ALLEGHENY COUNTY HEALTH DEPARTMENT

AIR QUALITY PROGRAM
301 39th Street, Bldg. #7
Pittsburgh, PA 15201-1891

Major Source Operating Permit

Issued To:	**University of Pittsburgh**	**ACHD Permit #:**	**0647**
Facility:	**University of Pittsburgh, Campus** **3412 Forbes Avenue** **Pittsburgh, PA 15260**	**Date of Issuance:**	**December 19, 2013**
		Expiration Date:	**December 18, 2018**
		Renewal Date:	**June 19, 2018**

Issued By: _____
Sandra L. Etzel
Air Pollution Control Mgr.

Prepared By: **Melissa Jativa**
Air Quality Engineer

TABLE OF CONTENTS

AMENDMENTS:

DATE	***SECTION***

I. CONTACT INFORMATION

Facility Location:	**University of Pittsburgh, Pittsburgh Campus** Public Safety Building, 4th Floor 3412 Forbes Avenue Pittsburgh, PA 15260
Permittee/Owner:	**University of Pittsburgh** Public Safety Building, 4th Floor 3412 Forbes Avenue Pittsburgh, PA 15260
Permittee/Operator: **(if not Owner)**	**same as above**
Responsible Official:	**Jay M Frerotte**
Title:	Director, Environmental Health and Safety
Company:	**University of Pittsburgh**
Address:	Public Safety Building, 4th Floor 3412 Forbes Avenue Pittsburgh, PA 15260
Telephone Number:	(412) 624-9505
Fax Number:	(412) 624-8524
Facility Contact:	**Keith M. Duval**
Title:	Environmental Manager
Telephone Number:	(412) 624-8952
Fax Number:	(412) 624-8524
E-mail Address:	kmd7@pitt.edu

AGENCY ADDRESSES:

ACHD Engineer:	**Melissa Jativa**
Title:	Air Quality Engineer
Telephone Number:	412-578-8137
Fax Number:	412-578-8144
E-mail Address:	mjativa@achd.net
ACHD Contact:	**Chief Engineer** **Allegheny County Health Department** Air Quality Program 301 39th Street, Building #7 Pittsburgh, PA 15201-1891
EPA Contact:	**Enforcement Programs Section (3AP12)** **USEPA Region III** 1650 Arch Street Philadelphia, PA 19103-2029

II. FACILITY DESCRIPTION

The University of Pittsburgh is a public university located in Pittsburgh. The source consists of one (1) campus-wide painting, one (1) Melwood spray booth, one printing operations, one (1) Melwood laminate spray area, seventy-seven (77) natural gas-fired boilers, six (6) natural gas fired boilers using No. 2 fuel oil as backup fuel, thirteen (13) natural gas-fired space heaters, thirty-one (31) natural gas-fired hot water heaters, sixty-seven (67) diesel-fired emergency generator engines, and four (4) natural gas-fired emergency generator engines. There is one diesel storage tank associated with each diesel fired emergency generator and the boilers using fuel oil as backup fuel.

The University of Pittsburgh is a minor source of particulate matter (PM), particulate matter of 10 microns or less in diameter (PM_{10}), particulate matter of 2.5 microns or less in diameter ($PM_{2.5}$), sulfur oxides (SO_X), volatile organic compounds (VOCs), and hazardous air pollutants (HAPs), and a major source of nitrogen oxides (NO_X), and carbon monoxide (CO) as defined in section 2101.20 of Article XXI. The facility is also a major source of greenhouse gas emissions (CO_2e) as defined in the U.S. EPA Greenhouse Gas Tailoring Rule.

The emission units regulated by this permit are summarized in Table II-1:

TABLE II-1
Emission Unit Identification

ID	SOURCE DESCRIPTION (LOCATION)	CONTROL DEVICE(S)	MAXIMUM CAPACITY	FUEL/RAW MATERIAL	STACK ID
CP1	Campus-Wide Painting	Uncontrolled	5,085 gallons/yr	Paints and Solvents	-
SP1	Melwood Spray Booth Furniture Painting	Fabric Filter	150 gallons/yr	Paints and Solvents	SP1
SP2	Thomas Blvd Spray Booth	Fabric Filter	75 gallons/yr	Paints and Solvents	SP2
PP1	University Literature Printing (Cathedral)	Uncontrolled	4,664 gallons/yr	Inks and Solvents	-
PLS1	Laminate Spray Area (Melwood)	Fabric Filter	210 gallons/yr	Adhesives	LS1
B1 through B9	Nine (9) AO Smith Boilers (Fraternity Boilers)	Uncontrolled	0.44 MMBtu/hr (3.96 MMBtu/hr total)	Natural Gas	SB1 through SB9
B10 through B17	Eight (8) Hydro Therm / Ace Boiler MR-900 B-P (Sutherland Hall)	Uncontrolled	0.30 MMBtu/hr (2.4 MMBtu/hr total)	Natural Gas	SB10
B22A and B22B	Two (2) AO Smith Boilers; DB-7205110E (Forbes Craig Bldg)	Uncontrolled	0.91 MMBtu/hr (1.82 MMBtu/hr total)	Natural Gas	SB22
B23A	Bryan Boilers RW1050-S-15-FDG (Biotech Building)	Uncontrolled	10.7 MMBtu/hr	Natural Gas	B23
B23B	Bryan Boilers RW1050-S-15-FDG (Biotech Building)	Uncontrolled	8.7 MMBtu/hr	Natural Gas	B23

ID	SOURCE DESCRIPTION (LOCATION)	CONTROL DEVICE(S)	MAXIMUM CAPACITY	FUEL/RAW MATERIAL	STACK ID
B23C	Bryan Boilers RW1050-S-15-FDG (Biotech Building)	Uncontrolled	8.7 MMBtu/hr	Natural Gas	B23
B26	Peerless Boiler 211A-06-W (Child Care Center)	Uncontrolled	1.05 MMBtu/hr	Natural Gas	SB26
B27	AO Smith Boiler LB-1000-920 (Eureka)	Uncontrolled	1.00 MMBtu/hr	Natural Gas	SB27
B28A through B28G	Seven (7) Raypack / Ajax Boilers; H4-1223A-CCDCCDA (Forbes Residence Hall)	Uncontrolled	1.00 MMBtu/hr (7.00 MMBtu/hr total)	Natural Gas	SB28
B30A and B30B	Two (2) Peerless Boilers 211-6-VW-1 (Craig Hall)	Uncontrolled	1.05 MMBtu/hr (2.10 MMBtu/hr total)	Natural Gas	SB32
B31	Peerless Boiler 211-10-S-1 (Falk School)	Uncontrolled	1.89 MMBtu/hr	Natural Gas	SB31
B33A, B33B, B33C	Three (3) American Standard 4BN-J2 (310 Oakland Ave)	Uncontrolled	0.164 MMBtu/hr, 0.164 MMBtu/hr, 0.125 MMBtu/hr (0.453 MMBtu/hr total)	Natural Gas	SB33
B34	Utica Boiler PEG-3000-C1DE (318 Oakland Ave)	Uncontrolled	0.38 MMBtu/hr	Natural Gas	SB34
B35A through B35C	Three (3) Galaxy Boilers GG-250 (306 Oakland Ave)	Uncontrolled	0.25 MMBtu/hr (0.75 MMBtu/hr total)	Natural Gas	SB35
B36	Burnham Boiler 208NCL-TE12 (264 Oakland Ave Apts)	Uncontrolled	0.24 MMBtu/hr	Natural Gas	SB36
B37	Crane Boiler 7-202 (268 Oakland Ave Apts)	Uncontrolled	0.18 MMBtu/hr	Natural Gas	SB37
B38	Weil-McLain Boiler H-10 (296-306 Oakland Ave)	Uncontrolled	0.54 MMBtu/hr	Natural Gas	SB38
B39A through B39C	Three (3) Weil-McLain Boilers HE-6 (College Garden Apts - 5820 Elwood)	Uncontrolled	0.167 MMBtu/hr (0.50 MMBtu/hr total)	Natural Gas	SB39
B40A and B40B	Two (2) Hydro-Therm Boilers R-250B (College Garden Apts -5830 Elwood)	Uncontrolled	0.25 MMBtu/hr (0.50 MMBtu/hr total)	Natural Gas	SB40

ID	SOURCE DESCRIPTION (LOCATION)	CONTROL DEVICE(S)	MAXIMUM CAPACITY	FUEL/RAW MATERIAL	STACK ID
B41A and B41B	Two (2) Hydro-Therm Boilers R-250C-PV (College Garden Apts - 5840 Elwood)	Uncontrolled	0.25 MMBtu/hr (0.50 MMBtu/hr total)	Natural Gas	SB41
B42A and B42B	Two (2) Hydro-Therm Boilers R-250C-PV (College Garden Apts - 5821 Walnut)	Uncontrolled	0.25 MMBtu/hr (0.50 MMBtu/hr total)	Natural Gas	SB42
B43A and B43B	Two (2) Hydro-Therm Boilers R-250B (College Garden Apts - 5831 Walnut)	Uncontrolled	0.25 MMBtu/hr (0.50 MMBtu/hr total)	Natural Gas	SB43
B44A through B44C	Three (3) Weil-McLain Boilers HE-6 (College Garden Apts - 5841 Walnut)	Uncontrolled	0.167 MMBtu/hr (0.50 MMBtu/hr total)	Natural Gas	SB44
B45	One (1) Weil-McLain Boiler LGB-8 (263 Atwood Ave Apts)	Uncontrolled	0.91 MMBtu/hr	Natural Gas	SB45
B46	One (1) Crane Boiler 13-36A (305 Atwood Ave Apts)	Uncontrolled	0.87 MMBtu/hr	Natural Gas	SB46
B47	One (1) Bryan Boiler CLM150-W-G1 (Mayflower Apts - 141 N. Dithridge)	Uncontrolled	1.44 MMBtu/hr	Natural Gas	SB47
B48	Six (6) Nebraska Boilers (Carillo Street Steam Plant)	Uncontrolled	140 MMBtu/hr (840 MMBtu/hr total)	Natural Gas	B48-1 through B48-6
B49A and B49B	Two (2) Lochinvar Boilers (3343 Forbes Ave)	Uncontrolled	1.44 MMBtu/hr (2.88 MMBtu/hr total)	Natural Gas	SB48
B50A and B50B	Two (2) Kewanee Boilers (Thomas Blvd)	Uncontrolled	2.145 MMBtu/hr (4.29 MMBtu/hr total)	Natural Gas	SB50
B51	One (1) Burnham Boiler P-207-WI (260 Oakland Ave Apts)	Uncontrolled	0.198 MMBtu/hr	Natural Gas	SB36
B52A through B52C	Three (3) Galaxy Boiler (234-236 Oakland Ave Apts)	Uncontrolled	0.20 MMBtu/hr (0.60 MMBtu/hr total)	Natural Gas	SB36
B53A and B53B	Two (2) Lochinvar Boilers (3343 Forbes Ave)	Uncontrolled	0.50 MMBtu/hr (1.00 MMBtu/hr total)	Natural Gas	SB48

ID	SOURCE DESCRIPTION (LOCATION)	CONTROL DEVICE(S)	MAXIMUM CAPACITY	FUEL/RAW MATERIAL	STACK ID
B54	One (1) Fulton Boiler PHW-1000 (Public Safety Bldg)	Uncontrolled	0.84 MMBtu/hr	Natural Gas	SB54
B55A and B55B	Two (2) NG Boilers (Panther Hall)	Uncontrolled	3.5 MMBtu/hr (7.0 MMBtu/hr total)	Natural Gas	SB55
B56A and B56B	Two (2) NG Boilers (PA Hall)	Uncontrolled	3.5 MMBtu/hr (7.0 MMBtu/hr total)	Natural Gas	SB56
H1A and H1B	Two (2) Forced Air Heaters Dayton 4LX62, Reznor BEX250 (Motor Pool)	Uncontrolled	0.10 MMBtu/hr (0.20 MMBtu/hr total)	Natural Gas	SH1
H2A through H2F	Six (6) Radiant Heaters #2 Solaronics (Melwood Warehouse)	Uncontrolled	0.15 MMBtu/hr (0.90 MMBtu/hr total)	Natural Gas	-
H3A through H3E	Five (5) Infrared Heaters Vintage HE80N, HE100N-40 (Public Safety Building)	Uncontrolled	3 – 1.0 MMBtu/hr, 2 – 0.8 MMBtu/hr (4.6 MMBtu/hr total)	Natural Gas	-
HW1 through HW18	Eighteen (18) AO Smith Boilers; BT-100 (Fraternity Hot Water Tank)	Uncontrolled	0.075 MMBtu/hr (1.35 MMBtu/hr total)	Natural Gas	SHW1 through SHW18
HW19 through HW22	Four (4) ACE Breecher Boilers; B-11 (Sutherland Hot Water Tanks)	Uncontrolled	1.06 MMBtu/hr (4.24 MMBtu/hr total)	Natural Gas	SHW19 through SHW22
HW23 and HW24	Two (2) AJAX Boilers; B86 (Forbes Residence Hall Hot Water Tanks)	Uncontrolled	0.80 MMBtu/hr (1.60 MMBtu/hr total)	Natural Gas	SHW23 and SHW24
HW25	Patterson-Kelley Boiler; NB-88860 (Ruskin Hall Hot Water Heater)	Uncontrolled	1.10 MMBtu/hr	Natural Gas	SHW25
HW26	AO Smith Hot Water Heater – GCVX 50 100 (3343 Forbes Ave)	Uncontrolled	0.065 MMBtu/hr	Natural Gas	SHW25
HW27	AO Smith Hot Water Heater – M2TW75T6BN (Thackeray Hall)	Uncontrolled	0.076 MMBtu/hr	Natural Gas	SHW27
HW28	AO Smith Hot Water Heater – HWZ00M890 (Thaw Hall)	Uncontrolled	0.190 MMBtu/hr	Natural Gas	SHW28
HW29	AO Smith Hot Water Heater – BTR-200-110 (SRCC)	Uncontrolled	0.199 MMBtu/hr	Natural Gas	SHW29
HW30	Hot Water Heater (Panther Hall)	Uncontrolled	0.99 MMBtu/hr	Natural Gas	SHW29

