



October 5th, 2006

Loren J. Hueter
U.S. NRC, Region III
2443 Warrenville Road, Suite 210
Lisle, Illinois 60532-4351

Subject: Request for additional information regarding Pangea's 7/18/06 request for amendment of Nuclear Materials License No. 24-32318-01

Mr. Hueter

This letter has been written in response to your 9/29/06 request for additional information concerning Pangea's 7/18/06 request for amendment to Nuclear Materials License No. 24-32318-01. Pangea confirms Mr. Cushman's selection as the replacement RSO for Mr. Dan Hoffman and the addition of Scott Rehmer, Lachelle Telfair, and Chris Jarrell as Authorized users. All three are long-term employees and are professionals experienced with working with different sectors of the radiological remediation / decommissioning cycle. In support of these additions, attached are copies of resumes for the three proposed Authorized Users.

Pangea also confirms that the formerly used facility at 743 Spirit 40 Park Drive, Suite 232, Chesterfield, MO was used only as a corporate headquarters and storage facility for exempt quantity sources and radiological instrumentation. All instruments and sources owned by Pangea during the period were taken to temporary job sites for use, and returned to the Chesterfield location for storage at the conclusion of each project. The entire inventory was transferred to the new corporate headquarters at 2604 S. Jefferson, St. Louis, MO 63118 in June, 2004 following it's use at a temporary job site in Hematite, MO. The Calibration Source Inventory and the leak test surveys from the time of the transfer to the new corporate headquarters are attached.

Please let me know if there are more questions or if you need any additional information.

Sincerely,
Pangea, Inc

Christopher L. Stone
Vice President, Operations

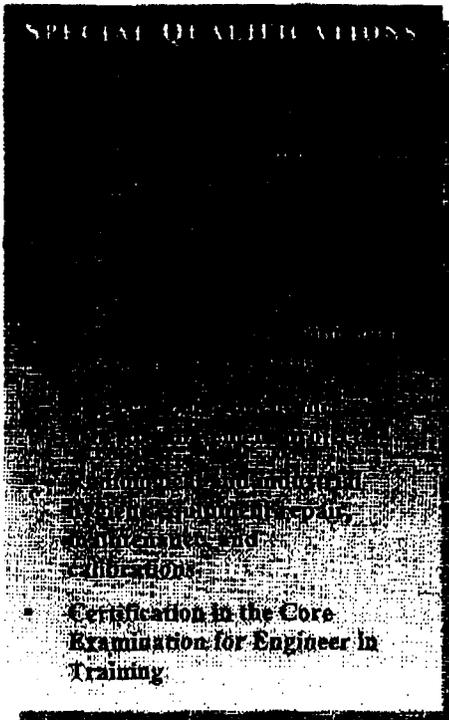
Matthew Cushman
Director of Radiological Services

Attachments

Resumes (x3): Scott Rehmer, Lachelle Telfair, Chris Jarrel
Source Inventory, Leak Test Records

SCOTT M. REHMER

ENVIRONMENTAL COMPLIANCE ENGINEER



Pangea Group – St. Louis, MO (1998 – Present)

St. Louis FUSRAP Sites (2001 – 2006)

Sample Coordinator

- Serves as lead to the Sample Technician position, provides daily assignments, work activities, and oversight.
- Responsible for development of Data Quality Objectives and Sampling Plans.
- Coordinates all sample returns from labs requiring data review and treatment before disposition.
- Performs and oversees the performance of field tests and obtains data for use by environmental engineering personnel in determining sources and methods of controlling and remediation of air, water, and soil pollutants.
- Review and generate environmental reports for NPDES, FFA, MSD.
- Generates monthly and annual sample projections to US Army Corps of Engineers.
- Compiles the NPDES event summary spreadsheets for each rainfall event, including notifications, reports, and data review.
- Constructs the Storm water radiation result data summary for the NPDES quarterly report which includes engineering calculations and data review.
- Responsible for Sample Tracker Database maintenance and data importation.
- Participates in coordination and sampling meetings for the Compliance Group including preparatory, construction planning, etc.
- Provides formal training onsite for all environmental sampling technicians.

