

### FDR Stabilizing Agent Selection Guide Table

This table shows generally recommended guidelines for selection of stabilizing agents for FDR based on the material properties of the materials to be stabilized. A wide range of bituminous and chemical stabilizing agents are currently available, and are used to improve physical properties and/or moisture resistance of the reclaimed materials.

For specific reclaimed materials, some stabilizing agents are more effective and economical than other materials. Each type of stabilizing agent has its place in the FDR process. There are no hard and fast rules with the selection of a chemical or bituminous stabilizing agent, and there is overlap in the selection criteria. Agency preferences and availability of stabilizing agents and experienced contractors play a part in selection of the stabilizing agent.

Material Type – Including RAP	Well Graded Gravel	Poorly Graded Gravel	Silty Gravel	Clayey Gravel	Well Graded Sand	Poorly Graded Sand	Silty Sand	Clayey Sand	Silt, Silt with Sand	Lean Clay	Organic Silt/Organic Lean Clay	Elastic Silt	Fat Clay, Fat Clay with Sand
USCS	GW	GP	GM	GC	SW	SP	SM	SC	ML	CL	OL	MH	CH
AASHTO	A-1-a	A-1-a	A-1-b	A-1-b A-2-6	A-1-b	A-3 or A-1-b	A-2-4 or A- 2-5	A-2-6 or A- 2-7	A-4 or A- 5	A-6	A-4	A-5 or A- 7-5	A-7-6
<u>Emulsified Asphalt</u> SE > 30 or PI < 6 and P <sub>200</sub> < 20%	X	X	X	X	X	X	X						
<u>Foamed Asphalt</u> PI < 10 and P <sub>200</sub> 5 to 20%	X		X	X	X		X						
<u>Cement, CKD or Self-Cementing Class C Fly Ash</u> PI < 20 SO <sub>4</sub> < 3000 ppm	X	X	X	X	X	X	X	X	X	X			
<u>Lime/LKD</u> PI > 20 and P <sub>200</sub> > 25% SO <sub>4</sub> < 3000 ppm								X		X		X	X

P<sub>200</sub> = Percent passing No. 200 sieve  
SE = Sand equivalent (AASHTO T 176 or ASTM D2419)  
PI = Plasticity index (AASHTO T 90 or ASTM D4318)