

# Plans Workshop Waste/Discharges and Air Quality July 18, 2017

**TABLE 1. WASTE ESTIMATED TO BE GENERATED, TREATED AND/OR DOWNHOLE DISPOSED OR DISCHARGED TO THE GOM**

Please specify if the amount reported is a total or per well amount and be sure to include appropriate units.

Projected generated waste			Projected ocean discharges		Projected Downhole Disposal
Type of Waste	Composition	Projected Amount	Discharge rate	Discharge Method	
<b>Will drilling occur? If yes, you should list muds and cuttings</b>					
EXAMPLE: Cuttings wetted with synthetic based fluid	Cuttings generated while using synthetic based drilling fluid.	X bbl/well	X bbl/day/well	discharge overboard	No
Water-based drilling fluid					
Cuttings wetted with water-based fluid					
Cuttings wetted with synthetic-based fluid					
<b>Will humans be there? If yes, expect conventional waste</b>					
EXAMPLE: Sanitary waste water	Sanitary waste from living quarters	X bbl/well	X bbl/hr/well	chlorinate and discharge overboard	No
Domestic waste					
Sanitary waste					
<b>Is there a deck? If yes, there will be Deck Drainage</b>					
Deck Drainage					
<b>Will you conduct well treatment, completion, or workover?</b>					
Well treatment fluids					
Well completion fluids					
Workover fluids					
<b>Miscellaneous discharges. If yes, only fill in those associated with your activity.</b>					
Desalination unit discharge					
Blowout prevent fluid					
Ballast water					
Sludge water					
Excess cement at seafloor					
Fire water					
Cooling water					
<b>Will you produce hydrocarbons? If yes, only fill in for produced water.</b>					
Produced water					
<b>Please enter individual or general to indicate which type of NPDES permit you will be covered by?</b>					

NOTE: All discharged wastes should comply with the requirements of the NPDES permit.

# Waste and Discharge Information

If you don't have the waste type, for example completion fluids, write "not applicable" or NA.

**TABLE 2. WASTE AND SURPLUS ESTIMATED TO BE TRANSPORTED AND/OR DISPOSED OF ONSHORE**

please specify whether the amount reported is a total or per well

Type of Waste	Projected generated waste	Solid and Liquid Wastes transportation	Waste Disposal		
			Name/Location of Facility	Amount	Disposal Method
<b>Will drilling occur? If yes, fill in the muds and cuttings.</b>					
EXAMPLE: Synthetic-based drilling fluid or mud	internal olefin, ester	Below deck storage tanks on offshore support vessels	Newport Environmental Services Inc., Ingleside, TX	X bbl/well	Recycled
Oil-based drilling fluid or mud					
Synthetic-based drilling fluid or mud					
Cuttings wetted with Water-based fluid					
Cuttings wetted with Synthetic-based fluid					
Cuttings wetted with oil-based fluids					
<b>Will you produce hydrocarbons? If yes fill in for produced sand.</b>					
Produced sand					
<b>Will you have additional wastes that are not permitted for discharge? If yes, fill in the appropriate rows.</b>					
EXAMPLE: trash and debris (recyclables)	Plastic, paper, aluminum	barged in a storage bin	ARC, New Iberia, LA	X lb/well	Recycled
Trash and debris					
Used oil					
Wash water					
Chemical product wastes					
<b>NOTE: If you will not have a type of waste, enter NA in the row.</b>					

You do not have to use the tables, follow 30 CFR 550 Subpart B.

# Secretarial Order 3350, Issued May 1, 2017 addresses AQ Rule.

(5) Immediately cease all activities to promulgate the "Offshore Air Quality Control, Reporting, and Compliance" Proposed Rule published at 81 Federal Register 197173 (April 5, 2016) and all other rules and guidance published pursuant thereto. Within 21 days of the issuance of this Order, the Director of BOEM shall provide to the ASLM, the Deputy Secretary, and Counselor to the Secretary for Energy Policy, a report explaining the effects, if any, of not issuing a new rule addressing offshore air quality, and providing options for revising or withdrawing the proposed rule consistent with the policy set forth in section 2 of the Executive Order.

(6) Within 21 days of the issuance of this Order, BOEM shall provide to the ASLM, the Deputy Secretary, and Counselor to the Secretary for Energy Policy, a report summarizing progress on the action items 1-5 above.

