Draft Environmental Impact Report

City of Glendale Biogas Renewable Generation Project

July 1, 2020

Lead Agency:
City of Glendale Community Development Department
Planning Division
633 E. Broadway, Room 103
Glendale, California 91206

Proponent:
City of Glendale
141 North Glendale Avenue
Glendale, California 91206

Consultant:
Stantec Consulting Services Inc.
290 Conejo Ridge Avenue
Thousand Oaks, California 91361

This page has been intentionally left blank.

Table of Contents

ABBREVIATIONS I

1.0 INTRODUCTION 1.1
1.1 PURPOSE OF THE DRAFT ENVIRONMENTAL IMPACT REPORT 1.1
1.2 ENVIRONMENTAL IMPACT REPORT SCOPING PROCESS 1.2
1.2.1 Notification 1.2
1.2.2 Notice of Preparation 1.2
1.2.3 Baseline Environmental Conditions 1.2
1.2.4 Scoping Meetings 1.3
1.2.5 2019 California Environmental Quality Act Updates 1.4
1.2.6 Initial Study 1.5
1.2.7 Effects Found Not to be Significant 1.5
1.3 FORMAT OF THE DRAFT ENVIRONMENTAL IMPACT REPORT 1.6
1.4 AGENCIES INVOLVED AND PERMIT, CONSULTATION, AND ENVIRONMENTAL REVIEW REQUIREMENTS 1.8
1.5 EIR REVIEW PROCESS 1.10

2.0 PROJECT DESCRIPTION 2.1
2.1 PROJECT OBJECTIVES 2.4
2.2 PROJECT LOCATION AND SURROUNDING USES 2.4
2.3 DESCRIPTION OF THE PROPOSED PROJECT 2.4
2.3.1 Power Generation Facility 2.5
2.3.2 Natural Gas and Water Pipelines 2.7
2.3.3 Existing Pipeline Decommissioning 2.8
2.4 PROJECT OPERATIONS 2.17
2.5 PROJECT CONSTRUCTION SCHEDULE 2.17
2.5.1 Phase I – Demolition and Removal of Existing Equipment 2.17
2.5.2 Phase II – Site Grading and Construction 2.21
2.5.3 Phase III – System Startup 2.21

3.0 GENERAL DESCRIPTION OF ENVIRONMENTAL SETTING 3.1
3.1 OVERVIEW OF ENVIRONMENTAL SETTING 3.1
3.1.1 On-Site Conditions 3.1
3.1.2 Surrounding Uses 3.2
3.1.3 Existing Conditions 3.2
3.2 RELATED PROJECTS AND CUMULATIVE IMPACTS 3.2

4.0 ENVIRONMENTAL IMPACT ANALYSIS 4.7
4.1 AESTHETICS 4.7
4.1.1 Environmental Setting 4.7
4.1.2 Laws, Ordinances, Regulations and Standards 4.10
4.1.3 Methodology and Thresholds of Significance 4.13
4.1.4 Project Impacts 4.25
4.1.5 Cumulative Impacts 4.38