ID	SOURCE DESCRIPTION (LOCATION)	CONTROL DEVICE(S)	MAXIMUM CAPACITY	FUEL/RAW MATERIAL	STACK ID
HW31	Hot Water Heater (PAHall)	Uncontrolled	0.99 MMBtu/hr	Natural Gas	SHW29
DG1	Emergency Generator Cummins Onan 80DGDA (Eberly Hall)	Uncontrolled	80 kW	No. 2 Fuel Oil	SDG1
DG2	Emergency Generator Onan; 50-DGDA (Bellefield Hall)	Uncontrolled	50 kW	No. 2 Fuel Oil	SDG2
DG3	Emergency Generator Kohler 200ROZD71 (Bendum Hall)	Uncontrolled	200 kW	No. 2 Fuel Oil	SDG3
DG4	Emergency Generator Kohler 750ROZD71 (Biotech Building)	Uncontrolled	680 kW	No. 2 Fuel Oil	SDG4
DG5	Emergency Generator Caterpillar 3412 (Cathedral Of Learning)	Uncontrolled	600 kW	No. 2 Fuel Oil	SDG5
DG6	Emergency Generator Onan; DFAC-4488188 (Chevron)	Uncontrolled	250 kW	No. 2 Fuel Oil	SDG6
DG7	Emergency Generator Onan; DGCB-3373593 (Clapp Hall)	Uncontrolled	60 kW	No. 2 Fuel Oil	SDG7
DG8	Emergency Generator Olympian C125P1 (Crawford Hall)	Uncontrolled	125 kW	No. 2 Fuel Oil	SDG8
DG9	Emergency Generator Olympian D100P1 (David Lawrence)	Uncontrolled	100 kW	No. 2 Fuel Oil	SDG9
DG10	Emergency Generator Onan; DGFC-3381687 (Eureka Building)	Uncontrolled	200 kW	No. 2 Fuel Oil	SDG10
DG11	Emergency Generator Onan; 25DKAF (Field House)	Uncontrolled	25 kW	No. 2 Fuel Oil	SDG11
DG12	Emergency Generator Cummins DGFB-4963250 (Forbes Residence Hall)	Uncontrolled	175 kW	No. 2 Fuel Oil	SDG12
DG13	Emergency Generator Onan; DFCB-3381249 (Forbes Quad)	Uncontrolled	300 kW	No. 2 Fuel Oil	SDG13
DG16	Emergency Generator Kohler 80ROZJ71 (Library of Info Science)	Uncontrolled	80 kW	No. 2 Fuel Oil	SDG16

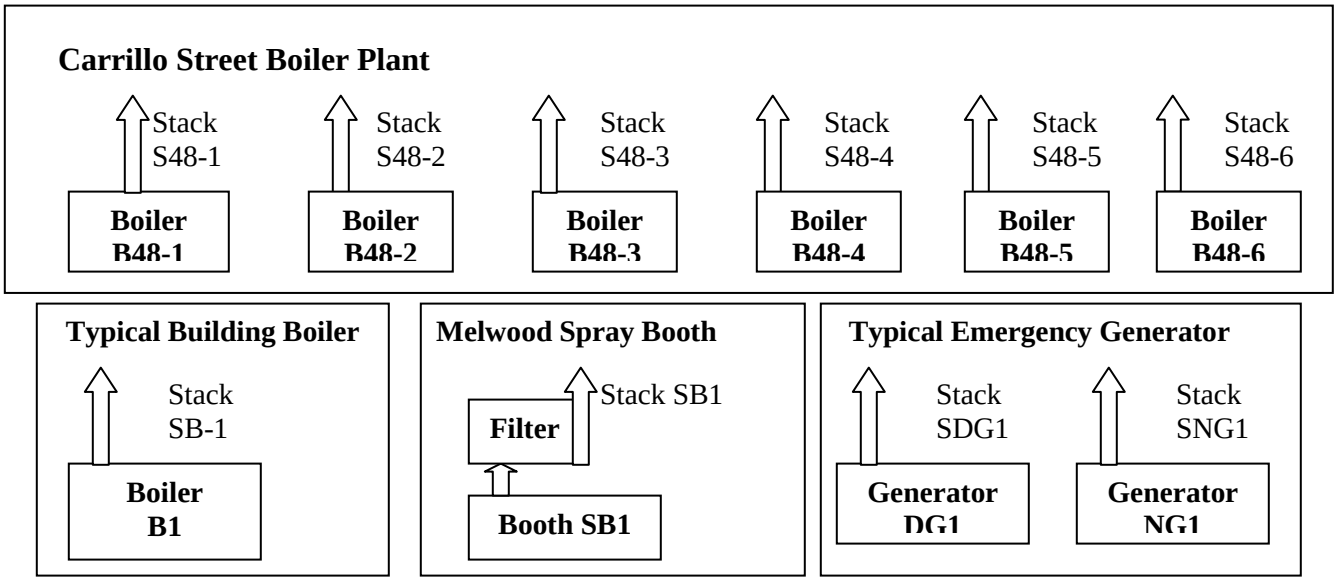
ID	SOURCE DESCRIPTION (LOCATION)	CONTROL DEVICE(S)	MAXIMUM CAPACITY	FUEL/RAW MATERIAL	STACK ID
DG17	Emergency Generator Olympian D200P1 (Alumni Hall)	Uncontrolled	200 kW	No. 2 Fuel Oil	SDG17
DG18	Emergency Generator Onan 750-DYC-15R (Mervis Hall)	Uncontrolled	75 kW	No. 2 Fuel Oil	SDG18
DG19	Emergency Generator Olympian D200P1 (Old Engineering Building)	Uncontrolled	200 kW	No. 2 Fuel Oil	SDG19
DG20	Emergency Generator Caterpillar SR-4 (Salk Hall)	Uncontrolled	750 kW	No. 2 Fuel Oil	SDG20
DG21	Emergency Generator Onan 250DFBE (S and S Garage)	Uncontrolled	250 kW	No. 2 Fuel Oil	SDG21
DG22	Emergency Generator Olympian D100P1 (Thackeray Hall)	Uncontrolled	100 kW	No. 2 Fuel Oil	SDG22
DG23	Emergency Generator Olympian D150P2 (Thaw Hall)	Uncontrolled	150 kW	No. 2 Fuel Oil	SDG23
DG24	Emergency Generator Onan 400DFCE (Litchfield Towers)	Uncontrolled	275 kW	No. 2 Fuel Oil	SDG24
DG25	Emergency Generator Onan 200DGFC (Lothrop Hall)	Uncontrolled	200 kW	No. 2 Fuel Oil	SDG25
DG26	Emergency Generator Caterpillar 3406 (Lothrop Hall)	Uncontrolled	400 kW	No. 2 Fuel Oil	SDG26
DG27	Emergency Generator Kohler 275RHOZ81 (William Pitt Union)	Uncontrolled	275 kW	No. 2 Fuel Oil	SDG27
DG28	Emergency Generator Kohler 230ROZ81 (Centre Plaza)	Uncontrolled	265 kW	No. 2 Fuel Oil	SDG28
DG29	Emergency Generator Caterpillar 3512TA (Petersen Events Center)	Uncontrolled	1,250 kW	No. 2 Fuel Oil	SDG29
DG30	Emergency Generator Kohler 400 (Sennot Square)	Uncontrolled	400 kW	No. 2 Fuel Oil	SDG30
DG31	Clark Control Fire Pump DDFR-03DT-5068F (Field House Fire Pump)	Uncontrolled	82 kW	No. 2 Fuel Oil	SDG31

ID	SOURCE DESCRIPTION (LOCATION)	CONTROL DEVICE(S)	MAXIMUM CAPACITY	FUEL/RAW MATERIAL	STACK ID
DG32	Patterson Fire Pump (Litchfield Fire Pump)	Uncontrolled	65 kW	No. 2 Fuel Oil	SDG32
DG33-1	Emergency Generator Caterpillar 3456/SR4B (Carrillo St.)	Uncontrolled	1,000 kW	No. 2 Fuel Oil	SDG33
DG33-2	Emergency Generator Caterpillar 3456/SR4B (Carrillo St.)	Uncontrolled	1,000 kW	No. 2 Fuel Oil	SDG33
DG34	Emergency Generator Onan 400 DFCE (Eberly Hall #2)	Uncontrolled	400 kW	No. 2 Fuel Oil	SDG34
DG35	Emergency Generator Onan 35.0DGGD (Music Building)	Uncontrolled	35 kW	No. 2 Fuel Oil	SDG35
DG36	Emergency Generator Onan DGDB5628758 (3343 Forbes)	Uncontrolled	100 kW	No. 2 Fuel Oil	SDG36
DG37	Emergency Generator Kohler 60 (Frick Fine Arts)	Uncontrolled	62 kW	No. 2 Fuel Oil	SDG37
DG40	Emergency Generator Caterpillar 3508 (Life Science Annex)	Uncontrolled	1,000 kW	No. 2 Fuel Oil	SDG40
DG41	Emergency Generator Kohler 250REOZD (McGowan)	Uncontrolled	256 kW	No. 2 Fuel Oil	SDG41
DG42	Emergency Generator Kohler 400 REOZV-13C2 (PA Hall)	Uncontrolled	400 kW	No. 2 Fuel Oil	SDG42
DG43	Emergency Generator Caterpillar 3512 (BST-3)	Uncontrolled	1,500 kW	No. 2 Fuel Oil	SDG43
DG44	Emergency Generator Caterpillar 3516 (BST-3 #2)	Uncontrolled	1,750 kW	No. 2 Fuel Oil	SDG44
DG45	Emergency Generator Cummins DGDK (Trees Hall)	Uncontrolled	125 kW	No. 2 Fuel Oil	SDG45
DG46	Emergency Generator Cummins DGFS (Victoria Hall)	Uncontrolled	230 kW	No. 2 Fuel Oil	SDG46
DG47	Emergency Generator Cummins DFGE 5754681 (McCormick Quad)	Uncontrolled	750 kW	No. 2 Fuel Oil	SDG47

ID	SOURCE DESCRIPTION (LOCATION)	CONTROL DEVICE(S)	MAXIMUM CAPACITY	FUEL/RAW MATERIAL	STACK ID
DG48	Emergency Generator Cummins DGCG-5710358 (Craig Hall)	Uncontrolled	80 kW	No. 2 Fuel Oil	SDG48
DG50	Emergency Generator Cummins/Onan (Sutherland)	Uncontrolled	300 kW	No. 2 Fuel Oil	SDG50
DG51	Emergency Generator Cummins/Onan (Frats 1 through 4)	Uncontrolled	16 kW	No. 2 Fuel Oil	SDG51
DG52	Emergency Generator Cummins/Onan (Frats 5 and 6)	Uncontrolled	11 kW	No. 2 Fuel Oil	SDG52
DG53	Emergency Generator Cummins/Onan (Frats 7 and 8)	Uncontrolled	7 kW	No. 2 Fuel Oil	SDG53
DG54	Emergency Generator Cummins/Onan (Panther Hall)	Uncontrolled	800 kW	No. 2 Fuel Oil	SDG54
DG56	Emergency Generator Cummins DQAD (Public Safety)	Uncontrolled	250 kW	No. 2 Fuel Oil	SDG56
DG57	Emergency Generator Kohler 150ROZJ (Law School)	Uncontrolled	150 kW	No. 2 Fuel Oil	SDG57
DG58	Emergency Generator Caterpillar C18 DITA (Benedum Hall)	Uncontrolled	600 kW	No. 2 Fuel Oil	SDG58
DG59	Emergency Generator Cummins DFED (Posvar Hall)	Uncontrolled	500 kW	No. 2 Fuel Oil	SDG59
DG60	Emergency Generator Cummins QSB5-DSFAD (Falk School)	Uncontrolled	60 kW	No. 2 Fuel Oil	SDG60
DG61	Emergency Generator Caterpillar C27 (Mid-Campus)	Uncontrolled	800 kW	No. 2 Fuel Oil	SDG61
DG62	Emergency Generator Cummins QSB7 (Olympic Sports Complex)	Uncontrolled	100 kW	No. 2 Fuel Oil	SDG62
DG63	Emergency Generator Cummins DQGAB (Chevron Annex)	Uncontrolled	1500 kW	No. 2 Fuel Oil	SDG63
DG64	Emergency Generator Cummins DSGAC (University Club)	Uncontrolled	150 kW	No. 2 Fuel Oil	SDG64

ID	SOURCE DESCRIPTION (LOCATION)	CONTROL DEVICE(S)	MAXIMUM CAPACITY	FUEL/RAW MATERIAL	STACK ID
DG65	Emergency Generator Koehler 100REOZJD (Forbes Craig)	Uncontrolled	100 kW	No. 2 Fuel Oil	SDG65
DG66	Diesel Fire Pump Engine Clarke P-DFPLYT-T2501 (University Club)	Uncontrolled	65 kW	No. 2 Fuel Oil	SDG66
DG67	Emergency Generator Cummins DSHAC-5857339 (Darragh Street)	Uncontrolled	200 kW	No. 2 Fuel Oil	SDG67
DG68	Emergency Generator Cummins DFAC-5659890 (Graduate School of Public Health)	Uncontrolled	250 kW	No. 2 Fuel Oil	SDG68
DG69	Emergency Generator Cummins DQHAB-5938319 (Ruskin Hall)	Uncontrolled	300 kW	No. 2 Fuel Oil	SDG69
DG70	Emergency Generator Cummins DGFC-5005544 (Thomas Blvd)	Uncontrolled	200 kW	No. 2 Fuel Oil	SDG70
DG71	Emergency Generator Caterpillar C-9 (Bouquet Gardens)	Uncontrolled	250 kW	No. 2 Fuel Oil	SDG71
DG72	Emergency Generator CAT C-18 (Salk Hall Addition)	Uncontrolled	600 kW	No. 2 Fuel Oil	SDG72
DG73	Emergency Generator Cummins QSX15-G9 (Nordenberg Hall)	Uncontrolled	350 kW	No. 2 Fuel Oil	SDG73
DG74	Emergency Generator Cummins QSK23-G7 (GSPH Addition)	Uncontrolled	750 kW	No. 2 Fuel Oil	SDG74
NG6	Emergency Generator Onan 175.0 WB-15R (Learning and Research Development Center)	Uncontrolled	175 kW	Natural Gas	SNG6
NG17	Emergency Generator Kohler 175RZ2828 (3343 Forbes Ave)	Uncontrolled	175 kW	Natural Gas	SNG17
NG18	Emergency Generator Cummins GGHG (Benedum Hall)	Uncontrolled	85 KW	Natural Gas	SNG18
NG19	Emergency Generator Cummins WSG-1068 (Victoria Hall)	Uncontrolled	100 KW	Natural Gas	SNG19

Process Flow Diagrams


Carrillo Street Boiler Plant
Stack S48-1
Boiler B48-1
Stack S48-2
Boiler B48-2
Stack S48-3
Boiler B48-3
Stack S48-4
Boiler B48-4
Stack S48-5
Boiler B48-5
Stack S48-6
Boiler B48-6
Typical Building Boiler
Stack SB-1
Boiler B1
Melwood Spray Booth
Stack SB1
Filter
Booth SB1
Typical Emergency Generator
Stack SDG1
Generator DG1
Stack SNG1
Generator NG1

DECLARATION OF POLICY

Pollution prevention is recognized as the preferred strategy (over pollution control) for reducing risk to air resources. Accordingly, pollution prevention measures should be integrated into air pollution control programs wherever possible, and the adoption by sources of cost-effective compliance strategies, incorporating pollution prevention, is encouraged. The Department will give expedited consideration to any permit modification request based on pollution prevention principles.

