

U.S. ENVIRONMENTAL PROTECTION AGENCY  
POLLUTION/SITUATION REPORT  
Nickel-63 Radiological Response - Removal Polrep



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
Region II

**Subject:** POLREP #3  
(PJ Start Date)  
Nickel-63 Radiological Response

Guaynabo, PR  
Latitude: 18.4439396 Longitude: -66.1129342

**To:**

**From:** Eric M. Daly/Geoff Garrison, On-Scene Coordinators

**Date:** 2/24/2010

**Reporting Period:** 02/10/10-02/24/10

1. Introduction

1.1 Background

<b>Site Number:</b>	<b>Contract Number:</b>
<b>D.O. Number:</b>	<b>Action Memo Date:</b>
<b>Response Authority:</b> CERCLA	<b>Response Type:</b> PRP Oversight
<b>Response Lead:</b> EPA	<b>Incident Category:</b> Removal Action
<b>NPL Status:</b>	<b>Operable Unit:</b>
<b>Mobilization Date:</b>	<b>Start Date:</b> 2/24/2010
<b>Demob Date:</b>	<b>Completion Date:</b>
<b>CERCLIS ID:</b> PRC200400539	<b>RCRIS ID:</b>
<b>ERNS No.:</b>	<b>State Notification:</b>
<b>FPN#:</b>	<b>Reimbursable Account #:</b>

1.1.1 Incident Category

Radiological Assessment/PRP Oversight

1.1.2 Site Description

Storage Facility

1.1.2.1 Location

Guayanabo, Puerto Rico

1.1.2.2 Description of Threat

Instruments containing sealed Nickel-63 Sources

1.1.3 Preliminary Removal Assessment/Removal Site Inspection Results

Pending

2. Current Activities

2.1 Operations Section

2.1.1 Narrative

Ni-63 Radiological Response-Daly, Garrison

On February 5, 2010, OSC Daly received a call from OSC Garrison regarding a report from the Puerto Rico Environmental Quality Board (EQB). EQB requested EPA assistance in assessing a potential radioactive source. There are 37 obsolete drug screening instruments, Model IONSCAN 400/400A, which were consolidated and relocated to secured storage at Centro Tratamiento Social A.I.J. (Juvenile Detention Center-PR Departamento De Corrección) in Guaynabo, PR. OSC Daly contacted the RERT Commanders, ERRD-RPB Management, CEPD Management, and the Region 02 Health Physicists.

RERT Commander, Sam Poppell, contacted the manufacturer of the instruments, Smiths Detection. The technician verified that there is a radiological source in each of the units, Nickel-63 (Ni-63). The Ni-63 is a beta emitter and a sealed source within the unit. Since the radiological isotope is contained in the unit as a sealed source, the radiation is not detectable with standard survey instrumentation. Sealed sources pose no internal radiation hazard. The only way to detect the source while it is in this configuration is to perform a leak test.

OSC Daly also contacted the Nuclear Regulatory Commission (NRC). EPA was informed that the Ni-63 sources need to be removed by the manufacturer or a qualified HP technician before the units are disposed of as scrap.

EQB and OSC Garrison visited the Guaynabo storage area on February 8, 2010. Activities included gathering some of the unit serial numbers, observe the condition of the units, verify the presence of the sealed sources, and photo documentation. The information collected was shared with all involved agencies.

On February 18, 2010, OSCs Daly and Garrison visited the Site to gather more information and meet with Departamento De Corrección Representatives. Under the guidance of RERT Commander and NRC, more specific information was retrieved in relation to the units and regulations that apply. These instruments consist of two parts; one that contains the Ni-63 source and one that contains a pump. Each part is stored in an individual carrying case. The pump units can be disposed of without the radiological unit requirements. Prior to moving any of the Ni-63 units, a leak test must be performed on each instrument. This is very important since it was discovered that the Departamento De Corrección possess many more of these instruments at different facilities throughout the island.

On February 24, 2010, EQB provided a written referral to EPA to oversee this removal. This date will serve as the "start date" for this PJ oversight. The NRC does not have the mechanism to oversee a removal and therefore will coordinate with EPA throughout this process. Puerto Rico Department of Health Director of Radiological Health Division was also contacted and provided the current information. On February 25, 2010, a meeting with EPA, NRC, EQB, Departamento De Corrección, and Puerto Rico Department of Health will be held to discuss the next steps (Inventory of all units, leak testing all units, transportation of units to the secured location in Guaynabo, work plan, safety plan).

OSC Daly is in the process of obtaining a Site ID. At this point, no EPA Contractor Resources are planned on being utilized during this removal (Emergency PRP Removal without an Enforcement Instrument).

#### 2.1.2 Response Actions to Date

#### 2.1.3 Enforcement Activities, Identity of Potentially Responsible Parties (PRPs)

#### 2.1.4 Progress Metrics

<i><b>Waste Stream</b></i>	<i><b>Medium</b></i>	<i><b>Quantity</b></i>	<i><b>Manifest #</b></i>	<i><b>Treatment</b></i>	<i><b>Disposal</b></i>

#### 2.2 Planning Section

No information available at this time.

#### 2.3 Logistics Section

No information available at this time.

#### 2.4 Finance Section

No information available at this time.

#### 2.5 Other Command Staff

No information available at this time.

#### 3. Participating Entities

No information available at this time.

#### 4. Personnel On Site

No information available at this time.

#### 5. Definition of Terms

No information available at this time.

#### 6. Additional sources of information

No information available at this time.

#### 7. Situational Reference Materials

No information available at this time.