4.2 AIR QUALITY 4.39
4.2.1 Environmental Setting 4.41
4.2.2 Laws, Ordinances, Regulations, and Standards 4.47
4.2.3 Methodology and Threshold of Significance 4.53
4.2.4 Project Impacts 4.56
4.2.5 Cumulative Impacts 4.103
4.3 BIOLOGICAL RESOURCES 4.105
4.3.1 Environmental Setting 4.106
4.3.2 Laws, Ordinances, Regulations, and Standards 4.140
4.3.3 Methodology and Thresholds of Significance 4.147
4.3.4 Project Impacts 4.148
4.3.5 Cumulative Impacts 4.161
4.4 ENERGY 4.163
4.4.1 Environmental Setting 4.164
4.4.2 Laws, Ordinances, Regulations and Standards 4.166
4.4.3 Methodology and Thresholds of Significance 4.172
4.4.4 Project Impacts 4.173
4.4.5 Cumulative Impacts 4.175
4.5 GEOLOGY AND SOILS 4.177
4.5.1 Environmental Setting 4.178
4.5.2 Laws, Ordinances, Regulations and Standards 4.180
4.5.3 Methodology and Thresholds of Significance 4.184
4.5.4 Project Impacts 4.185
4.5.5 Cumulative Impacts 4.192
4.6 GREENHOUSE GAS EMISSIONS 4.193
4.6.1 Environmental Setting 4.194
4.6.2 Laws, Ordinances, Regulations and Standards 4.195
4.6.3 Methodology and Thresholds of Significance 4.198
4.6.4 Project Impacts 4.199
4.6.5 Cumulative Impacts 4.200
4.7 HAZARDS AND HAZARDOUS MATERIALS 4.201
4.7.1 Environmental Setting 4.202
4.7.2 Laws, Ordinances, Regulations and Standards 4.204
4.7.3 Methodology and Thresholds of Significance 4.207
4.7.4 Project Impacts 4.208
4.7.5 Cumulative Impacts 4.216
4.8 HYDROLOGY AND WATER QUALITY 4.217
4.8.1 Environmental Setting 4.218
4.8.2 Laws, Ordinances, Regulations and Standards 4.219
4.8.3 Methodology and Thresholds of Significance 4.223
4.8.4 Project Impacts 4.224
4.8.5 Cumulative Impacts 4.228
4.9 LAND USE AND PLANNING 4.229
4.9.1 Environmental Setting 4.229
4.9.2 Laws, Ordinances, Regulations and Standards 4.231
4.9.3 Methodology and Thresholds of Significance 4.237
4.9.4 Project Impacts 4.237

4.9.5 Cumulative Impacts....4.238
4.10 NOISE....4.239
4.10.1 Environmental Setting....4.240
4.10.2 Laws, Ordinances, Regulations and Standards....4.249
4.10.3 Methodology and Thresholds of Significance....4.250
4.10.4 Project Impacts....4.254
4.10.5 Cumulative Impacts....4.257
4.11 TRANSPORTATION....4.259
4.11.1 Environmental Setting....4.260
4.11.2 Laws, Ordinances, Regulations and Standards....4.261
4.11.3 Methodology and Thresholds of Significance....4.263
4.11.4 Project Impacts....4.266
4.11.5 Cumulative Impacts....4.268
4.12 TRIBAL CULTURAL RESOURCES....4.269
4.12.1 Environmental Setting....4.269
4.12.2 Laws, Ordinances, Regulations and Standards....4.271
4.12.3 Methodology and Thresholds of Significance....4.272
4.12.4 Project Impacts....4.273
4.12.5 Cumulative Impacts....4.274
4.13 UTILITIES AND SERVICE SYSTEMS....4.275
4.13.1 Environmental Setting....4.275
4.13.2 Laws, Ordinances, Regulations and Standards....4.276
4.13.3 Methodology and Thresholds of Significance....4.278
4.13.4 Project Impacts....4.279
4.13.5 Cumulative Impacts....4.279
4.14 WILDFIRE....4.281
4.14.1 Environmental Setting....4.282
4.14.2 Laws, Ordinances, Regulations and Standards....4.288
4.14.3 Methodology and Thresholds of Significance....4.291
4.14.4 Project Impacts....4.292
4.14.5 Cumulative Impacts....4.300

5.0 ALTERNATIVES....5.1
5.1 INTRODUCTION....5.2
5.2 PRELIMINARY ALTERNATIVES SCREENING EVALUATION....5.0
5.3 ALTERNATIVES SELECTED FOR ANALYSIS....5.0
5.4 ALTERNATIVES CONSIDERED AND NOT SELECTED FOR FURTHER ANALYSIS....5.1
5.4.1 Generate Electricity in Microturbines....5.1
5.4.2 Generate Electricity in Combustion Turbines....5.2
5.4.3 Reduce Number of Internal Combustion Engines from Four to Three....5.2
5.4.4 Generate Electricity with Fuel Cells....5.3
5.4.5 Convert LFG to Compressed Natural Gas....5.4
5.5 ANALYSIS FORMAT....5.6
5.6 ALTERNATIVES ANALYSIS....5.7
5.6.1 Alternative 1: No Project....5.7
5.6.2 Alternative 2: Convert Landfill Gas to Natural Gas....5.9