The permittee is subject to the terms and conditions set forth below. These terms and conditions constitute provisions of *Allegheny County Health Department Rules and Regulations, Article XXI Air Pollution Control*. The subject equipment has been conditionally approved for operation. The equipment shall be operated in conformity with the plans, specifications, conditions, and instructions which are part of your application, and may be periodically inspected for compliance by the Department. In the event that the terms and conditions of this permit or the applicable provisions of Article XXI conflict with the application for this permit, these terms and conditions and the applicable provisions of Article XXI shall prevail. Additionally, nothing in this permit relieves the permittee from the obligation to comply with all applicable Federal, State and Local laws and regulations.

III. GENERAL CONDITIONS - Major Source

1. Prohibition of Air Pollution (§2101.11)

It shall be a violation of this permit to fail to comply with, or to cause or assist in the violation of, any requirement of this permit, or any order or permit issued pursuant to authority granted by Article XXI. The permittee shall not willfully, negligently, or through the failure to provide and operate necessary control equipment or to take necessary precautions, operate any source of air contaminants in such manner that emissions from such source:

a. Exceed the amounts permitted by this permit or by any order or permit issued pursuant to Article XXI;
b. Cause an exceedance of the ambient air quality standards established by Article XXI §2101.10; or
c. May reasonably be anticipated to endanger the public health, safety, or welfare.

2. Definitions (§2101.20)

a. Except as specifically provided in this permit, terms used retain the meaning accorded them under the applicable provisions and requirements of Article XXI or the applicable federal or state regulation. Whenever used in this permit, or in any action taken pursuant to this permit, the words and phrases shall have the meanings stated, unless the context clearly indicates otherwise.

b. Unless specified otherwise in this permit or in the applicable regulation, the term "*year*" shall mean any twelve (12) consecutive months.

3. Conditions (§2102.03.c)

It shall be a violation of this permit giving rise to the remedies provided by Article XXI §2109.02, for any person to fail to comply with any terms or conditions set forth in this permit.

4. Certification (§2102.01)

Any report, or compliance certification submitted under this permit shall contain written certification by a responsible official as to truth, accuracy, and completeness. This certification and any other certification required under this permit shall be signed by a responsible official of the source, and shall state that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete.

5. Transfers (§2102.03.e)

This permit shall not be transferrable from one person to another, except in accordance with Article XXI §2102.03.e and in cases of change-in-ownership which are documented to the satisfaction of the Department, and shall be valid only for the specific sources and equipment for which this permit was issued. The transfer of permits in the case of change-in-ownership may be made consistent with the administrative permit amendment procedure of Article XXI §2103.14.b The required documentation and fee must be received by the Department at least 30 days before the intended transfer date.

6. Term (§2103.12.e, §2103.13.a)

a. This permit shall remain valid for five (5) years from the date of issuance, or such other shorter period if required by the Clean Air Act, unless revoked. The terms and conditions of an expired permit shall automatically continue pending issuance of a new operating permit provided the permittee has submitted a timely and complete application and paid applicable fees required under Article XXI Part C, and the Department through no fault of the permittee is unable to issue or deny a new permit before the expiration of the previous permit.

b. Expiration. Permit expiration terminates the source's right to operate unless a timely and complete renewal application has been submitted consistent with the requirements of Article XXI Part C.

7. Need to Halt or Reduce Activity Not a Defense (§2103.12.f.2)

It shall not be a defense for a permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit.

8. Property Rights (§2103.12.f.4)

This permit does not convey any property rights of any sort, or any exclusive privilege.

9. Duty to Provide Information (§2103.12.f.5)

a. The permittee shall furnish to the Department in writing within a reasonable time, any information that the Department may request to determine whether cause exists for modifying, revoking and reissuing, or terminating the permit or to determine compliance with the permit. Upon request, the permittee shall also furnish to the Department copies of any records required to be kept by the permit.

b. Upon cause shown by the permittee the records, reports, or information, or a particular portion thereof, claimed by the permittee to be confidential shall be submitted to the Department in accordance with the requirements of Article XXI, §2101.07.d.4. Information submitted to the Department under a claim of confidentiality, shall be available to the US EPA and the PADEP

upon request and without restriction. Upon request of the permittee the confidential information may be submitted to the USEPA and PADEP directly. Emission data or any portions of any draft, proposed, or issued permits shall not be considered confidential.

10. Modification of Section 112(b) Pollutants which are VOCs or PM10 (§2103.12.f.7)

Except where precluded under the Clean Air Act or federal regulations promulgated under the Clean Air Act, if this permit limits the emissions of VOCs or PM_{10} but does not limit the emissions of any hazardous air pollutants, the mixture of hazardous air pollutants which are VOCs or PM_{10} can be modified so long as no permit emission limitations are violated. A log of all mixtures and changes shall be kept and reported to the Department with the next report required after each change.

11. Right to Access (§2103.12.h.2)

Upon presentation of credentials and other documents as may be required by law, the permittee shall allow authorized Department and other federal, state, county, and local government representatives to:

a. Enter upon the permittee's premises where a permitted source is located or an emissions-related activity is conducted, or where records are or should be kept under the conditions of the permit;
b. Have access to, copy and remove, at reasonable times, any records that must be kept under the conditions of the permit;
c. Inspect at reasonable times any facilities, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under the permit; and
d. As authorized by either Article XXI or the Clean Air Act, sample or monitor at reasonable times substances or parameters for the purpose of assuring compliance with the permit or other applicable requirements.

12. Certification of Compliance (§2103.12.h.5, §2103.22.i.1)

a. The permittee shall submit on an annual basis, certification of compliance with all terms and conditions contained in this permit, including emission limitations, standards, or work practices. The certification of compliance shall be made consistent with General Condition 4 above and shall include the following information at a minimum:

1) The identification of each term or condition of the permit that is the basis of the certification;
2) The compliance status;
3) Whether compliance was continuous or intermittent;
4) The method(s) used for determining the compliance status of the source, currently and over the reporting period consistent with the provisions of this permit; and
5) Such other facts as the Department may require to determine the compliance status of the source.

b. All certifications of compliance must be submitted to the Administrator as well as the Department by May 30 of each year for the time period beginning April 1 of the previous year and ending March 31 of the same year. The first report shall be due May 30, 2014 for the time period beginning on the issuance date of this permit through March 31, 2014. Compliance certifications may be emailed to the Administrator at R3_APD_Permits@epa.gov in lieu of mailing a hard copy.

13. Record Keeping Requirements (§2103.12.j.1)

a. The permittee shall maintain records of required monitoring information that include the following:

1) The date, place as defined in the permit, and time of sampling or measurements;
2) The date(s) analyses were performed;
3) The company or entity that performed the analyses;
4) The analytical techniques or methods used;
5) The results of such analyses; and
6) The operating parameters existing at the time of sampling or measurement.

b. The permittee shall maintain and make available to the Department, upon request, records including computerized records that may be necessary to comply with the reporting and emission statements in Article XXI §2108.01.e. Such records may include records of production, fuel usage, maintenance of production or pollution control equipment or other information determined by the Department to be necessary for identification and quantification of potential and actual air contaminant emissions.

14. Retention of Records (§2103.12.j.2)

The permittee shall retain records of all required monitoring data and support information for a period of at least five (5) years from the date of the monitoring sample, measurement, report, or application. Support information includes all calibration and maintenance records and all original strip-chart recordings for continuous monitoring instrumentation, and copies of all reports required by this permit.

15. Reporting Requirements (§2103.12.k)

a. The permittee shall submit reports of any required monitoring at least every six (6) months. All instances of deviations from permit requirements must be clearly identified in such reports. All required reports must be certified by the Responsible Official.

b. Prompt reporting of deviations from permit requirements is required, including those attributable to upset conditions as defined in this permit and Article XXI §2108.01.c, the probable cause of such deviations, and any corrective actions or preventive measures taken.

c. All reports submitted to the Department shall comply with the certification requirements of General Condition 4 above.

d. Semiannual reports required by this permit shall be submitted to the Department as follows: [Revise these dates as necessary to correspond to the TV Certification reporting period. The intent is to stagger the receipt of reports and certifications so everything is not received at once.]

1) One semiannual report is due by May 15 of each year for the time period beginning October 1 of the previous year and ending March 31.
2) One semiannual report is due by November 15 of each year for the time period beginning April 1 and ending September 30.
3) The first semiannual report shall be due May 15, 2014 for the time period beginning on the issuance date of this permit through March 31, 2014.

16. Severability Requirement (§2103.12.l)

The provisions of this permit are severable, and if any provision of this permit is determined by a court of competent jurisdiction to be invalid or unenforceable, such a determination will not affect the remaining provisions of this permit.

17. Existing Source Reactivations (§2103.13.d)

The permittee shall not reactivate any source that has been out of operation or production for a period of one year or more unless the permittee has submitted a reactivation plan request to, and received a written reactivation plan approval from, the Department. Existing source reactivations shall meet all requirements of Article XXI §2103.13.d.

18. Administrative Permit Amendment Procedures (§2103.14.b, §2103.24.b)

An administrative permit amendment may be made consistent with the procedures of Article XXI §2103.14.b and §2103.24.b. Administrative permit amendments are not authorized for any amendment precluded by the Clean Air Act or the regulations thereunder.

19. Revisions and Minor Permit Modification Procedures (§2103.14.c, §2103.24.a)

Sources may apply for revisions and minor permit modifications on an expedited basis in accordance with Article XXI §2103.14.c and §2103.24.a.

20. Significant Permit Modifications (§2103.14.d)

Significant permit modifications shall meet all requirements of the applicable subparts of Article XXI, Part C, including those for applications, fees, public participation, review by affected States, and review by EPA, as they apply to permit issuance and permit renewal. The approval of a significant permit modification, if the entire permit has been reopened for review, shall commence a new full five (5) year permit term. The Department shall take final action on all such permits within nine (9) months following receipt of a complete application.

21. Duty to Comply (§2103.12.f.1, §2103.22.g)

The permittee shall comply with all permit conditions and all other applicable requirements at all times. Any permit noncompliance constitutes a violation of the Clean Air Act, the Air Pollution Control Act, and Article XXI and is grounds for any and all enforcement action, including, but not limited to, permit termination, revocation and reissuance, or modification, and denial of a permit renewal application.

22. Renewals (§2103.13.b., §2103.23.a)

Renewal of this permit is subject to the same fees and procedural requirements, including those for public participation and affected State and EPA review, that apply to initial permit issuance. The application for renewal shall be submitted at least six (6) months but not more than eighteen (18) months prior to expiration of this permit. The application shall also include submission of a supplemental compliance review as required by Article XXI §2102.01.

23. Reopenings for Cause (§2103.15, §2103.25.a, §2103.12.f.3)

a. This permit shall be reopened and reissued under any of the following circumstances:

1) Additional requirements under the Clean Air Act become applicable to a major source with a remaining permit term of three (3) or more years. No such reopening is required if the effective date of the requirement is later than the date on which the permit is due to expire, unless the original permit or any of its terms and conditions has been extended solely due to the failure of the Department to act on a permit renewal application in a timely fashion.
2) Additional requirements, including excess emissions requirements, become applicable to an affected source under the acid rain program. Upon approval by the Administrator, excess emissions offset plans shall be deemed to be incorporated into this permit.
3) The Department or EPA determines that this permit contains a material mistake or that inaccurate statements were made in establishing the emissions standards or other terms or conditions of this permit.
4) The Administrator or the Department determines that this permit must be reissued or revoked to assure compliance with the applicable requirements.

b. This permit may be modified; revoked, reopened, and reissued; or terminated for cause. The filing of a request by the permittee for a permit modification, revocation and reissuance, or termination, or of a notification of planned changes or anticipated noncompliance does not stay any permit condition. No permit revision shall be required, under any approved economic incentives, marketable permits, emissions trading, and other similar programs or processes, for changes that are provided for in this permit.

24. Reopenings for Cause by the EPA (§2103.25.b)

This permit may be modified, reopened and reissued, revoked or terminated for cause by the EPA in accordance with procedures specified in Article XXI §2103.25.b.

25. Annual Operating Permit Administration Fee (§2103.40)

In each year during the term of this permit, on or before the last day of the month in which the application for this permit was submitted, the permittee shall submit to the Department, in addition to any other applicable administration fees, an Annual Operating Permit Administration Fee in accordance with §2103.40. by check or money order payable to the "Allegheny County Air Pollution Control Fund" in the amount specified in the fee schedule applicable at that time.

26. Annual Major Source Emissions Fees Requirements (§2103.41)

No later than September 1 of each year, the permittee shall pay an annual emission fee in accordance with Article XXI §2103.41 for each ton of a regulated pollutant (except for carbon monoxide) actually emitted from the source. The permittee shall not be required to pay an emission fee for emissions of more than 4,000 tons of each regulated pollutant. The emission fee shall be increased in each year after 1995 by the percentage, if any, by which the Consumer Price Index for the most recent calendar year exceeds the Consumer Price Index for the previous calendar year.

27. Other Requirements not Affected (§2104.08, §2105.02)

Compliance with the requirements of this permit shall not in any manner relieve any person from the duty to fully comply with any other applicable Federal, State, or County statute, rule, regulation, or the like, including but not limited to the odor emission standards under Article XXI §2104.04, any applicable NSPSs, NESHAPs, MACTs, or Generally Achievable Control Technology (GACT) standards now or hereafter established by the EPA, and any applicable requirements of BACT or LAER as provided by Article XXI, any condition contained in any applicable Installation or Operating Permit and/or any additional or more stringent requirements contained in an order issued to such person pursuant to Article XXI Part I.

28. Termination of Operation (§2108.01.a)

In the event that operation of any source of air contaminants is permanently terminated, the person responsible for such source shall so report, in writing, to the Department within 60 days of such termination.

29. Emissions Inventory Statements (§2108.01.e & g)

a. Emissions inventory statements in accordance with Article XXI §2108.01.e shall be submitted to the Department by March 15 of each year for the preceding calendar year. The Department may require more frequent submittals if the Department determines that more frequent submissions are required by the EPA or that analysis of the data on a more frequent basis is necessary to implement the requirements of Article XXI or the Clean Air Act.

b. The failure to submit any report or update within the time specified, the knowing submission of false information, or the willful failure to submit a complete report shall be a violation of this permit giving rise to the remedies provided by Article XXI §2109.02.

30. Tests by the Department (§2108.02.d)

Notwithstanding any tests conducted pursuant to Article XXI §2108.02, the Department or another entity designated by the Department may conduct emissions testing on any source or air pollution control equipment. At the request of the Department, the person responsible for such source or equipment shall provide adequate sampling ports, safe sampling platforms and adequate utilities for the performance of such tests.

31. Other Rights and Remedies Preserved (§2109.02.b)

Nothing in this permit shall be construed as impairing any right or remedy now existing or hereafter created in equity, common law or statutory law with respect to air pollution, nor shall any court be deprived of such jurisdiction for the reason that such air pollution constitutes a violation of this permit.

