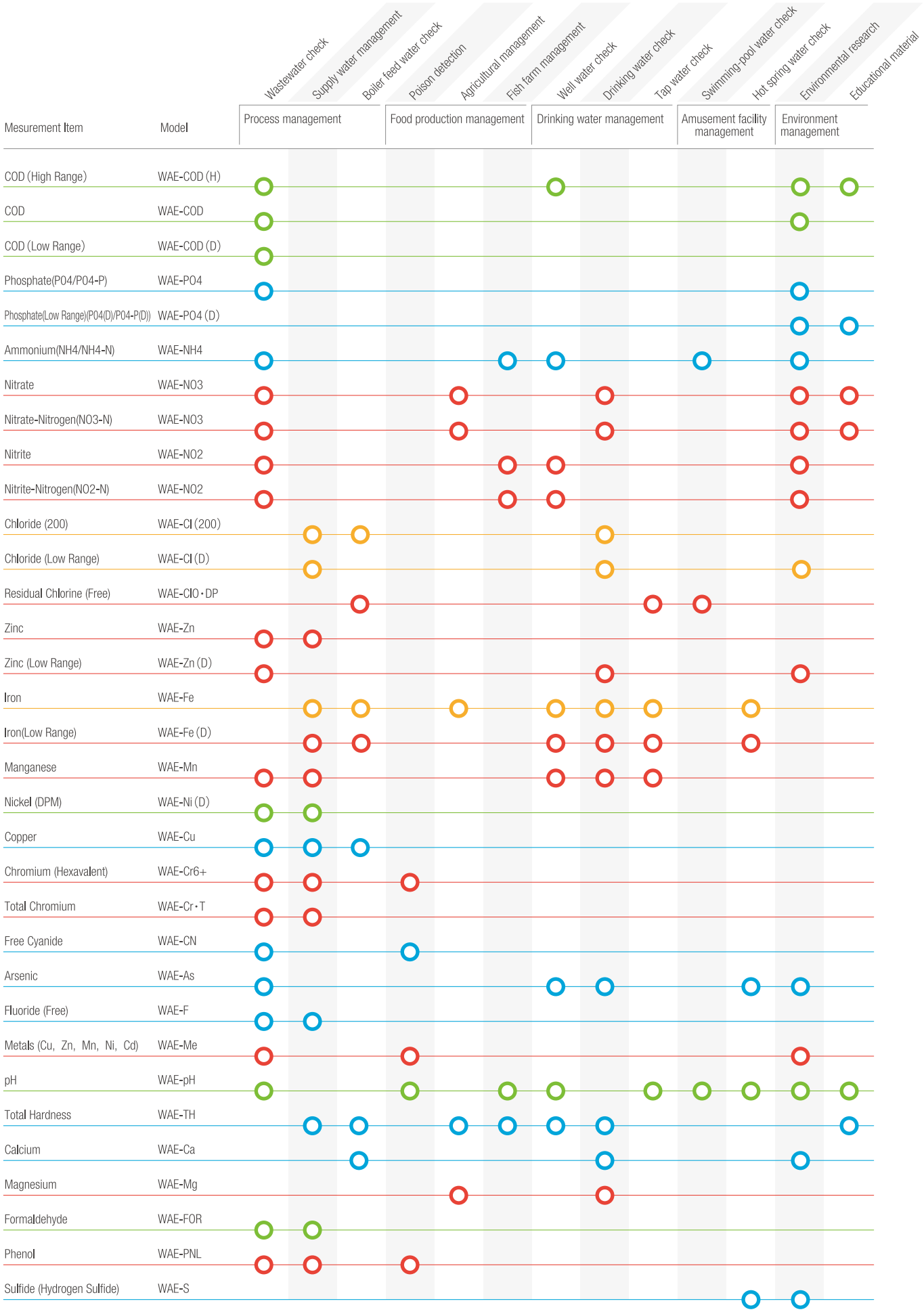APPLICATIONS