



April 20, 2011

Mike Romero  
Oregon DEQ – Northwest Region  
2020 SW 4<sup>th</sup> Avenue, Suite 400  
Portland, Oregon 97201-5263

**Re: RI-SCE Addendum, Former Mar Com Site (South)  
2007 PGE Transformers Removal and Cleanup  
DEQ ECSI ID Number: 2350**

Dear Mike,

This is an addendum to the May 2010 Remedial Investigation and Source Control Evaluation (RI-SCE) report to document the July 2007 removal and cleanup of transformers from the former Mar Com Site (South) completed by Portland General Electric (PGE). The former Mar Com Site (South) is located at 8970 North Bradford Street in Portland, Oregon (Site).

### **Background**

Historical activities at the Site consisted primarily of boat, ship, and barge construction and repair. The Site has been unoccupied since 2005. Prior to the removal of the buildings, there were reported to be a series of break-ins, acts of vandalism, and theft of metal from the Site. On July 11, 2007, Langley – St-Johns, LLC. (the property owner) contacted PGE to report that thieves knocked a PGE transformer onto the ground from the pole mounted platform and were removing metal from the transformer. There were previously three PGE transforms located on the pole mounted platform located approximately fifteen feet above the ground surface. The three transformers are shown in the Photo 1(Attachment 1 - Photographs). The one transformer knocked to the ground spilled oil onto the ground surface.

### **PGE Removal of Transformers and Soil Cleanup**

A crew from PGE responded to the notification on the evening of July 11, 2007. PGE noted that the spilled oil was contained to the area immediately adjacent to the poles where the transformers were located. This area was an unpaved portion of the Site (approximately 14 feet by 30 feet) surrounded by pavement (Attachment 1, Photo 1). PGE estimated that 200 gallons of transformer oil was spilled. PGE removed the three transformers, removed surface debris, and excavated 17 cubic yards of soil based on visual observation. All soil with visually observed oil staining was reportedly removed by PGE and the oil staining on the paved surfaces was cleaned with degreaser. Photo 2 (Attachment 1) shows the transformer area following the removal of the transformers and the removal of the soil. A copy of PGE's Spill/Release Report (OERS No. 07-1515) is provided at Attachment 2. This Spill/Release Report includes additional photographs of the transformer area before and after removal. Removed material was reportedly taken to Columbia Ridge Landfill in Arlington, Oregon. Disposal receipts are included in Attachment 2. Sampling of the oil in the three PGE transformers was completed by PGE to assess the PCB content of the oil in the transformers. The transformer oil in transformer no.



233 was non-detect for PCBs, the total PCBs in the transformer oil in transformer no. 234 was 3 milligrams per kilogram (mg/Kg), and total PCBs in the transformer oil in transformer no. 235 was 30 mg/Kg. These results are provided in Attachment 3 - PGE Analytical Testing Report for total PCBs. Analysis for individual PCB Aroclor values was not completed. PGE did not collect confirmation soil samples following the removal of soil with observed oil staining. Analytical testing was limited to sampling of the oil in the three transformers for total PCB content.

### Source Control Evaluation

Because sampling by PGE was limited to analysis of the total PCB content of the transformer oil, it is not possible to directly compare results to the PCB Aroclor screening levels values listed in the May 2010 RI-SCE report. However, Aroclor 1242, Aroclor 1254, and Aroclor 1260 are most commonly associated with transformer oils. The soil screening level values listed in the May 2010 RI-SCE included values for human health (direct contact) and ecological receptor exposure. The screening level values listed for Aroclor 1242, Aroclor 1254, and Aroclor 1260 for human health exposure was 980 µg/Kg (0.98 mg/Kg). Assuming the transformer containing 30 mg/Kg total PCB oil was spilled, and using soil properties associated with loose sand, the percent of oil in soil would need to be approximately 6 to 12 percent oil by volume to result in 0.98 mg/Kg PCBs in soil. It is assumed that 6 to 12 percent oil in soil would be visually apparent as oil stained soil. Oil stained soil was removed by PGE.

Records and photographs show that the PGE transformers were removed and soil was removed below the areas of the transformers. As presented in the PGE Spill/Release Report (Attachment 2) and as discussed in a paragraph above, the source of transformer oil has been removed and it is assumed that the residual impacts from the spill of transformer oil has also been removed to below the referenced screening level values. The area of soil removal by PGE was later filled with on-site fill material and covered with landscaping bark. This area has remained relatively unchanged since 2007. Soil remaining in the former transformer area following excavation by PGE is not in an area of stormwater runoff nor available to direct exposure. Information from the 2007 PGE transformers removal and cleanup does not change the conclusion for the May 2010 RI-SCE report that no potentially complete exposure pathways for contaminant migration to the Willamette River were identified in connection with residual surface or subsurface soil impacts.

