



August 7, 2023

EMISSIONS INVENTORY ID: 351

SD State University  
Attn: Lilly Sabet  
5500 Campanile Dr  
Mail Code 1243  
San Diego, CA 92182

### 2021 CTR/TOXICS/CEI APPROVED EMISSIONS INVENTORY REPORT

On February 15, 2023, San Diego Air Pollution Control District had mailed you a revised final copy of the 2021 CTR/Toxics/CEI Emissions Inventory Report. The San Diego Air Pollution Control District has prepared the attached 2021 Approved Revised CTR/Toxics/CEI Emissions Inventory Report for SD State University located at 5500 Campanile Dr in the city of San Diego, CA. The District has evaluated the additional revisions requested by the facility and applied those approved to the Emissions report.

This report has been prepared as required by District Rule 19.3. The Emissions Inventory has been evaluated per the requirements of Criteria and Toxic Reporting Regulation (CTR, 17CCR 93400 et. Seq.), AB2588 “Hot Spots” Program (H&SC 44300 et. Seq.), Emissions Inventory Criteria and Guidelines Regulation (17CCR 93300.5) and/or District Rule 19.3.

This Emissions Inventory resulted in the following approved revised/refined prioritization scores: cancer = **12.54**, chronic = **0.06**, and acute = **3.82**. Receptor distances are presented in the attached HHRP Specific Distance Report. **Based on these scores, SD State University is not required to submit a health risk assessment (HRA) for the year 2021 at this time.**

The approved report includes a summary of total facility emissions and the 2021 process data provided to the District by the facility. A summary of emissions by device and material with emission factors used by the District can be provided upon request.

Federal law requires a signed Emissions Statement from each facility that emits twenty-five (25) tons or more per year of oxides of nitrogen (NO<sub>x</sub>) or volatile organic compounds (VOC). If applicable, please sign and return the attached Emissions Statement form.

Please contact Hans Fritschen at 858-414-9097 or [hans.fritschen@sdapcd.org](mailto:hans.fritschen@sdapcd.org) if you have any questions or comments.

#### Attachments:

1. Facility Emissions
2. Completed Data Request Form
3. HHRP Specific Distance Report
4. Emissions Statement

Note: email copy sent on August 7, 2023, care of: [lsabet@sdsu.edu](mailto:lsabet@sdsu.edu)



# FACILITY EMISSIONS

## 2021 EMISSIONS INVENTORY REPORT

The San Diego Air Pollution Control District has prepared emissions estimates for the facility below.

**Facility:** SD State University  
**EIF ID:** 351

5500 Campanile Dr  
 San Diego, CA 92182

#	Criteria Pollutant	Annual Emissions (tons/yr)	Hourly Emissions (lbs/hr)
1	Carbon Monoxide (CO)	1.773E+000	6.320E+001
2	Nitrogen Oxides (NOx)	1.658E+001	1.950E+002
3	Particulate Matter (PM10)	2.523E+000	9.713E+000
4	Sulfur Oxides (SOx)	2.220E-001	3.065E-001
5	Total Organic Gases (TOG)	4.251E+000	3.030E+001
6	Total Particulates (TSP)	2.523E+000	9.809E+000
7	Volatile Organic Compounds (VOC)	8.659E-001	1.410E+001

#	Toxic Air Contaminant	Annual Emissions (lbs/yr)	Hourly Emissions (lbs/hr)
1	1,3-Butadiene	1.153E+000	1.178E-001
2	2,2,4-Trimethylpentane	1.856E-001	6.300E-003
3	Acetaldehyde	3.275E+001	4.366E-001
4	Acrolein	4.857E+000	2.024E-002
5	Arsenic (inorganic)	6.310E-003	8.648E-004
6	Benzene	9.799E+000	1.087E-001
7	Cadmium	5.915E-003	8.107E-004
8	Chlorobenzene	7.887E-004	1.081E-004
9	Chromium, Hexavalent	3.943E-004	5.405E-005
10	Chromium, Non-Hexavalent	1.972E-003	2.702E-004
11	Copper	1.617E-002	2.216E-003
12	Dichlorobenzene	1.473E-002	3.936E-005
13	Diesel Particulate	6.285E+001	7.530E+000
14	Ethyl Benzene	2.391E+001	1.612E-002
15	Formaldehyde	5.341E+002	1.157E+000
16	Hexane	2.259E+001	8.618E-002
17	Hydrogen Chloride	7.335E-001	1.005E-001
18	Lead (inorganic)	3.273E-002	4.486E-003
19	Manganese	1.222E-002	1.675E-003
20	Mercury (inorganic)	7.887E-003	1.081E-003
21	Methanol	2.945E-002	1.938E-003
22	Methylene Chloride	3.776E-004	2.484E-005
23	Naphthalene	1.031E+000	1.110E-002
24	Nickel (except nickel oxide)	1.538E-002	2.108E-003

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# FACILITY EMISSIONS

## 2021 EMISSIONS INVENTORY REPORT

25	PAHs, total, w/o individ. components reported [Treated as B(a)P for HRA]	1.742E+000	2.028E-002
26	Propylene	1.842E+000	2.524E-001
27	Selenium	8.676E-003	1.189E-003
28	Toluene	9.778E+001	1.050E-001
29	Xylenes	4.791E+001	4.528E-002
30	Zinc	8.833E-002	1.211E-002



EIF ID	351
SRID	APCD1976-SITE-00208
Facility	SD State University
Reporting Year	2021
Generated	2023-07-20

# Electronic Emissions Inventory Submission Report

EIF ID	351
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Site Name	SD State University
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Site Information	
SRID	APCD1976-SITE-00208
Site Address:	5500 Campanile Dr

PERMIT INFORMATION	
Permit Number	0
Permit Description:	NON-PERMITTED DEVICES

DEVICE INFORMATION	
Device:	20000
Device Description:	IF APPLICABLE, FACILITY-WIDE WIPE SOLVENT OPERATIONS ON SITE, NOT ASSOCIATED WITH ANY PERMITTED OPERATIONS, NOTE REPORTED ELSEWHERE

MATERIAL INFORMATION	
Material:	1
EQ Name:	J01-000

MATERIAL/PROCESS INFORMATION	
Material Name:	
Manufacturer/Supplier:	
Annual Material Usage (lbs/year):	0
Maximum Hourly Usage (lbs/hour):	0
Process Type:	
- GMAW (yes/no):	No
- SMAW (yes/no):	No
- MIG (yes/no):	No
- TIG (yes/no):	No
- Other (please describe):	
Device Operating Schedule:	
- Daily Operation (hours/day):	0
- Weekly Operation (days/week):	0
- Annual Operation (days/year):	0

PHYSICAL SOURCE INFORMATION	
RELEASE (FUGITIVE EMISSIONS)	
Diameter (ft):	
Exhaust Gas Temperature (F):	
Exhaust Gas Flowrate (CFM):	
Height Above Ground (ft):	
Control Device Description	
Capture Efficiency (%):	0
Volatile Control Efficiency (%):	
Non-Volatile Control Efficiency (%):	
STACK (DUCTED EMISSIONS)	
Emission Control Method:	
Volatile Control Efficiency (%):	
Non-Volatile Control Efficiency (%):	
Additional Information:	
Capture Efficiency (%):	100
LOCATION	
Longitude (Decimal Degrees)	
Latitude (Decimal Degrees)	
Datum	
Is this location confidential?:	

Non-Default Emission Factors	
Using only default values	

Non-Default Speciations	
Using only default values	

# Electronic Emissions Inventory Submission Report

EIF ID	351
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Site Name	SD State University
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Site Information	
SRID	APCD1976-SITE-00208
Site Address:	5500 Campanile Dr

PERMIT INFORMATION	
Permit Number	0
Permit Description:	NON-PERMITTED DEVICES

DEVICE INFORMATION	
Device:	987762
Device Description:	CERTIFICATE OF EXEMPTION SOLVENT CLEANING OPERATION: ONE (1) REMOTE RESERVOIR CLEANER MANUFACTURER: HANDI-KLEEN MODEL PL36 DEGREASING SOLVENT: SEE ATTACHMENT AA (PREVIOUSLY PERMIT NUMBER 985066)

MATERIAL INFORMATION	
Material:	1
EQ Name:	E01-D01

MATERIAL/PROCESS INFORMATION	
Material Name:	999
Other:	STODDARD
Manufacturer/Supplier:	
Annual Material Usage (gals/year):	0
Waste Shipped Off Site (gals/year):	0
Density (lbs/gal):	6.57
VOC Content (lbs/gal):	6.57
Process Type:	
- Surface Prep. (yes/no):	No
- Hand Wipe (yes/no):	No
- Clean-up (yes/no):	No
- Other (describe):	
Device Operating Schedule:	
- Daily Operation (hours/day):	0
- Weekly Operation (days/week):	0
- Annual Operation (days/year):	0

PHYSICAL SOURCE INFORMATION	
Height Above Ground (ft):	0
Diameter (ft):	0
Exhaust Gas Temperature (F):	0
Exhaust Gas Flowrate (CFM):	0
Control Device Description	
Capture Efficiency (%):	0
Volatile Control Efficiency (%):	0
Non-Volatile Control Efficiency (%):	0
Emission Control Method:	
Volatile Control Efficiency (%):	0
Non-Volatile Control Efficiency (%):	0
Additional Information:	
Capture Efficiency (%):	100
STACK (DUCTED EMISSIONS)	
RELEASE (FUGITIVE EMISSIONS)	
LOCATION	
Longitude (Decimal Degrees)	
Latitude (Decimal Degrees)	
Datum	
Is this location confidential?:	

Non-Default Emission Factors	
Using only default values	

Non-Default Speciations	
Using only default values	

# Electronic Emissions Inventory Submission Report

EIF ID	351
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Site Name	SD State University
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Site Information	
SRID	APCD1976-SITE-00208
Site Address:	5500 Campanile Dr

PERMIT INFORMATION	
Permit Number	1
Permit Description:	FACILITY-WIDE PERMITTED DEVICES

DEVICE INFORMATION	
Device:	3000
Device Description:	EMERGENCY ENGINE GENERATORS NATURAL GAS-FIRED (4 CYCLE, RICH-BURN, NO CONTROLS)

MATERIAL INFORMATION	
Material:	1
EQ Name:	A01-E18

MATERIAL/PROCESS INFORMATION	
Fuel Type :	999
Other Fuel Type :	NATURAL GAS
Design Capacity	
Design Capacity Units (mmBTU/hr, BHP, etc)	
Annual Fuel Usage (million ft3/year):	0.00944
Maximum Fuel Usage (ft3/min):	10.4
Fuel Sulfur Content (lbs/million ft3):	0
Regularly Source Tested (yes/no):	No
Boilers	
Boiler, please choose type:	998
Engines	
Engine Type :	999
Engine Control:	999
Engine Fuel Mixture	999
Flares	
Flare, please choose type/control:	998
Turbines	
Turbine Type:	999
Turbine control:	998
Equipped With:	
Other Controls (please describe):	
Device Operating Schedule:	
- Daily Operation (hours/day):	0
- Weekly Operation (days/week):	0
- Annual Operation (days/year):	39

PHYSICAL SOURCE INFORMATION	
Height Above Ground (ft):	0
Diameter (ft):	0
Exhaust Gas Temperature (F):	0
Exhaust Gas Flowrate (CFM):	0
Control Device Description	
Volatile Control Efficiency (%):	0
Non-Volatile Control Efficiency (%):	0
Emission Control Method:	
Volatile Control Efficiency (%):	0
Non-Volatile Control Efficiency (%):	0
Additional Information:	
STACK (DUCTED EMISSIONS)	
RELEASE (FUGITIVE EMISSIONS)	
LOCATION	
Longitude (Decimal Degrees)	
Latitude (Decimal Degrees)	
Datum	
Is this location confidential?:	
Capture Efficiency (%):	100
Capture Efficiency (%):	0

Non-Default Emission Factors	
Using only default values	

Non-Default Speciations	
Using only default values	

# Electronic Emissions Inventory Submission Report

EIF ID	351
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Site Name	SD State University
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Site Information	
SRID	APCD1976-SITE-00208
Site Address:	5500 Campanile Dr

PERMIT INFORMATION	
Permit Number	APCD2000-PTO-001803
Permit Description:	PAINT SPRAY BOOTH, 14'W X 8'H X 33'D; EXHAUST FILTERS; 2-HP EXHAUST FAN LOCATION: PHY PLANT PAINT SHOP NO APP

DEVICE INFORMATION	
Device:	1803
Device Description:	SAME AS PERMIT DESCRIPTION

MATERIAL INFORMATION	
Material:	1
EQ Name:	F01-P08

MATERIAL/PROCESS INFORMATION	
Note: Report Transfer Efficiency (%) and Fallout Percent (%) using the APCD refe	
Material Name:	MISC PAINTS
Manufacturer/Supplier:	VARIOUS
Annual Material Usage (gals/year):	0
Waste Shipped Off Site (gals/year):	0
Maximum Hourly Usage (gals/hour):	0
Density (lbs/gal):	9.95
VOC Content (lbs/gal):	1.62
Percent Solids [%]	
Application Method:	AIR GUN
Transfer Efficiency (%):	50
Fallout Percent (%):	50
Type of Operation:	WOOD PRODUCTS
Type of Material:	
Water-based coating (yes/no):	Yes
Device Operating Schedule:	
- Daily Operation (hours/day):	0
- Weekly Operation (days/week):	0
- Annual Operation (days/year):	0

PHYSICAL SOURCE INFORMATION	
Height Above Ground (ft):	0
Diameter (ft):	0
Exhaust Gas Temperature (F):	0
Exhaust Gas Flowrate (CFM):	0
Control Device Description	BOOTH WITH EXHAUST FILTER
Capture Efficiency (%):	100
Volatile Control Efficiency (%):	0
Non-Volatile Control Efficiency (%):	90
Emission Control Method:	
Volatile Control Efficiency (%):	0
Non-Volatile Control Efficiency (%):	0
Additional Information:	
Capture Efficiency (%):	0
STACK (DUCTED EMISSIONS)	
RELEASE (FUGITIVE EMISSIONS)	
LOCATION	
Longitude (Decimal Degrees)	
Latitude (Decimal Degrees)	
Datum	
Is this location confidential?:	

Non-Default Emission Factors	
Using only default values	

Non-Default Speciations	
Using only default values	



# Electronic Emissions Inventory Submission Report

EIF ID	351
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Site Name	SD State University
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Site Information	
SRID	APCD1976-SITE-00208
Site Address:	5500 Campanile Dr

PERMIT INFORMATION	
Permit Number	APCD2000-PTO-900967
Permit Description:	WOOD COATING: ONE (1) WALK-IN PAINT SPRAY BOOTH INSIDE BUILDING 421 (3'D X 4'W X 7'H), EQUIPPED WITH DRY EXHAUST FILTERS.

