

READ ME file for the 2017 Platform Source Gulfwide Access File

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WHAT IS PROVIDED HERE?

The platform emission inventory file developed for the 2017 Gulfwide Emission Inventory Study is provided for review and use by BOEM, air quality modelers, State and local agencies, and industry. This READ ME file provides important information integral to your use of the file.

ACRONYMS

BOEM	Bureau of Ocean Energy Management
CH ₄	Methane
CO	Carbon Monoxide
CO ₂	Carbon Dioxide
CO ₂ E	Carbon Dioxide Equivalent
ID	Identification
NAICS	North American Industry Classification System
N ₂ O	Nitrous Oxide
NH ₃	Ammonia
NO _x	Oxides of Nitrogen (NO and NO ₂)
Pb	Lead
PCT	Percent
PM ₁₀	Particulate Matter with an aerodynamic diameter of 10 micrometers and smaller
PM ₂₅	Particulate Matter with an aerodynamic diameter of 2.5 micrometers and smaller
SCC	Source Classification Code
SO ₂	Sulfur Dioxide
VOC	Volatile Organic Compound

INTRODUCTION

The 2017 Gulfwide emissions inventory for platform sources is a comprehensive inventory covering criteria pollutants and greenhouse gases. The Gulfwide Inventory was developed by Eastern Research Group, Inc. (ERG), in Morrisville, North Carolina.

The scope of the 2017 Gulfwide Inventory effort was to compile 2017 base year activity data for all active platforms in the Gulf of Mexico on the Outer Continental Shelf (OCS).

WHAT INVENTORY DATA FILE IS PROVIDED?

This file is provided in Access 2016. The zipped file contains an Access database with one table containing platform and emissions data.

HOW IS THE DATA FILE ORGANIZED?

ERG organized the 2017 Gulfwide Inventory for platform sources into a single table of monthly as well as annual emission records. Each record contains the supporting platform, equipment, process, and release point information.

Table 1 summarizes the structure of the BOEM platform file provided.

WHAT SOFTWARE DO I NEED TO USE THE DATA FILE?

The files are provided in Microsoft Access 2016. MS-Access provides a reliable, commonly used platform which can be used to view and link tables.

HOW CAN I REVIEW OR USE THE FILE?

BOEM, air quality modelers, State and local agencies, and industry representatives can review and use this file in a number of ways. Emission estimates can be summarized by operator, platform, block, area, pollutant, and equipment type. Estimates can also be assessed for specific geographic areas in the Gulf of Mexico on the OCS by mapping the latitude/longitude coordinates to the area of interest.

Table 1. Summary of Platform BOEM Records^a

Field Name	Description
AREA_BLOCK	BOEM Area and BOEM Block
PLATFORM_ID	BOEM Complex ID and BOEM Structure ID
COMPLEX_ID	A unique identifier code that is assigned by BOEM to a group of related structures prior to construction
STRUCTURE_ID	A unique number assigned by BOEM to a specific structure within a complex
AREA	Designated name of the geographic area in which the structure is located
BLOCK	Designated number of the geographical block in which the structure is located
NAME	A name or identifier that denotes a structure within its Area/Block
LEASE_NUMBER	The lease number issued by BOEM for the construction and operation of an offshore structure
NAICS_CODE	North American Industry Classification Code
PLATFORM_NAME_EPA	The name of the facility
COMPANY_NUMBER_BOEM	ID assigned by BOEM for the designated operator of the platform
COMPANY_NAME	Name of the company operating the platform
DIST_SHORE_MI	The distance in miles to the nearest U.S. shoreline
WATER_DEPTH_FT	The distance in feet from mean sea level to the mud line
SITE_DESCRIPTION_EPA	Comments/description of platform
COMPANY_ADDRESS	Street address for the company operating the platform
COMPANY_CITY	City for the company operating the platform
COMPANY_STATE	State for the company operating the platform
COMPANY_ZIP	Zip code for the company operating the platform
MAJOR_STRUCTURE_FLAG_TIMS	An indicator of whether a platform contains at least 6 completions or contains more than 2 pieces of production equipment
STRUCTURE_TYPE_TIMS	An indicator of the type of structure
EMISSION_UNIT_ID	Unique unit ID reported consistently over time by agency
EMISSION_UNIT_DESCRIPTION_ALT	A description of the emission unit
EQUIP_TYPE	Type of equipment
EQUIP_ID	Unique ID assigned to the equipment by the platform operator
EQUIP_MFG	Manufacturer of the equipment
EQUIP_MODEL	Model of the equipment
MAX_HP_NG	The manufacturer's maximum rated horsepower output for natural gas-fired equipment

