



August 31, 2007

U. S. Nuclear Regulatory Commission
Region I
Security and Industrial Branch
Division of Nuclear Materials Safety
475 Allendale Road
King of Prussia, PA 19406 - 1415

NMSB3

Attention: Mr. John D. Kinneman - Chief

RE: U. S. Silica Company - Mauricetown Plant / Port Elizabeth Plant

Dear Mr. Kinneman:

03014788

Reference is made to NRC License Number 47-09375-07 issued to the U. S. Silica Company that expires on September 30, 2014. The following three amendments are requested for this license.

1. **PORT ELIZABETH PLANT** – Request the addition of this NJ location to the license.
2. **MAURICETOWN PLANT** – Request the addition of two new fixed Ronan gauges to the license. Information discussing these two new gauges is enclosed for review.
3. **PORT ELIZABETH PLANT** – Request the addition of one new fixed Ronan gauge to the license. Information discussing this new gauge is enclosed for review.

USS understands that no NRC fee is required for the processing of these three amendment requests. Advise if any questions exist or if further information is needed after your review.

Sincerely,

U. S. SILICA COMPANY

Jack M. Pryor, P.E., P.S., QEP, CES
Senior Civil Engineer

SEP - 4 2007 PM 12: 45

RECEIVED
REGION 1

/jmp
Enclosures

cc: J. A. Ulizio
C. S. Eves
USS Environmental Database / Central Files

141017

NMSS/RGN1 MATERIALS-002

RONAN

Measurements Division

RONAN ENGINEERING COMPANY MEASUREMENTS DIVISION

8050 Production Dr.
Florence KY. 41042 USA
Phone (859) 342-8500 FAX (859) 342-6426

August 31, 2007

Proposal#

US Silica

Ronan Representative: Pro-Quip

Attn:

Prepared by: Chris Mann

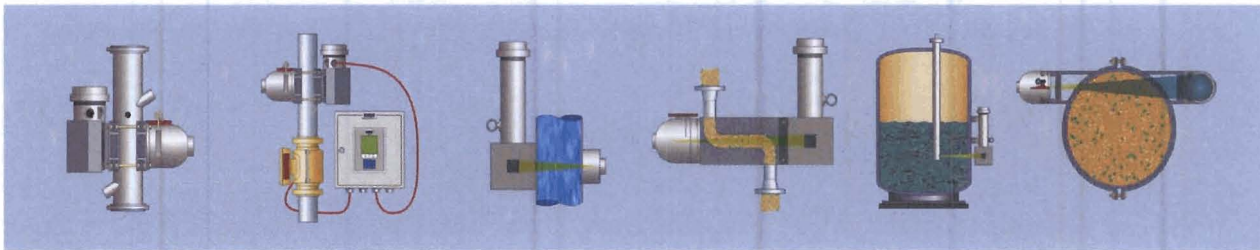
Reference: Mass flow Gauge for sand dredge. Stacker 1

Manufacturing Plant

Ronan Engineering is pleased to present the following information for your consideration.

Application Description:

Ronan's RLL Low Energy Gamma Radiation System measures the process density by keeping all components external to the pipe. An RLL-1 source holder, which does NOT require Site Specific Licensing, containing a Cs-137 gamma source will be mounted external to one side of the pipe. Mounted to the opposite side of the pipe will be an extra sensitive scintillation detector in an explosion proof pipe housing with enamel paint. The source holder and detector will be attached to a common mounting bracket made to clamp around a pipe. As the process inside the pipe increases in density the signal reaching the detector will decrease. This signal will be communicated from the detector to the X96S microprocessor through an interconnect cable. The X96S Microprocessor will accept a 4 – 20ma output from the flow meter and display the density measurement(s) and will output solids density, and mass flow the main unit of measurement via 4-20mA analog output.



