READ ME file for the 2005 Gulfwide Access Files

CONTENTS

Secti	tion	Page
WHA	AT IS PROVIDED HERE?	ii
ACR	RONYMS	ii
INTI	RODUCTION	1
WHA	AT INVENTORY DATA FILES ARE PROVIDED?	1
HOV	W ARE THE DATA FILES ORGANIZED?	1
WHA	AT SOFTWARE DO I NEED TO USE THE DATA FILES?	1
HOV	W CAN I REVIEW OR USE THE FILES?	1
Tabl	les	Page
	Summary of Platform NIF Records	
1b	Summary of Platform NIF Records	4

WHAT IS PROVIDED HERE?

The platform emission inventory files developed in the Gulfwide Study are provided for review and use by MMS, air quality modelers, State and local agencies, and industry. This READ ME file provides important information integral to your use of the files.

ACRONYMS

CE Control Efficiency Access Table

CH4 Methane

CO Carbon Monoxide CO2 Carbon Dioxide

EM Emissions Access Table

EP Emission Process Access Table
EPA Environmental Protection Agency
ER Emission Release Point Access Table

EU Emission Unit Access Table

H2S Hydrogen Sulfide ID Identification

MMS Minerals Management Service

NAICS North American Industry Classification System

NEI National Emissions Inventory

NIF NEI Input Format N2O Nitrous Oxide NOX Nitrogen Oxides

PCT Percent

PE Emission Period Access Table

PM10 Particulate Matter 10 PM2.5 Particulate Matter 2.5 SI Sites Access Table

SIC Standard Industrial Classification

SCC Source Classification Code

SO2 Sulfur Dioxide
THC Total Hydrocarbons
TR Transmittal Access Table
VOC Volatile Organic Compounds

INTRODUCTION

The 2005 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 2005 Gulfwide Inventory effort was to compile 2005 base year activity data for all major active platforms in Gulf of Mexico on the Outer Continental Shelf (OCS). When reviewing the results of the *Year 2005 Gulfwide Emission Inventory Study*, it is important to keep in mind the widespread damage in the Gulf of Mexico caused by hurricanes Katrina and Rita, which impacted the inventory results for September through December.

WHAT INVENTORY DATA FILES ARE PROVIDED?

These files are currently provided in Access XP*. The zipped file contains an Access* database with eight record types, or tables, containing platform and emissions data.

HOW ARE THE DATA FILES ORGANIZED?

ERG has used a structure similar to that of the U.S. Environmental Protection Agency's National Emissions Inventory (NEI) database to compile the Gulfwide Inventory platform files. The specific data structure used for the 2005 Gulfwide Inventory is based on NEI Input Format (NIF) Version 3.0 for point sources. Further information about the NIF can be found at http://www.epa.gov/ttn/chief/nif/index.html#ver3.

Tables 1a and 1b summarize the structure of the NIF platform files provided.

WHAT SOFTWARE DO I NEED TO USE THE DATA FILES?

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

HOW CAN I REVIEW OR USE THE FILES?

MMS, air quality modelers, State and local agencies, and industry representatives can review and use these files 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 1a. Summary of Platform NIF Records^a