Weldon Spring, MO (1998 – 2001)

Environmental Protection Group, Environmental Safety and Health

- Performed inspections for groundwater wells, erosion control, and NPDES compliance.
- Sampled, preserved, labeled, packaged, and shipped environmental and radiological samples.
- Initiated, generated, and transferred environmental and radiological chain of custody.
- Created schedules for the monitoring plan, biological monitoring, well details, and maintenance of pumps and generators.
- Redeveloped groundwater wells.
- Conducted the analyses on immuno-assays for PAHs, PCBs, and TNTs in water and soil.
- Analyzed water samples for dissolved oxygen, sulfate, nitrate, alkalinity, ammonia, iron, uranium, and various specific ions, and soil samples for radiological isotopes.

Allied Technology Group, Inc. - Weldon Spring, MO (1992 – 1998)

Field Operations Group, Environmental Safety and Health

- Surveyed for worker protection for industrial hygiene and radiological concerns.
- Inspected and supported the water treatment plants.
- Monitored and maintained access control operations.
- Monitored for confined space entry, airborne gases, photo-ions, aerosols, and heat stress.
- Sampled for airborne radionuclides, asbestos, lead, cadmium, welding fumes, and volatile organics.
- Acquired and calibrated Dwyer airflow rotameters.
- Calibrated and repaired all ES&H equipment.
- Approved equipment, personal, and vehicle surveys for off-site release.

ATC Environmental, Inc. - Brentwood, MO (1990 – 1992)

Environmental Scientist

- Project management on asbestos abatement projects.
- Analyzed and collected air samples from personnel, area, and containment clearance.
- Packaged and shipped water samples for inorganic analyses.
- Performed inspections for pre-abatement, daily routine, and clearance criteria.

Law Environmental Associates, Inc. - St. Louis, MO (1988 - 1990)

Environmental Safety and Health Technician

- Analyzed air samples for asbestos using phase contrast microscopy.
- Prepared air samples for bulk, PCM, and TEM analyses.
- Collected samples from personnel, general area, and containments.
- Performed qualitative fit testing and inspected personal respirators.

CERTIFICATIONS

Completed the Engineer In Training Core Examination (Part 1 of 2 for the P.E.)

OSHA 40-Hour Hazardous Waste Operations Training

OSHA 30-Hour Construction Training

RCRA 40 CFR 264.16 Training

AHERA Asbestos Abatement Contractor, Worker, and Supervisor Certification

Radiological Control Technician Certification

DOT Worker, Level 1, Training

Radioactive Materials Transportation Training

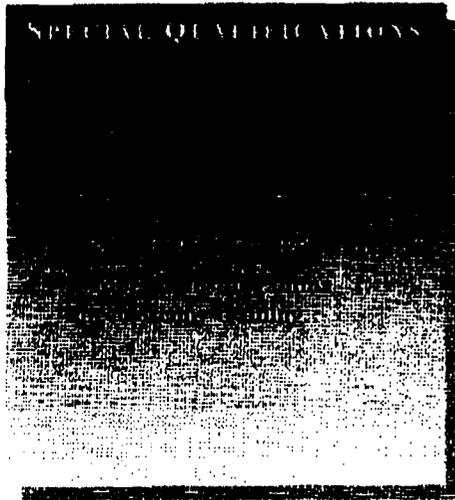
EDUCATION

Washington University

Bachelor of Science in Mechanical Engineering

CHRISTOHER L. JARRELL

SR. LABORATORY ANALYST



Pangea Group – St. Louis, MO (10/98 - Present)

Health Physics Technician

Duties include:

- Maintain and operate Gamma Spectroscopy, Alpha Spectroscopy, Gas Proportional Counter, Kinetic Phosphorescence Analysis, and HACH spectrometer for Nitrate, Sulfates, and Phosphates.
- Perform analysis for settleable solids, total suspended solids, and co precipitation for gross alpha.
- Highly involved with sample receipt and tracking using the LIMS database system
- Experience with solid and water sample preparation as well as chemical separations for Isotopic Thorium, Uranium, and Radium.

Safety and Ecology Corporation (06/97 - 10/98)

Environmental Health and Safety Technician

Duties included:

- Performed Radiological surveys; Airborne, Transferable and Removable
- Performed Industrial Hygiene monitoring including Radon, Organic Vapors, Hydrogen Disulfide, and Carbon Dioxide levels in the work place
- Responsible for testing, surveying, and sampling of numerous hazardous materials and radioactive substances.
- Calibrated, repaired and operated radiological and Industrial Hygiene field and Laboratory equipment
- Permitted unrestricted release of radioactive material from radiological areas in conformance with NRC, DOE, and DOT Regulation
- Maintained Radiological and Industrial Hygiene log books and records
- Conducted Site Orientations, Hazardous Communication, Radiological Worker II, and Radiological Awareness Training
- Experienced in the preparation and shipment of Radiological as well as chemical samples