Sincerely,  
**SLR International Corp**



Megan Coracci  
Senior Scientist

Attachments:


- Attachment 1 – Photographs
- Attachment 2 – PGE Spill/Release Report (OERS No. 07-1515)
- Attachment 3 – PGE Analytical Testing Report for Total PCBs



**Photo 1:** Site Photograph from June 2006 showing the three PGE transformers



**Photo 2:** Transformer area following transformer removal and soil removal

	RI-SCE Addendum, 2007 PGE Transformer Removal Former Mar Com Site (South) Portland, Oregon
PHOTOGRAPHS	Job No: 108.00242.00001

**ATTACHMENT 2**

**PGE SPILL/RELEASE REPORT (OERS NO. 07-1515)**

# SPILL/RELEASE REPORT



## 1 - GENERAL INFORMATION

OERS No. 07-1515

- a. Company/Individual Name: Portland General Electric
- b. Address: 121 SW Salmon, 3WTCBR05  
Portland, OR 97204
- c. Company Contact Person: Chip Bloomer
- d. Phone Number(s): 503-464-7109
- e. Specific on-site location of the release (and address if different from above):  
8970 N Bradford Street  
Portland Oregon  
Map Attached

**Please provide a map of the site showing area(s) where the release occurred, any sample collection locations, location of roads/ditches/surface water bodies, etc.**

## 2 - RELEASE INFORMATION

- a. Date/Time Release started: 7/11/07 Date/Time stopped: 7/11/07 5:00 p.m.
- b. Release was reported to (specify Date/Time/Name of Person contacted where applicable):  
ODEQ Follow up call with Kimberly Van Patton 7/12/07 aprox. 11:00 am  
OERS 7/12/07 10:00 am Jim Raymond  
NRC \_\_\_\_\_  
Other (describe): \_\_\_\_\_
- c. Person(s) reporting release: Chip Bloomer
- d. Name, quantity and physical state (gas, liquid, solid or semi-solid) of material(s) released:  
Transformer (mineral oil) 200 gals

**Please attach copies of material safety data sheets (MSDS) for released material(s).**

- e. The release affected:    Air    Groundwater    Surface Water X Soil    Sediment
- f. Name and distance to nearest surface water body(s), even if unaffected (include locations of creeks, streams, rivers and ditches that discharge to surface water on maps):  
Willamette River aprox. 300 feet
- Has the release reached the surface water identified above?:    Yes X No  
Could the release potentially reach the surface water identified above?    Yes X No  
Explain: All material removed from site

- g. Depth to nearest aquifer/groundwater: NA
- Is nearest aquifer/groundwater potable (drinkable)?    Yes X No  
Has the release reached the nearest aquifer/groundwater?    Yes X No  
Explain: Insufficient material spilt to saturate ground to below upper surface levels

h. Release or potential release to the air occurred?  Yes  No

Explain: \_\_\_\_\_  
\_\_\_\_\_

i. Was there a threat to public safety?  Yes  No

j. Is there potential for future releases?  Yes  No

Explain:  Transformers removed from area. All oil and contaminated material removed from site. \_\_\_\_\_  
\_\_\_\_\_

k. Describe other effects/impacts from release (emergency evacuation, fish kills, etc.):

None \_\_\_\_\_  
\_\_\_\_\_

l. Describe how the release occurred. Include details such as the release source, cause, contributing weather factors, activities occurring prior to or during the release, dates and times of various activities, first responders involved in containment activities, etc.:

7/11/07 - Property owner reported to PGE dispatch that vandals were attempting to remove metal from three transformers. 7/11/07 5:00 p.m.- PGE immediately investigated and dispatch internal spill crew. There were three small electrical transformers that were not in service that thieves were attempting to extract the metal from. Initially all three transformers were pole mounted, but thieves knocked one to the ground and partially drained the oil from the other two on the mounts. Oil was contained to area immediately adjacent to poles where the transformers were mounted. Clean up was initiated at 5:00 pm 7/11/07 and continued until complete at 7/12/07 am. Pictures of the spill area and transformers are attached.

### 3 - SITE INFORMATION

a. Adjacent land uses include (check all that apply and depict on site maps):

Residential  Commercial  Light Industrial  Heavy Industrial  
 Agricultural  Other (describe): \_\_\_\_\_

b. What is the population density surrounding the site: \_\_\_\_\_

c. Is the site and/or release area secured by fencing or other means?  Yes  No

d. Soil types (check all that apply):  alluvial  bedrock  clay  sandy  
 silt  silty loam  artificial surface (cement/asphalt/etc.)

e. Describe site topography:  Flat  - Vacant secure property formally used for marine repair activities. Primarily asphalt except for area immediately adjacent to transformer pole mounts. \_\_\_\_\_

**4 - CLEANUP INFORMATION**

a. Was site cleanup performed?  Yes  No

If No, explain: \_\_\_\_\_  
\_\_\_\_\_

b. Who performed the site cleanup?

Company Name: Portland General Electric

Address: 121 SW Salmon  
Portland, Oregon 97204

Cleanup Supervisor: Tom Van Hoon

Phone Number(s): 503-963-6884

c. Has all contamination been removed from the site?  Yes  No

If No, explain: \_\_\_\_\_  
\_\_\_\_\_

d. Estimated volume of contaminated soil removed: 17 Cubic Yards

e. Estimated volume of contaminated soil left in place: 0

f. Was a hazardous waste determination made for cleanup materials?  Yes  No

g. Based on the determination, are the cleanup materials hazardous wastes?