Application Data (please review/confirm):

Application Description: Density gauge for sand slurry

Product: sand Slurry

Build up of product on walls is not expected

Product conductivity: No

Pipe Material: 8 inch, dr-11, No liner, No Insulation

Carrier/SpG: Water/1.00

Solids/SpG: sand/2.65

SpG Range: 1 to 1.3 SpG by 0.006 SpG resolution %Solids Range: 0 to 35% by 0.5 % resolution

Main Measuring Unit: %Solids/0 to 35% Solids

Analog Output Reference: 4mA=0%; 20mA=35% Solids, 0 – 130TPH

Distance from Detector to Microprocessor: 50 feet.

Microprocessor power: 115 VAC, 60 Hz

Microprocessor and Detector Area is non-explosive and within a temperature range of +20 to +120° F.

The measurement will be repeatable to +/- 1% of span.



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Ronan Engineering Density System:

- A) RLL1 Source Holder, model RLL1-16195L2A2
 - Carbon steel with industrial enamel paint construction
 - Includes (10) 90 μ Ci, Cs-137, model SRC-PT-CS-90UCI gamma sources
 - No shutter or wipe tests are required!

- B) Density Detector, model DET16994-A4PA
 - 4 inches active length, solid-crystal design
 - Extra-sensitive scintillation detector
 - Includes model HSNB-18458-3 explosion-proof housing, suitable for Class I, Division 1, Groups A, B, C & D and Class II, Division 1, Groups E, F & G
 - Industrial enamel baked on painted
 - Detector heater blanket and controls

- C) Pipe mounting bracket, model BRKT-3787-8
 - Mounting bracket for 8-inch pipe
 - Common bracket that mounts source and detector to pipe
 - Carbon steel with industrial enamel baked on paint construction

- D) One model X96SSSA-00Y2000 Microprocessor
 - Mild steel with industrial enamel baked on paint, rated NEMA-4, wall-mount enclosure
 - Displays the Density value(s) on a multi-line backlit LCD display
 - Includes two (2) 4-20 mA analog outputs
 - 115 VAC, 60 HZ powered
 - Calibrated through Menu Driven Display
 - Performs Curve Correction for linearization of the level reading
 - Performs Automatic Source Decay Compensation
 - Performs automatic self check diagnosis

- E) Inter-connect cable, model CBLE-11635-50
 - Four (4) conductor cable

Equipment Cost (fob Florence, KY prepaid & added to invoice).....**\$11,775.00 per system**

Equipment Summary:

<u>Qty.</u>	<u>P/N</u>	<u>Description</u>
1	RLL1-16195L2A2	Source holder
10	SRC-PT-CS-90UCI	90 μ CI, Cs-137, gamma source
1	DET16994-A4PA	Extra sensitive scintillation detector
1	HSNB-18458-3	Explosion-proof detector housing
1	BRKT-16780-8	Pipe mounting bracket for 8-inch pipe
1	X96SSSA-00Y2000	Microprocessor in a NEMA 4 enclosure
1	SFTW-X96S-DEN-H	X96S Density software with HART
1	CBLE-11635-50	Interconnect cable from Detector to Microprocessor



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Optional:

X96SPHA-000S000 Stainless Steel, rated NEMA 4x wall mount enclosure Microprocessor instead of X96SSHA-000S000 mild steel, painted, rated NEMA 4 wall mount enclosure (rest of features are same as listed above)

Please add **\$370.00 per system**

Accessories:

-Each system includes one (1) user manual/drawing documentation package. Please add \$45.00 for each additional manual/drawing documentation package desired.

-Stainless Steel equipment tags, please add \$20.00 for each tag needed.

The above mentioned pricing does NOT include any installation/start-up cost. **Installation/start-up by Ronan Measurements Service Department is recommended.** This service is provided on a Time & Materials basis. Please see enclosed Domestic Service Rate Sheet located later in this proposal for details. Start-up services must be on a separate purchase order.

