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Long Beach LNG Import Project
Draft Environmental Impact Statement/
Environmental Impact Report

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ACRONYMS AND ABBREVIATIONS

°F	degrees Fahrenheit
ABSG	ABSG Consulting Inc.
ACHP	Advisory Council on Historic Preservation
ACOE	U.S. Army Corps of Engineers
A.D. Little	Arthur D. Little, Inc.
Agency Staffs	environmental staffs of the FERC and the POLB
ALT	Applied LNG Technologies USA
APE	area of potential effect
API	American Petroleum Institute
AQMP	Air Quality Management Plan
ASCE	American Society of Civil Engineers
ATIAA	Air Toxic "Hot Spots" Information and Assessment Act
BA	Biological Assessment
BACT	Best Available Control Technology
Basin Plan	Los Angeles River Basin (Region 4)
bgs	below ground surface
BHC	Board of Harbor Commissioners
BHP	BHP Billiton
BMPs	Best Management Practices
Bscfd	billion standard cubic feet per day
Btu	British thermal unit
Btu/ft^2-hr	British thermal units per square foot per hour
C_2	Ethane
C_{3+}	Propane and heavier hydrocarbons
CAA	Clean Air Act
CAAQS	California Ambient Air Quality Standards
CalARP	California Accidental Release Prevention Program
CalTrans	California Department of Transportation
CARB	California Air Resources Board
CCA	California Coastal Act of 1976
CCC	California Coastal Commission
CDFG	California Department of Fish and Game
CEC	California Energy Commission
CEII	Critical Energy Infrastructure Information
CEQ	Council on Environmental Quality
CEQA	California Environmental Quality Act
CESA	California Endangered Species Act
CFR	Code of Federal Regulations
Chevron Texaco	ChevronTexaco Corporation
CLE	Contingency Level Earthquake
CMP	Congestion Management Program
CO	carbon monoxide
CO_2	carbon dioxide
Coast Guard	U.S. Coast Guard
Commission	Federal Energy Regulatory Commission
CPUC	California Public Utilities Commission
CRE	Comisión Reguladora de Energía
CRHR	California Register of Historical Resources
Crystal Energy	Crystal Energy LLC

CSLC	California State Lands Commission
CSWRCB	California State Water Resources Control Board
CWA	Clean Water Act
CZMA	Coastal Zone Management Act of 1972
dBA	decibels of the A-weighted scale
DC	demand-to-capacity
DDT	dichlorodiphenyltrichloroethane
DEGADIS	Dense Gas Dispersion Model
Distrigas	Distrigas of Massachusetts Corporation
DMG	California Division of Mines and Geology
DO	dissolved oxygen
DOGGR	California Department of Conservation-Division of Oil, Gas, & Geothermal Resources
DOP	City of Long Beach, Department of Oil Properties
DOT	U.S. Department of Transportation
DSHA	deterministic seismic hazard analyses
DTSC	California Department of Toxic Substances Control
DWSAP	California Drinking Water Source Assessment and Protection
ECD	Environmental Compliance Department
EFH	Essential fish habitat
EI	Environmental Inspector
EIA	Energy Information Administration
EIR	environmental impact report
EIS	environmental impact statement
EIS/EIR	environmental impact statement/environmental impact report
El Paso	El Paso Natural Gas Company
EPA	U.S. Environmental Protection Agency
ERL	Effects Range Low
ERM	Effects Range Medium
ESA	Endangered Species Act of 1973
ESD	emergency shutdown
FERC	Federal Energy Regulatory Commission
FMP	Facilities Master Plan
FPC	Federal Power Commission
FR	Federal Register
FSO	Facility Security Officer
FSRU	floating storage and regasification unit
FWS	U.S. Fish and Wildlife Service
g	gravity
GB	Gasoducto Bajanorte
GBS	gravity-based structure
General Plan	City of Long Beach General Plan
gpd	gallons per day
gpm	gallons per minute
Hanjin	Hanjin Shipping Company
HCAs	high consequence areas
HDD	horizontal directional drill
HDD Plan	Horizontal Directional Drill Plan
HSC	Harbor Safety Committee

hp	horsepower
Inland Testing Manual	Evaluation of Dredged Material Proposed for Discharge in Waters of the U.S. – Testing Manual
ICTF	International Container Transfer Facility
ILWU	International Longshore and Warehouse Union
IMO	International Maritime Organization
IP District	Port-Related Industrial District
IR	Installation Restoration
ISO	Insurance Service Organization
Jacobsen Pilots	Jacobsen Pilot Services, Inc.
kV	kilovolt
kW	kilowatt
LA Basin	Los Angeles Basin
LACFD	Los Angles County Fire Department
LADOT	Los Angeles Department of Transportation
LAER	Lowest Achievable Emission Rate
LAFD	City of Los Angeles Fire Department
LARC	Los Angeles Refinery Carson Plant
LAXT	Los Angeles Export Terminal
LBFD	Long Beach City Fire Department
LBPD	Long Beach Police Department
L_{dn}	day-night sound level
$L_{eq(24)}$	24-hour equivalent sound level
LFL	lower flammability limit
LNG	liquefied natural gas
LNG Working Group	LNG Permitting Interagency Working Group
LOI	Letter of Intent
LOR	Letter of Recommendation
LOS	level of service
LPG	liquefied petroleum gas
MAOP	maximum allowable operating pressure
MARAD	U.S. Maritime Administration
MARSEC	Maritime Security
MATES II Study	Multiple Air Toxics Exposure Study in the SCAB
MBC	MBC Applied Environmental Sciences
Mcf	thousand cubic feet
MEC	MEC Analytical Systems, Inc.
Memorandum	Memorandum of Understanding on Natural Gas Transportation Facilities
µg/kg	micrograms per kilogram
$\mu g/m^3$	micrograms per cubic meter
mg/kg	milligrams per kilogram
MLLW	mean lower low water
MMBtu	million British thermal units
MMscfd	million standard cubic feet per day
MOA	Memorandum of Agreement
MP	milepost
mph	miles per hour
MSA	Magnuson-Stevens Fishery Conservation and Management Act
msl	mean sea level