5.6.3 Alternative 3: Convert Landfill Gas to Liquid Natural Gas 5.11
5.6.4 Alternative 4: Locate Engine Generators at Another Location 5.14
5.6.5 Comparison of Alternatives 5.16
5.6.6 Identification of the Environmentally Superior Alternative 5.18

6.0 OTHER CEQA CONSIDERATIONS 6.1
6.1 SIGNIFICANT AND UNAVOIDABLE IMPACTS 6.1
6.2 SIGNIFICANT IRREVERSIBLE ENVIRONMENTAL CHANGES 6.1
6.2.1 Irreversible Commitment of Resources 6.1
6.2.2 Irreversible Environmental Changes 6.1
6.2.3 Potential Environmental Damage from Accidents 6.1
6.3 GROWTH INDUCING IMPACTS 6.2
6.3.1 Removal of an Impediment to Growth 6.2
6.3.2 Economic Growth 6.3
6.3.3 Precedent-Setting Actions 6.3
6.3.4 Development on Isolated or Adjacent Area of Open Space 6.3
6.4 EFFECTS FOUND NOT TO BE SIGNIFICANT 6.4

7.0 REFERENCES 7.1

8.0 LIST OF EIR PREPARERS AND ORGANIZATIONS AND PERSONS CONTACTED 8.1
8.1 CITIES 8.1
8.1.1 City of Glendale 8.1
8.1.2 City of Burbank 8.1
8.1.3 City of Los Angeles 8.1
8.1.4 City of Pasadena 8.2
8.1.5 City of La Canada-Flintridge 8.2
8.2 COUNTIES 8.2
8.2.1 Los Angeles County Department of Public Works 8.2
8.2.2 Los Angeles County Department of Regional Planning 8.2
8.3 EIR PREPARATION 8.2
8.3.1 Stantec Consulting Services Inc. 8.2
8.3.2 Montrose Air Quality Services 8.3

LIST OF TABLES

Table 1 Project Temporary and Permanent Site Modification 2.5
Table 2 Ambient Air Quality Standards 4.42
Table 3 State and Federal Air Quality Designations for South Coast Air Basin 4.43
Table 4 Background Pollutant Concentrations and Exceedances of State/Federal AAQS 4.46
Table 5 Title 40 CFR Part 60 Applicable Emission Standards and Complementing SCAQMD Regulation 4.48
Table 6 BACT Determinations for Landfill Gas Combustion Equipment 4.52
Table 7 SCAQMD Air Quality Significance Thresholds 4.55
Table 8 SCAQMD Localized Air Quality Significance Thresholds at SRA8 ..... 4.56
Table 9 CalEEMod Input Parameters 4.57