Limited Warranty for Microprocessor and Detector is **three (3) years**, please refer to warranty sheet for details in later part of this proposal.

Typical delivery is 4-6 week after receipt of order and/or approval drawings, complete ship to address and responsible party information.

The above pricing does not include any applicable taxes.

Freight is FOB Ronan-Florence, Kentucky-prepaid and added to invoice.

Please see enclosed terms and conditions sheet located later in this proposal.

This proposal is good for thirty (30) days.

Payment terms in US are net thirty (30) days from shipment of equipment, outside of US are prepaid before shipment or Letter of Credit. All credit is subject to credit approval.

***Please note: Complete ship to address (PO Box is not acceptable), radiation responsible party's name and contact information (title, phone #, etc.) for source must be provided with order to meet delivery time listed in this quotation! Sources can not be built and/or shipped until this information is received!**

If you have any questions or would like to discuss this further, please do not hesitate to contact us.

Thank you in advance for your consideration!

Please visit our web-site www.ronanmeasure.com



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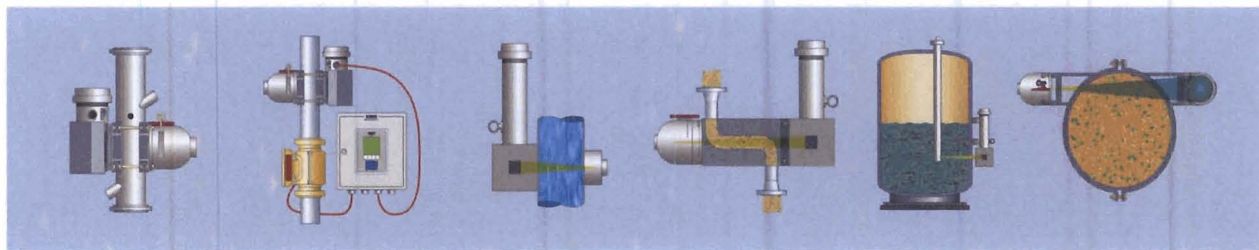
Prepared by: Chris Mann

Reference: Mass flow Gauge for sand dredge. Stacker 3 *- Maurice A. Plot*

Ronan Engineering is pleased to present the following information for your consideration.

Application Description:

Ronan's RLL Low Energy Gamma Radiation System measures the process density by keeping all components external to the pipe. An RLL-1 source holder, which does NOT require Site Specific Licensing, containing a Cs-137 gamma source will be mounted external to one side of the pipe. Mounted to the opposite side of the pipe will be an extra sensitive scintillation detector in an explosion proof pipe housing with enamel paint. The source holder and detector will be attached to a common mounting bracket made to clamp around a pipe. As the process inside the pipe increases in density the signal reaching the detector will decrease. This signal will be communicated from the detector to the X96S microprocessor through an interconnect cable. The X96S Microprocessor will accept a 4 – 20ma output from the flow meter and display the density measurement(s) and will output solids density, and mass flow the main unit of measurement via 4-20mA analog output.



Application Data (please review/confirm):

Application Description: Density gauge for sand slurry

Product: sand Slurry

Build up of product on walls is not expected

Product conductivity: No

Pipe Material: 10 inch, SCH-40, No liner, No Insulation

Carrier/SpG: Water/1.00

Solids/SpG: sand/2.65

Spg Range: 1 to 1.3 SpG by 0.006 SpG resolution %Solids Range: 0 to 30% by 0.5 % resolution

Main Measuring Unit: %Solids/0 to 40% Solids

Analog Output Reference: 4mA=0%; 20mA=30% Solids, 0 – 100 TPH

Distance from Detector to Microprocessor: 50 feet.

Microprocessor power: 115 VAC, 60 Hz

Microprocessor and Detector Area is non-explosive and within a temperature range of +20 to +120° F.

The measurement will be repeatable to +/- 1% of span.



