

From:
Raul Robles, CEO
R & F Asphalt Unlimited, Inc.
P.O. 801028
Coto Laurel, PR 00780-1028

To:
James R. Cassata, Ph.D., CHP, License Reviewer
Division of Nuclear Materials Safety
U.S. Nuclear Regulatory Commission, Region I
2100 Renaissance Boulevard, Suite 100
King of Prussia, PA 19406 – 2713

Mr. Cassata:

This letter is in response to your request for additional information in an email to me dated November 7, 2017. Note the attachment to this letter is a letter from Mr. Moises Estrada dated November 10, 2017, and it is being provided in this letter because it has useful additional information in answering your request for additional information. I will refer to this attachment where applicable in my responses below.

Regarding Item 1: We have reviewed our original application dated September 13, 2017, to ensure that we can equivalently commit to the current requirements in NUREG-1556, Volume 1, revision 2, dated June 2016. We understand that in the original application we referenced to having committed to various items listed in revision 1 but should have written to having committed to those same items in revision 2, which is the latest version of NUREG-1556, Volume 1. This was essentially an administrative oversight in the original application.

Regarding Items 2 and 3: To clarify, we are asking to have the same materials, quantities, and gauges listed on the renewed license as are listed on the current license as follows:

- CPN International Model MC Series portable gauging devices using sealed sources from CPN International Model CPN-131 with Cesium 137 (20 mCi Total) and Americium 241 (100 mCi Total).
- Seaman Nuclear Corporation Model C-200 portable gauging devices using sealed sources from Radium Chemical Company Model RAN-W25 with Radium 226 (18 mCi Total).

Date November 18, 2017
Mail Control Number: 601490
Docket Number: 3037552
License Number: 52-31279-01

Regarding Item 4: I am applying for approval for Moises Estrada to be the RSO on the renewed license. His training certificates and signed delegation of authority letter are provided in the attachment to this letter, dated November 10, 2017.

Regarding Item 5: The answers to your questions regarding item 5, a through d, are in the attachment to this letter, dated November 10, 2017.

Regarding Item 6: The answer to your question regarding item 6 is in the attachment to this letter, dated November 10, 2017.

If your need any further information, please feel free to contact Moises Estrada at (787) 376-3923.

Sincerely,

A handwritten signature in dark ink, appearing to read "Raul Robles". The signature is fluid and cursive, with the first name "Raul" and last name "Robles" clearly distinguishable.

Raul Robles, CEO.

November 10, 2017

James R. Cassata, Ph. D., OOO
Health Physicist
Nuclear Regulatory Commission (NRC), Region I
Division of Nuclear Materials Safety (DNMS)
Commercial, Industrial, R & D, and Academic Branch (CIRDA)

Mr. Cassata:

Responding to the information requested:

ITEM #1

Corrective action:

See attached document items 5 and 6 NUREG

ITEM #2 and ITEM #3

Corrective action:

See document with pictures, diagrams and descriptive table of the nuclear gauges.

ITEM #4

Corrective Action:

See attached letter signed

ITEM #5

Indent a:

R & f Asphalt Unlimited, Inc.

Carretera PR 14 9.6 Km

Coto Laurel, PR 00780 - 1028

Tel 787-284-3065 Fax 787-840-6122 or 787-284-3077

Indent b:

If they are permanently stored in this location.

Indent c; Indent d:

See document with pictures, diagrams and descriptive table of the nuclear gauges.

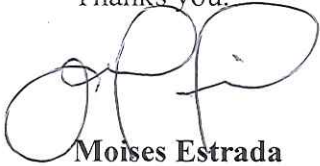
ITEM #6

Corrective Action:

We will develop, implement and maintain procedures for ensuring accountability of the licensed materials at all times. View report of the leak test that is carried out every 6 months, the next leak test will be in December 2017.

I hope to have answered all your questions. Any other questions contact me when you want it please.

Thanks you.

A handwritten signature in black ink, appearing to be 'ME' with a large loop, positioned above the printed name.

Moises Estrada

R & F Asphalt Unlimited, Inc.