Transmittal	Site	Emission Unit	Emission Release Point
Record Type = TR	Record Type =SI	Record Type= EU	Record Type= ER
State County FIPS = MMS Area and MMS Block	State County FIPs = MMS Area and MMS Block	State County FIPs = MMS Area and MMS Block	State County FIPs = MMS Area and MMS Block
Organization Name = MMS; MMS Area and MMS Block Descriptions (e.g., AC025 = Area = AC, Block = 025)	State Facility Identifier = MMS Complex ID and MMS Structure ID	State Facility Identifier = MMS Complex ID and MMS Structure ID	State Facility Identifier = MMS Complex ID and MMS Structure ID
Transaction Type = 00	Facility Registry Identifier = MMS Lease Number	Emission Unit ID = combination of equipment type abbreviation and equipment ID assigned by MMS	Emission Release Point ID = combination of equipment type abbreviation and emission release point ID assigned by MMS
Inventory Year = 2005	SIC = 1382	SIC Unit Level = 1382	Emission Release Point Type = stack (02) or fugitive (01)
Inventory Type = CRIT	NAICS = 211111	NAICS Unit Level = 211111	Stack Height = stack height (feet)
Transaction Creation Date	Facility Name = MMS Company Name, MMS ID, MMS Complex ID, and MMS Structure ID	Emission Unit Description = combination of equipment type and equipment ID assigned by MMS operator	Stack Diameter = inner diameter of stack (feet)
Incremental Submission Number	Site Description = MMS Area, MMS Block, and MMS Name	Submittal Flag = A	Exit Gas Temperature = temperature of the gaseous emissions (°F)
	Location Address (mailing address for contact)		
Contact Person = MMS COR	City (mailing address for contact)	Tribal Code = 000	Exit Gas Velocity = exit velocity of emissions in at the exit outlet (ft/sec)
Contact Phone = MMS COR phone #	State (mailing address for contact)		Exit Gas Flow Rate = stack gas flow rate (ft ³ /sec)
Telephone Number Type = Office	Zip Code (mailing address for contact)		X-Coordinate = platform longitude (decimal degrees)
Electronic Address = MMS COR E- mail address	Country = USA		Y-Coordinate = platform latitude (decimal degrees)
Electronic Address Type = email	Submittal Flag = A		XY Coordinate Type = LATLON
Source Type = Point	Tribal Code = 000		Emission Release Point Description = stack or fugitive
			Release Height = equipment elevation for fugitives
			Fugitive Dimension Units = FT

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

Transmittal	Site	Emission Unit	Emission Release Point
			Emission Release Point Description =
			stack or fugitive
Affiliation Type = Report Certifier			Submittal Flag = A
Format Version = 3			Horizontal Collection Method = 027
			Horizontal Reference Datum Code =
			001
Tribal Code = 000			Reference Point Code = 102
			Coordinate Data Source Code = 087
			Tribal Code = 000

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

Emission Process	Control Equipment	Emission Period	Emission
Record Type = EP	Record Type = CE	Record Type= PE	Record Type= EM
State County FIPs = MMS Area and MMS Block	State County FIPs = MMS Area and MMS Block	State County FIPs = MMS Area and MMS Block	State County FIPs = MMS Area and MMS Block
State Facility Identifier = MMS Complex ID and MMS Structure ID	State Facility Identifier = MMS Complex ID and MMS Structure ID	State Facility Identifier = MMS Complex ID and MMS Structure ID	State Facility Identifier = MMS Complex ID and MMS Structure ID
Emission Unit ID = combination of equipment type abbreviation and equipment ID assigned by MMS	Emission Unit ID = combination of equipment type abbreviation and equipment ID assigned by MMS	Emission Unit ID = combination of equipment type abbreviation and equipment ID assigned by MMS	Emission Unit ID = combination of equipment type abbreviation and equipment ID assigned by MMS
Emission Release Point ID = combination of equipment type abbreviation and emission release point ID assigned by MMS	Emission Process ID = unique process for the emission unit	Emission Process ID = unique process for the emission unit	Emission Process ID = unique process for the emission unit
Emission Process ID = unique process for the emission unit	Pollutant Code = EPA pollutant code	Start Date = start date in which reported emissions occur	Pollutant Code = EPA pollutant code
SCC = EPA Source Category Code	Primary PCT Control Efficiency = control efficiency of the primary control device	End Date = end date in which reported emissions occur	Emission Release Point ID = combination of equipment type abbreviation and emission release point ID assigned by MMS
Emission Process Description = description of the emission process	Primary Device Type = EPA Control device code	Actual Throughput = Numeric value of process activity	Start Date = start date in which reported emissions occur
Heat Content = heat content of the fuel	Control System Description = Control description information	Throughput Units = Throughput unit of measure description	End Date = end date in which reported emissions occur
Sulfur Content = sulfur content of a fuel (mass percent)	Submittal Flag = A	Material = EPA Material code that was processed	Emission Numeric Value = actual emissions per period
Submittal Flag = A	Tribal Code = 000	Period Hours Per Day = Actual number of hours per day	Emission Unit Numerator = TON
Tribal Code = 000		Period Hours Per Day = Actual number of hours per period	Emission Type = 30 (entire period)