Table 10 Overall Air Quality Impact Due to the Construction of the proposed Project....4.59
Table 11 Criteria Pollutant Emission Summary – Facility Occupancy....4.60
Table 12 Overall Air Quality Impact of the proposed Project in the Operational Phase....4.63
Table 13 Comparison of Overall Operation Emissions with Significance Thresholds....4.63
Table 14 American Meteorological Society/Environmental Protection Agency Regulatory Model (AERMOD) Input Parameters....4.63
Table 15 AERMOD Model Output....4.64
Table 16 Localized Significance Threshold Construction Analysis....4.95
Table 17 Localized Significance Threshold Operation Analysis....4.95
Table 18 AERMOD Model Output....4.96
Table 19 TAC Emission Summary – Project....4.99
Table 20 Maximum MICR Values....4.101
Table 21 Overall HI Values....4.102
Table 22 Project Temporary and Permanent Site Modification....4.112
Table 23 Known and Potential Occurrences of Special-Status Plant Taxa within the BSA....4.120
Table 24 Known and Potential Occurrence of Special-Status Wildlife within the BSA....4.132
Table 25 Proposed Project Impacts to Vegetation Communities and Land Cover Types....4.157
Table 26 Distance of Faults to Project Site and Maximum Magnitudes....4.179
Table 27 Site Soils....4.180
Table 28 Baseline GHG Emission Rates....4.195
Table 29 Net Increase of GHG Emissions from the Construction Activities....4.199
Table 30 Net Increase of GHG Emissions from the Operation Activities....4.199
Table 31 Project Area Parcel Acreage, Zoning and Land Use Designation....4.230
Table 32 Project Area Zoning, Land Use Designation and Permit Requirements....4.233
Table 33 Definitions of Acoustical Terms....4.242
Table 34 Typical Sound Levels Measure in the Environment....4.243
Table 35 Sensitive Receptors in Close Proximity to Project Site....4.246
Table 36 Noise Impact Thresholds for Project Construction and Operation....4.250
Table 37 Noise Level Summary for Project Construction....4.251
Table 38 Noise Impact Thresholds for Project Operation....4.252
Table 39 Noise Level Summary for Project Operation....4.253
Table 40 Noise Level Summary for Project Construction....4.254
Table 41 Noise Level Summary for Project Operation....4.255
Table 42 Vibration Source Amplitudes for Construction Equipment....4.256
Table 43 Level of Service Standards for Signalized Intersections....4.263
Table 44 Level of Service Standards for Intersections at Caltrans Ramps....4.264
Table 45 Level of Service Standards for Ramps....4.264
Table 46 Existing AM and PM Peak Hour Intersection Levels of Service....4.265
Table 47 Existing Level of Service Standards for Ramps....4.265
Table 48 Records Search Results....4.271
Table 49 Estimated Wastewater Generation....4.276
Table 50 2018 Monthly Average Temperatures and Precipitation....4.283

Table 51 Regional Fire History....4.284
Table 52 2018 Regional Fire Stations....4.286
Table 53 Operational and Planned LFG to Energy Projects in California....5.5
Table 54 CPUC Renewable Natural Gas Specification Compared to Scholl Canyon LFG....5.9
Table 55 Comparison of Alternatives....5.17
Table 56 Effects Found Not to be Significant....6.4

LIST OF FIGURES

Figure 2.2-1 Project Location....2.9
Figure 2.3-1 Proposed Project Elements....2.10
Figure 2.3-2 Existing Facility Demolition Plan....2.12
Figure 2.3-3 Major Equipment Location Plan....2.14
Figure 2.5-1 Project Schedule....2.14
Figure 4.1-1 View 1....4.17
Figure 4.1-2 View 2....4.18
Figure 4.1-3 View 3....4.20
Figure 4.1-4 View 4....4.22
Figure 4.1-5 Engine Exhaust Stacks....4.31
Figure 4.1-6 Flare Stack....4.32
Figure 4.1-7 Water Tank....4.34
Figure 4.2-1A AERMOD Output for 1st highest 1-Hourly NO_2 Concentrations (in ppm)....4.66
Figure 4.2-1B AERMOD Output for 8th highest 1-hourly NO2 Concentrations (ppm)....4.68
Figure 4.2-1C AERMOD Output for Annual NO_2 Concentrations (in ppm)....4.70
Figure 4.2-1D AERMOD Output for 1st Highest 1-Hourly CO Concentrations (in ppm)....4.72
Figure 4.2-1E AERMOD Output for 1st Highest 8-Hourly CO Concentrations (in ppm)....4.74
Figure 4.2-1F AERMOD Output for 1st Highest 24-hour PM10 Concentrations ($\mu g/m^3$)....4.76
Figure 4.2-1G AERMOD Output for 6th Highest 24-hour PM10 Concentrations ($\mu g/m^3$)....4.78
Figure 4.2-1H AERMOD Output for 8th Highest 24-hour PM2.5 Concentrations ($\mu g/m^3$)....4.80
Figure 4.2-1I AERMOD Output for Annual Average PM10/PM2.5 Concentrations ($\mu g/m^3$)....4.82
Figure 4.2-1J AERMOD Output for 1st highest 1-hour SO_2 Concentrations (ppm)....4.84
Figure 4.2-1K AERMOD Output for 4th highest 1-hour SO_2 Concentrations (ppm)....4.86
Figure 4.2-1L AERMOD Output for 1st highest 24-hour SO_2 Concentrations (ppm)....4.88
Figure 4.2-2 Nearest Sensitive Receptor Location....4.92
Figure 4.3-1 Vegetation Communities and Land Cover Types....4.109
Figure 4.9-1 Project Area Parcels, Zoning, and Land Use Designations....4.234
Figure 4.10-1 Sensitive Noise Receptor Map....4.247

