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**A2Z  
ENVIRONMENTAL  
GROUP,  
LLC**

# Fax

**To:** Mr. Jim Dwyer – Nuclear Regulatory  
Commission Region I

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**Fax:** 610-337-5269

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**Phone:** 610-337-5330

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**From:** Barry D. Snyder

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**Date:** 2/10/06

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**Pages:** 5

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**Re:** Letter and report on NORM Waste from  
Constellation-Brandon Shores

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**CC:**

Urgent     For Review     Please Comment     Please Reply     Please Recycle

Mr. Dwyer, here is the report from RSO Inc on the NORM waste from Constellation Brandon Shores. We have a full 30 yard roll-off can with steel debris, aluminum cans, metal piping and the coal sludge. There are also some metal grindings but no metal powders. Coal Dust is listed as being a producer of Uranium and Thorium at NORM Levels. Constellation Brandon Shores Plant burns coal for fuel production. It is therefore more than likely from a stack or furnace cleaning where these coal dusts collect. If you have any further questions, please contact me at 410-679-8877(Office) or 443-807-8694(Cell)

Thank you for your time on this matter!

Barry D. Snyder

Field Chemist/Chemical Operations Manager

A2Z Environmental Group LLC

**A2Z Environmental Group LLC  
311 South Haven Street  
Baltimore, MD 21224**

**February 10, 2006**

**Mr. Jim Dwyer  
Nuclear Regulatory Commission Region I  
475 Allendale Road  
King of Prussia, Pennsylvania 19406**

**Dear Mr. Dwyer,**

Enclosed is the analytical report from the testing of Naturally Occurring Radioactive Materials (NORM) waste at Constellation- Brandon Shores Plant. The waste consists of metal pipes, angle iron, aluminum cans, some metal grindings, trash, debris and furnace bottom coal dust / fly ash sludge from an outage clean-up operation at the plant. It is in a 30 cubic yard roll-off container. The NORM waste isotopes are Uranium and Thorium and are believed to be from the coal sludge. The activity is highest on the Thorium at 12.53 picocuries/gram.

Mr. John Krueger of Pennsylvania Department of Environmental Protection has agreed to accept this waste at Modern Landfill in York, Pennsylvania as a residual waste. DEP however, requires a letter from the NRC stating that this is not a regulated nuclear waste. That is the purpose of this letter.

The following is a list of contacts and their phone numbers:

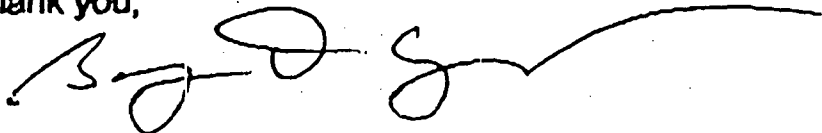
1. Constellation- Brandon Shores Generating Station 1000 Brandon Shores Road, Curtis Bay, MD 21226 Mike (410) 787-5271 or Steve Moore (410) 787-5577
2. Pennsylvania Department of Environmental Protection Waste Management Mr. John Krueger (717) 705-4938 or Environmental Chemist Mr. Jim Staub (717) 705-4918
3. RSO Incorporated Radiation Service Organization P.O. Box 1450 Laurel, MD 20725-1450 Mr. David Wellner (301) 953-2482 Ext. 306 <http://www.rsoinc.com/index.cfm?ref=21273> Or <http://www.rsoinc.com/>

● Page 2

February 10, 2006

4. A2Z Environmental Group LLC 311 South Haven Street,  
Baltimore, MD 21224 Mr. Barry D. Snyder Field  
Chemist/Chemical Operations Manager (410) 679-8877 (Office)  
or (443) 807-8694 (cell).

Thank you,

A handwritten signature in black ink, appearing to read 'Barry D. Snyder', with a long horizontal flourish extending to the right.

Mr. Barry D. Snyder  
Field Chemist / Chemical Operations Manager  
A2Z Environmental Group LLC

BS



Radiation Service Organization

January 9, 2006

Barry Snyder  
A2Z Environmental Group  
311 S. Haven Street  
Baltimore, MD

Re: Gamma Spectrum Analysis of Soil from Roll-off at Power Plant

Dear Mr. Snyder,

RSO is please to provide you with the gamma spectrum analysis for the soil sample that was received by our lab on 1/6/06.

**Method**

The sample was put into a 500-ml marinelli beaker. The gamma spectrum analysis was conducted by using RSO's high purity germanium counting system. A NIST traceable mixed gamma standard in a 500-ml marinelli beaker configuration was used for both the energy and efficiency calibration of the counting system. A gamma spectrum was collected and analyzed by Canberra Genie 2000 spectroscopy software.

**Results**

See enclosed sample analysis report for activity concentrations.

**Conclusions**

The identified radionuclides are all progeny of uranium and thorium. Both are naturally occurring radioactive material (NORM). The gamma lines from each sample were compared to libraries of naturally occurring radionuclides along with other common isotopes. No other isotopes other than those from the uranium and thorium series were identified. The activity concentrations of the identified isotopes are consistent with the low level concentrations found in soil and other building materials.

Thank you for this opportunity to be of service. If you have any questions please do not hesitate to contact me.

Sincerely,

David Bisson, CHP  
Manager, Radiation Safety Services

Enclosures


DB

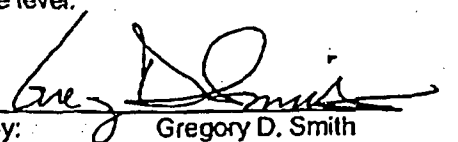
RSO, Inc.  
Report of Gamma Spectrum Analysis

Job: A2Z Environmental Group  
 Lab Control #: 2006-006  
 Date Received: January 6, 2006  
 Sample Matrix: Soil  
 Sample Analysis: Gamma Spectrum Analysis

Sample Number	Thorium Series			Uranium Series		
	Ra-228 (based on Ac-228)	Pb-212	Bi-212	U-238 (based on Th-234)	Ra-226 (based on Pb-214)	Bi-214
	pCi/g of sample	pCi/g of sample	pCi/g of sample	pCi/g of sample	pCi/g of sample	pCi/g of sample
Soil from Roll-off	10.14 +/- 0.87	11.66 +/- 0.94	12.53 +/- 1.86	8.53 +/- 2.90	6.92 +/- 2.31	6.98 +/- 0.75

Error term shown is counting error only at the 2 sigma confidence level.

  
 Report Prepared By: David Bisson  
 Certified Health Physicist  
 RSO, Inc.

  
 Report Reviewed By: Gregory D. Smith  
 Certified Health Physicist  
 RSO, Inc.