No  No If Yes, list all waste codes: \_\_\_\_\_

h. Was contaminated soil or water disposed of at an off-site location?  Yes  No

**If yes, attach copies of receipts/manifests/etc., and provide the following information:**

Facility Name: Columbia ridge Landfill

Address: 18177 Ceder Springs Lane  
Arlington, OR 97812

Facility Contact: \_\_\_\_\_

Phone Number(s): \_\_\_\_\_

i. Is contaminated soil or water being stored and/or treated on-site?  Yes  No

If yes, please describe the material(s), storage and/or treatment area, and methods utilized (attach additional sheets if necessary):  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

j. Describe cleanup activities including what actions were taken, dates and times actions were initiated and completed, volumes of contaminated materials that were removed, etc. (attach additional sheets or contractor reports if necessary or more convenient):

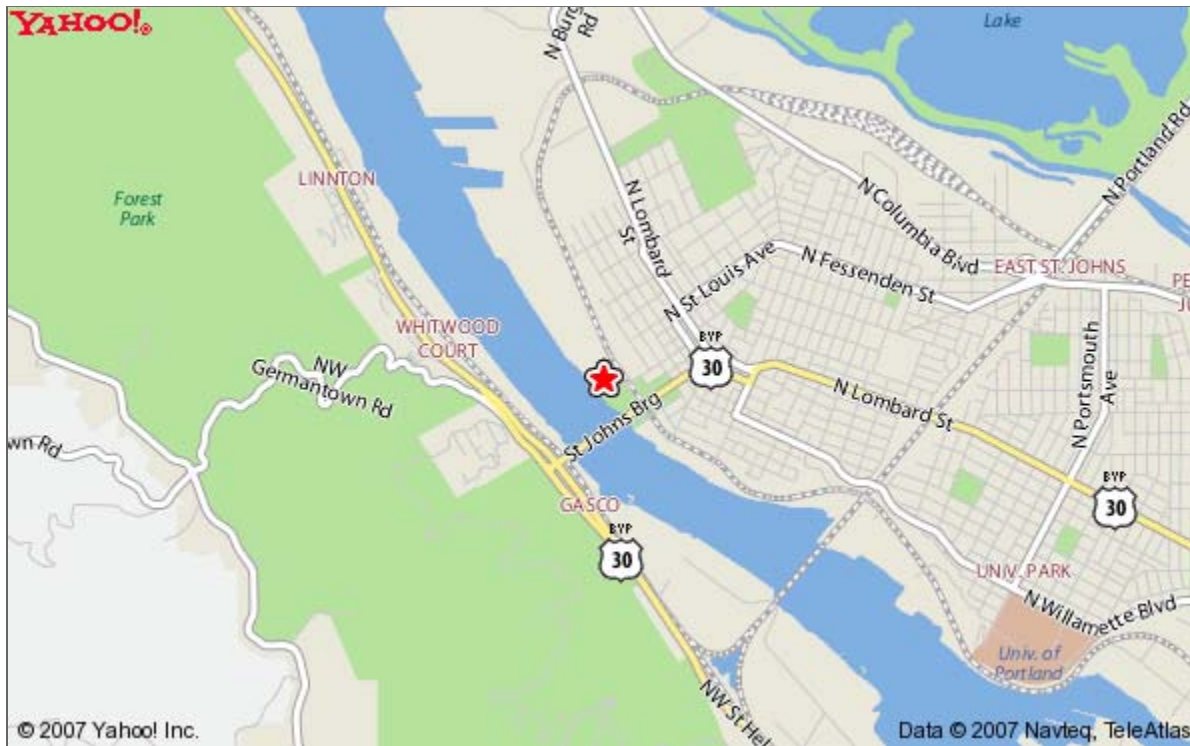
         Clean up was initiated at 5:00 pm 7/11/07 and continued until complete at 7/12/07

am. Soil, Vegetation, asphalt and various debris were removed. Remaining asphalt was cleaned with degreaser.  
\_\_\_\_\_  
\_\_\_\_\_





## LangleySt.Johns Property 8970 N Bradford St. St. Johns, Oregon



# LangleySt.Johns Property Spill Location











WALK COIN  
WALK COIN  
WALK COIN

**PCB Analysis Summary Report**  
**PGE-EM&C Substation Test/Maint Engrng (RC216)**

Friday, July 13, 2007

<u>Company #</u>	<u>Result</u>	<u>Sample Date</u>	<u>Analyte</u>	<u>Units</u>	<u>Lab ID</u>	<u>RC #</u>
233/333KVA	30	07/11/07 00:00	Total PCBs	mg/kg	PQG0368-01	RC216
234/333KVA	3	07/11/07 00:00	Total PCBs	mg/kg	PQG0368-02	RC216
235/333KVA	ND	07/11/07 00:00	Total PCBs	mg/kg	PQG0368-03	RC216

Note: The results on this report have been rounded to show only integer values. The actual results may be slightly higher, but are within standard rounding rules.