32. Enforcement and Emergency Orders (§2109.03, §2109.05)

a. The person responsible for this source shall be subject to any and all enforcement and emergency orders issued to it by the Department in accordance with Article XXI §2109.03, §2109.04 and §2109.05.

b. Upon request, any person aggrieved by an Enforcement Order or Emergency Order shall be granted a hearing as provided by Article XXI §2109.03.d; provided however, that an Emergency Order shall continue in full force and effect notwithstanding the pendency of any such appeal.

c. Failure to comply with an Enforcement Order or immediately comply with an Emergency Order shall be a violation of this permit thus giving rise to the remedies provided by Article XXI §2109.02.

33. Penalties, Fines, and Interest (§2109.07.a)

A source that fails to pay any fee required under this permit when due shall pay a civil penalty of 50% of the fee amount, plus interest on the fee amount computed in accordance with Article XXI §2109.06.a.4 from the date the fee was required to be paid. In addition, the source may have this permit revoked for failure to pay any fee required.

34. Appeals (§2109.10)

In accordance with State Law and County regulations and ordinances, any person aggrieved by an order or other final action of the Department issued pursuant to Article XXI or any unsuccessful petitioner to the Administrator under Article XXI Part C, Subpart 2, shall have the right to appeal the action to the Director in accordance with the applicable County regulations and ordinances.

35. Risk Management (§2104.08, 40 CFR Part 68)

Should this stationary source, as defined in 40 CFR Part 68.3, become subject to Part 68, then the owner or operator shall submit a risk management plan (RMP) by the date specified in Part 68.10 and shall certify compliance with the requirements of Part 68 as part of the annual compliance certification as required by *General Condition III.12* above.

36. Circumvention (§2101.14)

For purposes of determining compliance with the provisions of this permit and Article XXI, no credit shall be given to any person for any device or technique, including but not limited to the operation of any source with unnecessary amounts of air, the combining of separate sources except as specifically permitted by Article XXI and the Department, the use of stacks exceeding Good Engineering Practice height as defined by regulations promulgated by the US EPA at 40 CFR §§51.100 and 51.110 and Subpart I, and other dispersion techniques, which without reducing the amount of air contaminants emitted, conceals or dilutes an emission of air contaminants which would otherwise violate the provisions of this Article; except that, for purposes of determining compliance with Article §2104.04 concerning odors, credit for such devices or techniques, except for the use of a masking agent, may be given.

37. Duty to Supplement and Correct Relevant Facts (§2103.12.d.2)

a. The permittee shall provide additional information as necessary to address requirements that become applicable to the source after the date it files a complete application but prior to the Department taking action on the permit application.

b. The permittee shall provide supplementary fact or corrected information upon becoming aware that incorrect information has been submitted or relevant facts were not submitted.

c. Except as otherwise required by this permit and Article XXI, the Clean Air Act, or the regulations thereunder, the permittee shall submit additional information as necessary to address changes occurring at the source after the date it files a complete application but prior to the Department taking action on the permit application.

d. The applicant shall submit information requested by the Department which is reasonably necessary to evaluate the permit application.

38. Effect (§2102.03.g.)

Except as specifically otherwise provided under Article XXI, Part C, issuance of a permit pursuant to Article XXI Part B or Part C shall not in any manner relieve any person of the duty to fully comply with the requirements of this permit, Article XXI or any other provision of law, nor shall it in any manner preclude or affect the right of the Department to initiate any enforcement action whatsoever for violations of this permit or Article XXI, whether occurring before or after the issuance of such permit. Further, except as specifically otherwise provided under Article XXI Part C the issuance of a permit shall not be a defense to any nuisance action, nor shall such permit be construed as a certificate of compliance with the requirements of this permit or Article XXI.

39. Installation Permits (§2102.04.a.1.)

It shall be a violation of this permit giving rise to the remedies set forth in Article XXI Part I for any person to install, modify, replace, reconstruct, or reactivate any source or air pollution control equipment which would require an installation permit or permit modification in accordance with Article XXI Part B or Part C.

~PERMIT SHIELD IN EFFECT~

IV. SITE LEVEL TERMS AND CONDITIONS

1. Reporting of Upset Conditions (§2103.12.k.2)

The permittee shall promptly report all deviations from permit requirements, including those attributable to upset conditions as defined in Article XXI §2108.01.c, the probable cause of such deviations, and any corrective actions or preventive measures taken.

2. Visible Emissions (§2104.01.a)

Except as provided for by Article XXI §2108.01.d pertaining to a cold start, no person shall operate, or allow to be operated, any source in such manner that the opacity of visible emissions from a flue or process fugitive emissions from such source, excluding uncombined water:

a. Equal or exceed an opacity of 20% for a period or periods aggregating more than three (3) minutes in any sixty (60) minute period; or,

b. Equal or exceed an opacity of 60% at any time.

3. Odor Emissions (§2104.04) (County-only enforceable)

No person shall operate, or allow to be operated, any source in such manner that emissions of malodorous matter from such source are perceptible beyond the property line.

4. Materials Handling (§2104.05)

The permittee shall not conduct, or allow to be conducted, any materials handling operation in such manner that emissions from such operation are visible at or beyond the property line.

5. Operation and Maintenance (§2105.03)

All air pollution control equipment required by this permit or any order under Article XXI, and all equivalent compliance techniques approved by the Department, shall be properly installed, maintained, and operated consistently with good air pollution control practice.

6. Open Burning (§2105.50)

No person shall conduct, or allow to be conducted, the open burning of any material, except where the Department has issued an Open Burning Permit to such person in accordance with Article XXI §2105.50 or where the open burning is conducted solely for the purpose of non-commercial preparation of food for human consumption, recreation, light, ornament, or provision of warmth for outside workers, and in a manner which contributes a negligible amount of air contaminants.

7. Shutdown of Control Equipment (§2108.01.b)

a. In the event any air pollution control equipment is shut down for reasons other than a breakdown, the person responsible for such equipment shall report, in writing, to the Department the intent to shut down such equipment at least 24 hours prior to the planned shutdown. Notwithstanding the submission of such report, the equipment shall not be shut down until the approval of the Department is obtained; provided, however, that no such report shall be required if the source(s)

served by such air pollution control equipment is also shut down at all times that such equipment is shut down.

b. The Department shall act on all requested shutdowns as promptly as possible. If the Department does not take action on such requests within ten (10) calendar days of receipt of the notice, the request shall be deemed denied, and upon request, the owner or operator of the affected source shall have a right to appeal in accordance with the provisions of Article XI.

c. The prior report required by Site Level Condition IV.7.a above shall include:

1) Identification of the specific equipment to be shut down, its location and permit number (if permitted), together with an identification of the source(s) affected;
2) The reasons for the shutdown;
3) The expected length of time that the equipment will be out of service;
4) Identification of the nature and quantity of emissions likely to occur during the shutdown;
5) Measures, including extra labor and equipment, which will be taken to minimize the length of the shutdown, the amount of air contaminants emitted, or the ambient effects of the emissions;
6) Measures which will be taken to shut down or curtail the affected source(s) or the reasons why it is impossible or impracticable to shut down or curtail the affected source(s) during the shutdown; and
7) Such other information as may be required by the Department.

8. Breakdowns (§2108.01.c)

a. In the event that any air pollution control equipment, process equipment, or other source of air contaminants breaks down in such manner as to have a substantial likelihood of causing the emission of air contaminants in violation of this permit, or of causing the emission into the open air of potentially toxic or hazardous materials, the person responsible for such equipment or source shall immediately, but in no event later than sixty (60) minutes after the commencement of the breakdown, notify the Department of such breakdown and shall, as expeditiously as possible but in no event later than seven (7) days after the original notification, provide written notice to the Department.

b. To the maximum extent possible, all oral and written notices required shall include all pertinent facts, including:

1) Identification of the specific equipment which has broken down, its location and permit number (if permitted), together with an identification of all related devices, equipment, and other sources which will be affected.
2) The nature and probable cause of the breakdown.
3) The expected length of time that the equipment will be inoperable or that the emissions will continue.
4) Identification of the specific material(s) which are being, or are likely to be emitted, together with a statement concerning its toxic qualities, including its qualities as an irritant, and its potential for causing illness, disability, or mortality.
5) The estimated quantity of each material being or likely to be emitted.
6) Measures, including extra labor and equipment, taken or to be taken to minimize the length of the breakdown, the amount of air contaminants emitted, or the ambient effects of the emissions, together with an implementation schedule.

7) Measures being taken to shut down or curtail the affected source(s) or the reasons why it is impossible or impractical to shut down the source(s), or any part thereof, during the breakdown.

c. Notices required shall be updated, in writing, as needed to advise the Department of changes in the information contained therein. In addition, any changes concerning potentially toxic or hazardous emissions shall be reported immediately. All additional information requested by the Department shall be submitted as expeditiously as practicable.

d. Unless otherwise directed by the Department, the Department shall be notified whenever the condition causing the breakdown is corrected or the equipment or other source is placed back in operation by no later than 9:00 AM on the next County business day. Within seven (7) days thereafter, written notice shall be submitted pursuant to Paragraphs a and b above.

e. Breakdown reporting shall not apply to breakdowns of air pollution control equipment which occur during the initial startup of said equipment, provided that emissions resulting from the breakdown are of the same nature and quantity as the emissions occurring prior to startup of the air pollution control equipment.

f. In no case shall the reporting of a breakdown prevent prosecution for any violation of this permit or Article XXI.

9. Cold Start (§2108.01.d)

In the event of a cold start on any fuel-burning or combustion equipment, except stationary internal combustion engines and combustion turbines used by utilities to meet peak load demands, the person responsible for such equipment shall report in writing to the Department the intent to perform such cold start at least 24 hours prior to the planned cold start. Such report shall identify the equipment and fuel(s) involved and shall include the expected time and duration of the startup. Upon written application from the person responsible for fuel-burning or combustion equipment which is routinely used to meet peak load demands and which is shown by experience not to be excessively emissive during a cold start, the Department may waive these requirements and may instead require periodic reports listing all cold starts which occurred during the report period. The Department shall make such waiver in writing, specifying such terms and conditions as are appropriate to achieve the purposes of Article XXI. Such waiver may be terminated by the Department at any time by written notice to the applicant.

10. Monitoring of Malodorous Matter Beyond Facility Boundaries (§2104.04)

The permittee shall take all reasonable action as may be necessary to prevent malodorous matter from becoming perceptible beyond facility boundaries. Further, the permittee shall perform such observations as may be deemed necessary along facility boundaries to insure that malodorous matter beyond the facility boundary in accordance with Article XXI §2107.13 is not perceptible and record all findings and corrective action measures taken.

11. Orders (§2108.01.f)

In addition to meeting the requirements of General Condition III.28 and Site Level Conditions IV.7 through IV.10 above above, inclusive, the person responsible for any source shall, upon order by the Department, report to the Department such information as the Department may require in order to assess the actual and potential contribution of the source to air quality. The order shall specify a reasonable time

in which to make such a report.

12. Violations (§2108.01.g)

The failure to submit any report or update thereof required by General Condition III.28 and Site Level Conditions IV.7 through IV.11 above, inclusive, within the time specified, the knowing submission of false information, or the willful failure to submit a complete report shall be a violation of this permit giving rise to the remedies provided by Article XXI §2109.02.

13. Emissions Testing (§2108.02)

a. On or before December 31, 1981, and at two-year intervals thereafter, any person who operates, or allows to be operated, any piece of equipment or process which has an allowable emission rate, of 100 or more tons per year of particulate matter, sulfur oxides or volatile organic compounds shall conduct, or cause to be conducted, for such equipment or process such emissions tests as are necessary to demonstrate compliance with the applicable emission limitation(s) of this permit and shall submit the results of such tests to the Department in writing. Emissions testing conducted pursuant to this section shall comply with all applicable requirements of Article XXI §2108.02.e.

b. **Orders.** In addition to meeting the requirements of Site Level Condition IV.13.a above, the person responsible for any source shall, upon order by the Department, conduct, or cause to be conducted, such emissions tests as specified by the Department within such reasonable time as is specified by the Department. Test results shall be submitted in writing to the Department within 20 days after completion of the tests, unless a different period is specified in the Department's order. Emissions testing shall comply with all applicable requirements of Article XXI §2108.02.e.

c. **Tests by the Department.** Notwithstanding any tests conducted pursuant to Site Level Conditions IV.13.a and IV.13.b above, the Department or another entity designated by the Department may conduct emissions testing on any source or air pollution control equipment. At the request of the Department, the person responsible for such source or equipment shall provide adequate sampling ports, safe sampling platforms and adequate utilities for the performance of such tests.

d. **Testing Requirements.** No later than 45 days prior to conducting any tests required by this permit, the person responsible for the affected source shall submit for the Department's approval a written test protocol explaining the intended testing plan, including any deviations from standard testing procedures, the proposed operating conditions of the source during the test, calibration data for specific test equipment and a demonstration that the tests will be conducted under the direct supervision of persons qualified by training and experience satisfactory to the Department to conduct such tests. In addition, at least 30 days prior to conducting such tests, the person responsible shall notify the Department in writing of the time(s) and date(s) on which the tests will be conducted and shall allow Department personnel to observe such tests, record data, provide pre-weighed filters, analyze samples in a County laboratory and to take samples for independent analysis. Test results shall be comprehensively and accurately reported in the units of measurement specified by the applicable emission limitations of this permit.

e. Test methods and procedures shall conform to the applicable reference method set forth in this permit or Article XXI Part G, or where those methods are not applicable, to an alternative sampling and testing procedure approved by the Department consistent with Article XXI §2108.02.e.2.

f. **Violations**. The failure to perform tests as required by this permit or an order of the Department, the failure to submit test results within the time specified, the knowing submission of false information, the willful failure to submit complete results, or the refusal to allow the Department, upon presentation of a search warrant, to conduct tests, shall be a violation of this permit giving rise to the remedies provided by Article XXI §2109.02.

14. Abrasive Blasting (§2105.51)

a. Except where such blasting is a part of a process requiring an operating permit , no person shall conduct or allow to be conducted, abrasive blasting or power tool cleaning of any surface, structure, or part thereof, which has a total area greater than 1,000 square feet unless such abrasive blasting complies with all applicable requirements of Article XXI §2105.51.

b. In addition to complying with all applicable provisions of §2105.51, no person shall conduct, or allow to be conducted, abrasive blasting of any surface unless such abrasive blasting also complies with all other applicable requirements of Article XXI unless such requirements are specifically addressed by §2105.51.

15. Asbestos Abatement (§2105.62, §2105.63)

In the event of removal, encasement, or encapsulation of Asbestos-Containing Material (ACM) at a facility or in the event of the demolition of any facility, the permittee shall comply with all applicable provisions of Article XXI §2105.62 and §2105.63.