DEVICE INFORMATION	
Device:	900967
Device Description:	SAME AS PERMIT DESCRIPTION

MATERIAL INFORMATION	
Material:	1
EQ Name:	F01-P08

MATERIAL/PROCESS INFORMATION	
Note: Report Transfer Efficiency (%) and Fallout Percent (%) using the APCD refe	
Material Name:	MISC PAINTS
Manufacturer/Supplier:	VARIOUS
Annual Material Usage (gals/year):	0
Waste Shipped Off Site (gals/year):	0
Maximum Hourly Usage (gals/hour):	0
Density (lbs/gal):	9.2
VOC Content (lbs/gal):	4.02
Percent Solids [%]	
Application Method:	AIR GUN
Transfer Efficiency (%):	65
Fallout Percent (%):	30
Type of Operation:	WOOD COATING
Type of Material:	
Water-based coating (yes/no):	No
Device Operating Schedule:	
- Daily Operation (hours/day):	0
- Weekly Operation (days/week):	0
- Annual Operation (days/year):	0

PHYSICAL SOURCE INFORMATION	
Height Above Ground (ft):	0
Diameter (ft):	0
Exhaust Gas Temperature (F):	0
Exhaust Gas Flowrate (CFM):	0
Control Device Description	BOOTH WITH EXHAUST FILTERS
Capture Efficiency (%):	100
Volatile Control Efficiency (%):	0
Non-Volatile Control Efficiency (%):	90
Emission Control Method:	
Volatile Control Efficiency (%):	0
Non-Volatile Control Efficiency (%):	0
Additional Information:	
Capture Efficiency (%):	0
STACK (DUCTED EMISSIONS)	
RELEASE (FUGITIVE EMISSIONS)	
LOCATION	
Longitude (Decimal Degrees)	
Latitude (Decimal Degrees)	
Datum	
Is this location confidential?:	

Non-Default Emission Factors	
Using only default values	

Non-Default Speciations	
Using only default values	

# Electronic Emissions Inventory Submission Report

EIF ID	351
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Site Name	SD State University
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Site Information	
SRID	APCD1976-SITE-00208
Site Address:	5500 Campanile Dr

PERMIT INFORMATION	
Permit Number	APCD2000-PTO-900969
Permit Description:	WOOD AND FABRIC COATING: ONE (1) WALK-IN PAINT SPRAY BOOTH, 3'D X 4'W X 7', LOCATED IN DRAMATIC ARTS 107B, EQUIPPED WITH DRY EXHAUST FILTERS. LARGER PIECES ARE COATED IN THE ADJOINING ROOM.

DEVICE INFORMATION	
Device:	900969
Device Description:	SAME AS PERMIT DESCRIPTION

MATERIAL INFORMATION	
Material:	1
EQ Name:	F01-P08

MATERIAL/PROCESS INFORMATION	
Note: Report Transfer Efficiency (%) and Fallout Percent (%) using the APCD refe	
Material Name:	MISC PAINTS
Manufacturer/Supplier:	VARIOUS
Annual Material Usage (gals/year):	0.5
Waste Shipped Off Site (gals/year):	0
Maximum Hourly Usage (gals/hour):	1
Density (lbs/gal):	11.5
VOC Content (lbs/gal):	0.84
Percent Solids [%]	
Application Method:	AIR GUN
Transfer Efficiency (%):	50
Fallout Percent (%):	50
Type of Operation:	WOOD PRODUCTS
Type of Material:	
Water-based coating (yes/no):	Yes
Device Operating Schedule:	
- Daily Operation (hours/day):	1
- Weekly Operation (days/week):	0
- Annual Operation (days/year):	0

PHYSICAL SOURCE INFORMATION	
Height Above Ground (ft):	0
Diameter (ft):	0
Exhaust Gas Temperature (F):	0
Exhaust Gas Flowrate (CFM):	0
Control Device Description	BOOTH AND FILTERS
Capture Efficiency (%):	100
Volatile Control Efficiency (%):	0
Non-Volatile Control Efficiency (%):	90
Emission Control Method:	
Volatile Control Efficiency (%):	0
Non-Volatile Control Efficiency (%):	0
Additional Information:	
Capture Efficiency (%):	0
STACK (DUCTED EMISSIONS)	
RELEASE (FUGITIVE EMISSIONS)	
LOCATION	
Longitude (Decimal Degrees)	
Latitude (Decimal Degrees)	
Datum	
Is this location confidential?:	

Non-Default Emission Factors	
Using only default values	

Non-Default Speciations	
Using only default values	

# Electronic Emissions Inventory Submission Report

EIF ID	351
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Site Name	SD State University
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Site Information	
SRID	APCD1976-SITE-00208
Site Address:	5500 Campanile Dr

PERMIT INFORMATION	
Permit Number	APCD2001-PTO-973015
Permit Description:	ADHESIVE MATERIALS APPLICATION OPERATION: ONE (1) ADHESIVE APPLICATION AREA USING SPRAYING SYSTEM CORP. SPRAY EQUIPMENT TO APPLY PIONITE P-10-T AND WESTECH AEROSOL WT-HSC13 CONTACT ADHESIVES. 976950/973015(EZI)

DEVICE INFORMATION	
Device:	973015
Device Description:	SAME AS PERMIT DESCRIPTION

MATERIAL INFORMATION	
Material:	1
EQ Name:	F01-P09

MATERIAL/PROCESS INFORMATION	
Note: Report Transfer Efficiency (%) and Fallout Percent (%) using the APCD refe	
Material Name:	CONTACT ADHESIVE
Manufacturer/Supplier:	NORTH STAR
Annual Material Usage (gals/year):	0
Waste Shipped Off Site (gals/year):	0
Maximum Hourly Usage (gals/hour):	0
Density (lbs/gal):	8.1
VOC Content (lbs/gal):	0.67
Percent Solids [%]	
Application Method:	AIRLESS SPRAY
Transfer Efficiency (%):	50
Fallout Percent (%):	65
Type of Operation:	ADHESIVE
Type of Material:	ADHESIVE
Water-based coating (yes/no):	No
Device Operating Schedule:	
- Daily Operation (hours/day):	0
- Weekly Operation (days/week):	0
- Annual Operation (days/year):	0

PHYSICAL SOURCE INFORMATION	
Height Above Ground (ft):	0
Diameter (ft):	0
Exhaust Gas Temperature (F):	0
Exhaust Gas Flowrate (CFM):	0
Control Device Description	
Capture Efficiency (%):	0
Volatile Control Efficiency (%):	0
Non-Volatile Control Efficiency (%):	0
Emission Control Method:	
Volatile Control Efficiency (%):	0
Non-Volatile Control Efficiency (%):	0
Additional Information:	
Capture Efficiency (%):	100
STACK (DUCTED EMISSIONS)	
RELEASE (FUGITIVE EMISSIONS)	
LOCATION	
Longitude (Decimal Degrees)	
Latitude (Decimal Degrees)	
Datum	
Is this location confidential?:	

Non-Default Emission Factors	
Using only default values	

Non-Default Speciations	
Using only default values	

# Electronic Emissions Inventory Submission Report

EIF ID	351
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Site Name	SD State University
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Site Information	
SRID	APCD1976-SITE-00208
Site Address:	5500 Campanile Dr

PERMIT INFORMATION	
Permit Number	APCD2001-PTO-973015
Permit Description:	ADHESIVE MATERIALS APPLICATION OPERATION: ONE (1) ADHESIVE APPLICATION AREA USING SPRAYING SYSTEM CORP. SPRAY EQUIPMENT TO APPLY PIONITE P-10-T AND WESTECH AEROSOL WT-HSC13 CONTACT ADHESIVES. 976950/973015(EZI)

DEVICE INFORMATION	
Device:	973015
Device Description:	SAME AS PERMIT DESCRIPTION

MATERIAL INFORMATION	
Material:	2
EQ Name:	F01-P09

MATERIAL/PROCESS INFORMATION	
Note: Report Transfer Efficiency (%) and Fallout Percent (%) using the APCD refe	
Material Name:	LACQUER THINNER
Manufacturer/Supplier:	CSD/STARTEX
Annual Material Usage (gals/year):	4.5
Waste Shipped Off Site (gals/year):	0
Maximum Hourly Usage (gals/hour):	0.5
Density (lbs/gal):	6.8
VOC Content (lbs/gal):	6.8
Percent Solids [%]	
Application Method:	
Transfer Efficiency (%):	0
Fallout Percent (%):	0
Type of Operation:	
Type of Material:	
Water-based coating (yes/no):	No
Device Operating Schedule:	
- Daily Operation (hours/day):	0
- Weekly Operation (days/week):	0
- Annual Operation (days/year):	9

PHYSICAL SOURCE INFORMATION	
Height Above Ground (ft):	0
Diameter (ft):	0
Exhaust Gas Temperature (F):	0
Exhaust Gas Flowrate (CFM):	0
Control Device Description	
Capture Efficiency (%):	0
Volatile Control Efficiency (%):	0
Non-Volatile Control Efficiency (%):	0
Emission Control Method:	
Volatile Control Efficiency (%):	0
Non-Volatile Control Efficiency (%):	0
Additional Information:	
Capture Efficiency (%):	100
STACK (DUCTED EMISSIONS)	
RELEASE (FUGITIVE EMISSIONS)	
LOCATION	
Longitude (Decimal Degrees)	
Latitude (Decimal Degrees)	
Datum	
Is this location confidential?:	

Non-Default Emission Factors	
Using only default values	

Non-Default Speciations	
Using only default values	

# Electronic Emissions Inventory Submission Report

EIF ID	351
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Site Name	SD State University
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Site Information	
SRID	APCD1976-SITE-00208
Site Address:	5500 Campanile Dr

PERMIT INFORMATION	
Permit Number	APCD2003-PTO-975398
Permit Description:	<p>One (1) 60-T7300S GSC Solar Turbine Inc. Taurus Gas Turbine Engine, unit A, S/N 1128 T, S/N OHF15-T9157, natural gas fired, 59.48 million btu/hour, based upon lower heating value (lhv) at 46° F engine inlet temperature at 95% R.H, 5.233 MW net output power, with dry low oxides of nitrogen (NOx) (SoLoNOx) technology including an augmented backside cooled/ thermal barrier coating ABC/TBC combustor liner. One (1) John Zink Company low NOx duct burner (duct burner A), s/n 2001-68-1000, natural gas fired, 20 million btu/hour based upon higher heating value, and one (1) heat recovery steam generator. One (1) 4.169 MW steam turbine-generator set, S/N T-5613 is driven by unit A and unit B. The combined net power output of this cogeneration facility, consisting of two (2) gas turbine engines, each equipped with a duct burner and waste heat recovery system to supply steam and drive the steam turbine is 14.47 MW.</p> <p style="text-align: right;">975398 EAD 12/11/03</p>

DEVICE INFORMATION	
Device:	539801
Device Description:	<p>REPORT TOTAL FUEL USAGE FOR GAS TURBINE (UNIT A) WHEN OPERATED WITHOUT THE DUCT BURNER.</p> <p>CO AND NOX EMISSION FACTORS FOR NATURAL GAS COMBUSTION BASED ON LAST THREE SOURCE TESTS.</p>

MATERIAL INFORMATION	
Material:	1
EQ Name:	A01-T11

MATERIAL/PROCESS INFORMATION	
Fuel Type :	Natural Gas
Other Fuel Type :	NATURAL GAS
Design Capacity	59.5
Design Capacity Units (mmBTU/hr, BHP, etc)	mmBTU/hr
Annual Fuel Usage (million ft3/year):	300
Maximum Fuel Usage (ft3/min):	1,000
Fuel Sulfur Content (lbs/million ft3):	0
Regularly Source Tested (yes/no):	Yes
Boilers	
Boiler, please choose type:	NA
Engines	
Engine Type :	NA
Engine Control:	NA
Engine Fuel Mixture	NA
Flares	

PHYSICAL SOURCE INFORMATION	
Height Above Ground (ft):	0
Diameter (ft):	0
Exhaust Gas Temperature (F):	0
Exhaust Gas Flowrate (CFM):	0
Control Device Description	DUCT BURNER NOT OPERATED
Volatile Control Efficiency (%):	0
Non-Volatile Control Efficiency (%):	0
Emission Control Method:	
Volatile Control Efficiency (%):	0
Non-Volatile Control Efficiency (%):	0
Additional Information:	
STACK (DUCTED EMISSIONS)	
RELEASE (FUGITIVE EMISSIONS)	
LOCATION	
Longitude (Decimal Degrees)	
Latitude (Decimal Degrees)	

# Electronic Emissions Inventory Submission Report

MATERIAL/PROCESS INFORMATION	
Flare, please choose type/control:	NA
Turbines	
Turbine Type:	Natural Gas Fired
Turbine control:	With Lean Premix
Equipped With:	
Other Controls (please describe):	
Device Operating Schedule:	
- Daily Operation (hours/day):	24
- Weekly Operation (days/week):	7
- Annual Operation (days/year):	365

PHYSICAL SOURCE INFORMATION	
Datum	1
Is this location confidential?:	No
Capture Efficiency (%):	100
Capture Efficiency (%):	0

Non-Default Emission Factors	
Nitrogen Oxides (NOx)	50
Carbon Monoxide (CO)	2.31

Non-Default Speciations	
Using only default values	

# Electronic Emissions Inventory Submission Report

EIF ID	351
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Site Name	SD State University
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Site Information	
SRID	APCD1976-SITE-00208
Site Address:	5500 Campanile Dr

PERMIT INFORMATION	
Permit Number	APCD2003-PTO-975398
Permit Description:	<p>One (1) 60-T7300S GSC Solar Turbine Inc. Taurus Gas Turbine Engine, unit A, S/N 1128 T, S/N OHF15-T9157, natural gas fired, 59.48 million btu/hour, based upon lower heating value (lhv) at 46° F engine inlet temperature at 95% R.H, 5.233 MW net output power, with dry low oxides of nitrogen (NOx) (SoLoNOx) technology including an augmented backside cooled/ thermal barrier coating ABC/TBC combustor liner. One (1) John Zink Company low NOx duct burner (duct burner A), s/n 2001-68-1000, natural gas fired, 20 million btu/hour based upon higher heating value, and one (1) heat recovery steam generator. One (1) 4.169 MW steam turbine-generator set, S/N T-5613 is driven by unit A and unit B. The combined net power output of this cogeneration facility, consisting of two (2) gas turbine engines, each equipped with a duct burner and waste heat recovery system to supply steam and drive the steam turbine is 14.47 MW.</p> <p style="text-align: right;">975398 EAD 12/11/03</p>

DEVICE INFORMATION	
Device:	539802
Device Description:	<p>REPORT TOTAL COMBINED FUEL USAGE FOR GAS TURBINE (UNIT A) AND DUCT BURNER (UNIT A) WHEN BOTH ARE OPERATED SIMULTANEOUSLY.</p> <p>CO AND NOX EMISSION FACTORS FOR NATURAL GAS COMBUSTION BASED ON LAST THREE SOURCE TESTS.</p>