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Ronan Engineering Density System:

- A) RLL1 Source Holder, model RLL1-16195L2A2
 - Carbon steel with industrial enamel paint construction
 - Includes (10) 90 μ Ci, Cs-137, model SRC-PT-CS-90UCI gamma sources
 - No shutter or wipe tests are required!

- B) Density Detector, model DET16994-A4PA
 - 4 inches active length, solid-crystal design
 - Extra-sensitive scintillation detector
 - Includes model HSNG-18458-3 explosion-proof housing, suitable for Class I, Division 1, Groups A, B, C & D and Class II, Division 1, Groups E, F & G
 - Industrial enamel baked on painted
 - Detector heater blanket and controls

- C) Pipe mounting bracket, model BRKT-3787-10
 - Mounting bracket for 10-inch pipe
 - Common bracket that mounts source and detector to pipe
 - Carbon steel with industrial enamel baked on paint construction

- D) One model X96SSSA-00Y2000 Microprocessor
 - Mild steel with industrial enamel baked on paint, rated NEMA-4, wall-mount enclosure
 - Displays the Density value(s) on a multi-line backlit LCD display
 - Includes two (2) 4-20 mA analog outputs
 - 115 VAC, 60 HZ powered
 - Calibrated through Menu Driven Display
 - Performs Curve Correction for linearization of the level reading
 - Performs Automatic Source Decay Compensation
 - Performs automatic self check diagnosis

- E) Inter-connect cable, model CBLE-11635-50
 - Four (4) conductor cable

Equipment Cost (fob Florence, KY prepaid & added to invoice).....**\$11,775.00 per system**

Equipment Summary:

<u>Qty.</u>	<u>P/N</u>	<u>Description</u>
1	RLL1-16195L2A2	Source holder
10	SRC-PT-CS-90UCI	90 μ CI, Cs-137, gamma source
1	DET16994-A4PA	Extra sensitive scintillation detector
1	HSNG-18458-3	Explosion-proof detector housing
1	BRKT-16780-10	Pipe mounting bracket for 10-inch pipe
1	X96SSSA-00Y2000	Microprocessor in a NEMA 4 enclosure
1	SFTW-X96S-DEN-H	X96S Density software with HART
1	CBLE-11635-50	Interconnect cable from Detector to Microprocessor



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Optional:

X96SPHA-000S000 Stainless Steel, rated NEMA 4x wall mount enclosure Microprocessor instead of X96SSHA-000S000 mild steel, painted, rated NEMA 4 wall mount enclosure (rest of features are same as listed above)

Please add **\$370.00 per system**

Accessories:

- Each system includes one (1) user manual/drawing documentation package. Please add \$45.00 for each additional manual/drawing documentation package desired.
- Stainless Steel equipment tags, please add \$20.00 for each tag needed.

The above mentioned pricing does NOT include any installation/start-up cost. **Installation/start-up by Ronan Measurements Service Department is recommended.** This service is provided on a Time & Materials basis. Please see enclosed Domestic Service Rate Sheet located later in this proposal for details. Start-up services must be on a separate purchase order.

Limited Warranty for Microprocessor and Detector is **three (3) years**, please refer to warranty sheet for details in later part of this proposal.

Typical delivery is 4-6 week after receipt of order and/or approval drawings, complete ship to address and responsible party information.

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***Please note: Complete ship to address (PO Box is not acceptable), radiation responsible party's name and contact information (title, phone #, etc.) for source must be provided with order to meet delivery time listed in this quotation! Sources can not be built and/or shipped until this information is received!**