LIST OF APPENDICES

APPENDIX A NOTICE OF PREPARATION AND INITIAL STUDY....A.1

APPENDIX B AIR QUALITY....B.1
B.1 CALEEMOD Output Annual Report, Daily Report (Summer), and Daily Report (Winter)....B.1
B.2 Criteria Pollutant Emission Inventory....B.2
B.3 Ambient Air Quality Modeling Results....B.3

B.4 Toxic Emission Inventory B.4
B.5 HARP2 Model RESULTS B.5

APPENDIX C BIOLOGICAL RESOURCES TECHNICAL REPORT C.1

APPENDIX D GEOTECHNICAL INVESTIGATION REPORT D.1

APPENDIX E GENERAL PLAN FAULT MAPS E.1

APPENDIX F GREENHOUSE GAS (GHG) EMISSION INVENTORY F.1

APPENDIX G PHASE I ENVIRONMENTAL SITE ASSESSMENT G.1

APPENDIX H PRE-DEMOLITION ASBESTOS AND LEAD-BASED PAINT SURVEY H.1

APPENDIX I OFF-SITE CONSEQUENCE ANALYSIS FOR AQUEOUS AMMONIA I.1

APPENDIX J NOISE MODELING AND DATA COLLECTION SHEETS J.1

APPENDIX K TRAFFIC ANALYSIS K.1
K.1 Traffic Analysis Exhibit 1 ..... K.1
K.2 Traffic Analysis Exhibit 2 ..... K.2
K.3 Traffic Analysis Exhibit 3 ..... K.3

APPENDIX L TRIBAL CONSULT MEMORANDUM L.1

APPENDIX M FIRE PROTECTION DESIGN BASIS PLAN M.1

APPENDIX N OFF-SITE CONSEQUENCE ANALYSIS FOR LFG TO LNG (ALTERNATIVE 3) N.1

APPENDIX O OFF-SITE CONSEQUENCE ANALYSIS FOR LFG TO CNG (CONSIDERED ALTERNATIVE) O.1

This page has been intentionally left blank.

Abbreviations

AAQS	Ambient Air Quality Standards
AB	Assembly Bill
AERMOD	American Meteorological Society/Environmental Protection Agency Regulatory Model
AIP	Achieved in practice
ALOHA	Areal Locations of Hazardous Atmospheres
AMSL	Above mean sea level
A-P Zone	Alquist-Priolo Earthquake Special Studies Zone
AQMP	Air Quality Management Plan
ARB	California Air Resources Board
ASCE	American Society of Civil Engineers
ASHRAE	American Society of Heating and Air-Conditioning Engineers
ASSFC	Amalgamated System Sewage Facilities Charge
BACT	Best Available Control Technology
Basin Plan	Los Angeles Region Water Quality Control Plan
bgs	Below ground surface
bhp	Brake horsepower
BMP	Best Management Practice
BRTR	Biological Resources Technical Report
BSA	Biological Study Area
Btu/scf	British Thermal Unit per standard cubic foot
BUG	Backlight, uplight, and glare
C&D	Construction and demolition
CAA	Clean Air Act
CAAQS	California Ambient Air Quality Standards
CARB	California Air Resource Board
CadnaA	Computer Aided Noise Abatement
CAFE	Corporate Average Fuel Economy
CalARP	California accidental release prevention
CalEEMod	California Emissions Estimator Model
CalFire	California Department of Forestry and Fire Protection
CALGreen Code	California Green Building Standards
Cal/OSHA	California Division of Occupational Safety and Health
CalRecycle	California Department of Resources Recycling and Recovery
Caltrans	California Department of Transportation
CARB	California Air Resources Board
CAS	Chemical Abstracts Number