MATERIAL INFORMATION	
Material:	1
EQ Name:	A01-T11

MATERIAL/PROCESS INFORMATION	
Fuel Type :	Natural Gas
Other Fuel Type :	NATURAL GAS
Design Capacity	79.5
Design Capacity Units (mmBTU/hr, BHP, etc)	mmBTU/hr
Annual Fuel Usage (million ft3/year):	17.9
Maximum Fuel Usage (ft3/min):	1,400
Fuel Sulfur Content (lbs/million ft3):	0
Regularly Source Tested (yes/no):	Yes
Boilers	
Boiler, please choose type:	NA
Engines	
Engine Type :	NA
Engine Control:	NA
Engine Fuel Mixture	NA

PHYSICAL SOURCE INFORMATION	
Height Above Ground (ft):	0
Diameter (ft):	0
Exhaust Gas Temperature (F):	0
Exhaust Gas Flowrate (CFM):	0
Control Device Description	DUCT BURNER OPERATING
Volatile Control Efficiency (%):	0
Non-Volatile Control Efficiency (%):	0
Emission Control Method:	
Volatile Control Efficiency (%):	0
Non-Volatile Control Efficiency (%):	0
Additional Information:	
STACK (DUCTED EMISSIONS)	
RELEASE (FUGITIVE EMISSIONS)	
LOCATION	
Longitude (Decimal Degrees)	

# Electronic Emissions Inventory Submission Report

MATERIAL/PROCESS INFORMATION	
Flares	
Flare, please choose type/control:	NA
Turbines	
Turbine Type:	Natural Gas Fired
Turbine control:	With Lean Premix
Equipped With:	
Other Controls (please describe):	
Device Operating Schedule:	
- Daily Operation (hours/day):	24
- Weekly Operation (days/week):	7
- Annual Operation (days/year):	365

Non-Default Emission Factors	
Nitrogen Oxides (NOx)	60.6
Carbon Monoxide (CO)	11.4

PHYSICAL SOURCE INFORMATION	
Latitude (Decimal Degrees)	
Datum	1
Is this location confidential?:	No
Capture Efficiency (%):	100
Capture Efficiency (%):	0

Non-Default Speciations	
Using only default values	



# Electronic Emissions Inventory Submission Report

EIF ID	351
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Site Name	SD State University
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Site Information	
SRID	APCD1976-SITE-00208
Site Address:	5500 Campanile Dr

PERMIT INFORMATION	
Permit Number	APCD2003-PTO-975399
Permit Description:	<p>One (1) 60-T7300S GSC Solar Turbine Inc. Taurus Gas Turbine Engine, unit B, S/N 1129 T, S/N OHF15-T0573, natural gas fired, 59.48 million btu/hour, based upon lower heating value (lhv) at 46° F engine inlet temperature at 95% R.H, 5.233 MW net output power, with dry low oxides of nitrogen (NOx) (SoLoNOx) technology including an augmented backside cooled/ thermal barrier coating ABC/TBC combustor liner. One (1) John Zink Company low NOx duct burner (duct burner B), s/n 2001-70-1000, natural gas fired, 20 million btu/hour based upon higher heating value, and one (1) heat recovery steam generator. One (1) 4.169 MW steam turbine-generator set, S/N T-5613 is driven by unit A and unit B. The combined net power output of this cogeneration facility, consisting of two (2) gas turbine engines, each equipped with a duct burner and waste heat recovery system to supply steam and drive the steam turbine is 14.47 MW.</p> <p style="text-align: right;">975399 EAD 12/11/03</p>

DEVICE INFORMATION	
Device:	539901
Device Description:	<p>REPORT TOTAL FUEL USAGE FOR GAS TURBINE (UNIT B) WHEN OPERATED WITHOUT THE DUCT BURNER.</p> <p>CO AND NOX EMISSION FACTORS FOR NATURAL GAS COMBUSTION BASED ON LAST THREE SOURCE TESTS.</p>

MATERIAL INFORMATION	
Material:	1
EQ Name:	A01-T11

MATERIAL/PROCESS INFORMATION	
Fuel Type :	Natural Gas
Other Fuel Type :	NATURAL GAS
Design Capacity	59.5
Design Capacity Units (mmBTU/hr, BHP, etc)	mmBTU/hr
Annual Fuel Usage (million ft3/year):	399
Maximum Fuel Usage (ft3/min):	958
Fuel Sulfur Content (lbs/million ft3):	0
Regularly Source Tested (yes/no):	Yes
Boilers	
Boiler, please choose type:	NA
Engines	
Engine Type :	NA
Engine Control:	NA
Engine Fuel Mixture	NA
Flares	

PHYSICAL SOURCE INFORMATION	
Height Above Ground (ft):	0
Diameter (ft):	0
Exhaust Gas Temperature (F):	0
Exhaust Gas Flowrate (CFM):	0
Control Device Description	DUCT BURNER NOT OPERATED
Volatile Control Efficiency (%):	0
Non-Volatile Control Efficiency (%):	0
Emission Control Method:	
Volatile Control Efficiency (%):	0
Non-Volatile Control Efficiency (%):	0
Additional Information:	
STACK (DUCTED EMISSIONS)	
RELEASE (FUGITIVE EMISSIONS)	
LOCATION	
Longitude (Decimal Degrees)	
Latitude (Decimal Degrees)	

# Electronic Emissions Inventory Submission Report

MATERIAL/PROCESS INFORMATION	
Flare, please choose type/control:	NA
Turbines	
Turbine Type:	Natural Gas Fired
Turbine control:	With Lean Premix
Equipped With:	
Other Controls (please describe):	
Device Operating Schedule:	
- Daily Operation (hours/day):	24
- Weekly Operation (days/week):	7
- Annual Operation (days/year):	365

PHYSICAL SOURCE INFORMATION	
Datum	1
Is this location confidential?:	No
Capture Efficiency (%):	100
Capture Efficiency (%):	0

Non-Default Emission Factors	
Nitrogen Oxides (NOx)	37.3
Carbon Monoxide (CO)	2.31

Non-Default Speciations	
Using only default values	

# Electronic Emissions Inventory Submission Report

EIF ID	351
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Site Name	SD State University
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Site Information	
SRID	APCD1976-SITE-00208
Site Address:	5500 Campanile Dr

PERMIT INFORMATION	
Permit Number	APCD2003-PTO-975399
Permit Description:	<p>One (1) 60-T7300S GSC Solar Turbine Inc. Taurus Gas Turbine Engine, unit B, S/N 1129 T, S/N OHF15-T0573, natural gas fired, 59.48 million btu/hour, based upon lower heating value (lhv) at 46° F engine inlet temperature at 95% R.H, 5.233 MW net output power, with dry low oxides of nitrogen (NOx) (SoLoNOx) technology including an augmented backside cooled/ thermal barrier coating ABC/TBC combustor liner. One (1) John Zink Company low NOx duct burner (duct burner B), s/n 2001-70-1000, natural gas fired, 20 million btu/hour based upon higher heating value, and one (1) heat recovery steam generator. One (1) 4.169 MW steam turbine-generator set, S/N T-5613 is driven by unit A and unit B. The combined net power output of this cogeneration facility, consisting of two (2) gas turbine engines, each equipped with a duct burner and waste heat recovery system to supply steam and drive the steam turbine is 14.47 MW.</p> <p style="text-align: right;">975399 EAD 12/11/03</p>

DEVICE INFORMATION	
Device:	539902
Device Description:	<p>REPORT TOTAL COMBINED FUEL USAGE FOR GAS TURBINE (UNIT B) AND DUCT BURNER (UNIT B) WHEN BOTH ARE OPERATED SIMULTANEOUSLY.</p> <p>CO AND NOX EMISSION FACTORS FOR NATURAL GAS COMBUSTION BASED ON LAST THREE SOURCE TESTS.</p>

MATERIAL INFORMATION	
Material:	1
EQ Name:	A01-T11

MATERIAL/PROCESS INFORMATION	
Fuel Type :	Natural Gas
Other Fuel Type :	NATURAL GAS
Design Capacity	79.5
Design Capacity Units (mmBTU/hr, BHP, etc)	mmBTU/hr
Annual Fuel Usage (million ft3/year):	9.81
Maximum Fuel Usage (ft3/min):	1,400
Fuel Sulfur Content (lbs/million ft3):	0
Regularly Source Tested (yes/no):	Yes
Boilers	
Boiler, please choose type:	NA
Engines	
Engine Type :	NA
Engine Control:	NA
Engine Fuel Mixture	NA

PHYSICAL SOURCE INFORMATION	
Height Above Ground (ft):	0
Diameter (ft):	0
Exhaust Gas Temperature (F):	0
Exhaust Gas Flowrate (CFM):	0
Control Device Description	DUCT BURNER OPERATED
Volatile Control Efficiency (%):	0
Non-Volatile Control Efficiency (%):	0
Emission Control Method:	
Volatile Control Efficiency (%):	0
Non-Volatile Control Efficiency (%):	0
Additional Information:	
STACK (DUCTED EMISSIONS)	
RELEASE (FUGITIVE EMISSIONS)	
LOCATION	
Longitude (Decimal Degrees)	

# Electronic Emissions Inventory Submission Report

MATERIAL/PROCESS INFORMATION	
Flares	
Flare, please choose type/control:	NA
Turbines	
Turbine Type:	Natural Gas Fired
Turbine control:	With Lean Premix
Equipped With:	
Other Controls (please describe):	
Device Operating Schedule:	
- Daily Operation (hours/day):	24
- Weekly Operation (days/week):	7
- Annual Operation (days/year):	365

PHYSICAL SOURCE INFORMATION	
Latitude (Decimal Degrees)	
Datum	1
Is this location confidential?:	No
Capture Efficiency (%):	100
Capture Efficiency (%):	0

Non-Default Emission Factors	
Nitrogen Oxides (NOx)	48.3
Carbon Monoxide (CO)	9.24

Non-Default Speciations	
Using only default values	

# Electronic Emissions Inventory Submission Report

EIF ID	351
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Site Name	SD State University
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Site Information	
SRID	APCD1976-SITE-00208
Site Address:	5500 Campanile Dr

PERMIT INFORMATION	
Permit Number	APCD2004-PTO-000841
Permit Description:	BOILER NO.3:12.6 MM BTU/HR INPUT:INTERNATIONAL BOILER WORKS/ UNIVERSAL ENERGY CORPORATION MODEL BF-350C-W12X, EQUIPPED WITH A LOW NOX BURNER, FGR, AND EXCESS OXYGEN CONTINUOUS MONITOR, NATURAL GAS-FIRED, AND ONLY USING DIESEL NO. 2 FUEL FOR BACKUP AND LIMITED USE. Gas flow meter: Manufacturer: Rosemount Inc., Make: 3051 SFC Compact Orifice Flowmeter, Model: 3051 SFC1 SC040N040T32JAI3Q4E5M5, S/N 20SHFE0014015 40040 AS 0384 ID REPL 0295 DAS 972798 0999 EAD (08AUG2002 ADD CONDITION# 2800) 978333 EAD 060404

DEVICE INFORMATION	
Device:	841
Device Description:	CO AND NOX EMISSION FACTORS FOR NATURAL GAS COMBUSTION BASED ON THE LAST THREE SOURCE TEST RESULTS.

MATERIAL INFORMATION	
Material:	1
EQ Name:	A01-B17

MATERIAL/PROCESS INFORMATION	
Fuel Type :	999
Other Fuel Type :	NATURAL GAS
Design Capacity	
Design Capacity Units (mmBTU/hr, BHP, etc)	
Annual Fuel Usage (million ft3/year):	3.04
Maximum Fuel Usage (ft3/min):	182
Fuel Sulfur Content (lbs/million ft3):	0
Regularly Source Tested (yes/no):	Yes
Boilers	
Boiler, please choose type:	998
Engines	
Engine Type :	999
Engine Control:	999
Engine Fuel Mixture	999
Flares	
Flare, please choose type/control:	998
Turbines	
Turbine Type:	999
Turbine control:	998
Equipped With:	
Other Controls (please describe):	
Device Operating Schedule:	
- Daily Operation (hours/day):	24
- Weekly Operation (days/week):	7
- Annual Operation (days/year):	365

PHYSICAL SOURCE INFORMATION	
Height Above Ground (ft):	70
Diameter (ft):	4
Exhaust Gas Temperature (F):	300
Exhaust Gas Flowrate (CFM):	4,100
Control Device Description	STACK
Volatile Control Efficiency (%):	0
Non-Volatile Control Efficiency (%):	0
Emission Control Method:	
Volatile Control Efficiency (%):	0
Non-Volatile Control Efficiency (%):	0
Additional Information:	
STACK (DUCTED EMISSIONS)	
RELEASE (FUGITIVE EMISSIONS)	
LOCATION	
Longitude (Decimal Degrees)	
Latitude (Decimal Degrees)	
Datum	
Is this location confidential?:	
Capture Efficiency (%):	100
Capture Efficiency (%):	0

# Electronic Emissions Inventory Submission Report

Non-Default Emission Factors	
Nitrogen Oxides (NOx)	29.5
Carbon Monoxide (CO)	2.97

Non-Default Speciations	
Using only default values	

# Electronic Emissions Inventory Submission Report

EIF ID	351
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Site Name	SD State University
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Site Information	
SRID	APCD1976-SITE-00208
Site Address:	5500 Campanile Dr

PERMIT INFORMATION	
Permit Number	APCD2004-PTO-000841
Permit Description:	BOILER NO.3:12.6 MM BTU/HR INPUT:INTERNATIONAL BOILER WORKS/ UNIVERSAL ENERGY CORPORATION MODEL BF-350C-W12X, EQUIPPED WITH A LOW NOX BURNER, FGR, AND EXCESS OXYGEN CONTINUOUS MONITOR, NATURAL GAS-FIRED, AND ONLY USING DIESEL NO. 2 FUEL FOR BACKUP AND LIMITED USE. Gas flow meter: Manufacturer: Rosemount Inc., Make: 3051 SFC Compact Orifice Flowmeter, Model: 3051 SFC1 SC040N040T32JAI3Q4E5M5, S/N 20SHFE0014015 40040 AS 0384 ID REPL 0295 DAS 972798 0999 EAD (08AUG2002 ADD CONDITION# 2800) 978333 EAD 060404

DEVICE INFORMATION	
Device:	841
Device Description:	CO AND NOX EMISSION FACTORS FOR NATURAL GAS COMBUSTION BASED ON THE LAST THREE SOURCE TEST RESULTS.