MTA	Metropolitan Transportation Authority
MW	Megawatt
M_W	moment magnitude
NAAQS	National Ambient Air Quality Standards
NAHC	Native American Heritage Commission
NEPA	National Environmental Policy Act
NASFM	National Association of State Fire Marshals
NFPA	National Fire Protection Association
NGA	Natural Gas Act
NGL	natural gas liquids
NHPA	National Historic Preservation Act
nm	nautical mile
NO_2	nitrogen dioxide
NOAA Fisheries	U.S. Department of Commerce, National Oceanic and Atmospheric Administration, National Marine Fisheries Service
NOI/NOP	*Notice of Intent to Prepare a Joint Environmental Impact Statement and Notice of Preparation of a Joint Environmental Impact Report, Application Summary Report for SES' Proposed Long Beach LNG Import Project, Request for Comments on Environmental Issues, and Notice of Public Scoping Meeting*
North Baja	North Baja Pipeline, LLC
NO_x	nitrogen oxides
NPDES	National Pollutant Discharge Elimination System
NRHP	National Register of Historic Places
NSA	noise-sensitive areas
NVIC	*Navigation and Vessel Inspection Circular – Guidance on Assessing the Suitability of a Waterway for Liquefied Natural Gas (LNG) Marine Traffic*
OBE	Operating Basis Earthquake
OCIMF	Oil Companies International Marine Forum
OCORM	National Oceanic and Atmospheric Administration, Office of Coast and Ocean Resource Management
OEP	Office of Energy Projects
OLE	Operating Level Earthquake
OPS	Office of Pipeline Safety
PAH	polycyclic aromatic hydrocarbons
PCBs	polychlorinated biphenyls
PD District	Planned Development District
PERC	powered emergency release coupling
PFMC	Pacific Fishery Management Council
PHMSA	Pipeline and Hazardous Materials Safety Administration
PGA	peak ground accelerations
PM_{10}	particulate matter having an aerodynamic diameter of 10 microns or less
$PM_{2.5}$	particulate matter having an aerodynamic diameter of 2.5 microns or less
PMP	Port Master Plan
POLA	Port of Los Angeles
POLB	Port of Long Beach
POLB Quest Study	*Hazards Analysis of a Proposed LNG Import Terminal in the Port of Long Beach, California*
Port	Port of Long Beach
ppmw	parts per million by weight

PSHA	probabilistic seismic hazard analyses
psig	pounds per square inch gauge
Quest	Quest Consultants, Inc.
RCPG	Regional Comprehensive Plan and Guide
RECLAIM	New Source Review for the Regional Clean Air Incentives Market
RMP	Risk Management Plan
ROC	reactive organic compounds
ROD	Record of Decision
RPT	rapid phase transition
RTP	Regional Transportation Plan
RWQCB	Regional Water Quality Control Board
SAC	spaced aerial cable
Sandia Report	*Guidance on Risk Analysis and Safety Implications of a Large Liquefied Natural Gas (LNG) Spill Over Water*
SCAB	South Coast Air Basin
SCAG	Southern California Association of Governments
SCAQMD	South Coast Air Quality Management District
SCE	Southern California Edison
SDG&E	San Diego Gas and Electric
Secretary	Secretary of the Commission
SEMARNAT	Secretaria de Medio Ambiente y Recursos Naturales
Sempra/Shell	Sempra Energy LNG/Shell International Gas Ltd.
SERRF	Southeast Resource Recovery Facility
SES	Sound Energy Solutions
SHPO	State Historic Preservation Office
SIGTTO	Society of International Gas Tanker and Terminal Operators
SIP	State Implementation Plan
SIS	Safety Instrumented System
SO_2	sulfur dioxide
SoCal Gas	Southern California Gas Company's
SO_x	sulfur oxides
SOLAS	International Convention for Safety of Life at Sea
Spill Procedure	Spill Prevention and Response Procedure
SRC	selective catalytic reduction
SSE	Safe Shutdown Earthquake
SSO	Ship Security Officer
Supplemental NOP	*Supplemental Notice of Preparation and Initial Study*
SWPPP	Storm Water Pollution Prevention Plan
Tcf	trillion cubic feet
TEU	twenty-foot equivalent units
TGN	Transportadora de Gas Natural de Baja California
THUMS-HB	THUMS-Huntington Beach
TNT	tri-nitro toluene
tpy	tons per year
TSS	total suspended solids
TTI/Hanjin	Total Terminals Inc./Hanjin Shipping Company
USC	United States Code
USGS	U.S. Geological Survey
UV/IR	ultraviolet/infrared

V/C	volume-to-capacity
VOC	volatile organic compounds
VTS	vessel traffic service
WDRs	Waste Discharge Requirements
West Coast Basin	West Coast sub-basin of the Los Angeles County Groundwater Basin
Western Terminal	Western LNG Terminal Company
WSA	Waterway Suitability Assessment