

HEALTH SECURITY, PREPAREDNESS AND RESPONSE 2011 CARRYOVER GRANT PROJECT

The mission of the Carryover Grant project was to enhance the field equipment and training capabilities for Radiation Protection Services (RPS).

The project was designed to support RPS personnel with field capabilities to enhance emergency operations and sustain field environmental monitoring capabilities. In addition, this grant now allows RPS to provide initial analytical capabilities to differentiate between alpha, beta, and gamma energies, identify the isotope, and evaluate the potential health effects to public from field based teams.

In order to meet this mission, the project was divided in 3 areas indentified as having deficiency gaps. The areas where:

- Equipment for field training
- Equipment for Emergency Response Teams safety needs
- Equipment to enhance field laboratory environmental monitoring capabilities for low energy isotopes



*Field laboratory purchased with carryover funds.
\$4,340.00*

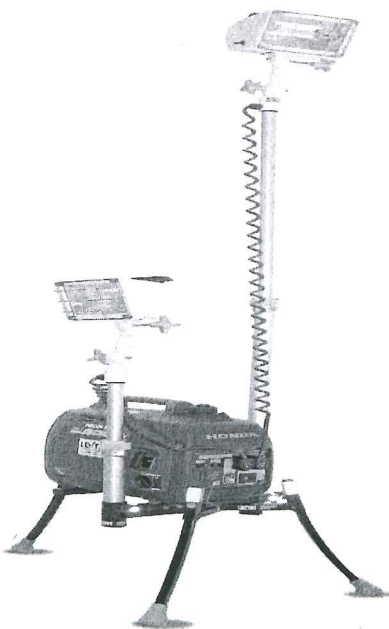
The Health Security, Preparedness and Response, 2011 All Hazards Carryover Project awarded RPS a total of \$90,572 to design and build a system that enables RPS personnel to respond and perform more efficient, professional, and become effective instilling confidence to the public to alleviate fear and uncertainty.

Summary of program funds allocated and expenditures for all 3 program areas

Programs	Total Awarded	Total Expenditures	Remaining Funds
Field Laboratory	\$37,694.00	\$34,973.93	\$2,720.07
Safety	\$28,913.00	\$30,897.68	-\$1,984.68
Training	\$23,965.00	\$24,291.12	-\$326.12
Totals	\$90,572.00	\$90,162.73	\$409.27

Where Do We Go From Here

The next steps identified by Emergency Response Team members, is a plan addressing response needs. With field equipment now available, a response system designed to meet the public's expectation for responding in a timely manner should be considered. Currently, response system gaps exist for transporting personnel and equipment to mitigate a radiological incident. Future proposals will be designed to meet this challenge for readiness and response.



*Generator Field Lighting System
\$3,529.00*

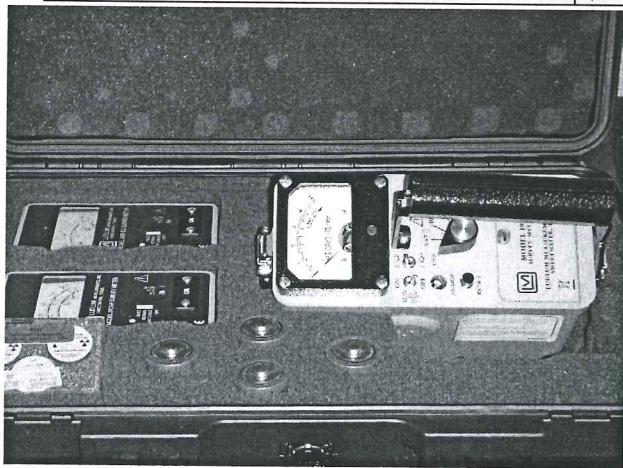
TRAINING PROGRAM SUMMARY

	Budget cost	Actual cost
Travel for 1 staff member, HPP planning		
Course Travel, Hotel @ \$110 x 3 days	\$330.00	
Course Travel Per diem @ \$71.00 x 3 days	\$213.00	
Pelican cases x		
Traffic Cones	0.00	\$536.00
Total Cost	\$543.00	\$536.00
	Budget cost	Actual cost
Equipment for field sampling		
Portable folding tables x 4	\$880.00	\$495.00
Portable folding chairs x 6	\$186.00	
Field shelter	\$1,062.00	\$4,340.00
Portable generator	\$911.00	0.00
Portable field lights with generator	\$4,000.00	\$3,529.00
Emergency decontamination system x 2	\$376.00	
Water bladder for decontamination	\$576.00	
Utility Ramp (loading equipment)	\$377.00	
100' Extension cord and adapter	\$150.00	
Ludlum uR 192 Detector x 4 @ \$2,059.00	\$8,236.00	\$8,276.00
Ludlum CPM 2401-P detector x 4 @ \$570	\$2,280.00	\$2,300.00
Ludlum mR 2401-EC detector x 4 @ \$507	\$2,028.00	\$2,048.00
NIST radiation sources 3 types	\$1,800.00	\$933.12
Pelican cases x 8 @ \$300.00	\$1,200.00	\$1,834.00
Calibration x 4 @\$300.00	\$1,200.00	
Portable weather station	\$160.00	
Total cost	\$23,422.00	\$23,755.12

The travel budget was awarded to RPS to provide hospital preparedness relating to radioactive material exposure training. However, salaries were not awarded for the project..