787-376-3923 (mobile)

787-284-3065 (office)

roblesempresas@gmail.com

**Suggested Format for Providing Information Requested in
Items 5 through 11 of
U.S. Nuclear Regulatory Commission Form 313**

Items 5 and 6: Materials To Be Possessed and Proposed Uses

Yes	No	Radionuclide	Manufacturer or Distributor Model No.	Quantity	Use as Listed on SSD Registration Certificate	Specify Other Uses Not Listed on SSD Registration Certificate
		Cesium-137	Gauge manufacturer (or distributor) and model number: <u>CPN MC 1DR P</u> <u>MD 00805856</u>	Specify activity per source and number of gauges requested. <u>10 mCi</u> <u>1</u>	Yes <input checked="" type="checkbox"/> Specific description of the gauge use: <u>Densities reads</u> <u>in soils and</u> <u>asphalt layers.</u>	<input checked="" type="checkbox"/> Not applicable <input type="checkbox"/> Uses are: (Submit safety analysis supporting safe use.)
		Americium-241	Gauge manufacturer (or distributor) and model number: <u>CPN MC 1DR P</u> <u>MD 00805856</u>	Specify activity per source and number of gauges requested. <u>50 mCi</u> <u>1</u>	Yes <input checked="" type="checkbox"/> Specific description of the gauge use: <u>Densities reads</u> <u>in soils and</u> <u>asphalt layers</u>	<input checked="" type="checkbox"/> Not applicable <input type="checkbox"/> Uses are: (Submit safety analysis supporting safe use.)

Yes	No	Radionuclide	Manufacturer or Distributor Model No.	Quantity	Use as Listed on SSD Registration Certificate	Specify Other Uses Not Listed on SSD Registration Certificate
		Californium-252	Gauge manufacturer (or distributor) and model number:	Specify activity per source and number of gauges requested.	Yes <input type="checkbox"/> Specific description of the gauge use:	<input type="checkbox"/> Not applicable <input type="checkbox"/> Uses are: (Submit safety analysis supporting safe use.)
		Radium-226	Gauge manufacturer (or distributor) and model number: <u>Seamans</u> <u>C-200</u> <u>A-362</u> <u>L-482</u> <u>L-442</u> <u>A-884</u>	Specify activity per source and number of gauges requested. <u>4.5 mCi</u> <u>4</u>	Yes <input checked="" type="checkbox"/> Specific description of the gauge use: <u>Densities reads in soils and asphalt layers.</u>	<input checked="" type="checkbox"/> Not applicable <input type="checkbox"/> Uses are: (Submit safety analysis supporting safe use.)
		Other Isotope (Specify):	Gauge manufacturer (or distributor) and model number:	Specify activity per source and number of gauges requested.	Yes <input type="checkbox"/> Specific description of the gauge use:	<input type="checkbox"/> Not applicable <input type="checkbox"/> Uses are: (Submit safety analysis supporting safe use.)
Is financial assurance required? If yes, submit evidence of financial assurance.						

Model Delegation of Authority to Radiation Safety Officer

Memo To: Radiation Safety Officer
From: Chief Executive Officer
Subject: Delegation of Authority

You, Moises Estrada, have been appointed radiation safety officer and are responsible for ensuring the safe use of radiation. You are responsible for managing the Radiation Protection Program; identifying radiation protection problems; initiating, recommending, or providing corrective actions; verifying implementation of corrective actions; stopping unsafe activities; and ensuring compliance with regulations. You are hereby delegated the authority necessary to meet those responsibilities, including prohibiting the use of byproduct material by employees who do not meet the necessary requirements and shutting down operations, when justified, to maintain radiation safety. You are required to notify management if staff does not cooperate and does not address radiation safety issues. In addition, you are free to raise issues with the U.S. Nuclear Regulatory Commission at any time. It is estimated that you will spend 1 hours per week conducting radiation protection activities.

