Abstract: The NAWCWD in cooperation with its industrial and government partners are exploring several innovative coating technologies to reduce the environmental liabilities associated with current military coatings that contain either hexavalent chromium (Cr(VI)), isocyanates or phosphates. These compounds are carcinogenic and/or toxic to the environment. Their replacement with currently available technologies can negatively impact mission readiness but their use is often at odds with compliance to federal and state environmental regulations. At NAWCWD novel, environmentally benign coatings are being prepared on various substrates, and tested in the laboratory and field tested where appropriate.