MATERIAL INFORMATION	
Material:	2
EQ Name:	A02-B04

MATERIAL/PROCESS INFORMATION	
Fuel Type:	DIESEL
Design Capacity	
Design Capacity Units (mmBTU/hr, BHP, etc)	
Annual Fuel Usage (gals/year):	0
Maximum Fuel Usage (gals/hour):	0
Fuel Sulfur Content (weight %):	
Regularly Source Tested (yes/no):	No
Equipped With:	
Other Controls (please describe):	
Device Operating Schedule:	
- Daily Operation (hours/day):	0
- Weekly Operation (days/week):	0
- Annual Operation (days/year):	0

PHYSICAL SOURCE INFORMATION	
Height Above Ground (ft):	70
Diameter (ft):	4
Exhaust Gas Temperature (F):	300
Exhaust Gas Flowrate (CFM):	4,100
Control Device Description	STACK
Capture Efficiency (%):	100
Emission Control Method:	
Additional Information:	
Capture Efficiency (%):	0
STACK (DUCTED EMISSIONS)	
RELEASE (FUGITIVE EMISSIONS)	
LOCATION	
Longitude (Decimal Degrees)	
Latitude (Decimal Degrees)	
Datum	
Is this location confidential?:	

Non-Default Emission Factors	
Using only default values	

Non-Default Speciations	
Using only default values	

# Electronic Emissions Inventory Submission Report

EIF ID	351
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Site Name	SD State University
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Site Information	
SRID	APCD1976-SITE-00208
Site Address:	5500 Campanile Dr

PERMIT INFORMATION	
Permit Number	APCD2004-PTO-920191
Permit Description:	BOILER NO.4:23.8 MM BTU/HR INPUT; CLEAVER-BROOKS MODEL D-34, UNIT W-3730, EQUIPPED WITH A LOW NOX BURNER, FGR, AND EXCESS OXYGEN CONTINUOUS MONITOR, NATURAL GAS-FIRED, AND ONLY USING DIESEL NO.2 FUEL FOR BACKUP AND LIMITED USE. Gas flow meter: Manufacturer: Rosemount Inc., Make: 3051 SFC Compact Orifice Flowmeter, Model: 3051 SFC1 SC040N040T32JAI3Q4E5M5, S/N 20SHFE0014014JCM 0395 920191; EAD 972799 9/99 (08AUG2002 ADD CONDITION #2800) 978334 EAD 060404

DEVICE INFORMATION	
Device:	920191
Device Description:	CO AND NOX EMISSION FACTORS FOR NATURAL GAS COMBUSTION BASED ON THE LAST THREE SOURCE TEST RESULTS.

MATERIAL INFORMATION	
Material:	2
EQ Name:	A01-B17

MATERIAL/PROCESS INFORMATION	
Fuel Type :	999
Other Fuel Type :	NATURAL GAS
Design Capacity	
Design Capacity Units (mmBTU/hr, BHP, etc)	
Annual Fuel Usage (million ft3/year):	9.23
Maximum Fuel Usage (ft3/min):	364
Fuel Sulfur Content (lbs/million ft3):	0
Regularly Source Tested (yes/no):	Yes
Boilers	
Boiler, please choose type:	998
Engines	
Engine Type :	999
Engine Control:	999
Engine Fuel Mixture	999
Flares	
Flare, please choose type/control:	998
Turbines	
Turbine Type:	999
Turbine control:	998
Equipped With:	
Other Controls (please describe):	
Device Operating Schedule:	
- Daily Operation (hours/day):	24
- Weekly Operation (days/week):	7
- Annual Operation (days/year):	365

PHYSICAL SOURCE INFORMATION	
Height Above Ground (ft):	70
Diameter (ft):	4
Exhaust Gas Temperature (F):	589
Exhaust Gas Flowrate (CFM):	2,200
Control Device Description	
Volatile Control Efficiency (%):	0
Non-Volatile Control Efficiency (%):	0
Emission Control Method:	
Volatile Control Efficiency (%):	0
Non-Volatile Control Efficiency (%):	0
Additional Information:	
STACK (DUCTED EMISSIONS)	
RELEASE (FUGITIVE EMISSIONS)	
LOCATION	
Longitude (Decimal Degrees)	
Latitude (Decimal Degrees)	
Datum	
Is this location confidential?:	
Capture Efficiency (%):	100
Capture Efficiency (%):	0

Non-Default Emission Factors	
Nitrogen Oxides (NOx)	29.8

Non-Default Speciations	
Using only default values	



# Electronic Emissions Inventory Submission Report

Non-Default Emission Factors	
Carbon Monoxide (CO)	124

Non-Default Speciations	
Using only default values	

# Electronic Emissions Inventory Submission Report

EIF ID	351
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Site Name	SD State University
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Site Information	
SRID	APCD1976-SITE-00208
Site Address:	5500 Campanile Dr

PERMIT INFORMATION	
Permit Number	APCD2004-PTO-920191
Permit Description:	BOILER NO.4:23.8 MM BTU/HR INPUT; CLEAVER-BROOKS MODEL D-34, UNIT W-3730, EQUIPPED WITH A LOW NOX BURNER, FGR, AND EXCESS OXYGEN CONTINUOUS MONITOR, NATURAL GAS-FIRED, AND ONLY USING DIESEL NO.2 FUEL FOR BACKUP AND LIMITED USE. Gas flow meter: Manufacturer: Rosemount Inc., Make: 3051 SFC Compact Orifice Flowmeter, Model: 3051 SFC1 SC040N040T32JAIA3Q4E5M5, S/N 20SHFE0014014JCM 0395 920191; EAD 972799 9/99 (08AUG2002 ADD CONDITION #2800) 978334 EAD 060404

DEVICE INFORMATION	
Device:	920191
Device Description:	CO AND NOX EMISSION FACTORS FOR NATURAL GAS COMBUSTION BASED ON THE LAST THREE SOURCE TEST RESULTS.

MATERIAL INFORMATION	
Material:	1
EQ Name:	A02-B04

MATERIAL/PROCESS INFORMATION	
Fuel Type:	DIESEL
Design Capacity	
Design Capacity Units (mmBTU/hr, BHP, etc)	
Annual Fuel Usage (gals/year):	0
Maximum Fuel Usage (gals/hour):	0
Fuel Sulfur Content (weight %):	
Regularly Source Tested (yes/no):	No
Equipped With:	
Other Controls (please describe):	
Device Operating Schedule:	
- Daily Operation (hours/day):	0
- Weekly Operation (days/week):	0
- Annual Operation (days/year):	0

PHYSICAL SOURCE INFORMATION	
Height Above Ground (ft):	70
Diameter (ft):	4
Exhaust Gas Temperature (F):	589
Exhaust Gas Flowrate (CFM):	2,200
Control Device Description	
Capture Efficiency (%):	100
Emission Control Method:	
Additional Information:	
Capture Efficiency (%):	0
STACK (DUCTED EMISSIONS)	
RELEASE (FUGITIVE EMISSIONS)	
LOCATION	
Longitude (Decimal Degrees)	
Latitude (Decimal Degrees)	
Datum	
Is this location confidential?:	

Non-Default Emission Factors	
Using only default values	

Non-Default Speciations	
Using only default values	

# Electronic Emissions Inventory Submission Report

EIF ID	351
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Site Name	SD State University
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Site Information	
SRID	APCD1976-SITE-00208
Site Address:	5500 Campanile Dr

PERMIT INFORMATION	
Permit Number	APCD2005-PTO-951138
Permit Description:	EMERGENCY ENGINE GENERATOR, 574 HP CATERPILLAR MODEL 3406B DIESEL ENGINE SERIAL NUMBER: 4PM00392, TURBOCHARGED, AFTERCOOLED. LOCATED AT COX ARENA. 951138 GDS 2/98 17 CCR 93115 SJE 10/05

DEVICE INFORMATION	
Device:	951138
Device Description:	EMISSION FACTORS USED ARE NOX 6.29, CO 15.28, ROG 0.024, PM 4.43 G/BHP-HR PER APP ATCM SUBMITTAL.  DIESEL PM EMISSION FACTOR CHANGED TO 1.0 G/BHP-HR PER AP-42 (BYRNES/PENEDA 2/2016).

MATERIAL INFORMATION	
Material:	1
EQ Name:	A05-E15

MATERIAL/PROCESS INFORMATION	
Fuel Type:	DIESEL
Engine Manufacturer:	CATERPILLAR
Engine Make:	3406B
Engine Model:	1,994
Engine Year	
Engine Family Number:	UNKNOWN
Engine Tier (1-4):	
Engine Rating (bhp):	574
Non-Emergency Operations	
- Annual Fuel Usage (gals/year):	249
- Max Hourly Fuel Usage (gals/hour):	29.5
Renewable Diesel Used (yes/no):	no
- Typical Load (%):	100
- Operating Hours (hours/year):	8.45
Emergency Operations	
Annual Fuel Usage (gallons/year)	103
Maximum Hourly Fuel Usage (gallons/hour)	29.5
Typical Load (%)	
Operating Hours (hours/year)	3.5
Device Operating Schedule:	
- Daily Operation (hours/day):	0
- Weekly Operation (days/week):	0
- Annual Operation (days/year):	16

PHYSICAL SOURCE INFORMATION	
Height Above Ground (ft):	12
Diameter (ft):	0.5
Exhaust Gas Temperature (F):	1,035
Exhaust Gas Flowrate (CFM):	3,335
Control Device Description	
Control Efficiency (%):	0
STACK (DUCTED EMISSIONS)	
Other Control Type:	
LOCATION	
Longitude (Decimal Degrees)	
Latitude (Decimal Degrees)	
Datum	
Is this location confidential?:	

Non-Default Emission Factors	
Carbon Monoxide (CO)	271
Nitrogen Oxides (NOx)	659
Particulate Matter (PM10)	43.2
Total Particulates (TSP)	43.2
Volatile Organic Compounds (VOC)	1.04
Diesel Particulate	43.2

Non-Default Speciations	
Using only default values	

# Electronic Emissions Inventory Submission Report

EIF ID	351
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Site Name	SD State University
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Site Information	
SRID	APCD1976-SITE-00208
Site Address:	5500 Campanile Dr

PERMIT INFORMATION	
Permit Number	APCD2005-PTO-961940
Permit Description:	EMERGENCY ENGINE GENERATOR, 896 HP CATERPILLAR MODEL 3412 DITA DIESEL ENGINE, S/N: 81Z20989, TURBOCHARGED, AFTERCOOLED. LOCATED AT NORTH LIFE SCIENCE. 961940 GDS 2/98 17 CCR 93 115 SJE 10/05

DEVICE INFORMATION	
Device:	961940
Device Description:	MISSION FACTORS USED ARE NOX 7.51, CO 0.28, ROG 0.066, PM 0.54 G/BHP-HR PER APP ATCM SUBMITTAL.  DIESEL PM FACTOR CHANGED TO 0.2 G/BHP-HR PER MFG INFO(BYRNES/PENEDA 2/2016).

MATERIAL INFORMATION	
Material:	1
EQ Name:	A05-E10

MATERIAL/PROCESS INFORMATION	
Fuel Type:	DIESEL
Engine Manufacturer:	CATERPILLAR
Engine Make:	3412 DITA
Engine Model:	1,997
Engine Year	
Engine Family Number:	UNKNOWN
Engine Tier (1-4):	
Engine Rating (bhp):	896
Non-Emergency Operations	
- Annual Fuel Usage (gals/year):	347
- Max Hourly Fuel Usage (gals/hour):	46.3
Renewable Diesel Used (yes/no):	no
- Typical Load (%):	100
- Operating Hours (hours/year):	7.5
Emergency Operations	
Annual Fuel Usage (gallons/year)	
Maximum Hourly Fuel Usage (gallons/hour)	
Typical Load (%)	
Operating Hours (hours/year)	
Device Operating Schedule:	
- Daily Operation (hours/day):	0
- Weekly Operation (days/week):	0
- Annual Operation (days/year):	12

PHYSICAL SOURCE INFORMATION	
Height Above Ground (ft):	12
Diameter (ft):	0.67
Exhaust Gas Temperature (F):	906
Exhaust Gas Flowrate (CFM):	4,986
Control Device Description	
Control Efficiency (%):	0
STACK (DUCTED EMISSIONS)	
Other Control Type:	
LOCATION	
Longitude (Decimal Degrees)	
Latitude (Decimal Degrees)	
Datum	
Is this location confidential?:	

Non-Default Emission Factors	
Carbon Monoxide (CO)	12.1
Nitrogen Oxides (NOx)	324
Particulate Matter (PM10)	8.63
Total Particulates (TSP)	8.63
Volatile Organic Compounds (VOC)	2.85
Diesel Particulate	8.63

Non-Default Speciations	
Using only default values	

# Electronic Emissions Inventory Submission Report

EIF ID	351
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Site Name	SD State University
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Site Information	
SRID	APCD1976-SITE-00208
Site Address:	5500 Campanile Dr

PERMIT INFORMATION	
Permit Number	APCD2005-PTO-970555
Permit Description:	EMERGENCY ENGINE GENERATOR, 830 HP DETROIT DIESEL MODEL 12V-92TA DIESEL ENGINE, S/N: 12VF012785. TURBOCHARGED, AFTERCOOLED. LOCATED AT SOUTH LIFE SCIENCE. 970555 GDS 2/98 17 CCR 93 115 SJE 10/05

DEVICE INFORMATION	
Device:	970555
Device Description:	EMISSION FACTORS USED ARE NOX 13.05, CO 3.57, ROG 0.33, PM 1 G/BHP-HR PER APP ATCM SUBMITTAL.  DIESEL PM FACTOR CHANGED TO 0.185 G/BHP-HR PER AP-42 (BYRNES/PENEDA 2/2016).

