It is recommended that alarms are replaced after 10 years. Why does the National Fire Protection Association (NFPA) recommend that home smoke alarms be replaced after 10 years?

Smoke alarms have a limited life. Although each smoke alarm and all of its parts have passed many stringent tests and are designed to be as reliable as possible, any of these parts could fail over time. Therefore, you must test the devices weekly. The unit should be replaced immediately if it is not operating properly. The performance of smoke alarms older than 10 years may be degraded. To ensure your family's safety, all smoke alarms and detectors need to be replaced after the end-of-life audible alarm signal, differing from the audible alarm signal, is activated and smoke/CO combination alarms need to be replaced after the end-of-life audible alarm signal, differing from the audible alarm signal, is activated or 10 years from the date of manufacture whichever comes first. All smoke alarms need to be replaced every 10 years.