TestAmerica - Portland, OR

*Brian L Cone*

Brian Cone, Industrial Services Manager

*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report shall not be reproduced except in full, without the written approval of the laboratory.*





**PCB EMERGENCY RUSH SAMPLE  
CHAIN OF CUSTODY  
FOR ELECTRICAL EQUIPMENT ONLY**

NCA WO# PQ60368

SPILL LOCATION <u>8970 N BRADFORD (PORTLAND)</u>		
COMPANY NO. <u>233, 234, 235</u>	KVA <u>333 (3)</u>	SERIAL NO.
RC NO. <u>328</u>	DATE SAMPLED <u>7/11/07</u>	SAMPLE TAKEN BY <u>J THOMAS</u>
<b>TELEPHONE RESULTS TO</b>		
SITE RESPONDER		
SPILL COORDINATOR (EM&C Response/Foreman) <u>J THOMAS</u>	PHONE <u>849-2659</u>	PAGER
EM&C RESPONSE	PHONE	PAGER
SAMPLE DELIVERED TO LAB BY <u>J THOMAS</u>	TIME <u>10:50AM</u>	DATE <u>7/12/07</u>
SAMPLE RECEIVED BY <u>[Signature]</u>	TIME <u>10:50</u>	DATE <u>7-12-07</u>
SAMPLE RECEIVED IN APPROPRIATE CONTAINER? <input type="checkbox"/> Yes <input type="checkbox"/> No		
<p><b>HAND THIS CHAIN OF CUSTODY ALONG WITH SAMPLE OVER TO LAB PERSONNEL ONLY. THIS CHAIN OF CUSTODY MUST BE WITH THE SAMPLE WHEN DELIVERED TO THE LAB.</b></p>		

Note: Lab to Contact Environmental Services With Test Results.

Verbal Results Given To:	By NCA Staff:	Results Given:
Date:	Time:	



# TestAmerica Sample Receipt Checklist

Cooler ID(s): \_\_\_\_\_

Received by: \_\_\_\_\_

Unpacked by: \_\_\_\_\_

Logged-in by: \_\_\_\_\_

Work Order No. PQG0368

<sup>1</sup>(section A)

<sup>2</sup>(section B)

Date: 7-12

Date: 7-12

Date: 7-12

Client: DGE

Time: 10:50

Initials: MP

Initials: MP

Project: Rush PCB Spill

Initials: MP

Temperature out of range:

- No Ice
- Ice Melted
- W/in 4 Hours
- Other: \_\_\_\_\_

\*\*\*ESI Clients (see Section C)

Cooler Temperature (IR):        °C plastic glass NA (oil/air samples, ESI client)

**A** Custody Seals: (#       )

Signature: Y N Dated: \_\_\_\_\_

None

Received from:

TA Courier

Senvoy

UPS

Fed Ex

Client

TDP

DHL

SDS

Mid-Valley

GS/TA

GS/Senvoy

Other: \_\_\_\_\_

Container Type:

#Cooler(s)

#Box(s)

None ( #Other: \_\_\_\_\_)

Coolant Type:

Gel Ice

Loose Ice

None

Packing Material:

Bubble Bags

Styrofoam Cubbies

None ( Other: \_\_\_\_\_)

**B**

Sample Status:

(If N circled, see NOD)

General:

Intact?  Y  N

# Containers Match COC?  Y  N none given

IDs Match COC?  Y  N

For Analyses Requested:

Correct Type & Preservation?  Y  N

Adequate Volume?  Y  N

Within Hold Time?  Y  N

Volatiles:

VOAs Free of Headspace? Y N  NA

TB on COC? not provided Y N  NA

Metals:

HNO3 Preserved? Y N  NA

**C** \*\*\*ESI Clients Only:

Temperature Blank: \_\_\_\_\_ °C not provided

All preserved bottles checked Y N NA (voas/soils/all unp.)

All preserved accordingly? Y N (see NOD) NA (voas/soils/all unp.)

Army Corp:

Geiger (ticks/min): \_\_\_\_\_

Temperatures (IR): \_\_\_\_\_ °C \_\_\_\_\_ °C \_\_\_\_\_ °C \_\_\_\_\_ °C

(left) (middle) (right) (air)

Project Managers: \_\_\_\_\_

Comments: \_\_\_\_\_

PM Reviewed: \_\_\_\_\_ (Initial/Date)

COOPER POWER SYSTEMS

MATERIAL SAFETY DATA SHEET

TRANELEC(R\*) CONVENTIONAL TRANSFORMER OIL

COOPER POWER SYSTEMS  
1900 EAST NORTH STREET  
WAUKESHA, WISCONSIN 53188-3899  
USA

EMERGENCY TELEPHONE: (262) 547-1251

PRODUCT INFORMATION: WWW.COOPERPOWER.COM

**HAZARDOUS INGREDIENTS/IDENTITY INFORMATION**

EXPOSURE LIMITS	OSHA PEL	ACGIH*	TLV	STEL
TWA (MG/M3) EXPOSURE LIMIT FOR TOTAL PRODUCT AS OIL MIST (AEROSOL)	5		5	10

INGREDIENTS	CAS#	COMPONENT	CONCENTRATION
	64742-46-7	PETROLEUM MIDDLE DISTILLATES, SEVERELY HYDROTREATED	50-100%
	64742-53-6	PETROLEUM LIGHT NAPHTHENIC DISTILLATES, HYDROTREATED	0-50%
	128-37-0	BUTYLATED HYDROXY TOLUENE (ALSO KNOW AS 2,6-DITERTIARY-BUTYL PARA-CRESOL, OR DBPC)	<0.3%

HAZARDOUS MATERIALS IDENTIFICATION SYSTEM (HMIS):

HEALTH 1  
FLAMMABILITY\*\* 1  
REACTIVITY\*\* 1

COMPONENTS OF THIS PRODUCT ARE LISTED ON THE U.S. TOXIC SUBSTANCES CONTROL ACT  
CHEMICAL SUBSTANCES INVENTORY.