MATERIAL INFORMATION	
Material:	1
EQ Name:	A05-E10

MATERIAL/PROCESS INFORMATION	
Fuel Type:	DIESEL
Engine Manufacturer:	DETROIT DIESEL
Engine Make:	12V-92TA
Engine Model:	1,997
Engine Year	
Engine Family Number:	UNKNOWN
Engine Tier (1-4):	
Engine Rating (bhp):	830
Non-Emergency Operations	
- Annual Fuel Usage (gals/year):	298
- Max Hourly Fuel Usage (gals/hour):	41
Renewable Diesel Used (yes/no):	no
- Typical Load (%):	100
- Operating Hours (hours/year):	7.27
Emergency Operations	
Annual Fuel Usage (gallons/year)	
Maximum Hourly Fuel Usage (gallons/hour)	
Typical Load (%)	
Operating Hours (hours/year)	
Device Operating Schedule:	
- Daily Operation (hours/day):	0
- Weekly Operation (days/week):	0
- Annual Operation (days/year):	14

PHYSICAL SOURCE INFORMATION	
Height Above Ground (ft):	12
Diameter (ft):	0.67
Exhaust Gas Temperature (F):	810
Exhaust Gas Flowrate (CFM):	4,750
Control Device Description	
Control Efficiency (%):	0
STACK (DUCTED EMISSIONS)	
Other Control Type:	
LOCATION	
Longitude (Decimal Degrees)	
Latitude (Decimal Degrees)	
Datum	
Is this location confidential?:	

Non-Default Emission Factors	
Carbon Monoxide (CO)	154
Nitrogen Oxides (NOx)	563
Particulate Matter (PM10)	7.98
Total Particulates (TSP)	7.98
Volatile Organic Compounds (VOC)	14.2
Diesel Particulate	7.98

Non-Default Speciations	
Using only default values	

# Electronic Emissions Inventory Submission Report

EIF ID	351
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Site Name	SD State University
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Site Information	
SRID	APCD1976-SITE-00208
Site Address:	5500 Campanile Dr

PERMIT INFORMATION	
Permit Number	APCD2005-PTO-971088
Permit Description:	EMERGENCY ENGINE GENERATOR, 233 HP CATERPILLAR MODEL 3208 DIESEL ENGINE S/N: 30A00786, TURBOCHARGED. ENGINE LOCATED AT A-LOT. 971088 GDS 3/98 17 CCR 93115 SJE 10/05

DEVICE INFORMATION	
Device:	971088
Device Description:	FORMERLY OPERATED AS P/O 900971 (P/O 900971 RETIRED)  EMISSION FACTOR USED IS FROM DIESEL PM DEFAULT AP-42 DIESEL EMISSION FACTOR

MATERIAL INFORMATION	
Material:	1
EQ Name:	A05-E15

MATERIAL/PROCESS INFORMATION	
Fuel Type:	DIESEL
Engine Manufacturer:	CATERPILLAR
Engine Make:	3,208
Engine Model:	1,991
Engine Year	
Engine Family Number:	UNKNOWN
Engine Tier (1-4):	
Engine Rating (bhp):	233
Non-Emergency Operations	
- Annual Fuel Usage (gals/year):	105
- Max Hourly Fuel Usage (gals/hour):	9.7
Renewable Diesel Used (yes/no):	no
- Typical Load (%):	100
- Operating Hours (hours/year):	10.8
Emergency Operations	
Annual Fuel Usage (gallons/year)	
Maximum Hourly Fuel Usage (gallons/hour)	
Typical Load (%)	
Operating Hours (hours/year)	
Device Operating Schedule:	
- Daily Operation (hours/day):	0
- Weekly Operation (days/week):	0
- Annual Operation (days/year):	14

PHYSICAL SOURCE INFORMATION	
Height Above Ground (ft):	30
Diameter (ft):	0.5
Exhaust Gas Temperature (F):	1,000
Exhaust Gas Flowrate (CFM):	1,300
Control Device Description	
Control Efficiency (%):	0
STACK (DUCTED EMISSIONS)	
Other Control Type:	
LOCATION	
Longitude (Decimal Degrees)	
Latitude (Decimal Degrees)	
Datum	
Is this location confidential?:	

Non-Default Emission Factors	
Using only default values	

Non-Default Speciations	
Using only default values	

# Electronic Emissions Inventory Submission Report

EIF ID	351
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Site Name	SD State University
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Site Information	
SRID	APCD1976-SITE-00208
Site Address:	5500 Campanile Dr

PERMIT INFORMATION	
Permit Number	APCD2005-PTO-971090
Permit Description:	EMERGENCY ENGINE GENERATOR, 449 HP CATERPILLAR MODEL 3406BDI DIESEL ENGINE S/N 4RG01208, TURBOCHARGED. LOCATED AT STUDENT SERVICES EAST. 971090 GDS 3/98 17 CCR 93 115 SJE 10/05

DEVICE INFORMATION	
Device:	971090
Device Description:	EMISSION FACTORS USED ARE NOX 8.7, CO 0.808, ROG 0.303, PM 1 G/BHP-HR PER APP ATCM SUBMITTAL.  DIESEL PM FACTOR CHANGED TO 0.31 G/BHP-HR PER MFG INFO (BYRNES/PENEDA 2/2016). REGISTERED ENGINE, FORMERLY P/O 910194

MATERIAL INFORMATION	
Material:	1
EQ Name:	A05-E15

MATERIAL/PROCESS INFORMATION	
Fuel Type:	DIESEL
Engine Manufacturer:	CATERPILLAR
Engine Make:	3406BDI
Engine Model:	1,991
Engine Year	
Engine Family Number:	UNKNOWN
Engine Tier (1-4):	
Engine Rating (bhp):	449
Non-Emergency Operations	
- Annual Fuel Usage (gals/year):	71.8
- Max Hourly Fuel Usage (gals/hour):	8.65
Renewable Diesel Used (yes/no):	no
- Typical Load (%):	100
- Operating Hours (hours/year):	8.3
Emergency Operations	
Annual Fuel Usage (gallons/year)	
Maximum Hourly Fuel Usage (gallons/hour)	
Typical Load (%)	
Operating Hours (hours/year)	
Device Operating Schedule:	
- Daily Operation (hours/day):	0
- Weekly Operation (days/week):	0
- Annual Operation (days/year):	12

PHYSICAL SOURCE INFORMATION	
Height Above Ground (ft):	12
Diameter (ft):	0.5
Exhaust Gas Temperature (F):	1,000
Exhaust Gas Flowrate (CFM):	2,426
Control Device Description	
Control Efficiency (%):	0
STACK (DUCTED EMISSIONS)	
Other Control Type:	
LOCATION	
Longitude (Decimal Degrees)	
Latitude (Decimal Degrees)	
Datum	
Is this location confidential?:	

Non-Default Emission Factors	
Carbon Monoxide (CO)	34.9
Nitrogen Oxides (NOx)	375
Particulate Matter (PM10)	13.4
Total Particulates (TSP)	13.4
Volatile Organic Compounds (VOC)	13.1

Non-Default Speciations	
Using only default values	

# Electronic Emissions Inventory Submission Report

Non-Default Emission Factors	
Diesel Particulate	13.4

Non-Default Speciations	
Using only default values	



# Electronic Emissions Inventory Submission Report

EIF ID	351
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Site Name	SD State University
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Site Information	
SRID	APCD1976-SITE-00208
Site Address:	5500 Campanile Dr

PERMIT INFORMATION	
Permit Number	APCD2005-PTO-971091
Permit Description:	EMERGENCY ENGINE GENERATOR, 423 HP DETROIT DIESEL MODEL 8063-7405 DIESEL ENGINE, TURBOCHARGED. S/N: 06VF192154. LOCATED AT CHAPULTEPEC RESIDENCE HALL. 971091 GDS 3/98 17 CCR 93 115 SJE 10/05

DEVICE INFORMATION	
Device:	971091
Device Description:	EMISSION FACTORS USED ARE NOX 10.83, CO 2.84, ROG 0.09, PM 1 G/BHP-HR PER APP ATCM SUBMITTAL.  REGISTERED ENGINE, FORMERLY P/O 911343

MATERIAL INFORMATION	
Material:	1
EQ Name:	A05-E15

MATERIAL/PROCESS INFORMATION	
Fuel Type:	DIESEL
Engine Manufacturer:	DETROIT DIESEL
Engine Make:	6V-92TA
Engine Model:	1,991
Engine Year	
Engine Family Number:	UNKNOWN
Engine Tier (1-4):	
Engine Rating (bhp):	423
Non-Emergency Operations	
- Annual Fuel Usage (gals/year):	194
- Max Hourly Fuel Usage (gals/hour):	19.8
Renewable Diesel Used (yes/no):	no
- Typical Load (%):	100
- Operating Hours (hours/year):	9.8
Emergency Operations	
Annual Fuel Usage (gallons/year)	95.5
Maximum Hourly Fuel Usage (gallons/hour)	19.8
Typical Load (%)	
Operating Hours (hours/year)	4.83
Device Operating Schedule:	
- Daily Operation (hours/day):	0
- Weekly Operation (days/week):	0
- Annual Operation (days/year):	15

PHYSICAL SOURCE INFORMATION	
Height Above Ground (ft):	8
Diameter (ft):	0.5
Exhaust Gas Temperature (F):	800
Exhaust Gas Flowrate (CFM):	2,470
Control Device Description	
Control Efficiency (%):	0
STACK (DUCTED EMISSIONS)	
Other Control Type:	
LOCATION	
Longitude (Decimal Degrees)	
Latitude (Decimal Degrees)	
Datum	
Is this location confidential?:	

Non-Default Emission Factors	
Carbon Monoxide (CO)	123
Nitrogen Oxides (NOx)	467
Particulate Matter (PM10)	43.2
Total Particulates (TSP)	43.2
Volatile Organic Compounds (VOC)	3.88
Diesel Particulate	43.2

Non-Default Speciations	
Using only default values	

# Electronic Emissions Inventory Submission Report

EIF ID	351
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Site Name	SD State University
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Site Information	
SRID	APCD1976-SITE-00208
Site Address:	5500 Campanile Dr

PERMIT INFORMATION	
Permit Number	APCD2005-PTO-971093
Permit Description:	EMERGENCY ENGINE GENERATOR, 587 HP CATERPILLAR MODEL 3406B DIESEL ENGINE S/N 4PM00347, TURBOCHARGED, AFTERCOOLED. LOCATED AT EDUCATION AND BUSINESS ADMIN BUILDING. 971093 GDS 2/98 17 CCR 93 115 SJE 10/05

DEVICE INFORMATION	
Device:	971093
Device Description:	EMISSION FACTORS USED ARE NOX 6.15, CO 14.9, ROG 0.023, PM 4.33 G/BHP-HR PER APP ATCM SUBMITTAL.  REGISTERED ENGINE, FORMERLY P/O 950169 REGISTERED ENGINE, FORMERLY P/O 910193  DIESEL PM FACTOR CHANGED TO 1.0 G/BHP-HR PER AP-42 (BYRNES/PENEDA 2/2016).

MATERIAL INFORMATION	
Material:	1
EQ Name:	A05-E15

MATERIAL/PROCESS INFORMATION	
Fuel Type:	DIESEL
Engine Manufacturer:	CATERPILLAR
Engine Make:	3406B
Engine Model:	1,996
Engine Year	
Engine Family Number:	UNKNOWN
Engine Tier (1-4):	
Engine Rating (bhp):	587
Non-Emergency Operations	
- Annual Fuel Usage (gals/year):	252
- Max Hourly Fuel Usage (gals/hour):	29
Renewable Diesel Used (yes/no):	no
- Typical Load (%):	100
- Operating Hours (hours/year):	8.72
Emergency Operations	
Annual Fuel Usage (gallons/year)	
Maximum Hourly Fuel Usage (gallons/hour)	
Typical Load (%)	
Operating Hours (hours/year)	
Device Operating Schedule:	
- Daily Operation (hours/day):	0
- Weekly Operation (days/week):	0
- Annual Operation (days/year):	13

PHYSICAL SOURCE INFORMATION	
Height Above Ground (ft):	75
Diameter (ft):	0.42
Exhaust Gas Temperature (F):	1,036
Exhaust Gas Flowrate (CFM):	3,323
Control Device Description	
Control Efficiency (%):	0
STACK (DUCTED EMISSIONS)	
Other Control Type:	
LOCATION	
Longitude (Decimal Degrees)	
Latitude (Decimal Degrees)	
Datum	
Is this location confidential?:	

Non-Default Emission Factors	
Carbon Monoxide (CO)	643
Nitrogen Oxides (NOx)	265
Particulate Matter (PM10)	43.2

Non-Default Speciations	
Using only default values	

# Electronic Emissions Inventory Submission Report

Non-Default Emission Factors	
Total Particulates (TSP)	43.2
Volatile Organic Compounds (VOC)	0.99
Diesel Particulate	43.2

Non-Default Speciations	
Using only default values	

# Electronic Emissions Inventory Submission Report

EIF ID	351
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Site Name	SD State University
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Site Information	
SRID	APCD1976-SITE-00208
Site Address:	5500 Campanile Dr

PERMIT INFORMATION	
Permit Number	APCD2005-PTO-971094
Permit Description:	EMERGENCY ENGINE GENERATOR SET: CATERPILLAR ENGINE MODEL 3056, 166 BHP; S/N 7AK02298; OLYMPIAN GENERATOR, 100 KW MODEL 95A04660-S, S/N 2023634. LOCATED AT OPEN AIR THEATER. (971094 GDS 3/98) 17 CCR 93 115 SJE 10/05

DEVICE INFORMATION	
Device:	971094
Device Description:	EMISSION FACTORS ADJUSTED PER APP ATCM SUBMITTAL  REGISTERED ENGINE, FORMERLY P/O 950170  EMISSION FACTOR USED IS FROM DIESEL PM DEFAULT AP-42 DIESEL EMISSION FACTOR

MATERIAL INFORMATION	
Material:	1
EQ Name:	A05-E15

MATERIAL/PROCESS INFORMATION	
Fuel Type:	DIESEL
Engine Manufacturer:	CATERPILLAR
Engine Make:	3,056
Engine Model:	1,996
Engine Year	
Engine Family Number:	UNKNOWN
Engine Tier (1-4):	
Engine Rating (bhp):	166
Non-Emergency Operations	
- Annual Fuel Usage (gals/year):	50.1
- Max Hourly Fuel Usage (gals/hour):	8.95
Renewable Diesel Used (yes/no):	no
- Typical Load (%):	100
- Operating Hours (hours/year):	5.6
Emergency Operations	
Annual Fuel Usage (gallons/year)	
Maximum Hourly Fuel Usage (gallons/hour)	
Typical Load (%)	
Operating Hours (hours/year)	
Device Operating Schedule:	
- Daily Operation (hours/day):	0
- Weekly Operation (days/week):	0
- Annual Operation (days/year):	12

PHYSICAL SOURCE INFORMATION	
Height Above Ground (ft):	8
Diameter (ft):	0
Exhaust Gas Temperature (F):	0
Exhaust Gas Flowrate (CFM):	0
Control Device Description	
Control Efficiency (%):	0
STACK (DUCTED EMISSIONS)	
Other Control Type:	
LOCATION	
Longitude (Decimal Degrees)	
Latitude (Decimal Degrees)	
Datum	
Is this location confidential?:	

Non-Default Emission Factors	
Using only default values	

Non-Default Speciations	
Using only default values	

# Electronic Emissions Inventory Submission Report

EIF ID	351
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Site Name	SD State University
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Site Information	
SRID	APCD1976-SITE-00208
Site Address:	5500 Campanile Dr

PERMIT INFORMATION	
Permit Number	APCD2005-PTO-971095
Permit Description:	EMERGENCY ENGINE GENERATOR, 474 HP DETROIT DIESEL MODEL 8036-7416 DIESEL ENGINE S/N: 7A00043, TURBOCHARGED, AFTERCOOLED. LOCATED AT EAST COMMONS ADMINISTRATION. 971095 GDS 3/98 17 CCR 93 115 SJE 10/05

DEVICE INFORMATION	
Device:	971095
Device Description:	EMISSION FACTOR USED ARE FROM DIESEL PM DEFAULT AP-42 DIESEL EMISSION FACTOR  REGISTERED ENGINE, FORMERLY P/O 900970