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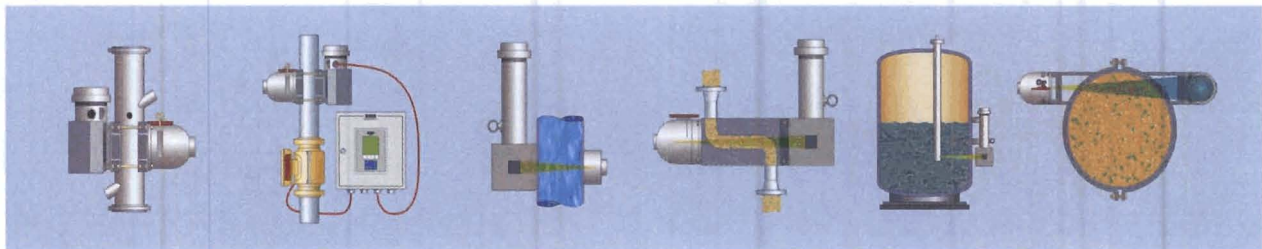
Prepared by: Chris Mann

Reference: Mass flow Gauge for sand dredge. *- Port Elizabeth Plant*

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Application Data (please review/confirm):

Application Description: Density gauge for sand slurry

Product: sand Slurry

Build up of product on walls is not expected

Product conductivity: No

Pipe Material: 16 inch, DR-11, No liner, No Insulation

Carrier/SpG: Water/1.00

Solids/SpG: sand/2.65

Spg Range: 1 to 1.30 SpG by 0.006 SpG resolution

%Solids Range: 0 to 35% by 0.5 % resolution

Main Measuring Unit: %Solids/0 to 35% Solids, 0 – 250 TPH

Analog Output Reference: 4mA=0%; 20mA=35% Solids

Distance from Detector to Microprocessor: 50 feet.

Microprocessor power: 115 VAC, 60 Hz

Microprocessor and Detector Area is non-explosive and within a temperature range of +20 to +120° F

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 - No shutter or wipe tests are required!

- B) Density Detector, model DET17977-A6PA
 - 6 inches active length, solid-crystal design
 - Extra-sensitive scintillation detector
 - Includes model HSNB-15201-3 explosion-proof housing, suitable for Class I, Division 1, Groups A, B, C & D and Class II, Division 1, Groups E, F & G
 - Industrial enamel baked on painted
 - Detector heater blanket and controls

- C) Pipe mounting bracket, model BRKT-3787-16
 - Mounting bracket for 16-inch pipe
 - Common bracket that mounts source and detector to pipe
 - Carbon steel with industrial enamel baked on paint construction

- D) One model X96SSSA-00Y2000 Microprocessor
 - Mild steel with industrial enamel baked on paint, rated NEMA-4, wall-mount enclosure
 - Displays the Density value(s) on a multi-line backlit LCD display
 - Includes two (2) 4-20 mA analog outputs
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Equipment Summary:

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10	SRC-PT-CS-90UCI	90 μ CI, Cs-137, gamma source
1	DET17977-A6PA	Extra sensitive scintillation detector
1	HSNB-15201-3	Explosion-proof detector housing
1	BRKT-16780-16	Pipe mounting bracket for 16-inch pipe
1	X96SSSA-00Y2000	Microprocessor in a NEMA 4 enclosure
1	SFTW-X96S-DEN	X96S Density software
1	CBLE-11635-50	Interconnect cable from Detector to Microprocessor



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If you have any questions or would like to discuss this further, please do not hesitate to contact us.

Thank you in advance for your consideration!

Please visit our web-site www.ronanmeasure.com

This is to acknowledge the receipt of your letter/application dated

8/31/2007, and to inform you that the initial processing which includes an administrative review has been performed.

AMEND. 47-09375-07
There were no administrative omissions. Your application was assigned to a technical reviewer. Please note that the technical review may identify additional omissions or require additional information.

Please provide to this office within 30 days of your receipt of this card

A copy of your action has been forwarded to our License Fee & Accounts Receivable Branch, who will contact you separately if there is a fee issue involved.

Your action has been assigned **Mail Control Number** 141017.
When calling to inquire about this action, please refer to this control number.
You may call us on (610) 337-5398, or 337-5260.