# Update to Air Quality Proposed Rule

ASLM TO REVIEW  
ON JULY 14, 2017



## Options:

- Propose some provisions that should not be finalized
- Propose essential updates (cross reference SILS, AAIs, NAAQS to EPA standards)
- Propose other “like-to-have” improvements (improve scientific accuracy)

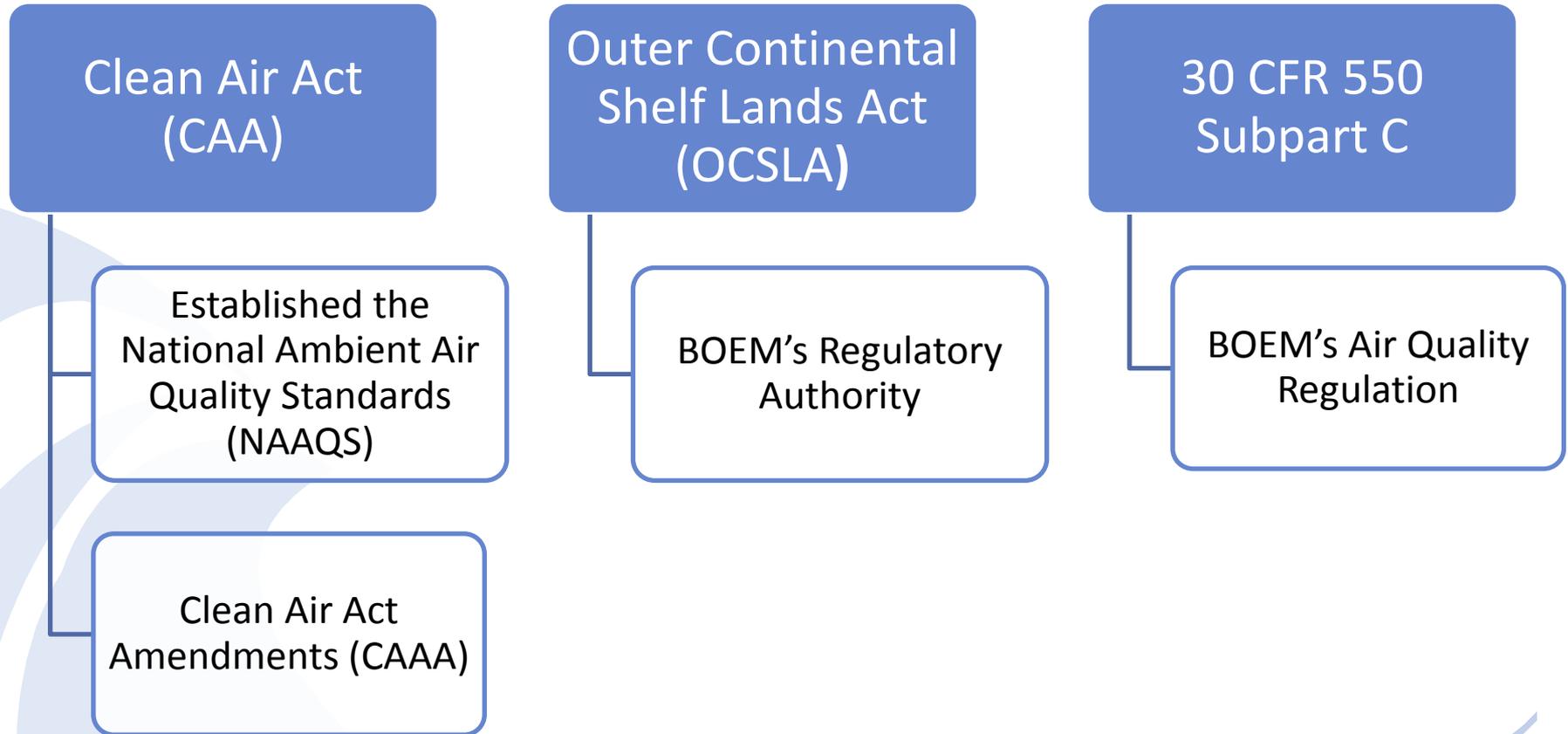


## How to Proceed:

- Withdraw rule
- Withdraw and start new rule
- Final rule with only essential updates
- Final rule with highest priority and “like-to-have” improvements

# Air Quality Program

The Air Quality(AQ) Unit carries out the environmental policies of the Department of the Interior in accordance with the following regulations:



# Air Quality Regulation vs Guidance

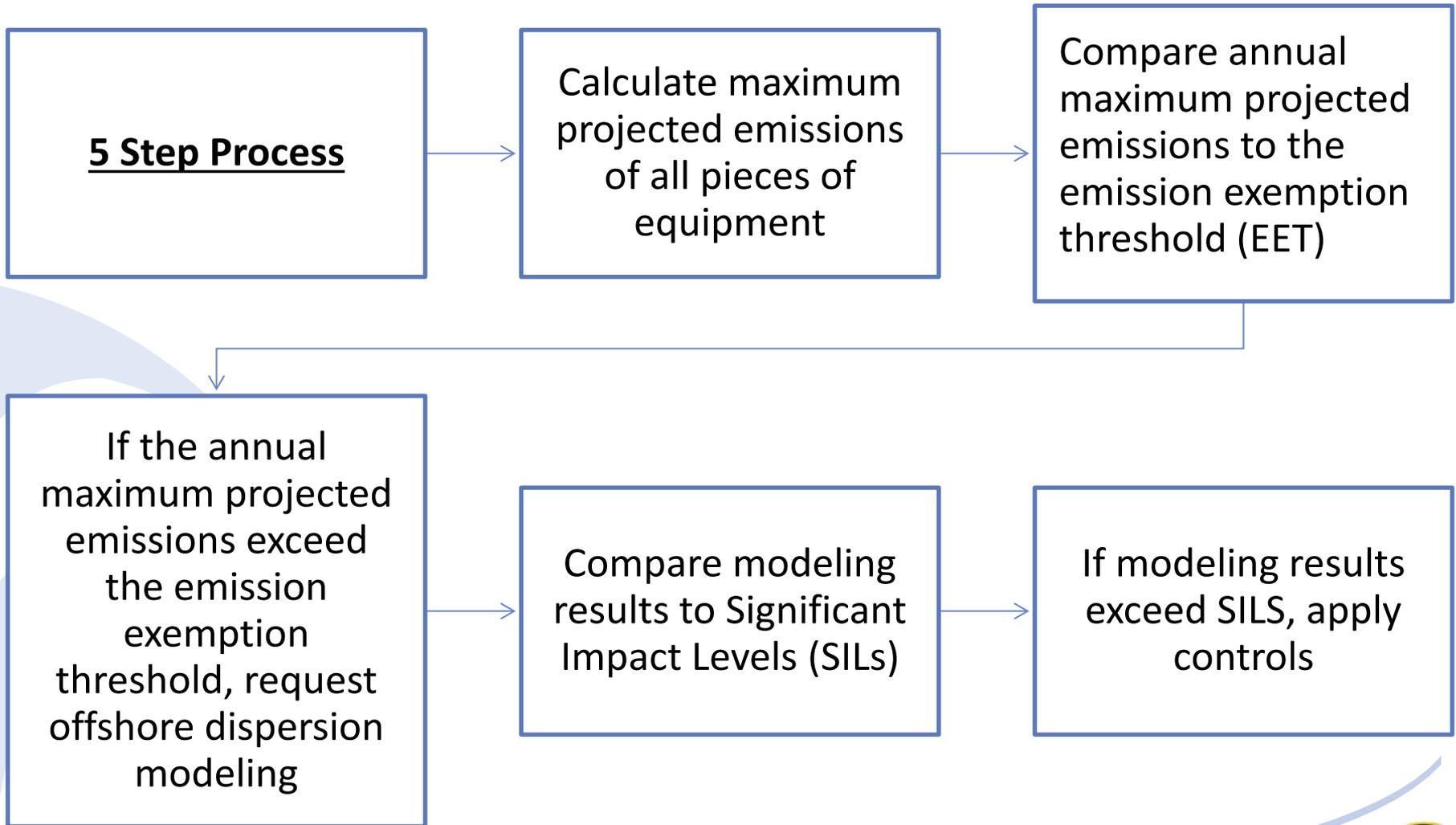
**REGULATIONS** =  
Mandatory  
Requirements

- 30 CFR 550 Subpart B - Plans and Information
- 30 CFR 550 Subpart C - Pollution Prevention and Control

**GUIDANCE** =  
Approach to Meeting  
Requirements

- NTLs - are issued by BOEM only as guidance documents to clarify, supplement, and provide more detail about certain BOEM regulatory requirements.
- **BOEM does not use NTLs to regulate**

# Current Air Quality Review Process



# Tips for Calculating Emissions

How to increase your flexibility but stay below the Emission Exemption Threshold:

- On spreadsheets, use longer activity periods if you can stay under the EET.
- If modeling, use longer activity periods if you can stay under the SIL.
- <https://www.boem.gov/GOMR-Environmental-Compliance/>

Please submit your additional questions on notecards.