16. Protection of Stratospheric Ozone (40 CFR Part 82)

a. Permittee shall comply with the standards for labeling of products using ozone-depleting substances pursuant to 40 CFR Part 82, Subpart E:

1) All containers in which a Class I or Class II substance is stored or transported, all products containing a Class I substance, and all products directly manufactured with a process that uses a Class I substance must bear the required warning statement if it is being introduced into interstate commerce pursuant to §82.106;
2) The placement of the required warning statement must comply with the requirements pursuant to §82.108;
3) The form of the label bearing the required warning statement must comply with the requirements pursuant to §82.110; and
4) No person may modify, remove or interfere with the required warning statement except as described in §82.112.

b. Permittee shall comply with the standards for recycling and emissions reduction pursuant to 40 CFR Part 82, Subpart F:

1) Persons opening appliances for maintenance, service, repair or disposal must comply with the prohibitions and required practices pursuant to §82.154 and §82.156;
2) Equipment used during the maintenance, service, repair or disposal of appliances must comply with the standards for recycling and recovery equipment pursuant to §82.158;
3) Persons maintaining, servicing, repairing or disposing of appliances, must be certified by an approved technician certification program pursuant to §82.161;

4) Persons maintaining, servicing, repairing or disposing of appliances must certify to the Administrator of the U.S. Environmental Protection Agency pursuant to §82.162;
5) Persons disposing of small appliances, motor vehicle air conditioners (MVAC) and MVAC-like appliances, must comply with the record keeping requirements pursuant to §82.166;
6) Owners of commercial or industrial process refrigeration equipment must comply with the leak repair requirements pursuant to §82.156; and
7) Owners or operators of appliances normally containing 50 or more pounds of refrigerant must keep records of refrigerant purchased and added to such appliances pursuant to §82.166.

c. If the permittee manufactures, transforms, destroys, imports or exports a Class I or Class II substance, the Permittee is subject to all the requirements as specified in 40 CFR Part 82, Subpart A (Production and Consumption Controls).

d. If the permittee performs a service on a motor vehicle that involves an ozone-depleting substance, refrigerant or regulated substitute substance in the MVAC, the Permittee is subject to all the applicable requirements as specified in 40 CFR Part 82, Subpart B (Servicing of Motor Vehicle Air Conditioners).

e. The permittee may switch from any ozone-depleting substance to any alternative that is listed as acceptable in the Significant New Alternatives Policy (SNAP) program promulgated pursuant to 40 CFR Part 82, Subpart G.

17. Volatile Organic Compound Storage Tanks (§2105.12.a)

No person shall place or store, or allow to be placed or stored, a volatile organic compound having a vapor pressure of 1.5 psia or greater under actual storage conditions in any aboveground stationary storage tank having a capacity equal to or greater than 2,000 gallons but less than or equal to 40,000 gallons, unless there is in operation on such tank pressure relief valves which are set to release at the higher of 0.7 psig of pressure or 0.3 psig of vacuum or at the highest possible pressure and vacuum in accordance with State or local fire codes, National Fire Prevention Association guidelines, or other national consensus standard approved in writing by the Department. Petroleum liquid storage vessels that are used to store produced crude oil and condensate prior to lease custody transfer are exempt from these requirements.

18. Permit Source Premises (§2105.40)

a. **General.** No person shall operate, or allow to be operated, any source for which a permit is required by Article XXI Part C in such manner that emissions from any open land, roadway, haul road, yard, or other premises located upon the source or from any material being transported within such source or from any source-owned access road, haul road, or parking lot over five (5) parking spaces:

1) Are visible at or beyond the property line of such source;
2) Have an opacity of 20% or more for a period or periods aggregating more than three (3) minutes in any sixty (60) minute period; or
3) Have an opacity of 60% or more at any time.

b. **Deposition on Other Premises.** Visible emissions from any solid or liquid material that has been deposited by any means from a source onto any other premises shall be considered emissions from such source within the meaning of Site Level Condition IV.18.a above.

19. Parking Lots and Roadways (§2105.42)

a. The permittee shall not maintain for use, or allow to be used, any parking lot over 50 parking spaces or used by more than 50 vehicles in any day or any other roadway carrying more than 100 vehicles in any day or 15 vehicles in any hour in such manner that emissions from such parking lot or roadway:

1) Are visible at or beyond the property line;
2) Have an opacity of 20% or more for a period or periods aggregating more than three (3) minutes in any 60 minute period; or
3) Have an opacity of 60% or more at any time.

b. Visible emissions from any solid or liquid material that has been deposited by any means from a parking lot or roadway onto any other premises shall be considered emissions from such parking lot or roadway.

c. Site Level Condition IV.19.a above shall apply during any repairs or maintenance done to such parking lot or roadway.

d. Notwithstanding any other provision of this permit, the prohibitions of Site Level Condition IV.19 may be enforced by any municipal or local government unit having jurisdiction over the place where such parking lots or roadways are located. Such enforcement shall be in accordance with the laws governing such municipal or local government unit. In addition, the Department may pursue the remedies provided by Article XXI §2109.02 for any violations of Site Level Condition IV.19.

20. Permit Source Transport (§2105.43)

a. No person shall transport, or allow to be transported, any solid or liquid material outside the boundary line of any source for which a permit is required by Article XXI Part C in such manner that there is any visible emission, leak, spill, or other escape of such material during transport.

b. Notwithstanding any other provision of this permit, the prohibitions of Site Level Condition IV.20 may be enforced by any municipal or local government unit having jurisdiction over the place where such visible emission, leak, spill, or other escape of material during transport occurs. Such enforcement shall be in accordance with the laws governing such municipal or local government unit. In addition, the Department may pursue the remedies provided by Article XXI §2109.02 for any violation of Site Level Condition IV.20.

21. Construction and Land Clearing (§2105.45)

a. No person shall conduct, or allow to be conducted, any construction or land clearing activities in such manner that the opacity of emissions from such activities:

1) Equal or exceed 20% for a period or periods aggregating more than three (3) minutes in any sixty (60) minute period; or
2) Equal or exceed 60% at any time.

b. Notwithstanding any other provision of this permit, the prohibitions of Site Level Condition

IV.21 may be enforced by any municipal or local government unit having jurisdiction over the place where such construction or land clearing activities occur. Such enforcement shall be in accordance with the laws governing such municipal or local government unit. In addition, the Department may pursue the remedies provided by Article XXI §2109.02 for any violations of Site Level Condition IV.21.

22. Mining (§2105.46)

No person shall conduct, or allow to be conducted, any mining activities in such manner that emissions from such activities:

a. Are visible at or beyond the property line;
b. Have an opacity of 20% or more for a period or periods aggregating more than three (3) minutes in any sixty (60) minute period; or,
c. Have an opacity of 60% or more at any time.

23. Demolition (§2105.47)

a. No person shall conduct, or allow to be conducted, any demolition activities in such manner that the opacity of the emissions from such activities equal or exceed 20% for a period or periods aggregating more than three (3) minutes in any 60 minute period.

b. Notwithstanding any other provisions of this permit, the prohibitions of Site Level Condition IV.23 may be enforced by any municipal or local government unit having jurisdiction over the place where such demolition activities occur. Such enforcement shall be in accordance with the laws governing such municipal or local government unit. In addition, the Department may pursue the remedies provided by Article XXI §2109.02 for any violations of Site Level Condition IV.23.

24. Fugitive Emissions (§2105.49)

The person responsible for a source of fugitive emissions, in addition to complying with all other applicable provisions of this permit shall take all reasonable actions to prevent fugitive air contaminants from becoming airborne. Such actions may include, but are not limited to:

a. The use of asphalt, oil, water, or suitable chemicals for dust control;
b. The paving and maintenance of roadways, parking lots and the like;
c. The prompt removal of earth or other material which has been deposited by leaks from transport, erosion or other means;
d. The adoption of work or other practices to minimize emissions;
e. Enclosure of the source; and
f. The proper hooding, venting, and collection of fugitive emissions.

25. Episode Plans (§2106.02)

The permittee shall upon written request of the Department, submit a source curtailment plan, consistent with good industrial practice and safe operating procedures, designed to reduce emissions of air contaminants during air pollution episodes. Such plans shall meet the requirements of Article XXI §2106.02.

26. New Source Performance Standards (§2105.05)

a. It shall be a violation of this permit giving rise to the remedies provided by §2109.02 of Article XXI for any person to operate, or allow to be operated, any source in a manner that does not comply with all requirements of any applicable NSPS now or hereafter established by the EPA, except if such person has obtained from EPA a waiver pursuant to Section 111 or Section 129 of the Clean Air Act or is otherwise lawfully temporarily relieved of the duty to comply with such requirements.

b. Any person who operates, or allows to be operated, any source subject to any NSPS shall conduct, or cause to be conducted, such tests, measurements, monitoring and the like as is required by such standard. All notices, reports, test results and the like as are required by such standard shall be submitted to the Department in the manner and time specified by such standard. All information, data and the like which is required to be maintained by such standard shall be made available to the Department upon request for inspection and copying.

~PERMIT SHIELD IN EFFECT~

V. EMISSION UNIT LEVEL TERMS AND CONDITIONS

A. Surface Coating and Printing (CP1, SP1, SP2, PP1, PLS1)

ID	SOURCE DESCRIPTION (LOCATION)	CONTROL DEVICE(S)	MAXIMUM CAPACITY	FUEL/RAW MATERIAL	STACK ID
CP1	Campus-Wide Painting	Uncontrolled	5,085 gallons/yr	Paints and Solvents	-
SP1	Melwood Spray Booth	Fabric Filter	150 gallons/yr	Paints and Solvents	SP1
SP2	Thomas Blvd Spray Booth	Uncontrolled	75 gallons/yr	Paints and Solvents	SP2
PP1	University Literature Printing (Cathedral)	Uncontrolled	4,664 gallons/yr	Inks and Solvents	-
PLS1	Laminate Spray Area (Melwood)	Fabric Filter	210 gallons/yr	Adhesives	LS1

1. Restrictions:

a. No person shall operate, or allow to be operated, any source in such manner that emissions of malodorous matter from such source are perceptible beyond the property line. (§2104.04)

b. The total emissions of VOCs due to Campus-Wide Painting (CP1) operations shall not exceed the emissions limitations in Table V-A-1 below. (§2103.12.a.2.B)

TABLE V-A-1: Campus-Wide Painting Emission Limitations

POLLUTANT	ANNUAL EMISSION LIMIT (tons/year) [1]
VOCs	4.33

[1] A year is defined as any consecutive 12-month period.

c. The Permittee shall at no time, operate or allow to be operated, the University Literature Printing (PP1) operations unless: (§2103.12.a.2.B)

1) The processes are properly maintained and operated according to the manufacturer's specifications.
2) All ink and solvent containers shall remain closed at all times unless filling, draining, or performing clean-up operations.
3) All solvent laden shop towels and rags shall be stored in a closed container when not in use.

d. The total emissions of VOCs and HAPs due to operation of the University Literature Printing (PP1) operations and press cleanup operations shall not exceed the emissions limitations in Table V-A-2 below. (§2103.12.a.2.B)

TABLE V-A-2: University Literature Printing Emission Limitations

POLLUTANT	HOURLY EMISSION LIMIT (lb/hr)[1]	ANNUAL EMISSION LIMIT (tons/year)[2]
VOCs	1.56	4.86
HAPs	0.12	0.36

[1] Based on a monthly average.
[2] A year is defined as any consecutive 12-month period.

e. The Permittee shall at no time, operate or allow to be operated, the Melwood Spray Booth (SP1) and Laminate Spray Area (Melwood) (PLS1) unless: (§2103.12.a.2.B)

1) The processes are properly maintained and operated according to the manufacturer's specifications and good engineering practices.
2) All solvent containers shall remain closed at all times unless filling, draining, or performing clean-up operations.
3) Fabric filters for particulate control are in place and operating at all times that the Melwood Spray Booth and Laminate Spray Area are in operation.

f. The total emissions of VOCs and HAPs due to operation of the Melwood Spray Booth, Thomas Blvd. Spray Booth, and Laminate Spray Area (Melwood) shall not exceed the emissions limitations in Table V-A-3 below. (§2103.12.a.2.B)

TABLE V-A-3: Melwood Spray Booth and Laminate Spray Area Emission Limitations

POLLUTANT	ANNUAL EMISSION LIMIT (tons/year)[1]	
	Melwood Spray Booth	Laminate Spray Area
VOCs	0.39	0.69
HAPs	0.05	0.14

[3] A year is defined as any consecutive 12-month period.

2. Testing Requirements:

The Department reserves the right to require emissions testing sufficient to assure compliance with the terms and conditions of this permit. Such testing shall be performed in accordance with Site Level Condition IV.13 entitled "Emissions Testing." (§2103.12.h.1)

3. Monitoring Requirements:

a. The permittee shall monitor the total daily hours of operation of the University Literature Printing, including those used for clean-up. (§2103.12.i)

b. The permittee shall monitor the monthly usage of each ink, wash, fountain solution, varnish, cleanup solvent, and glue used at the University Literature Printing, including those used for clean-up. (§2103.12.i)

c. The Laminate Spray Area and Melwood Spray Booth spray units and overspray filters shall be inspected weekly. (§2103.12.i)

4. Record Keeping Requirements:

a. The permittee shall keep and maintain the following data for each primer, sealer, colorant, paint, stain, clear finish, adhesive, etc. used for the campus-wide painting operations, Melwood spray booth furniture painting operation, Thomas Blvd. spray booth operation, and the spray laminate area operations: (§2103.12.j)

1) Records of the monthly consumption of each material used, in pounds or gallons;
2) The percent by weight VOC and HAP content of all materials, as applied;
3) For each month of operation, an estimate of VOC and HAP emissions during the latest 12 months;
4) The MSDS sheet for each type of material used; and
5) Records of the amount of materials shipped offsite for recycling.

b. The permittee shall keep and maintain the following data for University printing press and cleanup operations,: (§2103.12.j)

1) Records of the monthly usage of each ink, wash, fountain solution, varnish, cleanup solvent, and glue, in pounds or gallons;
2) The percent by weight VOC and HAP content of all materials, as applied;
3) For each month of operation, an estimate of VOC and HAP emissions during the latest 12 months; and
4) Records of the amount of materials shipped offsite for recycling.

c. The permittee shall record all instances of non-compliance with the conditions of this permit upon occurrence along with corrective action taken to restore compliance. (§2103.12.h.1)

d. All records shall be retained by the facility for at least five (5) years. These records shall be made available to the Department upon request for inspection and/or copying. [§2102.04.b.6; §2103.12.j.2]

5. Reporting Requirements:

a. The permittee shall report the following information to the Department in accordance with General Condition III.15 above The reports shall contain all required information for the time period of the report: (§2103.12.k.1)

1) Semi-annual and 12-month data required to be recorded by conditions V.A.4.a and V.A.4.b above;
2) Non-compliance information required to be recorded by condition V.A.4.c above

b. Reporting instances of non-compliance in accordance with condition V.A.5.a above, does not relieve the permittee of the requirement to report breakdowns in accordance with Site Level Condition IV.8, if appropriate. (§2103.12.k.1)

6. Work Practice Standards:

The permittee shall maintain the printing presses and spray booths in accordance with manufacturer's recommendations and good engineering practices.