\* ACGI STATES THAT THE AIR IS TO BE SAMPLED BY A METHOD THAT DOES NOT COLLECT  
VAPOR.

\*\* INTERCHANGEABLE WITH NFPA 704 RATINGS.

**PHYSICAL/CHEMICAL CHARACTERISTICS**

BOILING POINT: >160 DEG. C

VAPOR PRESSURE (MMHg): <0.1 @ 20 DEG. C

VAPOR DENSITY (AIR = 1): >5

SOLUBILITY IN WATER: NEGLIGIBLE: <0.1%

APPEARANCE AND ODOR: CLEAR LIQUID HAVING SLIGHT PETROLEUM ODOR.

VOLATILE ORGANIC COMPOUNDS (G/L): NIL

SPECIFIC GRAVITY (H2O = 1): 0.88

POUR POINT: -40 DEG. C

EVAPORATION RATE (BUTYL ACETATE = 1): NOT AVAILABLE

pH: ESSENTIALLY NEUTRAL

#### **FIRE AND EXPLOSION HAZARD DATA**

FLASH POINT (ASTM D-92): 145 DEG. C (TYPICAL)

FLAMMABILITY LIMITS: NOT AVAILABLE

EXTINGUISHING MEDIA: CO2, DRY CHEMICAL, FOAM, AND WATER SPRAY (FOG)

SPECIAL FIRE FIGHTING PROCEDURES:

USE MSHA/NIOSH APPROVED SELF-CONTAINED BREATHING APPARATUS WITH FULL FACE MASK AND FULL PROTECTIVE EQUIPMENT IN CONFINED AREAS. USE WATER TO KEEP FIRE-EXPOSED CONTAINERS COOL. WATER SPRAY MAY BE USED TO FLUSH SPILLS AWAY FROM SOURCES OF IGNITION. APPLICATION OF WATER TO FLAMING OIL CAN CAUSE SPREADING.

UNUSUAL FIRE AND EXPLOSION HAZARDS:

SLIGHT WHEN EXPOSED TO FLAME; CAN REACT WITH OXIDIZING MATERIALS.

#### **REACTIVITY DATA**

STABILITY: TRANELEC TRANSFORMER OIL IS STABLE UNDER NORMAL CONDITIONS OF USE.

INCOMPATIBILITY (MATERIALS TO AVOID):

AVOID CONTACT WITH STRONG OXIDIZING AGENTS.

HAZARDOUS DECOMPOSITION OR BY-PRODUCTS:

THERMAL DECOMPOSITION PRODUCTS ARE HIGHLY DEPENDENT ON THE COMBUSTION CONDITIONS. A COMPLEX MIXTURE OF AIRBORNE SOLID, LIQUID, PARTICULATES, AND GASES WILL EVOLVE WHEN THIS MATERIAL UNDERGOES PYROLYSIS OR COMBUSTION. CARBON MONOXIDE AND OTHER UNIDENTIFIED ORGANIC COMPOUNDS MAY BE FORMED UPON COMBUSTION.

HAZARDOUS POLYMERIZATION: WILL NOT OCCUR

#### **HEALTH HAZARD DATA**

ROUTES OF ENTRY:

SKIN CONTACT; EYE CONTACT OR INHALATION POSSIBLE UNDER MIST CONDITIONS.

SKIN:

ESSENTIALLY NON-TOXIC. RABBIT ACUTE DERMAL LD50 >2000 MG/KG. REPEATED OR PROLONGED CONTACT MAY RESULT IN LOCALIZED IRRITATION OF THE SKIN. MAY CAUSE ALLERGIC REACTIONS IN SOME INDIVIDUALS.

INGESTION:

ESSENTIALLY NON-TOXIC. RAT ACUTE ORAL LD50 >5000 MG/KG. MAY CAUSE GASTROINTESTINAL DISTRESS. SYMPTOMS MAY INCLUDE IRRITATION, NAUSEA, VOMITING AND DIARRHEA.

INHALATION:

MAY CAUSE RESPIRATORY TRACT IRRITATION. EXPOSURE TO DENSE OIL MIST MAY LEAD TO

RESPIRATORY PROBLEMS.

CARCINOGENICITY: NONE  
NTP: NO  
IARC MONOGRAPHS: NO  
OSHA REGULATED: NO

SIGNS AND SYMPTOMS OF EXPOSURE:  
PROLONGED OR REPEATED SKIN CONTACT MAY CAUSE IRRITATION.

