

**Project Summary**  
**Rocky Mountains Cooperative Ecosystem Studies Unit**

Project Title: SafePort Proposal - Henry Laboratory

Discipline: Interdisciplinary  
Type of Project: Research  
Funding Agency: US Army Core of Engineers  
Other Partners/Cooperators: Colorado State University  
Effective Dates: 3/29/2010 - 6/30/2013  
Funding Amount: \$245,508 [FY12: \$105,998; FY11: \$69,755; FY10: \$69,755]

Investigators and Agency Representative:

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Project Abstract:

The goal of this research is to develop microfluidic chips for the detection of perchlorate in real world samples.

CSU's Henry Laboratory will

1. Develop modular glass microchips for perchlorate analysis
2. Compare modular glass microchips to PDMS and PMMA microchips
3. Challenge the perchlorate separation with multiple concentrations of anions and include the ability to generate a calibration curve

Outcomes with Completion Dates: March 28, 2013

Keywords: microfluidic chips, detection of perchlorate, pollution preventions, US Army Core of Engineers, Colorado State University