

A.1 Technology Name

Rigid Porous Polyethylene

A.1.1 Source

D.R. LeBlanc and D.A. Vroblesky. Comparison of Pumped and Diffusion Sampling Methods to Monitor Concentrations of Perchlorate and Explosive Compounds in Ground Water. USGS Scientific Investigations Report 2008-5109. 2008.

A.1.2 Summary

Media:	Groundwater
Study Type:	Side by side
Technology:	Diffusion - RPP
Peer Reviewed:	No
Publication Date:	2008

A.1.3 Site Description

- Laboratory and field tests were completed to assess long-term monitoring utility of passive sampling devices (rigid porous polyethylene) for perchlorate and explosive compounds in groundwater at the Massachusetts Military Reservation (Cape Cod).
- Field tests were conducted near an impacted area with 15 wells containing various concentrations of perchlorate and explosive compounds in a sand and gravel aquifer.
- Passive samplers were deployed concurrent with a routine long-term monitoring pumping event using dedicated bladder pumps. Time between pumped and passive samples was up to 109 days.

A.1.4 Remedial Phase

Long-term monitoring.

A.1.5 Outcome

Most wells showed close agreement between sampling methods for perchlorate and explosives compounds (RDX and HMX). Wells that did show disagreement between methods were likely due to the extended timer lag between sampling events (up to 109 days between samples).