Safety and Ecology Corporation – Praxair Plant, Buffalo, NY (10/96 - 11/96)

Environmental Health and Safety Technician

- Performed Radiological and Chemical Sampling
- Industrial Hygiene Monitoring including Carbon Dioxide levels and Oxygen Content
- Permitted Unrestricted Release of materials from Radiological areas in conformance with DOE, NRC, and DOT regulations
- Maintained Radiological and Industrial Hygiene log books and records
- Calibrated, repaired, and operated various Radiological and Industrial Hygiene Field and Lab Instrumentation
- Performed Airborne, Transferable, and Removable Radiological surveys

Thermo NuTech – Colonie Interim Storage Site (CISS) Albany, NY (8/96 - 10/96)

Environmental Health and Safety Technician

- Performed Radiological and Chemical Surveys and sampling
- Industrial Hygiene monitoring including general work place safety, Carbon Dioxide levels, Oxygen content and PCB and TCB levels from chemical processing.
- Permitted unrestricted release of materials from controlled areas in conformance with DOE, NRC, and DOT regulations
- Calibrated, repaired, and operated various Radiological and Industrial Hygiene Field and Lab Instrumentation.
- Responsible for maintenance and cleaning of full face HEPA filtered respirators.

EDUCATION

Eastern Idaho Technical College

Certificate of Applied Science, Radiation Safety Technology

Idaho State University

General Studies

LA CHELLE TELFAIR

TRANSPORTATION & DISPOSAL COORDINATOR

SPECIAL QUALIFICATIONS

- Proficient in Microsoft Office
 - Experienced with public speaking in office setting and in construction area
 - Conducted training for various safety and regulatory compliance issues
- Environmental Compliance
- Safety Training Observation Program for Supervisors
- Diversity/Sensitivity Training
- Industry Certification in Unigraphics CAD/CAM

Pangea Group – St. Louis, MO (2001-Present)

Transportation and Disposal Coordinator

Duties include:

- Classify waste streams in accordance with DOT regulations and the Waste Acceptance Criteria for disposal sites
- Prepare all shipping documentation to be presented to the USACE for approval
- Maintain DOT compliance for samples, wastes and product movement
- Provide DOT Awareness and DOT Supervisors training on site
- Inspect waste storage and chemical storage areas.
- Create and review compliance plans and instructions
- Conduct site safety inspections to assure compliance with OSHA construction standards
- Spill Response Waste Management Support including characterization and disposal
- Coordinate with rail logistics, railroad and site staff for daily shipping activities
- Update Chemtrec files, waste profiles, sampling protocol, etc.
- Responsible for Hazardous Communication program
- Maintain a recycling program

Professional Environmental Engineers (1999-2001)

Compliance/Transportation Administrative Assistant

Duties included:

- Provide support to Database Manager on site by preparing and managing information from database and field personnel
- Query database system for reporting purposes
- Track shipping of waste to disposal facilities
- Design charts for actual quantity of contaminants leaving site
- Import lab data into database for reporting air, water and soil samples

PetroMart (1997-1999)

Manager

Duties included:

- Maintained budget record including sales figures and purchases
- Responsible for hiring, training, and scheduling 12 employees
- Audited inventory, bought merchandise, and made deposits
- Managed operations of computerized equipment

SPECIAL SKILLS

- Proficient in Microsoft Office
- Experienced with public speaking in office setting and in construction area
- Conducted training for various safety and regulatory compliance issues

EDUCATION

Blackburn College-1992

B.A.-American and English Literature

B.A.-Art

PANGEA GROUP CALIBRATION SOURCE INVENTORY
June 2004

SOURCE	MANUFACTURER	DATE OF MANUFACTURE/ CALIBRATION	HALF LIFE - YEARS	INITIAL ACTIVITY (μ Ci)	INITIAL ACTIVITY (dpm)	SERIAL NUMBER
Th-230	The Source, Inc.	9/27/94	7.54E4		27,500	94TH4702984
Th-230	The Source, Inc.	9/27/94	7.54E4		32,700	94TH4702983
Th-230	The Source, Inc.	6/17/03	7.54E4		33,400	94TH4702982
SrY-90	The Source, Inc.	6/17/03	29.1		26,300	94SR4703306
Cs-137	Spectrum Techniques, Inc.	4/2/03	30.2	1.0		137CS809

