



ISO9001  
CERTIFIED

Certified Small Business  
Under NAICS code 562910  
Environmental Remediation

PermaFix®

environmental services

Experience You Can Trust



## Eagle iScan Radiological Detection System

### Driveover / Walkover Scan:

The Perma-Fix **Eagle iScan** is a towed array gamma spectroscopy system with precision GPS tracking. The system offers exceptional sensitivity to a wide range of gamma-emitting radioisotopes and the ability to specify individual gamma emitters. Minimum Detectable Concentrations (MDCs) and isotopic reporting are offered on a project-by-project basis. At typical scan speeds, the system can effectively detect 1 pCi/g of Ra-226 or 2.5 pCi/g of Cs-137 contamination in small localized areas (nominal 0.5 m<sup>2</sup>).

The system is capable of covering up to 1 acre per hour with sub-meter spatial resolution. After scanning a survey area, spectral data, and GPS data are automatically merged using a cloud computing platform. Total count rate over time, mean spectral shape, total count rate based heat map and a spectral water fall plot are automatically generated within minutes of completing the survey for rapid analysis and potential remediation of any elevated areas. Additional spectral or GIS analysis can be done on a project-by-project basis.



### Gecko Scan:

Whether it's a single wall, a room, or a whole building, the **Perma-Fix Eagle iScan Gecko System** is here to help. The Gecko system allows for real-time, three-dimensional mapping of indoor radiological measurements by coupling the capabilities of handheld alpha/beta detectors with a stereo camera equipped with an inertial measurement unit to effectively record every measurement location. Therewithal its groundbreaking capabilities, data from the Gecko system can be streamed over a local wireless connection established directly from the system itself and processed on Windows-powered devices like tablets or desktop and laptop computers.

Data from the system is automatically saved into a local database upon starting each measurement and can be exported as a survey summary report showing the survey's average results, mean, standard deviation, and 4 plots, or in a spreadsheet format that presents local coordinates, alpha/beta readings, and timestamps. Spreadsheet information can be further analyzed by using geographic information system (GIS) software to produce spatial maps showcasing the position and concentration of radiological measurements in real-world maps.

The Eagle iScan radiological detection system was designed using years of experience in overland spectral scanning technology to offer our clients the best value for radiological characterizations and final status surveys involving specific gamma emitters. Contact us today to learn more.

## CONTACT US

Eric Laning  
VP of Health Physics Services  
elaning@perma-fix.com  
865-251-2075 (office)

perma-fix.com

PermaFix®

environmental services

A Nuclear Services and Waste Management Company