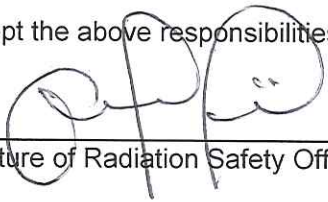


Signature of Management Representative

Nov. 9, 2017

Date

I accept the above responsibilities,



Signature of Radiation Safety Officer

Nov 9, 2017

Date

cc: Affected department heads

Leak Test

Leak Test Record
NRC License 52-25430-01

— Julio — Dic 2017

Leak Tested For:
Leak Tested By:

R & F Asphalt
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:	23-Jun-17	
Decay Activity uCi (from decay chart):	1.11132	0.05399
Standard (dpm):	2467130.4	119857.8

Instrument used to count wipe sample:	Beckman Gamma
Instrument Model Number:	5500
Instrument Serial Number:	8044788

NIST Traceable Standard (cpm)	587794	34523
Counting Efficiency:	0.24	0.29
Counting Efficiency in percentage (%):	23.83	28.80
Counting time (minutes)	1	1
Background (cpm)	77	77
Minimum Detectable Activity:	2.346E-05	1.941E-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	Gamma	Sample Activity	Sample Activity
CPN Am-241 & Cs-137 SnMD00805856	79		0.00015	0.00012

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:
Leak Tested By:

R & F Asphalt
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:	23-Jun-17	
Decay Activity uCi (from decay chart):	1.11132	0.05399
Standard (dpm):	2467130.4	119857.8

Instrument used to count wipe sample:	Beckman Gamma
Instrument Model Number:	5500
Instrument Serial Number:	8044788

NIST Traceable Standard (cpm)	587794	34523
Counting Efficiency:	0.24	0.29
Counting Efficiency in percentage (%):	23.83	28.80
Counting time (minutes)	1	1
Background (cpm)	77	77
Minimum Detectable Activity:	2.346E-05	1.941E-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
Seaman C-200 A-362	69	0.00013		0.00011

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:
Leak Tested By:

R & F Asphalt
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:	23-Jun-17	
Decay Activity uCi (from decay chart):	1.11132	0.05399
Standard (dpm):	2467130.4	119857.8

Instrument used to count wipe sample:	Beckman Gamma
Instrument Model Number:	5500
Instrument Serial Number:	8044788

NIST Traceable Standard (cpm)	587794	34523
Counting Efficiency:	0.24	0.29
Counting Efficiency in percentage (%):	23.83	28.80
Counting time (minutes)	1	1
Background (cpm)	77	77
Minimum Detectable Activity:	2.346E-05	1.941E-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	Gamma	Sample Activity	Sample Activity
Seaman C-200 L-482	71		0.00013	0.00011

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:	R & F Asphalt	
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:	23-Jun-17	
Decay Activity uCi (from decay chart):	1.11132	0.05399
Standard (dpm):	2467130.4	119857.8
Instrument used to count wipe sample:	Beckman Gamma	
Instrument Model Number:	5500	
Instrument Serial Number:	8044788	
NIST Traceable Standard (cpm)	587794	34523
Counting Efficiency:	0.24	0.29
Counting Efficiency in percentage (%):	23.83	28.80
Counting time (minutes)	1	1
Background (cpm)	77	77
Minimum Detectable Activity:	2.346E-05	1.941E-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
Seaman C-200 L-442	84	0.00016	0.00013

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:	R & F Asphalt	
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:	23-Jun-17	
Decay Activity uCi (from decay chart):	1.11132	0.05399
Standard (dpm):	2467130.4	119857.8
Instrument used to count wipe sample:	Beckman Gamma	
Instrument Model Number:	5500	
Instrument Serial Number:	8044788	
NIST Traceable Standard (cpm)	587794	34523
Counting Efficiency:	0.24	0.29
Counting Efficiency in percentage (%):	23.83	28.80
Counting time (minutes)	1	1
Background (cpm)	77	77
Minimum Detectable Activity:	2.346E-05	1.941E-05