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

Emission Process	Control Equipment	Emission Period	Emission
		Submittal Flag = A	Factor Numeric Value = emission
			factor value
		Tribal Code = 000	Factor Unit Numerator = numerator
			units
			Factor Unit Denominator =
			denominator units
			Material = EPA material code that
			was processed
			Control Status = indicates if reported
			emissions are controlled or
			uncontrolled
			Emission Data Level = level of
			disaggregation of the emission record
			Submittal Flag = A
			Tribal Code = 000

^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

B-INTp = Boiler/heater/burner: 10-100 MMBtu/hr, process 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

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

D>600g = Gasoline engine: >600 hp, gasoline fuel

DRI = Drilling rig

DR-DIE = Drilling rig, diesel fuel

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-MPf = Flare: medium smoke, with continuous pilot, flare

FL-MPp = Flare: medium smoke, with continuous pilot, pilot

FL-NNf = Flare: no smoke, no continuous pilot, flare

FL-NPf = Flare: no smoke, with continuous pilot, flare

Emission Unit ID and Process ID Key (Continued):

FL-NPp = Flare: no smoke, with continuous pilot, pilot

FUG = Fugitives

FCDRg = Fugitives – centrifugal, dry seal, natural gas stream

FCDRo = Fugitives – centrifugal, dry seal, oil stream

FCDRow = Fugitives – centrifugal, dry seal, oil/water stream

FCONg = Fugitives – connectors, natural gas stream

FCONho = Fugitives – connectors, heavy oil stream

FCONo = Fugitives – connectors, oil 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

FCPAow = Fugitives – centrifugal pack, oil/water stream

FCWEg = Fugitives – centrifugal, wet seal, natural gas stream

FCWEo = Fugitives – centrifugal, wet seal, oil stream

FCWEow = Fugitives – centrifugal, wet seal, oil/water stream

FFLAg = Fugitives – flanges, natural gas stream

FFLAho = Fugitives – flanges, heavy oil stream

FFLAo = Fugitives – flanges, oil stream

FFLAow = Fugitives – flanges, oil/water stream

FOEg = Fugitives – open-ended lines, natural gas stream

FOEho = Fugitives – open-ended lines, heavy oil stream

FOEo = Fugitives – open-ended lines, oil stream

Emission Unit ID and Process ID Key (Continued):

FOEow = Fugitives – open-ended lines, oil/water stream

FOTHg = Fugitives – other equipment, natural gas stream

FOTHho = Fugitives – other equipment, heavy oil stream

FOTHo = Fugitives – other equipment, oil stream

FOTHow = Fugitives – other equipment, oil/water stream

FPUMg = Fugitives – pumps, natural gas stream

FPUMho = Fugitives – pumps, heavy oil stream

FPUMo = Fugitives – pumps, oil stream

FPUMow = Fugitives – pumps, oil/water stream

FVALg = Fugitives – valves, natural gas stream

FVALho = Fugitives – valves, heavy oil stream

FVALo = Fugitives – valves, oil stream

FVALow = Fugitives – valves, oil/water stream

GLY = Glycol dehydrator unit

GLY-EG = Glycol dehydrator ethylene glycol

GLY-TE = Glycol dehydrator triethylene glycol

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

Emission Unit ID and Process ID Key (Continued):

NGE = Natural gas engine

NGE-2C = Natural gas engine: 2-stroke, clean-burn

NGE-2L = Natural gas engine: 2-stroke, lean-burn

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 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