

# H.A.P.I.

## Hot Asphalt Paving, Inc.

Construcción en general, Sistemas de Agua Potable, Sanitario y Pluvial,  
Construcción de Carreteras • Estacionamientos • Movimiento de Tierra y Mogolla

Hot Asphalt Paving  
609 Tito Castro Ave  
Suite 102 PMB 384  
Ponce, PR 00716-2232

February 22, 2013

L 2

03038487

52-31452-01/2012001

U.S. NRC Region I  
Attn: DNMS LAT  
2100 Renaissance Blvd  
King of Prussia, PA 19406

RE: Reply to a Notice of Violation  
Inspection Report No. 52-03038487/2012001

This is the information that you requested in response to the "Notice of Violation" that we received in January 2013.

Violation 1 – Minimum of two independent looks.

1. The violation is accepted as stated.
2. The reason for the violation is attributed to lack of knowledge to work safely with nuclear gauges.
3. Corrective action – The second look has been installed on the storage door.
4. Date of full compliance was February 11, 2013.

Violation 2 – Leak Testing of our nuclear gauges.

1. The violation is accepted as stated.
2. The reason for the violation is attributed to lack of knowledge to work safely with nuclear gauges.
3. Corrective action – David Rhoe (an outside Consultant) has been hired to provide training, technical support, perform annual audits and leak testing of our nuclear gauges. A copy of the leak test is attached.
4. Date of full compliance was February 11, 2013.

Violation 3 – Unmonitored individuals.

1. The violation is accepted as stated.
2. The reason for the violation is attributed to lack of knowledge to work safely with nuclear gauges.
3. Corrective action – David Rhoe (an outside Consultant) has been hired to provide training, technical support, perform annual audits and leak testing of our nuclear gauges. A copy of doses calibration has been attached for your review.
4. Date of full compliance was January 31, 2013.

NMSS/RGNI MATERIALS-004

REC RG 1 02 26 13 AM 07 07

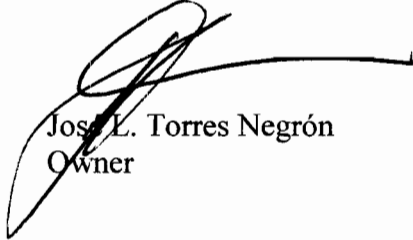
Page # 2

RE: Reply to a Notice of Violation

Inspection Report No. 52-03038487/2012001

If you have any questions or need any further information, please feel free to contact me at the address above.

Sincerely,



José L. Torres Negrón  
Owner

Leak Test Record  
NRC License 52-25430-01

Leak Tested For:	Hot Asphalt Paving	
Leak Tested By:	David Rhoe	
Standard Source (NIST traceable):	Am-241	Cs-137 NES-139S
Standard Activity (uCi):	1.145	0.105
Standard Date	15-Nov-98	09-Sep-88
Date of the Leak Test:	11-Feb-13	
Decay Activity uCi (from decay chart):	1.11919	0.05976
Standard (dpm):	2484601.8	132667.2
Instrument used to count wipe sample:	Beckman Gamma	
Instrument Model Number:	5500	
Instrument Serial Number:	8044788	
NIST Traceable Standard (cpm)	294078	37065
Counting Efficiency:	0.12	0.28
Counting Efficiency in percentage (%):	11.84	27.94
Counting time (minutes)	1	1
Background (cpm)	163	163
Minimum Detectable Activity:	6.871E-05	2.911E-05

Wipe (Smear) Test: All external or accessible surfaces of the source or housing are wiped with a piece of filter paper or other absorbent material which has been moistened with an appropriate solvent and the activity removed is measured.  
Note: Background counts were not subtracted from wipe test sample to calculate sample activity.

Source ID and Serial Number	Wipe Test	Sample Activity	Gamma Sample Activity
Ra-226 Seamans C-200 Sn A-750	154	0.00059	0.00025

This test reveals that 0.005 microcuries or less was present as removable contamination. Should the removable contamination exceed 0.005 microcuries, the source must be removed from use and necessary measures taken according to NRC regulations.