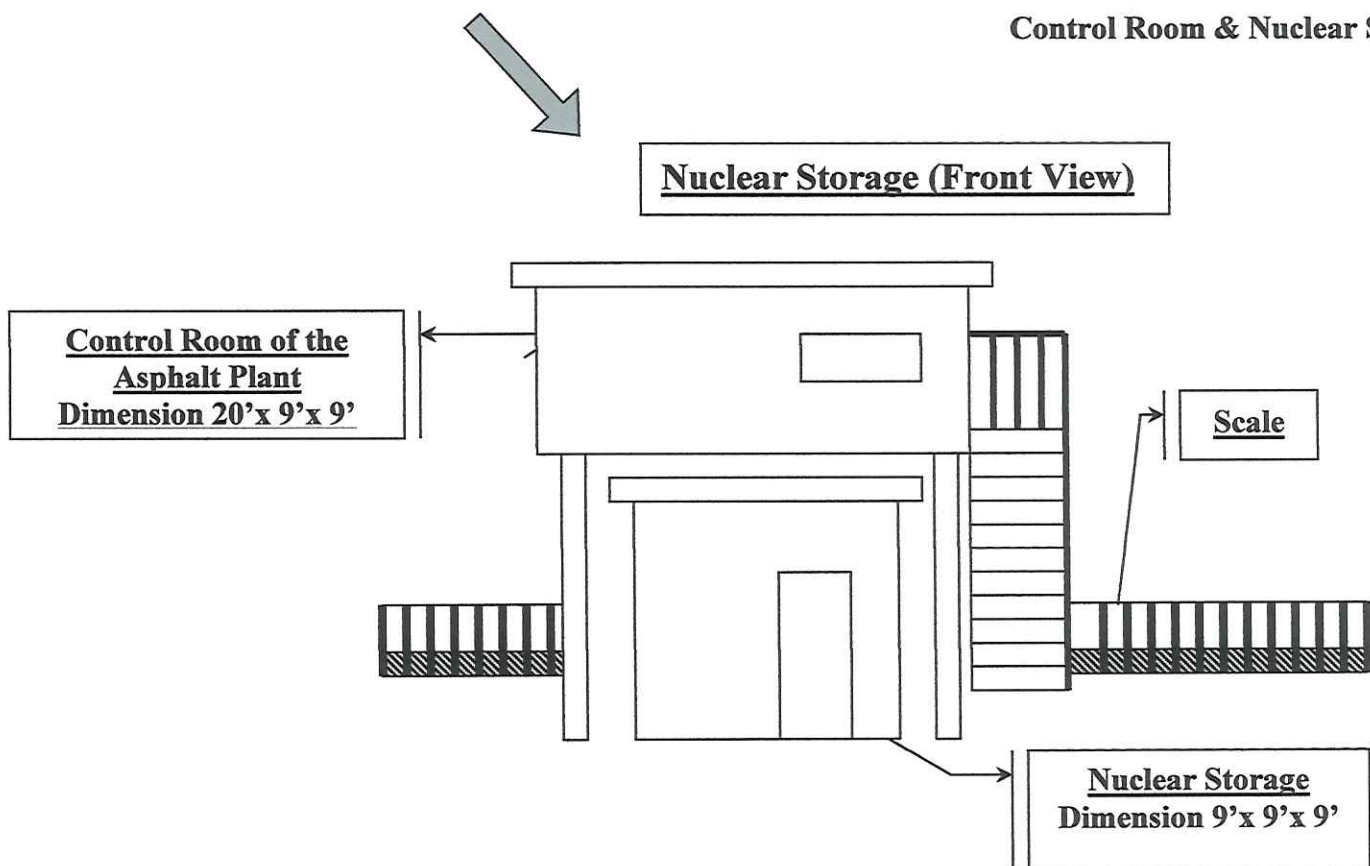
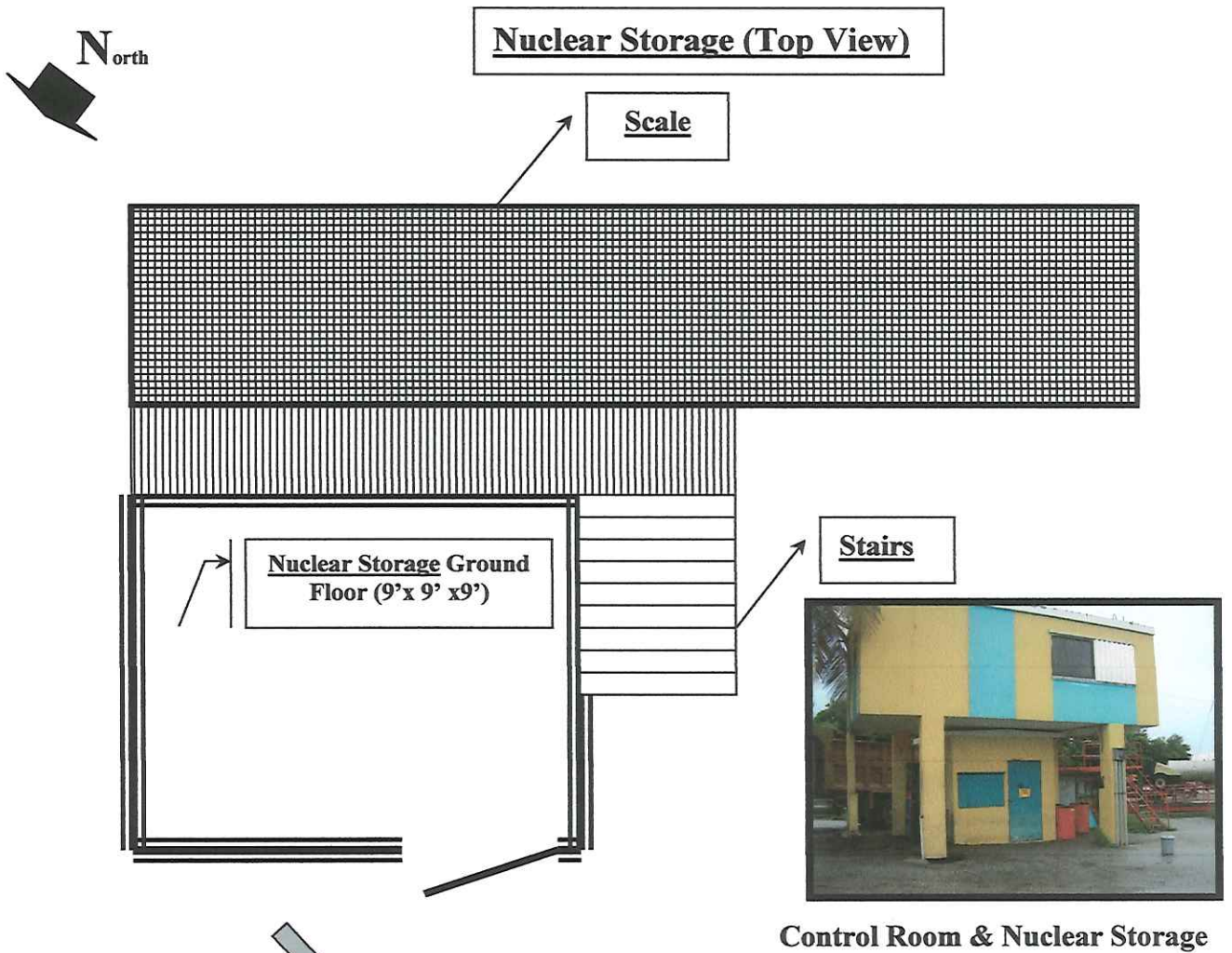
Wipe (Smear) Test: All external or accessible surfaces of the source or housing are wiped with a piece of filter paper or other absorbent material which has been moistened with an appropriate solvent and the activity removed is measured.
Note: Background counts were not subtracted from wipe test sample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