MATERIAL INFORMATION	
Material:	1
EQ Name:	A05-E15

MATERIAL/PROCESS INFORMATION	
Fuel Type:	DIESEL
Engine Manufacturer:	DETROIT DIESEL
Engine Make:	8036-7416
Engine Model:	1,991
Engine Year	
Engine Family Number:	UNKNOWN
Engine Tier (1-4):	
Engine Rating (bhp):	474
Non-Emergency Operations	
- Annual Fuel Usage (gals/year):	234
- Max Hourly Fuel Usage (gals/hour):	26.5
Renewable Diesel Used (yes/no):	no
- Typical Load (%):	100
- Operating Hours (hours/year):	8.83
Emergency Operations	
Annual Fuel Usage (gallons/year)	
Maximum Hourly Fuel Usage (gallons/hour)	
Typical Load (%)	
Operating Hours (hours/year)	
Device Operating Schedule:	
- Daily Operation (hours/day):	0
- Weekly Operation (days/week):	0
- Annual Operation (days/year):	14

PHYSICAL SOURCE INFORMATION	
Height Above Ground (ft):	30
Diameter (ft):	0.5
Exhaust Gas Temperature (F):	845
Exhaust Gas Flowrate (CFM):	2,400
Control Device Description	
Control Efficiency (%):	0
STACK (DUCTED EMISSIONS)	
Other Control Type:	
LOCATION	
Longitude (Decimal Degrees)	
Latitude (Decimal Degrees)	
Datum	
Is this location confidential?:	

Non-Default Emission Factors	
Using only default values	

Non-Default Speciations	
Using only default values	

# Electronic Emissions Inventory Submission Report

EIF ID	351
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Site Name	SD State University
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Site Information	
SRID	APCD1976-SITE-00208
Site Address:	5500 Campanile Dr

PERMIT INFORMATION	
Permit Number	APCD2005-PTO-974529
Permit Description:	EMERGENCY ENGINE GENERATOR, 66HP JOHN DIESEL ENGINE MODEL 4039D, S/N: C04039DF004 APPL# 974529 EFH 03/00. LOCATED AT PARKING STRUCTURE #5. 17 CCR 93 115 SJE 10/05

DEVICE INFORMATION	
Device:	974529
Device Description:	EMISSION FACTOR USED IS FROM DIESEL PM DEFAULT AP-42 DIESEL EMISSION FACTOR

MATERIAL INFORMATION	
Material:	1
EQ Name:	A05-E15

MATERIAL/PROCESS INFORMATION	
Fuel Type:	DIESEL
Engine Manufacturer:	JOHN DEERE
Engine Make:	4039D
Engine Model:	1,997
Engine Year	
Engine Family Number:	UNKNOWN
Engine Tier (1-4):	
Engine Rating (bhp):	66
Non-Emergency Operations	
- Annual Fuel Usage (gals/year):	28.7
- Max Hourly Fuel Usage (gals/hour):	3.56
Renewable Diesel Used (yes/no):	no
- Typical Load (%):	100
- Operating Hours (hours/year):	8.05
Emergency Operations	
Annual Fuel Usage (gallons/year)	14.5
Maximum Hourly Fuel Usage (gallons/hour)	3.56
Typical Load (%)	
Operating Hours (hours/year)	4.07
Device Operating Schedule:	
- Daily Operation (hours/day):	0
- Weekly Operation (days/week):	0
- Annual Operation (days/year):	14

PHYSICAL SOURCE INFORMATION	
Height Above Ground (ft):	0
Diameter (ft):	0
Exhaust Gas Temperature (F):	0
Exhaust Gas Flowrate (CFM):	0
Control Device Description	
Control Efficiency (%):	0
STACK (DUCTED EMISSIONS)	
Other Control Type:	
LOCATION	
Longitude (Decimal Degrees)	
Latitude (Decimal Degrees)	
Datum	
Is this location confidential?:	

Non-Default Emission Factors	
Using only default values	

Non-Default Speciations	
Using only default values	

# Electronic Emissions Inventory Submission Report

EIF ID	351
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Site Name	SD State University
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Site Information	
SRID	APCD1976-SITE-00208
Site Address:	5500 Campanile Dr

PERMIT INFORMATION	
Permit Number	APCD2005-PTO-975254
Permit Description:	EMERGENCY GENERATOR: 1170 HP DETROIT DIESEL ENGINE, MODEL 16V-92TA (8163-7406), DIESEL FIRED, S/N: 16VF015819, DRIVES A 750 KW KOHLER MODEL 750ROZD GENERATOR. LOCATED AT CHEMICAL SCIENCES LAB. 975254 EAD 9/1/01 17 CCR 93 115 SJE 10/05

DEVICE INFORMATION	
Device:	975254
Device Description:	EMISSION FACTOR USED ARE FROM DIESEL PM DEFAULT AP-42 DIESEL EMISSION FACTOR

MATERIAL INFORMATION	
Material:	1
EQ Name:	A05-E10

MATERIAL/PROCESS INFORMATION	
Fuel Type:	DIESEL
Engine Manufacturer:	DETROIT DIESEL
Engine Make:	16V-92TA
Engine Model:	2,000
Engine Year	
Engine Family Number:	UNKNOWN
Engine Tier (1-4):	
Engine Rating (bhp):	1,170
Non-Emergency Operations	
- Annual Fuel Usage (gals/year):	373
- Max Hourly Fuel Usage (gals/hour):	56.5
Renewable Diesel Used (yes/no):	no
- Typical Load (%):	100
- Operating Hours (hours/year):	6.6
Emergency Operations	
Annual Fuel Usage (gallons/year)	
Maximum Hourly Fuel Usage (gallons/hour)	
Typical Load (%)	
Operating Hours (hours/year)	
Device Operating Schedule:	
- Daily Operation (hours/day):	0
- Weekly Operation (days/week):	0
- Annual Operation (days/year):	12

PHYSICAL SOURCE INFORMATION	
Height Above Ground (ft):	0
Diameter (ft):	0
Exhaust Gas Temperature (F):	0
Exhaust Gas Flowrate (CFM):	0
Control Device Description	
Control Efficiency (%):	0
STACK (DUCTED EMISSIONS)	
Other Control Type:	
LOCATION	
Longitude (Decimal Degrees)	
Latitude (Decimal Degrees)	
Datum	
Is this location confidential?:	

Non-Default Emission Factors	
Using only default values	

Non-Default Speciations	
Using only default values	

# Electronic Emissions Inventory Submission Report

EIF ID	351
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Site Name	SD State University
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Site Information	
SRID	APCD1976-SITE-00208
Site Address:	5500 Campanile Dr

PERMIT INFORMATION	
Permit Number	APCD2005-PTO-976684
Permit Description:	EMERGENCY STANDBY ENGINE: JOHN DEERE DIESEL ENGINE, MODEL 6068TF250, S/N T06068T872914, 166 BHP, EPA TIER CERTIFIED OF ENGINE FAMILY NUMBER YJDXL06.8014, EQUIPPED WITH TURBOCHARGER, DRIVING A 100 KW GENERATOR. (976684-CCN-11/01) LOCATED AT CUICACALI RESIDENCE HALL. 17 CCR 93 115 SJE 10/05

DEVICE INFORMATION	
Device:	976684
Device Description:	EMISSION FACTORS USED ARE CO 0.7, PM 0.2, NOX 5.4 G/BHP-HR PER ARB E.O. U-R-4-75. Upper bound of 0.3 g/bhp-hr (THC EF in U-R-4-75) used for ROG EF.

MATERIAL INFORMATION	
Material:	1
EQ Name:	A05-E15

MATERIAL/PROCESS INFORMATION	
Fuel Type:	DIESEL
Engine Manufacturer:	JOHN DEERE
Engine Make:	6068TF250
Engine Model:	2,000
Engine Year	
Engine Family Number:	YJDXL06.8014
Engine Tier (1-4):	
Engine Rating (bhp):	166
Non-Emergency Operations	
- Annual Fuel Usage (gals/year):	86.4
- Max Hourly Fuel Usage (gals/hour):	8
Renewable Diesel Used (yes/no):	no
- Typical Load (%):	100
- Operating Hours (hours/year):	10.8
Emergency Operations	
Annual Fuel Usage (gallons/year)	
Maximum Hourly Fuel Usage (gallons/hour)	
Typical Load (%)	
Operating Hours (hours/year)	
Device Operating Schedule:	
- Daily Operation (hours/day):	0
- Weekly Operation (days/week):	0
- Annual Operation (days/year):	15

PHYSICAL SOURCE INFORMATION	
Height Above Ground (ft):	0
Diameter (ft):	0
Exhaust Gas Temperature (F):	0
Exhaust Gas Flowrate (CFM):	0
Control Device Description	
Control Efficiency (%):	0
STACK (DUCTED EMISSIONS)	
Other Control Type:	
LOCATION	
Longitude (Decimal Degrees)	
Latitude (Decimal Degrees)	
Datum	
Is this location confidential?:	

Non-Default Emission Factors	
Carbon Monoxide (CO)	30.2
Nitrogen Oxides (NOx)	233
Particulate Matter (PM10)	8.63
Total Particulates (TSP)	8.63
Volatile Organic Compounds (VOC)	11.5
Diesel Particulate	8.63

Non-Default Speciations	
Using only default values	



# Electronic Emissions Inventory Submission Report

EIF ID	351
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Site Name	SD State University
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Site Information	
SRID	APCD1976-SITE-00208
Site Address:	5500 Campanile Dr

PERMIT INFORMATION	
Permit Number	APCD2005-PTO-976851
Permit Description:	EMERGENCY STANDBY ENGINE: JOHN DEERE DIESEL ENGINE, MODEL 4045TF150, S/N: TO4045T864018, 100 BHP, EPA TIER 1 CERITIFED OF ENGINE FAMILY NUMBERY JDXL06.8014, EQUIPPED WITH TURBOCHARGER, DRIVING A 75 KW GENERATOR. (976851-CCN-3/02) LOCATED AT PARKING STRUCTURE #6. 17 CCR 93 115 SJE 10/05

DEVICE INFORMATION	
Device:	976851
Device Description:	EMISSION FACTORS USED ARE CO 0.7, PM 0.2, NOX 5.4 G/BHP-HR PER ARB E.O. U-R-4-75. Upper bound of 0.3 g/bhp-hr (THC EF in U-R-4-75) used for ROG EF.

MATERIAL INFORMATION	
Material:	1
EQ Name:	A05-E15

MATERIAL/PROCESS INFORMATION	
Fuel Type:	DIESEL
Engine Manufacturer:	JOHN DEERE
Engine Make:	4045TF150
Engine Model:	2,000
Engine Year	
Engine Family Number:	YJDXL06.8014
Engine Tier (1-4):	
Engine Rating (bhp):	100
Non-Emergency Operations	
- Annual Fuel Usage (gals/year):	32.5
- Max Hourly Fuel Usage (gals/hour):	4.9
Renewable Diesel Used (yes/no):	no
- Typical Load (%):	100
- Operating Hours (hours/year):	6.63
Emergency Operations	
Annual Fuel Usage (gallons/year)	
Maximum Hourly Fuel Usage (gallons/hour)	
Typical Load (%)	
Operating Hours (hours/year)	
Device Operating Schedule:	
- Daily Operation (hours/day):	0
- Weekly Operation (days/week):	0
- Annual Operation (days/year):	13

PHYSICAL SOURCE INFORMATION	
Height Above Ground (ft):	0
Diameter (ft):	0
Exhaust Gas Temperature (F):	0
Exhaust Gas Flowrate (CFM):	0
Control Device Description	
Control Efficiency (%):	0
STACK (DUCTED EMISSIONS)	
Other Control Type:	
LOCATION	
Longitude (Decimal Degrees)	
Latitude (Decimal Degrees)	
Datum	
Is this location confidential?:	

Non-Default Emission Factors	
Carbon Monoxide (CO)	30.2
Nitrogen Oxides (NOx)	233
Particulate Matter (PM10)	8.63
Total Particulates (TSP)	8.63
Volatile Organic Compounds (VOC)	11.5
Diesel Particulate	8.63

Non-Default Speciations	
Using only default values	

# Electronic Emissions Inventory Submission Report

EIF ID	351
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Site Name	SD State University
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Site Information	
SRID	APCD1976-SITE-00208
Site Address:	5500 Campanile Dr

PERMIT INFORMATION	
Permit Number	APCD2005-PTO-977645
Permit Description:	INTERNAL COMBUSTION ENGINE. MAKE: DETROIT DIESEL/MTU. MODEL 12V-2000 G81. SERIAL NO.730919. BHP RATING; 1120 HP. DIESEL FUELED. EQUIPPED WITH A TURBOCHARGER AND AFTERCOOLER. DRIVES AN EMERGENCY ELECTRICAL GENERATOR RATED AT 836 KW. BLACK START ENGINE LOCATED AT PHYSICAL PLANT. 17 CCR 93 115 SJE 10/05

DEVICE INFORMATION	
Device:	977645
Device Description:	EMISSION FACTORS USED ARE NOX 8.9, CO 0.8, PM 0.08, AND VOC 0.3 G/KW-HR PER ARB E.O. U-R-7-63

MATERIAL INFORMATION	
Material:	1
EQ Name:	A05-E10

MATERIAL/PROCESS INFORMATION	
Fuel Type:	DIESEL
Engine Manufacturer:	DETROIT DIESEL
Engine Make:	12V-2000 G81
Engine Model:	2,001
Engine Year	
Engine Family Number:	1DDXL31.8XRE
Engine Tier (1-4):	
Engine Rating (bhp):	1,120
Non-Emergency Operations	
- Annual Fuel Usage (gals/year):	264
- Max Hourly Fuel Usage (gals/hour):	54.7
Renewable Diesel Used (yes/no):	no
- Typical Load (%):	100
- Operating Hours (hours/year):	4.83
Emergency Operations	
Annual Fuel Usage (gallons/year)	109
Maximum Hourly Fuel Usage (gallons/hour)	54.7
Typical Load (%)	
Operating Hours (hours/year)	2
Device Operating Schedule:	
- Daily Operation (hours/day):	0
- Weekly Operation (days/week):	0
- Annual Operation (days/year):	14

PHYSICAL SOURCE INFORMATION	
Height Above Ground (ft):	0
Diameter (ft):	0
Exhaust Gas Temperature (F):	0
Exhaust Gas Flowrate (CFM):	0
Control Device Description	
Control Efficiency (%):	0
STACK (DUCTED EMISSIONS)	
Other Control Type:	
LOCATION	
Longitude (Decimal Degrees)	
Latitude (Decimal Degrees)	
Datum	
Is this location confidential?:	

Non-Default Emission Factors	
Carbon Monoxide (CO)	25.8
Nitrogen Oxides (NOx)	286
Particulate Matter (PM10)	2.57
Total Particulates (TSP)	2.57
Volatile Organic Compounds (VOC)	9.65
Diesel Particulate	2.57

Non-Default Speciations	
Using only default values	

# Electronic Emissions Inventory Submission Report

EIF ID	351
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Site Name	SD State University
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Site Information	
SRID	APCD1976-SITE-00208
Site Address:	5500 Campanile Dr

PERMIT INFORMATION	
Permit Number	APCD2005-PTO-980213
Permit Description:	WOOD, METAL, AND MISCELLANEOUS COATING OPERATION: ONE (1) JBI MODEL IDB108, 12'2"L X 10'4"W X8'2"H, PAINT SPRAY BOOTH, EQUIPPED WITH EXHAUST FAN AND FILTERS, TO APPLY COATINGS. LOCATED AT THE FURNITURE LAB.