~PERMIT SHIELD IN EFFECT~

B. Natural Gas-Fired Boilers, Space Heaters, and Water Heaters < 5 MMBtu/hr

Process Description:	117 natural gas-fired boilers, space heaters, and water heaters
Facility ID:	B1 – B22B, B26 - B28G, B30A – B47, B49A - 56B, H1A – H3E, and HW1 – HW31
Max. Design Rate/Units:	Natural Gas – 0.167 MMBtu/hr – 3.5 MMBtu/hr heat input
Capacity:	Total design heat input capacity for the boilers, space heaters, and water heaters is 54.42 MMBtu/hr
Raw Materials:	Natural gas
Control Device(s):	Uncontrolled

1. Restrictions:

a. The boilers, space heaters, and hot water heaters shall burn natural gas only. (§2103.12.a.2.B; §2104.03.a.1)

b. Particulate matter emissions from the boilers, space heaters and hot water heaters with a maximum heat input capacity greater than 0.50 MMBtu per hour shall not exceed 0.008 lb/MMBtu of actual heat input at any time while combusting natural gas. (§2104.02.a.1)

c. The total input of natural gas to the boilers B1 – B22B, B26 - B28G, B30A – B47, and B49A - B56B shall be limited to 462 million cubic feet (MMCF) in any 12 month consecutive period. (§2103.20.b.4)

d. The total input of natural gas to the space heaters and hot water heaters H1A – H3E and HW1 – HW31 shall be limited to 159 million cubic feet (MMCF) in any 12 month consecutive period. (§2103.20.b.4)

e. Emissions shall not exceed the emissions limitations in Table V-B-1 below. (§2103.12.a.2.B, §2104.02.a.1, §2104.03.a.1, §2103.20.b.4)

TABLE V-B-1 Emission Limitations for B1 – B22B, B26 - B28G, B30A – B47, B49A - 56B, H1A – H3E, and HW1 – HW31

POLLUTANT	ANNUAL EMISSION LIMIT (tons/year)*
PM	2.41
PM_{10}	2.41
$PM_{2.5}$	2.41
SO_2	0.20
NO_X	33.49
VOC	1.84
HAPs	0.63
CO	28.13

* A year is defined as any consecutive 12-month period.

2. Testing Requirements:

The Department reserves the right to require emissions testing sufficient to assure compliance with the terms and conditions of this permit. Such testing shall be performed in accordance with Site Level Condition IV.13 entitled "Emissions Testing." (§2103.12.h.1)

3. Monitoring Requirements:

The permittee shall install and maintain the necessary meter(s) or use monthly fuel bills to determine and to record the amount of natural gas fuel usage. (§2102.04.e, §2103.20.b.4)

4. Record Keeping Requirements:

a. The permittee shall keep records of monthly fuel consumption and the name of fuel gas supplier in order to demonstrate compliance with all applicable requirements of this permit. (§2103.12.j)

b. Records of all cold starts shall be kept by the facility and shall include, at a minimum, the date, time, and cause for the cold start. (§2103.12.j)

c. The permittee shall keep records of operation, maintenance, inspection, calibration, tune-ups, and/or replacement of equipment. (§2103.12.j)

d. The permittee shall record all instances of non-compliance with the conditions of this permit upon occurrence along with corrective action taken to restore compliance. (§2103.12.h.1)

5. Reporting Requirements:

a. The permittee shall report the following information to the Department semiannually in accordance with General Condition III.15 above. The reports shall contain all required information for the time period of the report: (§2103.12.k.1)

1) Calendar dates covered in the reporting period;
2) Total fuel usage for each calendar month covered in the reporting period;
3) Cold start information;
4) Reasons for any noncompliance with the permit;
5) Fuel supplier certifications; and
6) A certified statement signed by the responsible official that the records of fuel supplier certifications submitted represent all of the fuel combusted during the 6-month period.

b. Until terminated by written notice from the Department, the requirement for the permittee to report cold starts 24 hours in advance in accordance with §2108.01.d is waived and the permittee may report all cold starts semiannually in accordance with Condition V.B.5.a above. [§2103.12.a.2.B; §2103.12.k; IP#0647-I001]

c. Reporting instances of non-compliance does not relieve the permittee of the requirement to report breakdowns in accordance with Site Level Condition IV.8, if appropriate.

6. Work Practice Standards:

The Permittee shall maintain the boilers, space heaters and hot water heaters in accordance with manufacturer's recommendations and good engineering practices.

~PERMIT SHIELD IN EFFECT~

C. Natural Gas-Fired Boilers 5 - 15 MMBtu/hr

Process Description:	Three (3) natural gas-fired boilers
Facility ID:	B23A, B23B, and B23C
Max. Design Rate/Units:	Natural Gas – 8.67 MMBtu/hr – 10.7 MMBtu/hr heat input
Capacity:	Total design heat input capacity for the boilers is 28.04 MMBtu/hr
Raw Materials:	Natural gas
Control Device(s):	Uncontrolled

1. Restrictions:

a. Boilers B23A, B23B, and B23C shall burn natural gas only. (§2103.12.a.2.B; §2104.03.a.1)

b. Particulate matter emissions from boilers B23A, B23B, and B23C shall not exceed 0.008 lb/MMBtu of actual heat input at any time while combusting natural gas. (§2104.02.a.1)

c. The total input of natural gas to the boilers B23A, B23B, and B23C shall be limited to 241 million cubic feet (MMCF) in any 12 month consecutive period. (§2103.20.b.4)

d. Emissions shall not exceed the emissions limitations in Table V-C-1 below. (§2103.12.a.2.B, §2104.02.a.1, §2104.03.a.1, §2103.20.b.4)

TABLE V-C-1 Emission Limitations for B23A, B23B, and B23C

POLLUTANT	ANNUAL EMISSION LIMIT (tons/year)*
PM	0.98
PM_{10}	0.98
$PM_{2.5}$	0.98
SO_2	0.08
NO_X	13.85
VOC	0.76
HAPs	0.26
CO	11.63

* A year is defined as any consecutive 12-month period.

2. Testing Requirements:

The Department reserves the right to require emissions testing sufficient to assure compliance with the terms and conditions of this permit. Such testing shall be performed in accordance with Site Level Condition IV.13 entitled “Emissions Testing.” (§2103.12.h.1)

3. Monitoring Requirements:

The permittee shall install and maintain the necessary meter(s) or use monthly fuel bills to determine and to record the amount of natural gas fuel usage. (§2102.04.e, §2103.20.b.4)

4. Record Keeping Requirements:

a. The permittee shall keep records of monthly fuel consumption and the name of fuel gas supplier in order to demonstrate compliance with all applicable requirements of this permit. (§2103.12.j)

b. Records of all cold starts shall be kept by the facility and shall include, at a minimum, the date, time, and cause for the cold start. (§2103.12.j)

c. The permittee shall keep records of operation, maintenance, inspection, calibration, tune-ups, and/or replacement of equipment. (§2103.12.j)

d. The permittee shall record all instances of non-compliance with the conditions of this permit upon occurrence along with corrective action taken to restore compliance. (§2103.12.h.1)

5. Reporting Requirements:

a. The permittee shall report the following information to the Department semiannually in accordance with General Condition III.15 above. The reports shall contain all required information for the time period of the report: (§2103.12.k.1)

1) Calendar dates covered in the reporting period;
2) Total fuel usage for each calendar month covered in the reporting period;
3) Cold start information;
4) Reasons for any noncompliance with the emission standards;
5) Fuel supplier certifications; and
6) A certified statement signed by the responsible official that the records of fuel supplier certifications submitted represent all of the fuel combusted during the 6-month period.

b. Until terminated by written notice from the Department, the requirement for the permittee to report cold starts 24 hours in advance in accordance with §2108.01.d is waived and the permittee may report all cold starts semiannually in accordance with Condition V.C.5.a above. [§2103.12.a.2.B; §2103.12.k; IP#0647-I001]

c. Reporting instances of non-compliance does not relieve the permittee of the requirement to report breakdowns in accordance with Site Level Condition IV.8, if appropriate.

6. Work Practice Standards:

The Permittee shall maintain the boilers, space heaters and hot water heaters in accordance with manufacturer's recommendations and good engineering practices.

~PERMIT SHIELD IN EFFECT~

D. Carrillo Street Boilers (B48-1, B48-2, B48-3, B48-4, B48-5, B48-6)

Process Description:	Six natural gas-fired package boilers for steam production
Facility ID:	Boilers No. 1 through No. 6 (B48-1, B48-2, B48-3, B48-4, B48-5 and B48-6)
Max. Design Rate/Units:	Natural Gas - 140 MMBtu/hr heat input (each boiler) No. 2 Fuel Oil – 135 MMBtu/hr heat input (each boiler)
Capacity:	Total design heat input capacity for the three boilers is 840 MMBtu/hr
Raw Materials:	Natural gas; very low sulfur No. 2 fuel oil
Control Device(s):	Ultra low-NO_X burners with flue gas recirculation for NO_X control; very low sulfur No. 2 fuel oil.

1. Restrictions:

a. Only natural gas and No. 2 fuel oil shall be combusted in Boilers B48-1 through B48-6. (§2103.12.a.2.B; §2102.04.b.6; §2103.20.b.4; IP 0678-I001; IP 0678-I002)

b. The total quantity of natural gas combusted in Boilers B48-1 through B48-6 in the Carrillo Street Steam Plant shall not exceed 2,900 million cubic feet (MMCF) during any consecutive 12-month period. (§2103.12.a.2.B; §2102.04.b.6; §2103.20.b.4)

c. The total quantity of No. 2 fuel oil combusted in Boilers B48-1 through B48-6 in the Carrillo Street Steam Plant shall not exceed 417,000 gallons during any consecutive 12-month period. (§2103.12.a.2.B; §2102.04.b.6; §2103.20.b.4)

d. No.2 fuel oil shall only be combusted in Boilers B48-1 through B48-6 as a backup fuel in emergency situations, including where natural gas is not available. The permittee shall notify the Department before combusting No. 2 fuel oil in the boilers. (§2103.12.a.2.B; §2102.04.b.6; IP 0678-I001; IP 0678-I002)

e. Natural gas and No. 2 fuel oil shall be combusted exclusive of each other, at all times with the exception of the transition period between the two fuels. (§2103.12.h.1; IP 0678-I001; IP 0678-I002)

f. At all times, the sulfur content of the No. 2 fuel oil combusted in Boilers B48-1 through B48-6 shall not exceed 0.05% by weight. (§2103.12.a.2.B; §2102.04.b.6; §60.42b(j)(2); §60.45b(a); IP 0678-I001; IP 0678-I002)

g. When combusting No. 2 fuel oil in Boilers B48-1 through B48-6, the permittee shall not cause to be discharged into the atmosphere any gases that exhibit greater than 20 percent opacity (6-minute average) except for one 6-minute period per hour of not more than 27 percent opacity. (§2102.04.b.6; §60.43b(f); IP 0678-I001; IP 0678-I002)

h. The opacity standard in V.D.1.g above, applies at all times to each boiler except during periods of startup, shutdown, or malfunction. (§60.43b(g); IP 0678-I001; IP 0678-I002)

i. The permittee shall not operate, or allow to be operated, Boilers B48-1 through B48-6 in such manner that the opacity of visible emissions, excluding uncombined water, is: (§2104.01.a; IP 0678-I001; IP 0678-I002)

1) equal to or exceeds an opacity of 20% for a period or periods aggregating more than three (3) minutes in any 60-minute period;
2) equal to or exceeds an opacity of 60% at any time.

j. Visible emissions resulting solely from the cold start of each boiler are excluded from the opacity requirements of condition V.D.1.i above, if such a cold start has been reported as required by §2108.01.d. (§2104.01.b.3; IP 0678-I001; IP 0678-I002)

k. Emissions of particulate matter from each boiler shall not exceed 0.005 lb/MMBtu when combusting natural gas or 0.04 lb/MMBtu when combusting fuel oil. (§2103.12.a.2.B; §2102.04.b.6; IP 0678-I001; IP 0678-I002)

l. Emissions of nitrogen oxides from each boiler, when combusting natural gas, shall not exceed 9 parts per million (ppm) at 3% oxygen as an average concentration over any one (1) hour period. (§2103.12.a.2.B; §2102.04.b.6; IP 0678-I001b; IP 0678-I002a)

m. Emissions of nitrogen oxides from each boiler, when combusting natural gas, shall not, at any time, exceed 12 parts per million (ppm) at 3% oxygen. (§2103.12.a.2.B; §2102.04.b.6; IP 0678-I001b; IP 0678-I002a)

n. Emissions of nitrogen oxides from each boiler, when combusting No. 2 fuel oil, shall not exceed 55 parts per million (ppm) at 3% oxygen. (§2103.12.a.2.B; §2102.04.b.6; IP 0678-I001b; IP 0678-I002a)

o. Emissions of nitrogen oxides from each boiler shall not exceed 0.0115 lb/MMBtu when combusting natural gas or 0.070 lb/MMBtu when combusting fuel oil. (§2103.12.a.2.B; §2102.04.b.6; §60.44b(l)(2); IP 0678-I001; IP 0678-I002)

p. The nitrogen oxides standards in Condition V.D.1.m above apply at all times including periods of startup, shutdown, or malfunction. (§2103.12.a.2.B; §60.44b(h); IP 0678-I001; IP 0678-I002)

q. Emissions of CO from each boiler shall not exceed 50 ppm at 3% oxygen when combusting natural gas or 100 ppm at 3% oxygen when combusting fuel oil. (§2103.12.a.2.B; §2102.04.b.6; IP 0678-I001; IP 0678-I002)

r. Emissions of CO from each boiler shall not exceed 0.03875 lb/MMBtu when combusting natural gas or 0.078 lb/MMBtu when combusting fuel oil. (§2103.12.a.2.B; §2102.04.b.6; IP 0678-I001; IP 0678-I002)

s. Emissions of VOC from each boiler shall not exceed 0.0055 lb/MMBtu when combusting natural gas or 0.0050 lb/MMBtu when combusting fuel oil. (§2103.12.a.2.B; §2102.04.b.6; IP 0678-I001; IP 0678-I002)

t. Emissions of sulfur oxides from each boiler shall not exceed 0.0006 lb/MMBtu when combusting natural gas or 0.0515 lb/MMBtu when combusting No. 2 fuel oil. (§§2103.12.a.2.B; 2102.04.b.6; IP 0678-I001; IP 0678-I002)

u. Particulate emissions from the Carrillo Street boilers (B48-1 - B48-6) shall not exceed 0.008 lbs/MMBtu of actual heat input while combusting natural gas or 0.015 lbs/MMBtu while combusting fuel oil. (§2103.12.a.2.B; §2104.02.a.1)

v. Emissions from boilers B48-1 through B48-6 shall not exceed the emissions limitations in Table V-C-1 below. (§2103.12.a.2.B; §2102.04.b.6; IP 0678-I001; IP 0678-I002)

TABLE V-C-1: Emission Limitations for Boilers B48-1 through B48-6

POLLUTANT	Emissions per Boiler (lb/hr)		Each Boiler (tons/year)[1]	Total Combined Emissions, (tons/year)[1]
	Natural Gas	No. 2 Fuel Oil		
Particulate Matter (PM)	0.7	5.4	1.43	8.56
PM_{10}	0.7	5.4	1.43	8.56
$PM_{2.5}$	0.7	1.35	1.28	7.69
Sulfur Oxides (SO_x)	0.084	6.95	0.40	2.39
Nitrogen Oxides (NO_X)	1.61	9.45	3.18	19.05
Volatile Organic Compounds (VOC)	0.77	0.68	1.38	8.28
Carbon Monoxide (CO)	5.43	10.53	9.93	59.59
HAPs	--	--	0.55	3.28

[1] A year is defined as any consecutive 12-month period.