  
 David Rhoe Health/Medical Physicist

Leak Test Record  
NRC License 52-25430-01

Leak Tested For:	Santa Isabel Asphalt	
Leak Tested By:	David Rhoe	
Standard Source (NIST tracable):	Am-241	Cs-137 NES-139S
Standard Activity (uCi):	1.145	0.105
Standard Date	15-Nov-98	09-Sep-88
Date of the Leak Test:	07-Dec-12	
Decay Activity uCi (from decay chart):	1.11935	0.05988
Standard (dpm):	2484957	132933.6
Instrument used to count wipe sample:	Beckman Gamma	
Instrument Model Number:	5500	
Instrument Serial Number:	8044788	
NIST Traceable Standard (cpm)	304224	37436
Counting Efficiency:	0.12	0.28
Counting Efficiency in percentage (%):	12.24	28.16
Counting time (minutes)	1	1
Background (cpm)	138	138
Minimum Detectable Activity:	6.113E-05	2.657E-05

Wipe (Smear) Test: All external or accessible surfaces of the source or housing are wiped with a piece of filter paper or other absorbent material which has been moistened with an appropriate solvent and the activity removed is measured.  
Note: Background counts were not subtracted from wipe test sample to calculate sample activity.

		Gamma	
Source ID and Serial Number	Wipe Test	Sample Activity	Sample Activity
Ra-226 Seamans C-200 Sn L-994	138	0.00051	0.00022

This test reveals that 0.005 microcuries or less was present as removable contamination. Should the removable contamination exceed 0.005 microcuries, the source must be removed from use and necessary measures taken according to NRC regulations.

  
 David Rhoe Health/Medical Physicist

Leak Test Record  
NRC License 52-25430-01

Leak Tested For:	Hot Asphalt Paving	
Leak Tested By:	David Rhoe	
Standard Source (NIST tracable):	Am-241	Cs-137 NES-139S
Standard Activity (uCi):	1.145	0.105
Standard Date	15-Nov-98	09-Sep-88
Date of the Leak Test:	31-Jan-12	
Decay Activity uCi (from decay chart):	1.11919	0.05976
Standard (dpm):	2484601.8	132667.2
Instrument used to count wipe sample:	Beckman Gamma	
Instrument Model Number:	5500	
Instrument Serial Number:	8044788	
NIST Traceable Standard (cpm)	294078	37065
Counting Efficiency:	0.12	0.28
Counting Efficiency in percentage (%):	11.84	27.94
Counting time (minutes)	1	1
Background (cpm)	163	163
Minimum Detectable Activity:	6.871E-05	2.911E-05

Wipe (Smear) Test: All external or accessible surfaces of the source or housing are wiped with a piece of filter paper or other absorbent material which has been moistened with an appropriate solvent and the activity removed is measured.  
Note: Background counts were not subtracted from wipe test sample to calculate sample activity.

Source ID and Serial Number	Wipe Test	Sample Activity	Gamma Sample Activity
Ra-226 Seamans C-200 Sn L-560	176	0.00067	0.00028

This test reveals that 0.005 microcuries or less was present as removable contamination. Should the removable contamination exceed 0.005 microcuries, the source must be removed from use and necessary measures taken according to NRC regulations.

  
 \_\_\_\_\_  
 David Rhoe Health/Medical Physicist

**DOSIMETRY EVALUATION**

**DOSIMETRY EVALUATION FOR SEAMANS C-200 PORTABLE GAUGES.**

A.	TIME NEEDED TO PERFORM THE ENTIRE ROUTINE CLEANING AND LUBRICATION PROCEDURE ON THE GAUGE.	2.0 hour
B.	EXPECTED WHOLE BODY DOSE RATE WHICH THE INDIVIDUAL WILL ENCOUNTER, DETERMINED USING MEASURED OR MANUFACTURER PROVIDED DATA,	2.00 mrem/hour
C.	TIME THE HANDS WERE EXPOSED TO THE UNSHIELDED SOURCE.	0.25 hour
D.	EXPECTED EXTREMITY DOSE RATE WHICH THE INDIVIDUAL WILL ENCOUNTER, DETERMINED USING MEASURED OR MANUFACTURER PROVIDED DATA FOR THE UNSHIELDED SOURCE.	4.00 mrem/hour
E.	CLEAN AND LUBRICATION PER YEAR	4.0 each

**FORMULA WHOLE BODY DOSE EQUIVALENT > (less than) 500 mrem require no dosimetry**

**FORMULA WHOLE BODY DOSE EQUIVALENT = Row A X Row B x Row E**

FORMULA DOSE EQUIVALENT = 2.00 hour X 2.00 mrem/hour X 4.0 each = **16.0 mrem**

**FORMULA EXTREMITY DOSE EQUIVALENT > (less than) 5000 mrem require no dosimetry**

**FORMULA EXTREMITY DOSE EQUIVALENT = Row C X RowD X Row E**

FORMULA DOSE EQUIVALENT = 0.25 hour X 4.00 mrem/hour X 4.0 each = **4.0 mrem**