CATEF	California Air Toxics Emission Factors
CBC	California Building Code
CCH	Consortium of California Herbaria
CCR	California Code of Regulations
CD	Control delay
CDFW	California Department of Fish and Wildlife
CDWR	California Department of Water Resources
CEC	California Energy Commission
CEQA	California Environmental Quality Act
cf	Cubic feet
CFC	California Fire Code
CFCs	Chlorofluorocarbons
CFR	Code of Federal Regulations
CGS	California Geological Survey
CH_4	Methane
City	City of Glendale
CMP	Congestion Management Program
CNDDB	California Natural Diversity Database
CNEL	Community Noise Equivalent Level
CNG	Compressed Natural Gas
CNPS	California Native Plant Society
CO	Carbon monoxide
CO_2	Carbon dioxide
CO_2e	Equivalent amount of carbon dioxide
CPT	Cone Penetration Test
CPUC	California Public Utilities Commission
CRHR	California Register of Historical Resources
CRPR	California Rare Plant Rank
CUP	Conditional Use Permit
CUPA	Certified Unified Program Agency
CWA	Clean Water Act
dB	Decibel
dBA	A-weighted decibel
dbh	Diameter at breast height
DOT	Department of Transportation
DTSC	Department of Toxic Substances Control
EA	Enforcement agency
EIR	Environmental Impact Report
EPA	Environmental Protection Agency
ERAs	Exceedance Response Actions

ERC	Emission Reduction Credits
ESA	Endangered Species Act
FE	Federally Endangered
FEMA	Federal Emergency Management Agency
FHWA	Federal Highway Administration
FRAP	Fire and Resource Assessment Program
GCP	General Construction Permit
GFD	Glendale Fire Department
GHG	Greenhouse gases
GMCGLA	City of Glendale Municipal CodeGeo-Logic Associates
gpd	Gallons per day
GPS	Global positioning system
GWh	Gigawatt-hour
GWP	Glendale Water and Power
GWP	Global Warming Potential
H_2S	Hydrogen sulfide
HAP	Hazardous Air Pollutant
HARP2	Hotspots Analysis Reporting Program Version 2
HCM	Highway Capacity Manual
HCS	Hazard Communication Standard
HFCs	Hydrofluorocarbons
HI	Hazard index
HIA	Hazard Index Acute
HIC	Hazard Index Chronic
HMBP	Hazardous Materials Business Plan
HNO_2	Nitrous acid
HNO_3	Nitric acid
hp	Horsepower
HSC	Health and Safety Code
Hz	Hertz
IBC	International Building Code
ICC	International Code Council
ICEs	Internal Combustion Engine
IESNA	Illuminating Engineering Society of North America
IPCC	Intergovernmental Panel on Climate Change
ISO	International Organization for Standardization
JPA	Joint Powers Agreement
kW	Kilowatts
kWh	Kilowatt-hour
L	Sound level

LACSD	Sanitation Districts of Los Angeles County
LADOT	Los Angeles Department of Transportation
LADPW	Los Angeles Department of Public Works
LdB	Sound level decibel
Ldn	Day/night average sound level
LEL	Lower explosive limit
Leq	Energy equivalent sound level
LFG	Landfill gas
Lmax	Maximum A-weighted noise level during the measurement period
Lmin	Minimum A-weighted noise level during the measurement period
LNG	Liquid Natural Gas
LOS	Level of Service
LRA	Local Responsibility Area
LST	Localized significance threshold
MBTA	Migratory Bird Treaty Act
MCE	Maximum credible earthquake
MCVII	A Manual of California Vegetation
MICR	Maximum individual cancer risk
mmBtu	One million British Thermal Units
mmscfd	Million standard cubic feet per day
MND	Mitigated Negative Declaration
MPE	Maximum possible earthquake
mph	Miles per hour
MPO	Metropolitan Planning Organization
MRP	Monitoring and reporting program
MSDS	Material Safety Data Sheets
MT	Metric tons
MW	Megawatt
MWe	Megawatts electric
MWh	Megawatt-hour
N_2O	Nitrous oxide
NAAQS	National ambient air quality standards
NAHC	California Native American Heritage Commission
NALs	Numeric action levels
NEC	National Electrical Code
NECs	No Exposure Certifications
NESHAP	National Emission Standards for Hazardous Air Pollutants
NFPA	National Fire Protection Association
NG	Natural gas
NHTSA	National Highway Traffic Safety Administration