2. Testing Requirements:

a. The permittee shall conduct performance tests on each boiler at least once every two years after the most recent stack test, to determine compliance with the carbon monoxide emission limitations specified in Conditions V.D.1.q and V.D.1.r above for each boiler, using Method 10 in 40 CFR Part 60, Appendix A. Only natural gas shall be combusted in the boilers during the performance test to demonstrate compliance with the CO emission limitation. (§2103.12.h.1; §2108.02; IP 0678-I001; IP 0678-I002)

b. To determine compliance with the emission limits for nitrogen oxides required in Conditions V.D.1.l, V.D.1.m, V.D.1.n and V.D.1.o above, the permittee shall conduct a performance test as required under §60.8 using the continuous system for monitoring nitrogen oxides in Condition V.D.3.a below. (§2103.12.h.1; §60.46b(e); IP 0678-I001; IP 0678-I002)

c. The permittee shall upon request determine compliance with the nitrogen oxides standards in Condition V.D.1.o above through the use of a 30-day performance test. During periods when performance tests are not requested, nitrogen oxides emissions data collected pursuant to §60.48b(g)(1) shall be used to calculate a 30-day rolling average emission rate on a daily basis and used to prepare excess emission reports, but will not be used to determine compliance with the nitrogen oxides emission standards. A new 30-day rolling average emission rate shall be calculated for each steam generating unit operating day as the average of all of the hourly nitrogen oxides emission data for the preceding 30 steam generating unit operating days. (§2103.12.h.1; §60.46b(e)(4); IP 0678-I001; IP 0678-I002)

d. Boilers B48-1 through B48-6 shall have a tune-up annually. [§2104.08.a; §2103.12.h; §63.11196(a)(1)]

1) Each tune-up shall be conducted no more than 13 months after the previous tune-up [§2104.08.a; §63.11223(a)]

2) A biennial performance tune-up shall be conducted according to §63.11223(b) to demonstrate continuous compliance with Conditions V.D.1.q and V.D.1.r above. [§2104.08.a; §63.11223(b); §63.11225(c)]
   a) As applicable, inspect the burner, and clean or replace any components of the burner as necessary (the source may delay the burner inspection until the next scheduled unit shutdown, but each burner must be inspected at least once every 36 months).
   b) Inspect the flame pattern, as applicable, and adjust the burner as necessary to optimize the flame pattern. The adjustment should be consistent with the manufacturer's specifications, if available.
   c) Inspect the system controlling the air-to-fuel ratio, as applicable, and ensure that it is correctly calibrated and functioning properly.
   d) Optimize total emissions of carbon monoxide. This optimization should be consistent with the manufacturer's specifications, if available.
   e) Measure the concentrations in the effluent stream of carbon monoxide in parts per million, by volume, and oxygen in volume percent, before and after the adjustments are made (measurements may be either on a dry or wet basis, as long as it is the same basis before and after the adjustments are made).
   f) Maintain onsite and submit, if requested by the Department, biennial report containing the information below:
      i) The concentrations of CO in the effluent stream in parts per million, by volume, and oxygen in volume percent, measured before and after the tune-up of the boiler.
      ii) A description of any corrective actions taken as a part of the tune-up of the boiler.
      iii) The type and amount of fuel used over the 12 months prior to the biennial tune-up of the boiler.
   g) If the unit is not operating on the required date for a tune-up, the tune-up must be conducted within one week of startup.

e. Carbon monoxide testing of boilers may use a portable carbon monoxide monitor. [§2103.12.h.1; §63.14.b(27); §63.11212(b) Table 4]

f. Testing shall be done at the representative operating load conditions while burning the type of fuel or mixture of fuels that have the highest emissions potential for carbon monoxide. [§2103.12.h.1; §63.11212(c)]

g. The permittee shall conduct a one-time performance test on each boiler within one year of issuance of this permit to determine compliance with the particulate matter emission limitations specified in Conditions V.D.1.u and V.D.1.v above for each boiler, using Method 5 in 40 CFR Part 60, Appendix A and Method 202 in 40 CFR 51, Appendix M. Only natural gas shall be combusted in the boilers during the performance test to demonstrate compliance with the PM emission limitation. (§2103.12.h.1; §2108.02)

h. The Department reserves the right to require emissions testing sufficient to assure compliance with the terms and conditions of this permit. Such testing shall be performed in accordance with Site Level Condition IV.13 above. (§2103.12.h.1)

3. Monitoring Requirements:

a. The permittee shall operate a continuous monitoring system (CEMS) for each boiler, and record the output of the system, for measuring nitrogen oxide emissions discharged to the atmosphere.

The CEMS data recorder shall convert the data to the required reporting units in compliance with 25 PA Code §§139.101-139.111 relating to requirements for continuous in-stack monitoring for stationary sources. The CEMS shall be approved by the Department prior to purchasing the system. (§60.48b(b)(1); §2103.12.i; §2108.02.a; 2108.03.b, & c; IP 0678-I001; IP 0678-I002)

b. When combusting No. 2 fuel oil in the boilers, the permittee shall monitor opacity according to the following procedures: (§2103.12.i; 60.13(i); IP 0678-I001; IP 0678-I002)

1) Contact the Department by telephone within 24 hours in the event of temporary, emergency conversion to No. 2 fuel oil in accordance with the provisions specified in paragraph V.D.1.d above. Written notification shall be provided to the Department within five (5) days of the emergency conversion to No. 2 fuel oil;
2) At least once during each daylight shift when the boiler(s) are combusting No. fuel oil, an observer certified in accordance with U. S. Environmental Protection Agency (EPA) Method 9 shall perform a 6-minute visible emission observation consisting of 24 consecutive opacity readings. In order to obtain representative results, the oil consumption during the observation must be the maximum rate during the shift.
3) An observer certified in accordance with EPA Method 9 shall perform a 6-minute visible emission observation whenever the boiler reaches operating load after a cold startup with No. 2 fuel oil.
4) If the average opacity for a 6-minute set of opacity readings collected in accordance with Condition V.D.3.b.2) or V.D.3.b.3) above exceeds 10%, the observer shall collect two additional 6-minute sets of visible emission readings for a total of three data sets.
5) Records of the date and time of visible emission observations, along with the results of each observation, must be maintained.

c. The continuous monitoring systems required in Condition V.D.3.a above of this section shall be operated and data recorded during all periods of operation of the affected facility except for continuous monitoring system breakdowns and repairs. Data is recorded during calibration checks, and zero and span adjustments. (§2103.12.i; §60.48b(c); IP 0678-I001; IP 0678-I002)

d. The 1-hour average nitrogen oxides emission rates measured by the continuous nitrogen oxides monitor required by Condition V.D.3.a above and required under §60.13(h) shall be expressed in ng/J or lb/million Btu heat input and shall be used to calculate the average emission rates in Condition V.D.1.o above. The 1-hour averages shall be calculated using the data points required under §60.13(b). At least 2 data points must be used to calculate each 1-hour average. (§2103.12.i; §60.48b(d); IP 0678-I001; IP 0678-I002)

e. The procedures under §60.13 shall be followed for installation, evaluation and operation of the continuous monitoring systems. The span value for the nitrogen oxides continuous monitoring system(s) is 500 parts per million (ppm) when the boiler(s) are combusting natural gas or fuel oil. (§2103.12.i; §60.48b(e)(2); IP 0678-I001; IP 0678-I002)

f. When nitrogen oxides emission data are not obtained because of continuous monitoring system breakdowns, repairs, calibration checks and zero and span adjustments, emission data shall be obtained by using standby monitoring systems, Method 7, Method 7A, or other approved reference methods to provide emission data for a minimum of 75 percent of the operating hours in each steam generating unit operating day, in at least 22 out of 30 successive steam generating unit operating days. (§2103.12.i; §60.48b(f); IP 0678-I001; IP 0678-I002)

g. Continuous nitrogen oxides monitoring systems shall meet the minimum data availability

requirements in 25 Pa. Code 139, Subchapter C. (§2103.12.i; §2108.03.b.4; IP 0678-I001; IP 0678-I002)

h. The permittee shall continuously monitor the oxygen content of the flue gas of each boiler to within 3% of the measured value and record the oxygen content to the nearest 0.1%, to ensure the subject boilers are being operated and maintained properly and are operating under the conditions demonstrated during the most recent compliance test. (§2103.12.i; IP 0678-I001; IP 0678-I002)

i. The permittee shall install and maintain the necessary meter(s) to determine and to record the monthly amount of natural gas fuel usage. (§2103.12.i; §63.11225(b)(4))

j. The permittee shall install and maintain the necessary meter(s) to determine and to record the daily amount of fuel oil used. (§2103.12.i; §63.11225(b)(4))

k. Daily fuel consumption may be monitored using daily operating records where meters cannot be used. (§2103.12.i)

l. Compliance with the fuel oil sulfur limitations of Condition V.D.1.f above may be determined based on a certification obtained from the fuel supplier. (§2103.12.i)

4. Record Keeping Requirements:

a. The permittee shall record and maintain records of the amounts of each fuel combusted in each boiler during each day and calculate the annual capacity factor individually for No. 2 fuel oil and natural gas for the reporting period. The annual capacity factor shall be determined on a 12-month rolling average basis with a new annual capacity factor calculated at the end of each calendar month. (§2103.12.h.1; §60.49b(d); IP 0678-I001; IP 0678-I002)

b. The permittee shall keep and maintain the following records for each boiler: (§2103.12.h.1; IP 0678-I001; IP 0678-I002)
   1) Flue gas oxygen content (hourly averages);
   2) Cold starts (date, time and duration of each occurrence);
   3) Records of operation, maintenance, inspection, calibration and/or replacement of combustion equipment; and
   4) Manufacturers' specifications, stack test protocols and reports.

c. The permittee shall maintain records for each boiler of the opacity monitoring specified in Condition V.D.3.b above. (§60.49b(f); IP 0678-I001; IP 0678-I002; §2103.12.h.1)

d. The permittee shall maintain records of the following information for each boiler for each steam generating unit operating day: (§60.49b(g); IP 0678-I001; IP 0678-I002; §2103.12.h.1)
   1) Calendar date.
   2) The average hourly measured nitrogen oxides emission rate, expressed as lbs-NO_2/million Btu heat input and ppm at 3% O_2..
   3) The 30-day average nitrogen oxides emission rates (lbs-NO_2/million Btu heat input) calculated at the end of each steam generating unit operating day from the measured hourly nitrogen oxide emission rates for the preceding 30 steam generating unit operating days.
   4) Identification of the steam generating unit operating days when the calculated 30-day average nitrogen oxides emission rates are in excess of the nitrogen oxides emissions standard in

Condition V.D.1.o above, with the reasons for such excess emissions as well as a description of corrective actions taken.

5) Identification of the steam generating unit operating days for which pollutant data have not been obtained, including reasons for not obtaining sufficient data and a description of corrective actions taken.
6) Identification of the times when emission data have been excluded from the calculation of average emission rates and the reasons for excluding data.
7) Identification of "F" factor used for calculations, method of determination, and type of fuel combusted.
8) Identification of the times when the pollutant concentration exceeded full span of the continuous monitoring system.
9) Description of any modifications to the continuous monitoring system that could affect the ability of the continuous monitoring system to comply with Performance Specification 2 or 3.
10) Results of daily CEMS drift tests and quarterly accuracy assessments as required under 40 CFR Part 60, Appendix F, Procedure 1.

e. The permittee shall obtain and maintain records of No. 2 fuel oil receipts from the fuel oil supplier, which certify that the oil meets the specification for No. 2 fuel oil as defined by the American Society of Testing and Materials in ASTM D396-78, Standard Specifications for Fuel Oils and that the sulfur content of the No. 2 fuel oil is not more than 0.05% by weight. (§60.42b(j)(2); §60.49b(r); IP 0678-I001; IP 0678-I002; §2103.12.j)

f. The permittee shall keep and maintain records of all tune-ups for the boiler as required in condition V.D.2.d above. [§2103.12.j; §63.11225(b)(4)]

g. The permittee shall record all instances of non-compliance with the conditions of this permit upon occurrence along with corrective action taken to restore compliance. (§2103.12.h.1)

h. All records required under this section shall be maintained by the permittee for a period of five years following the date of such record. [§2103.12.j.2]

5. Reporting Requirements:

a. The permittee shall submit excess emission reports semiannually for any excess emissions that occurred during the reporting period. Excess opacity emissions are defined as any period or periods that exceed the opacity standards in Conditions V.D.1.g and V.D.1.i above. Excess nitrogen oxide emissions are defined as any calculated 30-day rolling average nitrogen oxides emission rate which exceeds the emission limit in Condition V.D.1.o above. (§60.49b(h)(2)(ii), (h)(3) & (h)(4); IP 0678-I001; IP 0678-I002; §2103.12.k.1)

b. The permittee shall report the following information to the Department in accordance with General Condition III.15 above. The reports shall contain all required information for the time period of the report: (§2103.12.k.1)

1) Calendar dates covered in the reporting period;
2) Daily, monthly and 12-month data required to be recorded by Conditions V.D.4.a and V.D.4.d above; (§60.49b(i) ; IP 0678-I001; IP 0678-I002)
3) Cold start information;
4) Non-compliance information required to be recorded by Condition V.D.4.f above;
5) A statement from the permittee certifying that only very low sulfur No. 2 fuel oil was

combusted in the boilers during the reporting period; (§60.49b(r); IP 0678-I001; IP 0678-I002)