MEDICAL CONDITIONS GENERALLY AGGRAVATED BY EXPOSURE: NONE RECOGNIZED

EMERGENCY AND FIRST AID PROCEDURES:  
IF INGESTED, DO NOT INDUCE VOMITING. IF SPONTANEOUS VOMITING OCCURS, MONITOR THE SUBJECT FOR BREATHING DIFFICULTY. GET IMMEDIATE MEDICAL ATTENTION. IF INHALED, REMOVE AFFECTED PERSON FROM EXPOSURE TO MISTS. FOR EYE CONTACT, FLUSH THE EYES IMMEDIATELY WITH LARGE AMOUNTS OF WATER WITH THE EYELIDS HELD AWAY FROM THE EYE TO ENSURE THOROUGH RINSING. FOR SKIN CONTACT, REMOVE BY WASHING WITH SOAP AND WATER. GET MEDICAL ATTENTION IF IRRITATION PERSISTS.

### **CONTROL MEASURES**

RESPIRATORY PROTECTION:  
USE MSHA/NIOSH APPROVED SUPPLIED-AIR RESPIRATORY PROTECTION IF OCCUPATIONAL EXPOSURE LIMITS ARE EXCEEDED.

VENTILATION:  
USE LOCAL EXHAUST TO CAPTURE VAPOR, MISTS, OR FUMES IF NECESSARY.

PROTECTIVE GLOVES:  
USE CHEMICAL-RESISTANT (NITRILE) GLOVES TO PREVENT PROLONGED OR REPEATED SKIN CONTACT.

EYE PROTECTION:  
WEAR SPLASH GOGGLES OR SAFETY SHIELD TO PREVENT EYE CONTACT. EYE BATHS SHOULD BE READILY AVAILABLE IN THE AREA OF HANDLING TRANELEC OIL.

OTHER PROTECTIVE CLOTHING OR EQUIPMENT:  
WEAR CHEMICAL-RESISTANT (NITRILE) APRON OR OTHER IMPERVIOUS CLOTHING TO AVOID PROLONGED OR REPEATED SKIN CONTACT.

WORK/HYGENIC PRACTICES:  
WASH WITH SOAP AND WATER AFTER CONTACT. AVOID EXPOSURE TO MISTS.

### **PRECAUTIONS FOR SAFE HANDLING AND USE**

STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED:

STOP FLOW OR ELIMINATE SOURCE OF LEAKAGE. ELIMINATE ALL SOURCES OF IGNITION. ABSORB WITH AN OIL ABSORBENT MATERIAL. NO SPECIAL HAZARDS EXCEPT UNDER MIST OR SPRAY CONDITIONS.

A SPILL OR RELEASE TO NAVIGABLE WATERS MUST BE REPORTED IMMEDIATELY TO THE NATIONAL RESPONSE CENTER (800-424-8802). SPILLS MAY BE REPORTABLE TO STATE OR LOCAL AGENCIES.

WASTE DISPOSAL:  
FOR RECYCLING, CONSULT WITH LOCAL USED OIL RECYCLERS. TRANELEC OIL WHEN RECYCLED, DISCARDED OR DISPOSED OF IS A USED OIL PER 40 CFR 279. TRANELEC OIL IS NOT A HAZARDOUS WASTE PER 40 CFR 261. TRANELEC OIL FROM RETROFILLED ELECTRICAL EQUIPMENT, BY VIRTUE OF CONTAMINATION FROM RESIDUES OF EARLIER

FLUID(S), MAY QUALIFY AS A HAZARDOUS WASTE PER 40 CFR 261.

PRECAUTIONS TO BE TAKEN IN HANDLING AND STORAGE:  
AVOID EXTREMES OF TEMPERATURE IN STORAGE. STORE TRANELEC OIL IN LABELED,  
TIGHTLY CLOSED CONTAINERS IN COOL, DRY, ISOLATED AND WELL VENTILATED AREAS,  
AWAY FROM SOURCES OF IGNITION OR HEAT. TO MAINTAIN FLUID FOR INTENDED USE AS AN  
ELECTRICAL INSULATING FLUID, ELIMINATE EXPOSURE TO OXYGEN AND MOISTURE.

THIS MATERIAL SAFETY DATA SHEET HAS BEEN PREPARED IN ORDER TO HELP THE USERS OF  
TRANELEC CONVENTIONAL TRANSFORMER OIL. THE DATA CONTAINED HEREIN IS ACCURATE AS  
OF THE DATE OF PREPARATION OF THIS SHEET.

EFFECTIVE DATE: JANUARY 13, 2005

JOHN LUKSICH

SENIOR ENGINEER - DIELECTRIC FLUIDS

BULLETIN 98081

01/05

YGE 001

No. 1159



**PORTLAND GENERAL ELECTRIC**

**TRANSPORTING ELECTRICAL EQUIPMENT OR MATERIALS REPORT (Form 0080)**

For moving damaged (leaking and potentially leaking) electrical equipment and materials associated with cleanups (soil, water, absorbent pads, etc.).