Table 1. Summary of Platform BOEM Records^a (Continued)

Field Name	Description
MAX HP DIESEL	The manufacturer's maximum rated horsepower output for diesel-fired equipment
MAX FUEL USAGE RATE NG	The manufacturer's maximum rate of natural gas fuel usage
MAX FUEL USAGE RATE NG UNITS	Unit of measure for the manufacturer's maximum rate of natural gas fuel usage
MAX FUEL USAGE RATE DIESEL	The manufacturer's maximum rate of diesel fuel usage
MAX FUEL USAGE RATE DIESEL UNITS	Unit of measure for the manufacturer's maximum rate of diesel fuel usage
MAX HEAT INPUT RATE MMBTU PER HR	The manufacturer's maximum rated heat input rate
EMISSION PROCESS ID ALT	Unique process ID reported consistently over time by agency
EMISSION PROCESS DESCRIPTION ALT	A description of the emission process
SCC	EPA Source Classification Code
HEAT CONTENT	The energy content of a fuel
SULFUR CONTENT	The sulfur content of a fuel
SULFUR CONTENT UNITS	Unit of measure for the fuel sulfur content
EMISSION RELEASE POINT ID ALT	Unique release point ID reported consistently over time by agency
EMISSION RELEASE POINT DESCRIPTION ALT	A description of the release point
EMISSION RELEASE POINT TYPE	The code for physical configuration of the release point (1 = fugitive, 2 = vertical)
EMISSION DESTINATION	A description of emission destination (ex. routed to system)
STACK HEIGHT FT	The height (in feet) of the release point
STACK DIAMETER FT	The diameter (in feet) of the release point
OUTLET INNER DIAMETER IN	The inner diameter (in inches) of the release point
EXIT GAS TEMPERATURE F	The temperature of an exit gas stream (degrees Fahrenheit)
EXIT GAS VELOCITY FT PER SEC	The velocity of an exit gas stream (feet per second)
EXIT GAS FLOW RATE CUFT PER SEC	Numeric value of stack gas flow rate in (actual cubic feet per second)
OUTLET ORIENTATION DEGREES	The deviation of the outlet from vertically upward (0 indicates an upward pointing outlet; 180 indicates a downward pointing outlet)
X COORDINATE	An east-west coordinate that defines the position of an offshore structure
Y COORDINATE	A north-south coordinate that defines the position of an offshore structure
XY COORDINATE TYPE	The type of coordinates reported (ex. LATLON)
MONTH	Month when emissions occurred
START DATE	Start date of the period in which reported emissions occurred
END DATE	End date of the period in which reported emissions occurred
OPERATING HP	The operating horsepower during the survey period
FUEL USAGE RATE	The average rate of fuel usage during the survey period

Table 1. Summary of Platform BOEM Records^a (Continued)