Source ID and Serial Number	Wipe Test	Sample Activity	Gamma Sample Activity
Seaman C-200 A-884	72	0.00014	0.00011

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

Location of the Nuclear Gauges Storages & Records



Nuclear Storage

Location of the Nuclear Gauges Storages & Records



Pic #1 View Nuclear storage (ground floor) and Control Room Asphalt Plant (Top floor)



Pic #2 Frontal View

Physical Location of storage of the Nuclear Gauge & Records

R & F ASPHALT UNLIMITED, INC.

Carretera PR 14 Km 9.6

Coto Laurel PR 00780-1028

Tel. 787-284-3065 Fax 787-840-6122 or 787-284-3077

R & F Asphalt Unlimited Inc

Location of the Nuclear Gauges Storages & Records

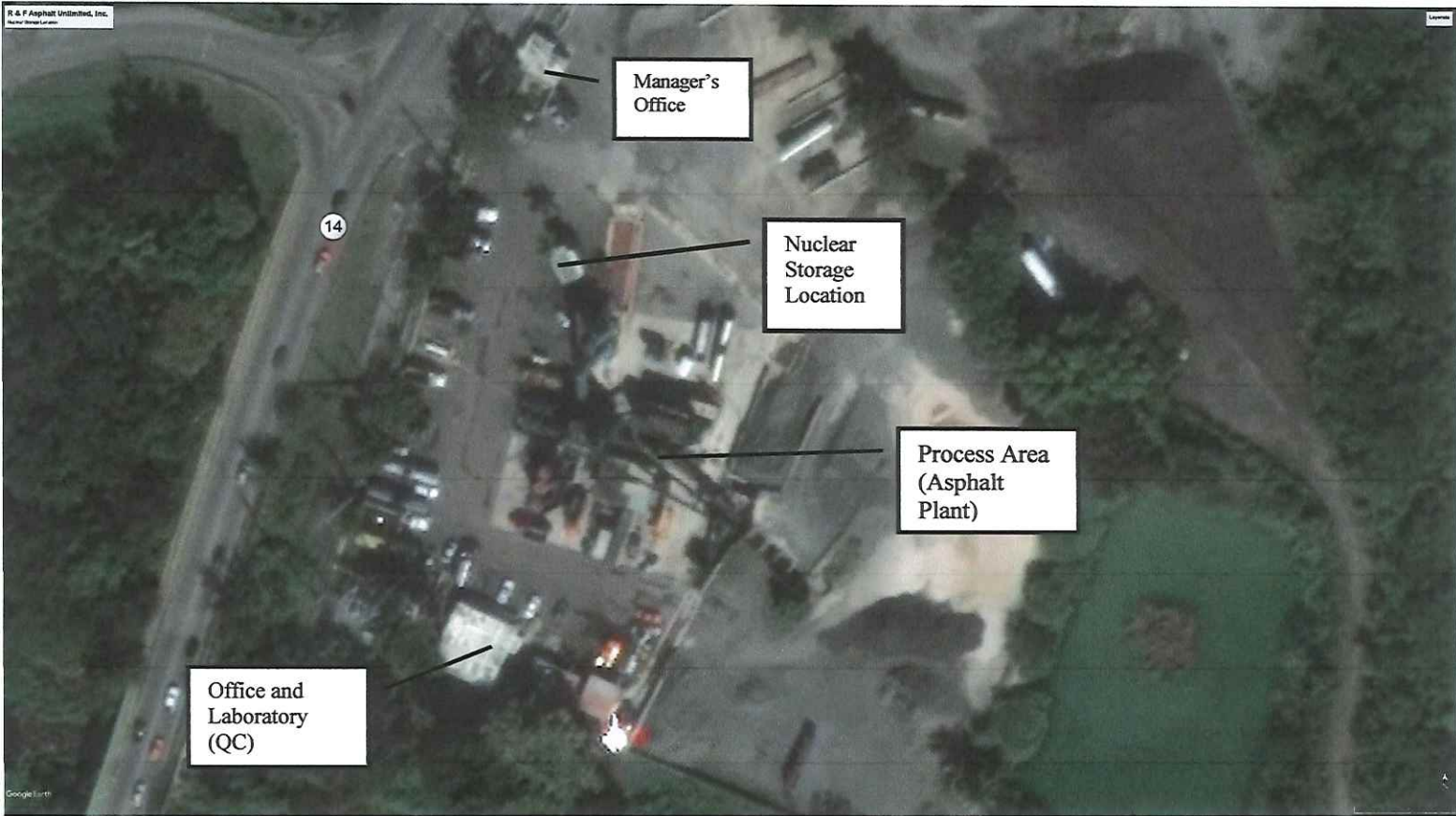


Pic #3 Panoramic View



Pic #4 Lateral View

Location of the Nuclear Gauges Storages & Records



NUCLEAR GAUGES LISTED IN LICENSE

MODELO	SERIAL NUMBER	ISOTOPO
CPN MC-1DR-P	MD00805856	Americium 241:Beryllium 1.85 GBq (50 mCi) Cesium 137 0.37 GBq (10 mCi)
SEAMANS C-200	A-362	Radium 226 166.5 MBq (4.5 mCi)
SEAMANS C-200	L-482	Radium 226 166.5 MBq (4.5 mCi)
SEAMANS C-200	L-442	Radium 226 166.5 MBq (4.5 mCi)
SEAMANS C-200	A-884	Radium 226 166.5 MBq (4.5 mCi)