DEVICE INFORMATION	
Device:	980213
Device Description:	SAME AS PERMIT DESCRIPTION

MATERIAL INFORMATION	
Material:	1
EQ Name:	F01-P09

MATERIAL/PROCESS INFORMATION	
Note: Report Transfer Efficiency (%) and Fallout Percent (%) using the APCD refe	
Material Name:	MISC PAINT
Manufacturer/Supplier:	VARIOUS
Annual Material Usage (gals/year):	4
Waste Shipped Off Site (gals/year):	0
Maximum Hourly Usage (gals/hour):	1
Density (lbs/gal):	10
VOC Content (lbs/gal):	2.4
Percent Solids [%]	
Application Method:	
Transfer Efficiency (%):	0
Fallout Percent (%):	0
Type of Operation:	
Type of Material:	
Water-based coating (yes/no):	No
Device Operating Schedule:	
- Daily Operation (hours/day):	0
- Weekly Operation (days/week):	0
- Annual Operation (days/year):	8

PHYSICAL SOURCE INFORMATION	
Height Above Ground (ft):	0
Diameter (ft):	0
Exhaust Gas Temperature (F):	0
Exhaust Gas Flowrate (CFM):	0
Control Device Description	
Capture Efficiency (%):	0
Volatile Control Efficiency (%):	0
Non-Volatile Control Efficiency (%):	0
Emission Control Method:	
Volatile Control Efficiency (%):	0
Non-Volatile Control Efficiency (%):	0
Additional Information:	
Capture Efficiency (%):	100
STACK (DUCTED EMISSIONS)	
RELEASE (FUGITIVE EMISSIONS)	
LOCATION	
Longitude (Decimal Degrees)	
Latitude (Decimal Degrees)	
Datum	
Is this location confidential?:	

Non-Default Emission Factors	
Using only default values	

Non-Default Speciations	
Using only default values	

# Electronic Emissions Inventory Submission Report

EIF ID	351
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Site Name	SD State University
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Site Information	
SRID	APCD1976-SITE-00208
Site Address:	5500 Campanile Dr

PERMIT INFORMATION	
Permit Number	APCD2006-PTO-030441
Permit Description:	Gasoline dispensing facility (non-retail): one (1) Healy 900 nozzle with one (1) grade per nozzlePhase II: Healy vacuum assist per ARB EO VR-201-FCAS configuration: vertical position per Figure 2b-2, Exhibit 2 of EO VR-201-FPhase I: two point CNI per ARB EO VR-104-ATank: one (1) 12,000 gallon, gasoline, underground(App# 982802/RKM-10/02-Dec-2005)(App# 986266/SH 12-Jan-2010)

DEVICE INFORMATION	
Device:	30441
Device Description:	SAME AS PERMIT DESCRIPTION

MATERIAL INFORMATION	
Material:	1
EQ Name:	L02-G11

MATERIAL/PROCESS INFORMATION	
Type of Operation (retail/non-retail) :	NON-RETAIL
Annual Gasoline Thru-put (gal/year):	42,824
Max. Gasoline Delivery (gallons):	18,000
Max. Storage Tank Capacity (gallons):	12,000
Underground Storage Tanks (yes/no):	Yes
- Phase I Vapor Recovery (yes/no):	Yes
- Pre-EVR (yes/no)	No
- EVR (yes/no):	No
- Phase II Vapor Recovery (yes/no):	Yes
- Pre-EVR (yes/no)	No
- EVR (yes/no):	No
Aboveground Storage Tanks (yes/no):	No
- CARB Protected Tank (yes/no):	No
- Phase I Vapor Recovery (yes/no):	No
- Pre-EVR (yes/no):	No
- EVR (yes/no):	No
- Phase II Vapor Recovery (yes/no):	No
- Pre-EVR (yes/no):	No
- EVR (yes/no):	No
Device Operating Schedule:	
- Daily Operation (hours/day):	24
- Weekly Operation (days/week):	7
- Annual Operation (days/year):	365

PHYSICAL SOURCE INFORMATION	
STACK (DUCTED EMISSIONS)	
Height Above Ground (ft):	0
Diameter (ft):	0
Exhaust Gas Temperature (F):	0
Exhaust Gas Flowrate (CFM):	0
LOCATION	
Longitude (Decimal Degrees)	
Latitude (Decimal Degrees)	
Datum	
Is this location confidential?:	

Non-Default Emission Factors	
Using only default values	

Non-Default Speciations	
Using only default values	

# Electronic Emissions Inventory Submission Report

EIF ID	351
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Site Name	SD State University
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Site Information	
SRID	APCD1976-SITE-00208
Site Address:	5500 Campanile Dr

PERMIT INFORMATION	
Permit Number	APCD2006-PTO-984091
Permit Description:	EMERGENCY STANDBY DIESEL ENGINE: DETROIT DIESEL SERIES 60-6063HV35, S/N: 06R0911198, 490 BHP, TURBOCHARGED, AFTERCOOLED, EPA TIER 3 CERTIFIED OF ENGINE FAMILY #5DDXL14.0VLD, CARB #U-R007-0103, DRIVING A 300 KW KOHLER GENERATOR. 984091-SJE-07/2006. LOCATED AT PUBLIC SAFETY.

DEVICE INFORMATION	
Device:	984091
Device Description:	EMISSIONS FACTORS USED ARE NMHC+NOX 3.9, CO 1.2, PM 0.18 G/KW-HR PER ARB E.O. U-R-007-0103

MATERIAL INFORMATION	
Material:	1
EQ Name:	A05-E15

MATERIAL/PROCESS INFORMATION	
Fuel Type:	DIESEL
Engine Manufacturer:	DETROIT DIESEL
Engine Make:	60-6063HV35
Engine Model:	2,005
Engine Year	
Engine Family Number:	5DDXL14.0VLD
Engine Tier (1-4):	
Engine Rating (bhp):	490
Non-Emergency Operations	
- Annual Fuel Usage (gals/year):	161
- Max Hourly Fuel Usage (gals/hour):	22.6
Renewable Diesel Used (yes/no):	no
- Typical Load (%):	100
- Operating Hours (hours/year):	7.12
Emergency Operations	
Annual Fuel Usage (gallons/year)	46.9
Maximum Hourly Fuel Usage (gallons/hour)	22.6
Typical Load (%)	
Operating Hours (hours/year)	2.07
Device Operating Schedule:	
- Daily Operation (hours/day):	0
- Weekly Operation (days/week):	0
- Annual Operation (days/year):	14

PHYSICAL SOURCE INFORMATION	
Height Above Ground (ft):	0
Diameter (ft):	0
Exhaust Gas Temperature (F):	0
Exhaust Gas Flowrate (CFM):	0
Control Device Description	
Control Efficiency (%):	0
STACK (DUCTED EMISSIONS)	
Other Control Type:	
LOCATION	
Longitude (Decimal Degrees)	
Latitude (Decimal Degrees)	
Datum	
Is this location confidential?:	

Non-Default Emission Factors	
Carbon Monoxide (CO)	38.6
Nitrogen Oxides (NOx)	119
Particulate Matter (PM10)	5.79
Total Particulates (TSP)	5.79
Volatile Organic Compounds (VOC)	6.28
Diesel Particulate	5.79

Non-Default Speciations	
Using only default values	

# Electronic Emissions Inventory Submission Report

EIF ID	351
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Site Name	SD State University
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Site Information	
SRID	APCD1976-SITE-00208
Site Address:	5500 Campanile Dr

PERMIT INFORMATION	
Permit Number	APCD2007-PTO-983770
Permit Description:	EMERGENCY STANDBY ENGINE: 415 BHP DETROIT DIESEL MODEL SERIES 60 /6063-MK35 DIESEL FIRED ENGINE WITH AFTERCOOLING, TURBOCHARGING, CARB # U-R-007-0086; EPA # DDX-NR7-04-02, DRIVING A 265 KW GENERATOR, S/N: 2055095983770 EAD 3/19/07. LOCATED AT STUDENT HEALTH SERVICES.

DEVICE INFORMATION	
Device:	983770
Device Description:	EMISSION FACTORS USED ARE NMHC+NOX 5.8, CO 0.8, PM 0.18 G/KW-HR PER ARB E.O. U-R-007-0086.

MATERIAL INFORMATION	
Material:	1
EQ Name:	A05-E15

MATERIAL/PROCESS INFORMATION	
Fuel Type:	DIESEL
Engine Manufacturer:	DETROIT DIESEL
Engine Make:	60/6063-MK35
Engine Model:	2,004
Engine Year	
Engine Family Number:	4DDXL12.7VGD
Engine Tier (1-4):	
Engine Rating (bhp):	415
Non-Emergency Operations	
- Annual Fuel Usage (gals/year):	88.7
- Max Hourly Fuel Usage (gals/hour):	10.9
Renewable Diesel Used (yes/no):	no
- Typical Load (%):	50
- Operating Hours (hours/year):	8.13
Emergency Operations	
Annual Fuel Usage (gallons/year)	29.1
Maximum Hourly Fuel Usage (gallons/hour)	10.9
Typical Load (%)	
Operating Hours (hours/year)	2.67
Device Operating Schedule:	
- Daily Operation (hours/day):	0
- Weekly Operation (days/week):	0
- Annual Operation (days/year):	14

PHYSICAL SOURCE INFORMATION	
Height Above Ground (ft):	0
Diameter (ft):	0
Exhaust Gas Temperature (F):	0
Exhaust Gas Flowrate (CFM):	0
Control Device Description	
Control Efficiency (%):	0
STACK (DUCTED EMISSIONS)	
Other Control Type:	
LOCATION	
Longitude (Decimal Degrees)	
Latitude (Decimal Degrees)	
Datum	
Is this location confidential?:	

Non-Default Emission Factors	
Carbon Monoxide (CO)	25.8
Nitrogen Oxides (NOx)	177
Particulate Matter (PM10)	5.79
Total Particulates (TSP)	5.79
Volatile Organic Compounds (VOC)	9.33
Diesel Particulate	5.79

Non-Default Speciations	
Using only default values	

# Electronic Emissions Inventory Submission Report

EIF ID	351
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Site Name	SD State University
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Site Information	
SRID	APCD1976-SITE-00208
Site Address:	5500 Campanile Dr

PERMIT INFORMATION	
Permit Number	APCD2015-PTO-002259
Permit Description:	Abrasive Blast Cabinet: Clemco Industries Corp., Model BNP 220P 900R&DF, S/N Z56853, equipped with a dust collector; and a Clemco Blast Machine, Model 1642, S/N C13140.

DEVICE INFORMATION	
Device:	225900
Device Description:	Same as permit description

MATERIAL INFORMATION	
Material:	1
EQ Name:	D01-A10

MATERIAL/PROCESS INFORMATION	
Material Name:	999
Other:	50lbs
Annual Material Usage (tons/year):	0
Max. Hourly Blast Rate (tons/hour):	0
Avg. Hourly Blast Rate (tons/hour):	0
Equipped With:	
- Recycle System (yes/no):	No
- Other Controls (please describe):	
Blasted Parts Coated With:	
- Chromium Compounds (yes/no):	No
- Copper Compounds (yes/no):	No
- Lead Compounds (yes/no):	No
- Nickel Compounds (yes/no):	No
Device Operating Schedule:	
- Daily Operation (hours/day):	0
- Weekly Operation (days/week):	0
- Annual Operation (days/year):	0

PHYSICAL SOURCE INFORMATION	
Height Above Ground (ft):	
Diameter (ft):	
Exhaust Gas Temperature (F):	
Exhaust Gas Flowrate (CFM):	
Control Device Description	
Capture Efficiency (%):	100
Solids Control Efficiency (%):	0
Emission Control Method:	
Solids Control Efficiency (%):	0
Additional Information:	
Capture Efficiency (%):	0
STACK (DUCTED EMISSIONS)	
RELEASE (FUGITIVE EMISSIONS)	
LOCATION	
Longitude (Decimal Degrees)	
Latitude (Decimal Degrees)	
Datum	
Is this location confidential?:	

Non-Default Emission Factors	
Using only default values	

Non-Default Speciations	
Using only default values	

# Electronic Emissions Inventory Submission Report

EIF ID	351
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Site Name	SD State University
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Site Information	
SRID	APCD1976-SITE-00208
Site Address:	5500 Campanile Dr

PERMIT INFORMATION	
Permit Number	APCD2016-PTO-002751
Permit Description:	Emergency standby engine: John Deere diesel engine, Model 6135HFG75, S/N RG6135G006769, rated at 755 bhp, Model Year 2015, Tier 2 certified of Engine Family Number FJDXL13.5132, driving a 500 KW generator.

DEVICE INFORMATION	
Device:	2751
Device Description:	Same as Permit Description
EPA certified emission factors: PM, 0.05 g/bhp-hr; CO, 0.4 g/bhp-hr; NOx, 4.17 g/bhp-hr; NMHC, 0.089 g/bhp-hr.	

MATERIAL INFORMATION	
Material:	1
EQ Name:	A05-E10

MATERIAL/PROCESS INFORMATION	
Fuel Type:	Diesel
Engine Manufacturer:	John Deere
Engine Make:	6135HFG75
Engine Model:	2,015
Engine Year	
Engine Family Number:	FJDXL13.5132
Engine Tier (1-4):	
Engine Rating (bhp):	755
Non-Emergency Operations	
- Annual Fuel Usage (gals/year):	252
- Max Hourly Fuel Usage (gals/hour):	39
Renewable Diesel Used (yes/no):	no
- Typical Load (%):	100
- Operating Hours (hours/year):	6.47
Emergency Operations	
Annual Fuel Usage (gallons/year)	95.6
Maximum Hourly Fuel Usage (gallons/hour)	39
Typical Load (%)	
Operating Hours (hours/year)	2.45
Device Operating Schedule:	
- Daily Operation (hours/day):	0
- Weekly Operation (days/week):	0
- Annual Operation (days/year):	13

PHYSICAL SOURCE INFORMATION	
Height Above Ground (ft):	
Diameter (ft):	
Exhaust Gas Temperature (F):	
Exhaust Gas Flowrate (CFM):	
Control Device Description	
Control Efficiency (%):	0
STACK (DUCTED EMISSIONS)	
Other Control Type:	
LOCATION	
Longitude (Decimal Degrees)	
Latitude (Decimal Degrees)	
Datum	
Is this location confidential?:	

Non-Default Emission Factors	
Carbon Monoxide (CO)	17.3
Nitrogen Oxides (NOx)	180
Particulate Matter (PM10)	2.16
Total Particulates (TSP)	2.16
Volatile Organic Compounds (VOC)	3.84
Diesel Particulate	2.16

Non-Default Speciations	
Using only default values	



# Electronic Emissions Inventory Submission Report

EIF ID	351
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Site Name	SD State University
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Site Information	
SRID	APCD1976-SITE-00208
Site Address:	5500 Campanile Dr

PERMIT INFORMATION	
Permit Number	APCD2018-PTO-003037
Permit Description:	Emergency Diesel Engine Generator: John Deere Model 6135HFG75, S/N RG6135G008326; Engine FamilyGJDXL13.5132; tier 2 certified; 755 bhp rated; turbocharged with air cooler; driving an emergency electrical generator

DEVICE INFORMATION	
Device:	3037
Device Description:	SAME AS PERMIT DESCRIPTION  EPA certified emission factors: PM, 0.05 g/bhp-hr; CO, 0.4 g/bhp-hr; NOx, 4.17 g/bhp-hr; NMHC, 0.089 g/bhp-hr.

