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



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY Region II

Subject: POLREP #1

Initial PolRep

Nickel-63 Radiological Response

Guaynabo, PR

Latitude: 18.4439396 Longitude: -66.1129342

To:

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

Date: 2/7/2010

Reporting Period: 02/05/10-02/07/10

1. Introduction

1.1 Background

Site Number: Contract Number: D.O. Number: Action Memo Date:

Response Authority: CERCLA Response Type: PRP Oversight
Response Lead: EPA Incident Category: Removal Assessment

NPL Status: Operable Unit:

Mobilization Date: Start Date:

Demob Date: Completion Date:

CERCLIS ID: PRC200400539 RCRIS ID:

ERNS No.: State Notification:

FPN#: Reimbursable Account #:

1.1.1 Incident Category

Radiological Assessment

1.1.2 Site Description

Storage Faciloity

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

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 twelve (12) obsolete drug screening instruments, Model IONSCAN 400A, being stored in a secured area in Guaynabo, PR. The current owner of the equipment wants the area assessed and assistance in proper disposal of the instruments. OSC Daly contacted the RERT Commanders, ERRD-RPB Management, CEPD Management, and the Region 02 Health Physicists. That is all the information we have at this time. I do not know who has possession of this item (TSA, Airport, other). I do not know an isotope or even what type of radiation (Alpha, Beta, and Gamma). There is also the possibility that this is not a radioactive source all together.

RERT Commander, Sam Poppell, was on duty and contacted both OSCs. Mr. Poppell identified the manufacturer of the instrument as 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 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 using a cotton swab and alcohol. The swab would then be sent to a fixed radiation lab for analysis. This method is only effective if the sealed source is leaking. Basically the Nuclear Regulatory Commission requires that the Ni-63 source(s) be removed by the manufacturer or a qualified HP technician before the units are disposed of as scrap. Smiths Detection is requesting the serial numbers for each of the units to confirm that they are Smiths Detection equipment and to determine the radiation source activity per unit. Mr. Poppell will continue to work with Smiths Detection to identify the units, the Ni-63 activity per unit, and a means of getting Smiths Detection to receive these units back for proper disposal.

According to EQB, IONSCAN 400A units are allegedly the property of the *Administracion de Correccion* (Administration of Corrections, AOC). AOC is an agency "appointed" to the Department of Correction and Rehabilitation of Puerto Rico (DCRPR) which in turn is an executive department of the government of Puerto Rico. EQB is still investigating, but it appears that AOC and/or DCRPR are viable responsible parties if the radiological sources require a removal action.

EQB and EPA Personnel will visit the Guaynabo storage area on February 8, 2010. Activities will include the recording of unit serial numbers, observe the condition of the units, verify the presence of the sealed sources, and photo documentation. The information collected will be shared with all involved agencies.

2.1.2 Response Actions to Date

Initial Site Visit scheduled for February 8, 2010

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

2.1.4 Progress Metrics

Waste Stream	Medium	Quantity	Manifest #	Treatment	Disposal

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.