<b>LOCATION (prior to equipment malfunction or spill)</b>	
WAS THIS EQUIPMENT OR THESE MATERIALS INVOLVED WITH A SPILL? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	CLEANUP PERFORMED BY EM&C SPILL RESPONSE? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
ADDRESS 8970 N BRADFORD ST. (PORTLAND)	DATE 7/11/07
TYPE OF EQUIPMENT (one piece of electrical equipment per form) <input checked="" type="checkbox"/> Transformer S <input type="checkbox"/> Capacitor <input type="checkbox"/> Other ( ) <input type="checkbox"/> Not Applicable	
KVA SIZE 333 (3)	COMPANY NO. 233, 234, 235
PCB CONTENT KNOWN BY STICKER <input type="checkbox"/> <1 (blue) <input type="checkbox"/> <15 (red) <input type="checkbox"/> <48 (black) <input type="checkbox"/> Non-PCB (green) <input checked="" type="checkbox"/> No Sticker	
PCB CONTENT (PPM) if known 233-30/234-3/235-ND	OIL SAMPLE SENT TO LAB? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
TYPE OF MATERIALS (check all that apply) <input checked="" type="checkbox"/> Soil <input type="checkbox"/> Water <input checked="" type="checkbox"/> Misc. Cleanup Materials <input type="checkbox"/> Other ( ) <input type="checkbox"/> Not Applicable	
MATERIALS (drums, etc) PROPERLY LABELED? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	DRUM / CONTAINER IDENTIFICATION NUMBER(S) 2 DROPPBOXES
TRANSPORTED BY (sign) NRC	LAST NAME (please print)

ROZ1565RT / ROZ1566RT

<b>TEMPORARY STORAGE AREA (IF APPLICABLE)</b>	
TSA LOCATION (line or service centers): <input type="checkbox"/> Beaverton <input type="checkbox"/> Gresham <input type="checkbox"/> Newberg <input type="checkbox"/> Oregon City <input type="checkbox"/> Salem <input type="checkbox"/> Sunset <input type="checkbox"/> Wilsonville <input type="checkbox"/> Woodburn <input type="checkbox"/> Other ( )	
DATE EQUIPMENT / MATERIALS ARRIVED AT TEMPORARY STORAGE AREA	TIME
0080 FORM ATTACHED TO TRANSFORMER? <input type="checkbox"/> Yes <input type="checkbox"/> No	
ANYONE PRESENT TO ACCEPT DELIVERY? <input type="checkbox"/> Yes <input type="checkbox"/> No	ACCEPTED BY (sign)
LAST NAME (please print)	
DATE EQUIPMENT / MATERIALS MOVED FROM TEMPORARY STORAGE AREA?	TIME
COPY OF THIS FORM ATTACHED TO TRANSFORMER? <input type="checkbox"/> Yes <input type="checkbox"/> No	
TRANSPORTED BY (sign)	LAST NAME (please print)

<b>THE TRANSFORMER SHOP</b>	
DATE EQUIPMENT / MATERIALS ARRIVED AT SHOP	TIME
0080 FORM ATTACHED TO TRANSFORMER? <input type="checkbox"/> Yes <input type="checkbox"/> No	
ANYONE PRESENT TO ACCEPT DELIVERY? <input type="checkbox"/> Yes <input type="checkbox"/> No	ACCEPTED BY (sign)
LAST NAME (please print)	

Original to Transformer Shop; Copy to Environmental Services



### Oregon Waste Systems

A Waste Management Company

18177 Cedar Springs Lane  
Arlington, Oregon 97812  
(541) 454-2030

Nº 642926

DATE/TIME: TIME 09:37 AM 13 JUL 07  
 LOAD DATE: \_\_\_\_\_  
 CUSTOMER: PGE  
 PROFILE NUMBER: PGE 001  
 TRUCK NUMBER: TRUCK ID 2060  
 TRAILER/CONTAINER NUMBER: 21565/21566  
 SEAL NUMBER: \_\_\_\_\_  
 CUSTOMER INVOICE NO.: 1159

GROSS WEIGHT: GROSS 81800 LB  
 TARE WEIGHT-TRACTOR: W TARE 47540 LB  
 TARE WGT.-TRAILER/CONTAINER: NET 34260 LB  
 NET WEIGHT: .....

GATEHOUSE: \_\_\_\_\_ SM  
 DRIVER: *[Signature]*  
 TRAIN ID: \_\_\_\_\_ ORIGIN: \_\_\_\_\_  
 WASTE TYPE: Residue of Debris  
 DISPOSAL:  CM  DC  BU  GRID  SEGREGATE  
 REMARKS: \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

HAULER: \_\_\_\_\_

105760

TICKET: 452802  
DATE: 07/13/2007  
TIME: 09:44 - 10:23  
LOAD DATE: 07/13/2007  
TIP DATE: 07/13/2007

WM Columbia Ridge Landfill  
18177 Cedar Springs Lane  
Arlington, OR 97812  
(541)-454-2030

CUSTOMER: PORTLAND GENERAL ELECTRIC  
PROFILE: P6E001 / PORTLAND GENERAL  
TRUCK: 2050  
ORIGIN: PDX / PORTLAND  
COMMENT:  
P.O.: 642926  
GROSS: 81800 LBS Manual  
TARE: 47540 LBS Manual  
NET: 34260 LBS  
CONTAINER: 21565/21566  
MANIFEST: 1159