MATERIAL INFORMATION	
Material:	1
EQ Name:	A05-E10

MATERIAL/PROCESS INFORMATION	
Fuel Type:	Diesel
Engine Manufacturer:	John Deere
Engine Make:	613HFG75
Engine Model:	2,016
Engine Year	
Engine Family Number:	GJDXL13.5132
Engine Tier (1-4):	
Engine Rating (bhp):	755
Non-Emergency Operations	
- Annual Fuel Usage (gals/year):	312
- Max Hourly Fuel Usage (gals/hour):	39
Renewable Diesel Used (yes/no):	no
- Typical Load (%):	100
- Operating Hours (hours/year):	8
Emergency Operations	
Annual Fuel Usage (gallons/year)	
Maximum Hourly Fuel Usage (gallons/hour)	
Typical Load (%)	
Operating Hours (hours/year)	
Device Operating Schedule:	
- Daily Operation (hours/day):	0
- Weekly Operation (days/week):	0
- Annual Operation (days/year):	12

PHYSICAL SOURCE INFORMATION	
Height Above Ground (ft):	
Diameter (ft):	
Exhaust Gas Temperature (F):	
Exhaust Gas Flowrate (CFM):	
Control Device Description	
Control Efficiency (%):	0
STACK (DUCTED EMISSIONS)	
Other Control Type:	
LOCATION	
Longitude (Decimal Degrees)	
Latitude (Decimal Degrees)	
Datum	
Is this location confidential?:	

Non-Default Emission Factors	
Carbon Monoxide (CO)	17.3
Nitrogen Oxides (NOx)	180
Particulate Matter (PM10)	2.16
Total Particulates (TSP)	2.16
Volatile Organic Compounds (VOC)	3.84
Diesel Particulate	2.16

Non-Default Speciations	
Using only default values	

# Electronic Emissions Inventory Submission Report

EIF ID	351
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Site Name	SD State University
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Site Information	
SRID	APCD1976-SITE-00208
Site Address:	5500 Campanile Dr

PERMIT INFORMATION	
Permit Number	APCD2019-PTO-003308
Permit Description:	Emergency Diesel Engine Generator: John Deere, Model 6135HFG84, S/N RG6135L035279; Model Year 2018; Engine Family JJDXL13.5146; Tier 3 certified; 538 bhp rated; equipped with a Miratech LTRV9-06-HSG-0 DPF; driving a 360 kW emergency electrical generator.

DEVICE INFORMATION	
Device:	3308
Device Description:	Same as permit description  EMISSION FACTORS USED ARE NOX 2.69, NMHC 0.13, CO 1.12, PM 0.01 G/HP-HR PER ENG EVAL CALCULATIONS

MATERIAL INFORMATION	
Material:	1
EQ Name:	A05-E15

MATERIAL/PROCESS INFORMATION	
Fuel Type:	Diesel
Engine Manufacturer:	John Deere
Engine Make:	6135HFG84
Engine Model:	2,018
Engine Year	
Engine Family Number:	JJDXL13.5146
Engine Tier (1-4):	
Engine Rating (bhp):	538
Non-Emergency Operations	
- Annual Fuel Usage (gals/year):	88
- Max Hourly Fuel Usage (gals/hour):	26.5
Renewable Diesel Used (yes/no):	no
- Typical Load (%):	100
- Operating Hours (hours/year):	3.32
Emergency Operations	
Annual Fuel Usage (gallons/year)	102
Maximum Hourly Fuel Usage (gallons/hour)	26.5
Typical Load (%)	
Operating Hours (hours/year)	3.83
Device Operating Schedule:	
- Daily Operation (hours/day):	0
- Weekly Operation (days/week):	0
- Annual Operation (days/year):	15

PHYSICAL SOURCE INFORMATION	
Height Above Ground (ft):	
Diameter (ft):	
Exhaust Gas Temperature (F):	
Exhaust Gas Flowrate (CFM):	
Control Device Description	DPM EF built in with 85% control from DPF
Control Efficiency (%):	0
STACK (DUCTED EMISSIONS)	
Other Control Type:	
LOCATION	
Longitude (Decimal Degrees)	
Latitude (Decimal Degrees)	
Datum	
Is this location confidential?:	

Non-Default Emission Factors	
Carbon Monoxide (CO)	48.3
Nitrogen Oxides (NOx)	116
Particulate Matter (PM10)	0.43
Total Particulates (TSP)	0.43
Volatile Organic Compounds (VOC)	5.61
Diesel Particulate	0.43

Non-Default Speciations	
Using only default values	



EIF ID	351
SRID	APCD2013-SITE-01322
Facility	SD State University
Reporting Year	2021
Generated	2023-07-20

# Electronic Emissions Inventory Submission Report

EIF ID	351
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Site Name	SD State University
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Site Information	
SRID	APCD2013-SITE-01322
Site Address:	5200 Campanile Dr

PERMIT INFORMATION	
Permit Number	APCD2013-PTO-001693
Permit Description:	Emergency standby engine: John Deere diesel engine, Model 6135HF485T (S/N: RG6135L027650), rated at 538 BHP, Model Year 2012 EPA Tier 3 certified Engine Family Number CJDXL13.5103, driving a 350 KW generator. Equipped with turbocharger and aftercooler.

DEVICE INFORMATION	
Device:	1693
Device Description:	Same as permit description  EPA certified emission factors: PM, 0.1 g/kW-hr; CO, 0.6 g/kW-hr; NOx, 3.31 g/kW-hr; NMHC, 0.11 g/kW-hr

MATERIAL INFORMATION	
Material:	1
EQ Name:	A05-E15

MATERIAL/PROCESS INFORMATION	
Fuel Type:	Diesel
Engine Manufacturer:	John Deere
Engine Make:	6125HF485T
Engine Model:	2,012
Engine Year	
Engine Family Number:	CJDXL13.5103
Engine Tier (1-4):	3
Engine Rating (bhp):	538
Non-Emergency Operations	
- Annual Fuel Usage (gals/year):	251
- Max Hourly Fuel Usage (gals/hour):	27.5
Renewable Diesel Used (yes/no):	no
- Typical Load (%):	
- Operating Hours (hours/year):	9.13
Emergency Operations	
Annual Fuel Usage (gallons/year)	
Maximum Hourly Fuel Usage (gallons/hour)	
Typical Load (%)	
Operating Hours (hours/year)	3.67
Device Operating Schedule:	
- Daily Operation (hours/day):	0
- Weekly Operation (days/week):	0
- Annual Operation (days/year):	15

PHYSICAL SOURCE INFORMATION	
Height Above Ground (ft):	
Diameter (ft):	
Exhaust Gas Temperature (F):	
Exhaust Gas Flowrate (CFM):	
Control Device Description	
Control Efficiency (%):	
STACK (DUCTED EMISSIONS)	
Other Control Type:	
LOCATION	
Longitude (Decimal Degrees)	
Latitude (Decimal Degrees)	
Datum	
Is this location confidential?:	

Non-Default Emission Factors	
Carbon Monoxide (CO)	19.3
Nitrogen Oxides (NOx)	107
Particulate Matter (PM10)	3.22
Total Particulates (TSP)	3.22
Volatile Organic Compounds (VOC)	3.54
Diesel Particulate	3.22

Non-Default Speciations	
Using only default values	



EIF ID	351
SRID	APCD2014-SITE-01778
Facility	SD State University
Reporting Year	2021
Generated	2023-07-20

# Electronic Emissions Inventory Submission Report

EIF ID	351
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Site Name	SD State University
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Site Information	
SRID	APCD2014-SITE-01778
Site Address:	6124 Montezuma Road

PERMIT INFORMATION	
Permit Number	APCD2015-PTO-002369
Permit Description:	Emergency standby engine: Cummins diesel engine, Model QSB7-G5 NR3 (S/N: 73773495), rated at 324 BHP, Model Year 2014, EPA Tier 3 certified Engine Family Number ECEXL0409AAD, driving a 325 KW generator. Equipped with turbocharger and aftercooler.

DEVICE INFORMATION	
Device:	2369
Device Description:	Same as permit description  EMISSION FACTORS USED ARE NOX+HC 2.7, CO 0.70, PM 0.07 G/HP-HR PER ENG EVAL CALCS

MATERIAL INFORMATION	
Material:	1
EQ Name:	A05-E15

MATERIAL/PROCESS INFORMATION	
Fuel Type:	Diesel
Engine Manufacturer:	Cummins
Engine Make:	QSB7-G5
Engine Model:	2,014
Engine Year	
Engine Family Number:	ECEXL0409AAD
Engine Tier (1-4):	
Engine Rating (bhp):	324
Non-Emergency Operations	
- Annual Fuel Usage (gals/year):	204
- Max Hourly Fuel Usage (gals/hour):	28
Renewable Diesel Used (yes/no):	no
- Typical Load (%):	
- Operating Hours (hours/year):	7.3
Emergency Operations	
Annual Fuel Usage (gallons/year)	
Maximum Hourly Fuel Usage (gallons/hour)	
Typical Load (%)	
Operating Hours (hours/year)	
Device Operating Schedule:	
- Daily Operation (hours/day):	0
- Weekly Operation (days/week):	0
- Annual Operation (days/year):	14

PHYSICAL SOURCE INFORMATION	
Height Above Ground (ft):	
Diameter (ft):	
Exhaust Gas Temperature (F):	
Exhaust Gas Flowrate (CFM):	
Control Device Description	
Control Efficiency (%):	
STACK (DUCTED EMISSIONS)	
Other Control Type:	
LOCATION	
Longitude (Decimal Degrees)	
Latitude (Decimal Degrees)	
Datum	
Is this location confidential?:	

Non-Default Emission Factors	
Carbon Monoxide (CO)	30.2
Nitrogen Oxides (NOx)	111
Particulate Matter (PM10)	3.02
Total Particulates (TSP)	3.02
Volatile Organic Compounds (VOC)	5.83
Diesel Particulate	3.02

Non-Default Speciations	
Using only default values	



# HHRP Specific Distance

**Inventory:** 2021 - 2021 Inventory Production

**EIF ID:** 351

**Facility Name:** SD State University

Site Record ID:	Device ID	Air Permit Number	Resident Distance (m)	Occupational Distance (m)	Acute Distance (m)
APCD2013-SITE-01322	1693	APCD2013-PTO-001693	161	208	105
APCD1976-SITE-00208	1803	APCD2000-PTO-001803	50	50	50
APCD1976-SITE-00208	20000	0	50	50	50
APCD1976-SITE-00208	225900	APCD2015-PTO-002259	350	479	350
APCD2014-SITE-01778	2369	APCD2015-PTO-002369	50	50	50
APCD1976-SITE-00208	2751	APCD2016-PTO-002751	214	161	106
APCD1976-SITE-00208	3000	1	50	50	50
APCD1976-SITE-00208	3037	APCD2018-PTO-003037	384	560	267
APCD1976-SITE-00208	30441	APCD2006-PTO-030441	50	50	50
APCD1976-SITE-00208	3308	APCD2019-PTO-003308	138	247	138
APCD1976-SITE-00208	539801	APCD2003-PTO-975398	262	360	262
APCD1976-SITE-00208	539802	APCD2003-PTO-975398	276	374	276
APCD1976-SITE-00208	539901	APCD2003-PTO-975399	262	360	262
APCD1976-SITE-00208	539902	APCD2003-PTO-975399	276	374	276



# HHRP Specific Distance

## Inventory: 2021 - 2021 Inventory Production

APCD1976-SITE-00208	841	APCD2004-PTO-000841	286	383	286
APCD1976-SITE-00208	900967	APCD2000-PTO-900967	50	50	50
APCD1976-SITE-00208	900969	APCD2000-PTO-900969	50	50	50
APCD1976-SITE-00208	920191	APCD2004-PTO-920191	286	383	286
APCD1976-SITE-00208	951138	APCD2005-PTO-951138	412	360	360
APCD1976-SITE-00208	961607	APCD2000-PTO-961607	414	422	219
APCD1976-SITE-00208	961608	APCD2000-PTO-961608	308	422	308
APCD1976-SITE-00208	961940	APCD2005-PTO-961940	363	461	348
APCD1976-SITE-00208	970555	APCD2005-PTO-970555	417	541	335
APCD1976-SITE-00208	971088	APCD2005-PTO-971088	216	424	216
APCD1976-SITE-00208	971090	APCD2005-PTO-971090	210	213	134
APCD1976-SITE-00208	971091	APCD2005-PTO-971091	129	238	129
APCD1976-SITE-00208	971093	APCD2005-PTO-971093	135	142	107
APCD1976-SITE-00208	971094	APCD2005-PTO-971094	490	427	158
APCD1976-SITE-00208	971095	APCD2005-PTO-971095	262	281	143
APCD1976-SITE-00208	973015	APCD2001-PTO-973015	50	50	50





# HHRP Specific Distance

## Inventory: 2021 - 2021 Inventory Production

APCD1976-SITE-00208	974529	APCD2005-PTO-974529	247	84.3	84.3
APCD1976-SITE-00208	975254	APCD2005-PTO-975254	236	317	149
APCD1976-SITE-00208	976684	APCD2005-PTO-976684	251	248	132
APCD1976-SITE-00208	976851	APCD2005-PTO-976851	131	141	131
APCD1976-SITE-00208	977230	APCD2002-PTO-977230	50	50	50
APCD1976-SITE-00208	977645	APCD2005-PTO-977645	246	345	246
APCD1976-SITE-00208	980213	APCD2005-PTO-980213	50	50	50
APCD1976-SITE-00208	983770	APCD2007-PTO-983770	268	304	106
APCD1976-SITE-00208	984091	APCD2006-PTO-984091	303	231	231
APCD1976-SITE-00208	987762	0	50	50	50