●	●	●	●	●	●	●

Environmental admissibility of secondary aggregates

- Dredged material (BG-F1, BG-F2, BG-F3, BG-0*, BG-F0*)
- Soil material (BM-F1, BM-F2, BM-F3, BM-0*, BM-F0*)
- Lignite fly ash (BFA)
- Foundry cupola slag (GKOS)
- Residual foundry sand (GRS)
- Track ballast (GS-0, GS-1, GS-2, GS-3)
- Incinerator bottom ash (HMVA-1, HMVA-2)
- Blast furnace lump slag (HOS-1, HOS-2)
- Blast furnace sand (HS)
- Copper smelting material (CUM-1, CUM-2)
- Recycled aggregate (RC-1, RC-2, RC-3)
- Melting chamber granulate from the firing of hard coal (SKG)
- Steelworks slag (SWS-1, SWS-2)
- Hard coal fly ash (SFA)
- Hard coal boiler ash (SKA)
- Brick material (ZM)

Einbauweise	Wasserschutzgebiet	Wasserschutzzone	Wasserschutzlinie	Wasserschutzstreifen
1. Decke bitumen- oder hydraulisch gebunden, Tag-schicht bitumengebunden	●	●	●	●
2. Bitumen unter Fundament- oder Bodenplatten, Bodenfestigung unter gebundener Deckschicht	●	●	●	●
3. Tag-schicht mit hydraulischen Bindemitteln unter gebundener Deckschicht	●	●	●	●
4. Verfüllung von Bagruben und Leitungsgräben unter gebundener Deckschicht	●	●	●	●
5. Asphalttrag-schicht (bellwasserundurchlässig) unter Pflastersteinen und Pflasterbelägen, Tag-schicht hydraulisch gebunden (Diabebeton) unter Pflaster und Platten	●	●	●	●
6. oder Platten, jeweils mit wasserundurchlässiger Fugeabdichtung	●	●	●	●
7. Schutzschicht (Dtl) unter gebundener Deck-schicht	●	●	●	●
8. Asphalttrag-schicht (bellwasserundurchlässig) unter Pflastersteinen und Pflasterbelägen, Tag-schicht hydraulisch gebunden (Diabebeton) unter Pflaster und Platten	●	●	●	●
9. MTS sowie Hinterfüllung von Bauwerken im Bereich des Fundaments	●	●	●	●

- 1) Exceptions: BM-0, BG-0, GS-0 and SKG may be used.
- 2) Distance of the bottom edge of the installation horizon of the secondary aggregate to the highest expected groundwater level HWG incl. safety distance of 0.5 m.
- 3) Definition includes gravel as well as gravel-silt and gravel-clay mixtures with a low proportion of fines; the option of an artificially created groundwater cover layer should be considered.