WASTE  
SPWM / SPECIAL WASTE COMINGLE (SPP) 17.13 T

Weightmaster:  
OUT: SARAH MASTRIONA B: DRARL01PC

Driver:  
IN: SARAH MASTRIONA B: DRARL01PC





**ATTACHMENT 3**

**PGE ANALYTICAL TESTING REPORT**

**PCB Analysis Summary Report**  
**PGE-EM&C Substation Test/Maint Engrng (RC216)**

Friday, July 13, 2007

<u>Company #</u>	<u>Result</u>	<u>Sample Date</u>	<u>Analyte</u>	<u>Units</u>	<u>Lab ID</u>	<u>RC #</u>
233/333KVA	30	07/11/07 00:00	Total PCBs	mg/kg	PQG0368-01	RC216
234/333KVA	3	07/11/07 00:00	Total PCBs	mg/kg	PQG0368-02	RC216
235/333KVA	ND	07/11/07 00:00	Total PCBs	mg/kg	PQG0368-03	RC216

Note: The results on this report have been rounded to show only integer values. The actual results may be slightly higher, but are within standard rounding rules.

TestAmerica - Portland, OR

*Brian L Cone*

Brian Cone, Industrial Services Manager

*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report shall not be reproduced except in full, without the written approval of the laboratory.*





**PCB EMERGENCY RUSH SAMPLE  
CHAIN OF CUSTODY  
FOR ELECTRICAL EQUIPMENT ONLY**

NCA WO# PQ60368

SPILL LOCATION <u>8970 N BRADFORD (PORTLAND)</u>		
COMPANY NO. <u>233, 234, 235</u>	KVA <u>333 (3)</u>	SERIAL NO.
RC NO. <u>328</u>	DATE SAMPLED <u>7/11/07</u>	SAMPLE TAKEN BY <u>J THOMAS</u>
<b>TELEPHONE RESULTS TO</b>		
SITE RESPONDER		
SPILL COORDINATOR (EM&C Response/Foreman) <u>J THOMAS</u>	PHONE <u>849-2659</u>	PAGER
EM&C RESPONSE	PHONE	PAGER
SAMPLE DELIVERED TO LAB BY <u>J THOMAS</u>	TIME <u>10:50AM</u>	DATE <u>7/12/07</u>
SAMPLE RECEIVED BY <u>Martin P... [Signature]</u>	TIME <u>10:50</u>	DATE <u>7-12-07</u>
SAMPLE RECEIVED IN APPROPRIATE CONTAINER? <input type="checkbox"/> Yes <input type="checkbox"/> No		
<p><b>HAND THIS CHAIN OF CUSTODY ALONG WITH SAMPLE OVER TO LAB PERSONNEL ONLY. THIS CHAIN OF CUSTODY MUST BE WITH THE SAMPLE WHEN DELIVERED TO THE LAB.</b></p>		

Note: Lab to Contact Environmental Services With Test Results.

Verbal Results Given To:	By NCA Staff:	Results Given:
Date:	Time:	

# TestAmerica Sample Receipt Checklist

Cooler ID(s): \_\_\_\_\_

Received by: \_\_\_\_\_

Unpacked by: \_\_\_\_\_

Logged-in by: \_\_\_\_\_

Work Order No. PQG0368

<sup>1</sup>(section A)

<sup>2</sup>(section B)

Date: 7-12

Date: 7-12

Date: 7-12

Client: DGE

Time: 10:50

Initials: MP

Initials: MP

Project: Rush PCB Spill

Initials: MP

Temperature out of range:

- No Ice
- Ice Melted
- W/in 4 Hours
- Other: \_\_\_\_\_

\*\*\*ESI Clients (see Section C)

Cooler Temperature (IR):        °C plastic glass NA (oil/air samples, ESI client)

**A** Custody Seals: (#       )

Signature: Y N Dated: \_\_\_\_\_

None

Received from:

TA Courier

Senvoy

UPS

Fed Ex

Client

TDP

DHL

SDS

Mid-Valley

GS/TA

GS/Senvoy

Other: \_\_\_\_\_

Container Type:

#Cooler(s)

#Box(s)

None ( #Other: \_\_\_\_\_)

Coolant Type:

Gel Ice

Loose Ice

None

Packing Material:

Bubble Bags

Styrofoam Cubbies

None ( Other: \_\_\_\_\_)

**B**

Sample Status:

(If N circled, see NOD)

General:

Intact?  Y  N

# Containers Match COC?  Y  N none given

IDs Match COC?  Y  N

For Analyses Requested:

Correct Type & Preservation?  Y  N

Adequate Volume?  Y  N

Within Hold Time?  Y  N

Volatiles:

VOAs Free of Headspace? Y N  NA

TB on COC? not provided Y N  NA

Metals:

HNO3 Preserved? Y N  NA

**C** \*\*\*ESI Clients Only:

Temperature Blank: \_\_\_\_\_ °C not provided

All preserved bottles checked Y N NA (voas/soils/all unp.)

All preserved accordingly? Y N (see NOD) NA (voas/soils/all unp.)

Army Corp:

Geiger (ticks/min): \_\_\_\_\_

Temperatures (IR): \_\_\_\_\_ °C \_\_\_\_\_ °C \_\_\_\_\_ °C \_\_\_\_\_ °C

(left) (middle) (right) (air)

Project Managers: \_\_\_\_\_

Comments: \_\_\_\_\_

PM Reviewed: \_\_\_\_\_ (Initial/Date)