NMOC	Non-methane organic compounds
NO	Nitric oxide
NO_2	Nitrogen dioxide
NOA	Notice of Availability
NOI	Notices of Intent
NOP	Notices of Preparation
NOTs	Notices of Termination
NOx	Nitrogen oxides
NPDES	National Pollutant Discharge Elimination System
NPPA	Native Plant Protection Act
NRHP	National Register of Historic Places
NSPS	New Source Performance Standards
NSR	New Source Review
NSWDs	Non-stormwater discharges
O&M	Operations and maintenance
O_3	Ozone
OEHHA	Office of Environmental Health Hazard Assessment
OPR	Governor's Office of Planning and Research
OSHA	Occupational Safety and Health Administration
Pb	Lead
PCE	Passenger car equivalent
PFCs	Perfluorocarbons
PM	Particulate matter
ppm	Parts per million
ppmv	Parts per million volume
PPV	Peak particle velocity
PRC	Public Resources Code
PRDs	Permit Registration Documents
Project	Biogas Renewable Generation Project
PSD	Prevention of Significant Deterioration
PTC	Permit to Construct
PTO	Permit to Operate
R1R	Restricted Residential
R4SBA	Riverine, Intermittent, Streambed, Temporary Flooded
RCRA	Resource Conservation and Recovery Act of 1976
RECLAIM	Regional Clean Air Market
REL	Reference exposure levels
RICE	Reciprocating internal combustion engines
RNG	Renewable natural gas
ROW	Right-of-way

ROWD	Report of waste discharge
RPS	Renewable Portfolio Standards
RTP	Regional Transportation Plan
RWQCB	Regional Water Quality Control Board
SAOs	Santa Ana Wind Occurrences
SB	Senate Bill
SCAB	South Coast Air Basin
SCAG	Southern California Association of Governments
SCAQMD	South Coast Air Quality Management District
SCCIC	South Central Coastal Information Center
scfh	Standard cubic feet per hour
scfm	Standard cubic feet per minute
SCLF	Scholl Canyon Landfill
SCR	Selective catalytic reduction
SCS	Sustainable communities strategy
SE	State Endangered
SEA	Significant Ecological Area
SF_6	Sulfur hexafluoride
SFP	State Fully Protected
SGMA	Sustainable Groundwater Management Act
SIP	State implementation plan
SLF	Sacred Lands File
SMARTS	Stormwater Multiple Application and Report Tracking System
SO_2	Sulfur dioxide
SO_4^{2-}	Sulfates
SoCalGas	Southern California Gas Company
SO_X	Sulfur oxides
SPCC	Spill prevention, control, and countermeasure
SR	Special Recreation
SRA	Source receptor area
SRTS	Safe Routes to School
SSC	Species of Special Concern
ST	State Threatened
S-waves	Secondary or shear waves
SWPPP	Stormwater Pollution Prevention Plan
SWRCB	State Water Resources Control Board
TAC	Toxic air contaminants
T-BACT	Best Available Control Technology for Toxics
TSA	Temperature swing adsorption
USACE	United States Army Corps of Engineers

USAR	Urban Search and Rescue
USDOT	United States Department of Transportation
USEPA	United States Environmental Protection Agency
USFWS	United States Fish & Wildlife Service
USGS	United States Geological Survey
V/C	Volume to capacity ratio
VHFHSZ	Very High Fire Hazard Severity Zone
VMT	Vehicle miles travelled
VOCs	Volatile organic compounds
vphpl	Vehicles per hour per lane
W	Watts
WDR	Waste Discharge Requirements
WDRs	Waste discharge requirements
WEAP	Worker Environmental Awareness Program
Wh	Watt-hours
WL	Watch List
WRPs	Water Reclamation Plants
WUI	Wildland-urban interface
WWTP	Wastewater Treatment Plant
ug/m^3	Micrograms per cubic meter

This page has been intentionally left blank.