6) A statement from the permittee that the record of fuel supplier certifications represent all the fuel oil used during the reporting period; (§60.49b(r); IP 0678-I001; IP 0678-I002)

c. The permittee may submit electronic quarterly reports for NO_X and/or opacity in lieu of submitting the written reports required under Conditions V.D.5.a and V.D.5.b above. The format of each quarterly electronic report shall be coordinated with the Department. The electronic report(s) shall be submitted no later than 30 days after the end of the calendar quarter and shall be accompanied by a certification statement from the permittee, indicating whether compliance with the applicable emission standards and minimum data requirements were achieved during the reporting period. Before submitting reports in the electronic format, the permittee shall coordinate with the Department to obtain their agreement to submit reports in this alternative format. (§60.49b(v); IP 0678-I001; IP 0678-I002)

d. The permittee shall submit to the Department a written report of data collected by the nitrogen oxides monitoring system at three month intervals. The report shall include at a minimum: (§60.49b(o); §2108.03.d; IP 0678-I001; IP 0678-I002; §2103.12.k)

1) An identification of each instance during the reporting period during which emissions exceeded the applicable emission limitations rates in Conditions V.D.1.l, V.D.1.m, V.D.1.n and V.D.1.o above and an identification of the reasons, if known, for such exceedance. The averaging period used for making such identification shall correspond to the averaging period specified in Condition V.D.2.c above.
2) An identification of each period during which the continuous emission monitoring system was inoperative, except for zero and span drift checks, the reasons therefore, and the nature of repairs or adjustments performed or to be performed.
3) An identification of calibrations, zero and span drift checks, and other quality assurance procedures.

e. The permittee shall prepare biennial reports for boilers B48-1 through B48-6 and submit to the Department upon request. The biennial reports shall contain the following information: [§2103.12.k; §63.11225(b)]

1) Company name and address
2) Statement by a responsible official with the official's name, title, phone number, e-mail address, and signature certifying the truth, accuracy and completeness of the notification and a statement of whether the source has complied with all the relevant standards and other requirements of 63 CFR Subpart JJJJJ.
3) If deviations from the applicable requirements have occurred during the reporting period, including a description of the deviation(s), the time periods during which the deviation(s) occurred and the corrective action(s) taken.

f. Reporting instances of non-compliance does not relieve the permittee of the requirement to report breakdowns in accordance with Site Level Condition IV.7, if appropriate. [§2102.04.b.6; §2103.12.k.1]

g. Until terminated by written notice from the Department, the requirement for the permittee to report cold starts 24 hours in advance in accordance with Site Level Condition IV.9 is waived and the permittee may report all cold starts in accordance with condition V.D.4.b above. (§2108.01.d; §2103.12.k.1; IP 0678-I001; IP 0678-I002)

6. Work Practice Standards:

a. Boilers B48-1 through B48-6 shall be: (§2102.04.b.6; IP 0678-I001; IP 0678-I002)

1) Operated and maintained in a manner consistent with good air pollution control practices;
2) Operated and maintained in a manner consistent with good operating and maintenance practices; and
3) Operated and maintained in accordance with the manufacturer's specifications and the applicable terms and conditions of this permit.

b. The permittee shall perform a one-time energy assessment on boilers B48-1 through B48-6. The energy assessments shall be performed by a qualified energy assessor. The energy assessments shall be completed no later than March 21, 2014, and shall meet the energy assessment requirements of 63 CFR Subpart JJJJJJ including: [§63.11196(a)(3); Table 2, 63 CFR Subpart JJJJJJ]

1) A visual inspection of the boiler system,
2) An evaluation of operating characteristics of the facility, specifications of energy using systems, operating and maintenance procedures, and unusual operating constraints,
3) Inventory of major systems consuming energy from affected boiler(s),
4) A review of available architectural and engineering plans, facility operation and maintenance procedures and logs, and fuel usage,
5) A list of major energy conservation measures,
6) A list of the energy savings potential of the energy conservation measures identified, and
7) A comprehensive report detailing the ways to improve efficiency, the cost of specific improvements, benefits, and the time frame for recouping those investments.

~PERMIT SHIELD IN EFFECT~

E. Diesel Generators (DG1 – DG13, DG16 – DG37, DG40 – DG54, DG56 – DG74)

Process Description:	Sixty seven(67) diesel fired generators
Facility ID:	Diesel Generators No. 1 – No. 13, No. 16 – No. 37, No. 40 – No. 54, No. 56 – No.74 (DG1 – DG13, DG16 – DG37, DG40 – DG54, DG56 – DG74)
Max. Design Rate/Units:	7 KW – 1750 KW
Capacity:	Total design heat input capacity for the sixty eight generators is 85.9 MMBtu/hr
Raw Materials:	No. 2 fuel oil
Control Device(s):	Uncontrolled

1. Restrictions:

a. The permittee shall only combust No. 2 fuel oil with maximum allowable sulfur content of 15 ppm. (§2103.12.a.2.B;§60.4207(b) ;§80.510(b); IP#0647-I001)

b. Particulate emissions from each emergency generator engine having an actual heat input capacity greater than 0.50 MMBtu per hour shall not exceed 0.28 lb/MMBtu of actual heat input at any time while combusting grade No. 2 fuel oil. (§2104.02.a.1.B)

c. The diesel-fired emergency generators DG1 – DG8, DG10 – DG13, DG18– DG32, DG34 – DG54, and DG64 – DG74 shall each be limited to 100 hours of operation in any consecutive 12-month period. (§2103.12.a.2.B)

d. The diesel-fired emergency generators DG33-1 and DG33-2 located at the Carrillo Street Boiler Plant shall each be limited to 150 hours of operation in any consecutive 12-month period. (§2103.12.a.2.B; IP#0678-I001; IP#0678-I002)

e. The diesel-fired emergency generators DG56 – DG63 shall each be limited to 400 hours of operation in any consecutive 12-month period. (§2103.12.a.2.B; IP#0647-I001)

f. The diesel-fired emergency generators DG9, DG16, and DG17 shall each be limited to 400 hours of operation in any consecutive 12-month period. (§2103.12.a.2.B)

g. The generators shall only be operated during emergency conditions when electrical power is not available or for a maximum of three (3) hours per month for routine maintenance. (§2102.04.e, §2103.12.a.2.B)

h. The generators shall be properly operated and maintained according to manufacturer's specifications. The manufacturer's operation and maintenance manuals shall be kept on site at all times. [§60.4206; §2103.12.a.2.B; §60.4206; IP#0647-I001]

i. Emissions from the diesel emergency generators shall not exceed the following: (§2103.12.a.2.B)

POLLUTANT	ANNUAL EMISSION LIMIT (tons/year)[1]
Nitrogen Oxides (NO_X)	51.97
Carbon Monoxide (CO)	10.61
Sulfur Oxides (SO_x)	2.26
Volatile Organic Compounds (VOC)	22.59
Particulate Matter	1.26
PM_{10}	1.26
$PM_{2.5}$	1.26
HAPs	0.02

[1] A year is defined as any consecutive 12-month period.

2. Testing Requirements:

a. The permittee shall conduct performance tests on diesel emergency generators DG56 – DG63 for CO and NOx using portable analyzing equipment at least once every five years after the most recent stack test. (§2103.12.h.1)

b. The Department reserves the right to require additional emissions testing sufficient to assure compliance with the terms and conditions of this permit. Such testing shall be performed in accordance with Site Level Condition IV.13 (§2103.12.h.1)

3. Monitoring Requirements:

a. The permittee shall install, operate, and maintain a non-resettable hour meter to record the hours of operation on each generator. [§2103.12.a.2.B; §60.4209(a); IP#0647-I001]

b. Compliance with the fuel oil sulfur limitations in conditions V.E.1.a above shall be determined based on a certification obtained from the fuel supplier meeting the requirements of condition V.E.4.a.1) below. (§2103.12.a.2.B; IP#0647-I001)

4. Record Keeping Requirements:

a. The permittee shall keep and maintain the following data for the generators. [§2103.12.a.2.B; §2103.12.j; §60.4214(b)]

1) Fuel consumption (monthly, and consecutive 12-month total), type of fuel consumed and suppliers' certification of sulfur content, and heating value;
2) Cold starts (date, time, duration and reason for each occurrence);
3) Total operating hours, (hours/day, monthly and consecutive 12-month total); and
4) Records of operation, maintenance, inspection, calibration and/or replacement of combustion equipment.

b. Records of diesel fuel certifications from fuel suppliers shall be maintained per shipment. Certifications shall include the name of the supplier and a statement from the supplier that the fuel complies with ASTM D975 "Standard Specifications for Diesel Fuel Oils". [§2103.12.a.2.B; §2103.12.j; IP#0647-I001]

c. The permittee shall record all instances of non-compliance with the conditions of this permit upon occurrence along with corrective action taken to restore compliance. (§2103.12.h.1)

d. All records shall be retained by the facility for at least five (5) years. These records shall be made available to the Department upon request for inspection and/or copying. (§2103.12.j.2)

5. Reporting Requirements:

a. The permittee shall report the following information to the Department in accordance with the requirements of General Condition III.15. The reports shall contain all required information for the time period of the report: [§2103.12.a.2.B; §2103.12.k; IP#0647-I001]

1) Monthly and consecutive 12-month data required to be recorded by condition V.E.4.a above;
2) Cold start information; and
3) Non-compliance information required to be recorded by V.E.4.c above.
4) Fuel oil certifications and a statement from the permittee that the record of fuel supplier certifications represents all the fuel oil used during the reporting period.

b. Until terminated by written notice from the Department, the requirement for the permittee to report cold starts 24 hours in advance in accordance with §2108.01.d is waived and the permittee may report all cold starts semiannually in accordance with Condition V.E.5.a above. [§2103.12.a.2.B; §2103.12.k; IP#0647-I001]

c. Reporting instances of non-compliance does not relieve the permittee of the requirement to report breakdowns in accordance with Site Level Condition IV.8, if appropriate. [§2103.12.a.2.B; §2103.12.k; IP#0647-I001]

6. Work Practice Standards:

The permittee shall operate and maintain the emergency generators according to the manufacturer's written instructions or procedures developed by the permittee that are approved by the manufacturer, over the entire life of the generator. In addition, the permittee may only change those settings that are permitted by the manufacturer. The manufacturer's operation and maintenance manuals shall be kept on site at all times. [§2103.12.a.2.B; §2105.03; §63.6590(c); §60.4206; §60.4211(a); IP#0647-I001]

~PERMIT SHIELD IN EFFECT~

F. Natural Gas Generators (NG-6, NG-17, NG-18, NG-19)

ID	SOURCE DESCRIPTION (LOCATION)	CONTROL DEVICE(S)	MAXIMUM CAPACITY	FUEL/RAW MATERIAL	STACK ID
NG6	Emergency Generator Onan 175.0 WB-15R (Learning and Research Development Center)	Uncontrolled	175 kW	Natural Gas	SNG6
NG17	Emergency Generator Kohler 175RZ2828 (3343 Forbes Ave)	Uncontrolled	175 kW	Natural Gas	SNG17
NG18	Emergency Generator Cummins GGHG (Benedum Hall)	Uncontrolled	85 kW	Natural Gas	SNG18
NG19	Emergency Generator Cummins WSG-1068 (Victoria Hall)	Uncontrolled	100 KW	Natural Gas	SNG19

1. Restrictions:

a. The emergency generators (NG6, NG17, NG18, and NG19) shall burn natural gas only. (§2103.12.a.2.B)

b. Particulate emissions from each emergency generator engine having an actual heat input capacity greater than 0.50 MMBtu per hour shall not exceed 0.012 lb/MMBtu of actual heat input while combusting natural gas. (§2104.02.a.1.A)

c. The natural gas-fired emergency generator engines NG6, NG18, and NG19 shall each be limited to 100 hours of operation in any consecutive 12-month period and NG17 shall be limited to 400 hours of operation in any consecutive 12-month period. (§2103.20.b.4)

d. The generators shall only be operated during emergency conditions when electrical power is not available or for a maximum of 3 hours per month for routine maintenance. (§2102.04.e, §2103.12.a.2.B)

2. Testing Requirements:

The Department reserves the right to require emissions testing sufficient to assure compliance with the terms and conditions of this permit. Such testing shall be performed in accordance with Site Level Condition IV.13 (§2103.12.h.1)

3. Monitoring Requirements:

The permittee shall install and maintain the necessary meter(s) to determine and to record the hours of operation. (§2103.12.a.2.B; §2103.12.i)

4. Record Keeping Requirements:

a. The permittee shall keep and maintain the following data for the generators. (§2103.12.j)
   1) Fuel consumption (daily, monthly, and consecutive 12-month total),
   2) Total operating hours, (monthly and consecutive 12-month total);
   3) Cold starts (date, time and duration of each occurrence); and

4) Records of operation, maintenance, inspection, calibration and/or replacement of parts or combustion equipment.

b. The permittee shall record all instances of non-compliance with the conditions of this permit upon occurrence along with corrective action taken to restore compliance. (§2103.12.h.1)

5. Reporting Requirements:

a. The permittee shall report the following information to the Department in accordance with the requirements of General Condition III.15. The reports shall contain all required information for the time period of the report: (§2103.12.k)
1) Monthly and consecutive 12-month data required to be recorded by condition V.F.4.a.1) above; and
2) Non-compliance information required to be recorded by condition V.F.4.b above.

b. Reporting instances of non-compliance does not relieve the permittee of the requirement to report breakdowns in accordance with Site Level Condition IV.8, if appropriate

6. Work Practice Standards:

The emergency generators shall be: (§2103.12.a.2.B)

a. Operated in such a manner as not to cause air pollution.

b. Operated and maintained in a manner consistent with good operating and maintenance practices.

c. Operated and maintained in accordance with manufacturer's specifications and the applicable terms and conditions of this permit.

~PERMIT SHIELD IN EFFECT~

VI. MISCELLANEOUS

A. Diesel Fuel Storage Tanks (T001)

ID	SOURCE DESCRIPTION	CONTROL DEVICE	MAXIMUM CAPACITY	FUEL/RAW MATERIAL	STACK ID
T001	Diesel Fuel Storage Tanks	Uncontrolled	-	No. 2 Fuel Oil	none

1. Work Practice Standards:

The Permittee shall maintain the diesel fuels storage tanks in accordance with manufacturer's recommendations and good engineering practices.

~PERMIT SHIELD IN EFFECT~

VII. ALTERNATIVE OPERATING SCENARIOS

There are no alternative operating scenarios.

VIII. EMISSIONS LIMITATIONS SUMMARY

[This section is provided for informational purposes only and is not intended to be an applicable requirement.]

The tons per year emission limitations for the University of Pittsburgh are summarized in the following table:

TABLE VII-1
Emission Limitations

POLLUTANT	ANNUAL EMISSION LIMIT (tons/year)*
Particulate Matter	13.22
PM10	13.22
PM2.5	13.22
Nitrogen Oxides	118.51
Sulfur Oxides	4.93
Volatile Organic Compounds	23.82
CO	110.12
Total HAPs	4.75

***** A year is defined as any consecutive 12-month period.