Carbide and Soot
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Soot is among the easiest stains to clean from speleothems and cave walls. In the past, cave visitors in some regions typically made carbide soot marks on cave walls with their lamp flames. Be especially aware of avoiding harm to markings that have historical significance. Call in experts in archaeology and historic culture to help evaluate cave sites. (See the chapter on historic markings, page 99; also see contact experts, page 334.)

Carbide Marks
If removal of carbide marks or arrows is deemed appropriate, slightly pressurized water will readily remove it. Carbide soot marks left on cave surfaces can usually be squirted with a spray bottle and they will disappear with little or no scrubbing. If gentle brushing is required, use nothing more than soft nylon bristles.

Spent Carbine
Removal of spent carbide requires more care. Wear gloves to avoid caustic burns. First remove, lift, or sweep up as much carbide as possible. Chisel away old carbide deposits that have formed hardened crusts. Be careful—a crust may seal the interior carbide, which can still be reactive after as much as 35 years (Veni 1994).

- Do not use a vacuum cleaner, even with a fine filter, because carbide dust may enter and corrode the motor and be ejected into the cave.
- If the carbide sits on sediment, scoop up and remove the sediment since it will be impregnated with the carbide—remove all sediment that smells of carbide.

Where carbide rests on rocks or speleothems, after sweeping or scooping up the majority, wash away any remaining carbide by isolating small areas for cleaning and dousing them one at a time with a relatively large volume of water to dilute the exothermic reaction and minimize corrosion of the underlying surface. Place sponges, towels, and other equipment immediately downslope to capture the runoff, which should be removed from the cave and properly disposed of along with the carbide and any contaminated sediment (Veni 1997).

Cited References