Field Name	Description
FUEL_USAGE_RATE_UNITS	Unit of measure for the fuel usage rate
HEAT_INPUT_RATE_MMBTU_PER_HR	The average heat input rate during the survey period
THROUGHPUT_VALUE	Numeric value of process activity
THROUGHPUT_NUMERATOR	Unit of measure for the throughput value
MATERIAL_CODE	Code description of material processed
MATERIAL_DESCRIPTION	Description of material processed
MATERIAL_I_O	A descriptor indicating whether material is used or produced
HOURS_PER_MONTH	Number of hours the process is active within the month specified
POLLUTANT_CODE	Pollutant Code
POLLUTANT_DESCRIPTION	Description of the pollutant
POLLUTANT_CATEGORY_NAME	Category name of the pollutant
EMISSION_FACTOR_NUMERIC_VALUE	The numeric value of the emission factor
EMISSION_FACTOR_NUMERATOR	Unit of measure for emission factor numerator
EMISSION_FACTOR_DENOMINATOR	Unit of measure for emission factor denominator
EMISSIONS_VALUE	Numeric value of emission
EMISSIONS_VALUE_UNITS	Unit of measure for emission value
EMISSIONS_DATA_LEVEL	The level of disaggregation of the emission record
EMISSIONS_TYPE	Flag indicating values reported are actual emissions
AUGMENTATION_FLAG	Descriptive flag indicating record was augmented
CONTROLLED_STATUS	Flag indicating whether emissions are controlled or uncontrolled
PRIMARY_DEVICE_CODE	The primary type of control equipment used
PRIMARY_PCT_CONTROL_EFFICIENCY	The percent control efficiency of primary control device
CONTROL_SYSTEM_DESCRIPTION	Description of control equipment chain
MOBILE_PLATFORM_DRILLING_RIG_NAME	Name of mobile platform drilling rig
PILOT_INCLUDED_IN_VOLUME_FLARED	Flag indicating if a pilot was included in volume flared
IS_LDAR_IN_PLACE	Flag indicating if LDAR is in place
NBR_MONTHS_BETWEEN_INSPECTIONS	Number of months between inspections
INSPECTION_METHOD	Description of inspection method
FUGITIVE_COUNT_TYPE	Flag indicating if fugitive component counts are based on actual or default counts
BLEED_RATE	Description of bleed rate

^a Bold fields indicate primary key

Emission Unit ID and Process ID Key:

AMI	=	Amine gas sweetening unit
BOI	=	Boiler/heater/burner
B-INTn	=	Boiler/heater/burner: 10-100 MMBtu/hr, natural gas
BO<10n	=	Boiler/heater/burner: <10 MMBtu/hr, natural gas
BO<10p	=	Boiler/heater/burner: <10 MMBtu/hr, process gas
BO>100	=	Boiler/heater/burner: >100 MMBtu/hr, natural gas
BO>100d	=	Boiler/heater/burner: >100 MMBtu/hr, diesel
B<100d	=	Boiler - Max MMBTU/hr<100-diesel
B>100d	=	Boiler - Max MMBTU/hr>100-diesel
BO<10w	=	Boiler - Max MMBTU/hr<10-waste gas
DIE	=	Diesel or gasoline engine
D<600d	=	Diesel engine: <600 hp, diesel fuel
D<600g	=	Gasoline engine: <600 hp, gasoline fuel
D>600d	=	Diesel engine: >600 hp, diesel fuel
DRI	=	Drilling Equipment
DR-DIE	=	Drilling Equipment, diesel fuel

Emission Unit ID and Process ID Key (Continued):

FCDRg	=	Fugitives – centrifugal, dry seal, natural gas stream
FCDRo	=	Fugitives – centrifugal, dry seal, oil stream
FCDRog	=	Fugitives – centrifugal, dry seal, oil/water/gas stream
FCDRow	=	Fugitives – centrifugal, dry seal, oil/water stream
FCONG	=	Fugitives – connectors, natural gas stream
FCONho	=	Fugitives – connectors, heavy oil stream
FCONng	=	Fugitives – connectors, natural gas liquids stream
FCONo	=	Fugitives – connectors, oil stream
FCONog	=	Fugitives – connectors, oil/water/gas stream
FCONow	=	Fugitives – connectors, oil/water stream
FCPAg	=	Fugitives – centrifugal pack, natural gas stream
FCPAho	=	Fugitives – centrifugal pack, heavy oil stream
FCPAo	=	Fugitives – centrifugal pack, oil stream
FCPAog	=	Fugitives – centrifugal pack, oil/water/gas stream
FCPAow	=	Fugitives – centrifugal pack, oil/water stream
FCWEg	=	Fugitives – centrifugal, wet seal, natural gas stream
FCWEo	=	Fugitives – centrifugal, wet seal, oil stream
FCWEog	=	Fugitives – centrifugal, wet seal, oil/water/gas stream
FCWEow	=	Fugitives – centrifugal, wet seal, oil/water stream
FFLAg	=	Fugitives – flanges, natural gas stream
FFLAng	=	Fugitives – flanges, natural gas liquids stream
FFLAho	=	Fugitives – flanges, heavy oil stream