RPS was allowed to utilize travel funds for training equipment. Traffic cones were purchased to commence the driver training program for the All Hazard Mobile Laboratory. 2 courses have been conducted to date.

Purchase of some items did not occur. Adjustment for price increases from the original quotes required RPS to prioritize purchasing.



Field radiation monitoring training kit with purchased pelican cases and radiation sources for survey meter training.



AHML Drivers Training Course
September 11, 2012

SAFETY PROGRAM SUMMARY



Pictured below is the Canberra Ultraradiac personal radiation monitor. Designed to electronically alarm when personnel are in high levels radiation areas

With the purchase of radios, RPS now has the infrastructure to provide direct, instant, and the ability to broadcast communications among all ERT personnel and the Incident Commander.

The communication program provides communications between Incident Command, All Hazards Mobile Lab, ERT personnel and if necessary, the field command post and field laboratory personnel.

By allowing the networking of communications, the Incident Commander can direct real time operations, enhance personnel safety, provide teams with instant communications to establish personnel accountability.

With further enhancements, the Oregon Health Authority may be able to communicate with field teams in Eastern Oregon from the Portland based Agency of Operations.



Total project cost to date: \$16,277

Pictured to the right is the airflow calibrator, essential in ensuring accurate air sampling data.

This program diminishes the questionable accuracy which in turn prevents inappropriate public health response and public messaging.



Equipment	Budget cost	Actual cost
Hi-Q Airflow Calibrator	\$2,000.00	\$3,654.85
Communication Package	\$10,872.00	\$14,610.48
Canberra Ultraradiac electronic dosimeter 8 units	\$6,320.00	\$6,320.00
Canberra FC2B Calibrator	\$4,093.00	\$4,133.00
Total Cost	\$23,285.00	\$28,718.33
Supplies	Budget cost	Actual cost
Radio programming and setup, FCC licensing	\$2,250.00	\$1,669.95
Air sampling stand	0.00	\$509.40
Total cost	\$2,250.00	\$2,179.35



Air Sampling Stan

LABROATORY PROJECT

The laboratory project was designed to provide field environmental monitoring. The project was designed to allow the Center for Health Protection personnel to perform analysis either in the laboratory setting or in the outdoor environment when studies in remote locations are necessary. The focus areas are for drinking water and environmental radiation monitoring.

The CANBERRA iSolo[®] is a portable, firmware based, single-sample, manual, gas-less alpha/beta counter. The iSolo is designed for the analysis of air filters and most other types of alpha/beta samples. When analyzing air filters, the iSolo discriminates both radon and thoron and their progeny from transuranic and fission product materials on the air filter samples. The iSolo weighs as little than 6.5 kg in its lightest configuration. The iSolo uses a solid state silicon PIPS detector for alpha and beta detection. The iSOLO can be operated for 10 hours or more with internal batteries.



CANNBERA iSolo Portable Counter
\$19,575

Also purchased to meet the mission of field monitoring is the Genesys UV water analyzer. The purpose will be to perform bulk screening of water samples in the event of a potential drinking water contamination event to quickly identify likely contaminants to narrow down actual sampling needs.

Genesys UV Water Analyzer \$6,3992



In the event of an unknown contamination incident, this equipment will allow rapid clearance to identify likely contaminants without the need for expensive and time consuming analysis.



Laboratory supplies purchased with carryover funds are designed to increase surge capacity at the PSOB laboratory to prepare for a radiological event affecting Oregon and out-of-state commodities.

Other	Budget cost	Actual cost
Iso Shield	0.00	\$3,500.00
Total Cost	\$2,428.00	\$3,500.00
Equipment	Budget cost	Actual cost
Nasco Telescoping Water Sampler	\$480.00	\$451.28
Pelican Cases (10) cases)	\$2,000.00	\$1,682.11
Protean Hi-speed Gas Flow Proportional	\$19,000.00	\$16,075.00
(DW) Hach DR 5000-UV Spectrophotometer	\$7,946.00	\$6,392.21
(DW) Quanti-tray Kit	\$725.00	
(DW) Colilert Detection Kit	\$775.00	
Total cost	\$30,926.00	24,600.60
Supplies	Budget cost	Actual cost
Marinelli Beakers, 0.5L, 3 cases	\$1,650.00	\$1,827.00
HI-Q air filters, 2", 10 boxes	\$500.00	\$452.10
HI-Q air filters, 4", 10 boxes	\$600.00	\$718.00
Nitrile gloves 20 boxes	\$180.00	\$169.75
Cotton swabs, wooden handle, 10 packages	\$160.00	\$33.05
1000 Liquid Scintillation glass vials	\$250.00	\$223.43
Calibration source for Proportional Counter	\$1,000.00	\$3,450.00
Total cost	\$4,340.00	\$6,873.33