RECORD COPY

Radiological Survey Form

Page 1 of 1

Description: <u>Source leak test</u>										
Date: <u>10/15/03</u>		Time: <u>1100</u>		Survey No: <u>CC-701503-01</u>			RWP No: <u>N/A</u>			
Purpose of Survey (For Release Surveys Include Recipient): <u>Informations</u> <u>Aspects</u>										
Instrument Data										
Instrument Manufacturer(s): <input type="checkbox"/> Biorad <input type="checkbox"/> Eberline <input type="checkbox"/> Ludlum <input checked="" type="checkbox"/> <input type="checkbox"/>										
Detector Type	Detector SN	Detector Cal Due	Meter Type	Meter SN	Meter Cal Due	Sensitivities	Bkgd. (cpm)	Correction Factor	MDA (dpm)	
43-10-1	171924	4/17/04	2929	171579	3/31/04	α	0.51	2.8	9.6	
						βγ	41	2.2	49.6	
43-			A			α				
			N			βγ				
						βγ (GM)		30		
N/A	N/A	N/A				Exposure	N/A	N/A	N/A	
Survey Results			Smearable Results				Direct Readings			
Sample Number	Description/Results	Gross α (removable) CPM	Net α Removable dpm/100 cm ²	Gross βγ Removable CPM	Net βγ Removable dpm/100 cm ²	Gross α CPM	Net α dpm/100 cm ²	Gross βγ CPM	Net βγ dpm/100 cm ²	Exposure Rate μR
1	95 SR 470 3306	5	13	46	NCD					
2	94 TH 470 2982	2	NCD	44	↓					
3	94 TH 470 2983	2	↓	40	↓					
4	94 TH 470 2984	6	15	39	↓					
5	137 Cs 809	0	NCD	31	↓					
6										
7										
8										
9										
10										
11										
12										
13										
14										
15										
Remarks:										
NCD = No Contamination Detected, i.e. < MDA										
Technician(s) Signature / Date: <u>[Signature]</u> / <u>10/15/03</u>										
LVI / Foreign Review: <u>[Signature]</u> / <u>10/15/03</u> NRC Review: <u>[Signature]</u>										

Exhibit A
Radiological Survey Report Form

Description: Semi-Annual Leak Test										
Date:	10/07/2004	Title:	1035	Survey No:	SCI-100704-01	RWP No:	N/A			
Purpose of Survey (For Release Surveys include Recipient): Leak Test										
Instrument Data Instrument Manufacturer (1): <input type="checkbox"/> Bioron <input type="checkbox"/> Eberline <input checked="" type="checkbox"/> Ludlum <input type="checkbox"/>										
Detector Type	Detector SN	Detector Cal Due	Meter Type	Meter SN	Meter Cal Due	Sensitivities	Wegd. (cpm)	Correction Factor	MDA (dpm)	
43-70-1	PR179154	08/08/03	2929	190612	08/08/04	α	0.42	2.9	9.1	
						β/γ	49.2	2.3	56.5	
43-93	PR200132	02/12/05	2224	190730	03/12/05	α	18.4	5.4	64.9	
						β/γ	194	3.0	151	
44-9	PR203335	03/15/04	3	171234	03/15/04	β/γ (GM)	47	30	713	
N/A	N/A	N/A	Model 19	8578	02/09/05	Exposure	N/A	N/A	N/A	
Survey Results			Separable Results			Direct Readings				
Sample Number	Description/Results	Gross α Removable CPM	Net α Removable dpm/100 cm ²	Gross β/γ Removables CPM	Net β/γ Removable dpm/100 cm ²	Gross α CPM	Net α dpm/100 cm ²	Gross β/γ CPM	Net β/γ dpm/100 cm ²	Exposure Rate μR
1	137 Cs 809	1	NCD	34	NGD					
2	95 Sr 470 3306	0	NCD	47	NCD					
3	94 Th 470 2982	0	NCD	45	NCD					
4	94 Th 470 2983	1	NCD	52	NCD					
5	94 Th 470 2984	0	NCD	49	NCD					
6								A		
7							N			
8										
9										
10			A							
11		N								
12										
13										
14										
15					N/A					
Remarks: N/A										
*NCD = No Contamination Detected, i.e. < MDA.										
Technician(s) Signature / Date:		 10/7/04			N/A					
Performs Review:		N/A			Client Review: N/A					