Emission Unit ID and Process ID Key (Continued):

FFLAo	=	Fugitives – flanges, oil stream
FFLAog	=	Fugitives – flanges, oil/water/gas stream
FFLAow	=	Fugitives – flanges, oil/water stream
FLA	=	Combustion flare
FL-LNf	=	Flare: light smoke, no continuous pilot, flare
FL-LPf	=	Flare: light smoke, with continuous pilot, flare
FL-LPp	=	Flare: light smoke, with continuous pilot, pilot
FL-NNf	=	Flare: no smoke, no continuous pilot, flare
FL-NPf	=	Flare: no smoke, with continuous pilot, flare
FL-NPp	=	Flare: no smoke, with continuous pilot, pilot
FOEg	=	Fugitives – open-ended lines, natural gas stream
FOEo	=	Fugitives – open-ended lines, oil stream
FOEog	=	Fugitives – open-ended lines, oil/water/gas stream
FOEow	=	Fugitives – open-ended lines, oil/water stream
FOTHg	=	Fugitives – other equipment, natural gas stream
FOTHho	=	Fugitives – other equipment, heavy oil stream
FOTHng	=	Fugitives – other equipment, natural gas liquids stream
FOTHo	=	Fugitives – other equipment, oil stream
FOTHog	=	Fugitives – other equipment, oil/water/gas stream
FOTHow	=	Fugitives – other equipment, oil/water stream
FPUMg	=	Fugitives – pumps, natural gas stream

Emission Unit ID and Process ID Key (Continued):

FPUMng	=	Fugitives – pumps, natural gas liquids stream
FPUMho	=	Fugitives – pumps, heavy oil stream
FPUMo	=	Fugitives – pumps, oil stream
FPUMog	=	Fugitives – pumps, oil/water/gas stream
FPUMow	=	Fugitives – pumps, oil/water stream
FUG	=	Fugitives
FVALg	=	Fugitives – valves, natural gas stream
FVALho	=	Fugitives – valves, heavy oil stream
FVALng	=	Fugitives – valves, natural gas liquids stream
FVALo	=	Fugitives – valves, oil stream
FVALog	=	Fugitives – valves, oil/water/gas stream
FVALow	=	Fugitives – valves, oil/water stream
GLY	=	Glycol dehydrator unit
LOA	=	Loading Operation
LOS	=	Losses from flashing
MUD	=	Mud degassing
MUD-o	=	Mud degassing oil-based mud
MUD-s	=	Mud degassing, synthetic-based mud
MUD-w	=	Mud degassing, water-based mud
NGE	=	Natural gas engine
NGE-2C	=	Natural gas engine: 2-stroke, clean-burn
NGE-2L	=	Natural gas engine: 2-stroke, lean-burn

Emission Unit ID and Process ID Key (Continued):

NGE-2R	=	Natural gas engine: 2-stroke, rich-burn
NGE-4C	=	Natural gas engine: 4-stroke, clean-burn
NGE-4L	=	Natural gas engine: 4-stroke, lean-burn
NGE-4R	=	Natural gas engine: 4-stroke, rich-burn
NGT	=	Natural gas, diesel, or dual-fuel turbine
NGT-D	=	Diesel Turbine
PNE	=	Pneumatic pumps
PRE	=	Pressure/level controllers
STO	=	Storage tank
STO-CO	=	Storage tank – condensate
STO-CR	=	Storage tank – crude oil
VEN	=	Cold vent