# Tips for Plan Submittal

**Activity schedule should match Air Quality Report (AQR)** - if you don't, we use what's in AQR section or BOEM RFI

**Relief Wells** - include in AQR

**Use Default Values - Horsepower (hp)** - or provide the hp rating for the named drilling unit to support the non-default value used

**Use Default Values - Actual Fuel** - or provide Manufacturer's data to support non-default fuel usage, or BOEM RFI

**Use Default Values - Run Times** - if not using 24/365, provide actual run time, or BOEM RFI

**Use Default Values - Emission Factors** - or provide the reference to support the non-default emission factor, or BOEM RFI

**Avoid RFIs by providing the complete story**

**Verify Distance to Shore** (available on website)

**Avoid Cutting and Pasting, check units**

# OOC Requested Topics for Air Quality

- Air Quality Report vs. OCS Plan Forms
- Definition of Facility
- Support Vessels
- Air Dispersion Modeling Guidelines
- Mitigation 2.05: Fuel Usage or Run Time Documentation
- AQR for Future Years

# OCS Plan Forms vs. Air Quality Report

- OCS Plan Forms
  - Covers proposed activities for initial, revised, or supplemental EP or DOCD
- Air Quality Report
  - Plan Emissions = proposed activities for initial, revised, or supplemental EP or DOCD
  - Complex Total Emissions = Total (all proposed activities under the initial, revised, and supplemental plans) for the EP or DOCD

# Definition of Facility

- **30 CFR 550.105**

- Facility: as used in 550.303, means all installations or devices permanently or temporarily attached to the seabed. They include mobile offshore drilling units (MODUs), even while operating in the “tender assist” mode (i.e., with skid-off drilling units) or other vessels engaged in drilling or downhole operations. They are used for exploration, development, and production activities for oil, gas, or sulphur and emit or have the potential to emit any air pollutant from one or more sources. They include all floating production systems (FPSs), including column-stabilized-units (CSUs); floating production, storage and offloading facilities (FPSOs); tension-let platforms (TLPs); spars, etc. During production, multiple installations or devices are a single facility if the installations or devices are at a single site. Any vessel used to transfer production from an offshore facility is part of the facility while it is physically attached to the facility.

# Support Vessels

- **Clean Air Act Title 42 U.S.C 7627 (4) (C)**
  - Outer Continental Shelf source: The terms “Outer Continental Shelf source” and “OCS source” include any equipment, activity, or facility which— (i) emits or has the potential to emit any air pollutant, (ii) is regulated or authorized under the Outer Continental Shelf Lands Act [43 U.S.C. 1331 et seq.], and (iii) is located on the Outer Continental Shelf or in or on waters above the Outer Continental Shelf. Such activities include, but are not limited to, platform and drill ship exploration, construction, development, production, processing, and transportation. For purposes of this subsection, emissions from any vessel servicing or associated with an OCS source, including emissions while at the OCS source or enroute to or from the OCS source within 25 miles of the OCS source, shall be considered direct emissions from the OCS source.
- **30 CFR § 550.224 (b), 550.257 (b)**

# Air Dispersion Modeling Guidelines

- If the sum of emissions exceed the Emission Exemption Threshold, perform modeling with the year of highest emissions.
- 30 CFR § 550.218 and 550.249 (e)
  - When BOEM requires air quality modeling, you must use the guidelines in appendix W of 40 CFR part 51 with a model approved by the Director.
- Air Dispersion Modeling Guidelines can be found at <https://www.boem.gov/Dispersion-Modeling-Guidelines/>.

# Mitigation 2.05: Fuel Usage or Run Time Documentation

The projected nitrogen oxides (NO<sub>x</sub>) emissions amounts in the plan were calculated using historic (insert fuel consumption rates, run times). Maintain monthly records of the total annual (insert fuel consumption, run times) for the (specify the affected vessels or equipment) with a limit of (insert limit in gallons/year, limit in hours/year) and provide the information to the Bureau of Ocean Energy Management's (BOEM's) Regional Supervisor, Office of Leasing and Plans, Plans Section annually by February 1st of each year, beginning in the year (insert year). If no activities were conducted during a calendar year, provide a statement to that effect in lieu of the required records. If at any time during the applicant's activities these records indicate that the NO<sub>x</sub> annual emissions may exceed the annual limit approved in your plan or the total annual (insert fuel consumption, run time) limit, the applicant must immediately prepare a revised plan pursuant to 30 CFR § 550.283 to include the recalculated emissions amounts. The applicant will not proceed with the actions that could cause the potential annual increase in emissions until the revised plan has been submitted to and approved by BOEM.

Gulf of Mexico OCS Oil and Gas Lease Sales: 2017-2022, Appendix B. Commonly Applied Mitigating Measures, BOEM 2016-018.

# AQR for Future Years

Why does BOEM ask operators to include at least 10 years to cover production emissions?

- If the operator does not have air quality spreadsheets in the plan to cover the air emissions for the activities BSEE will issue an Incident of Noncompliance (INC).

# Plan vs. Complex Total Emissions

Example 1:  
One lease,  
one DOCD

DOCD N-1111

**Complex Total Emissions**  
Existing emissions + R- or S-  
plan emissions

Existing  
production  
emissions

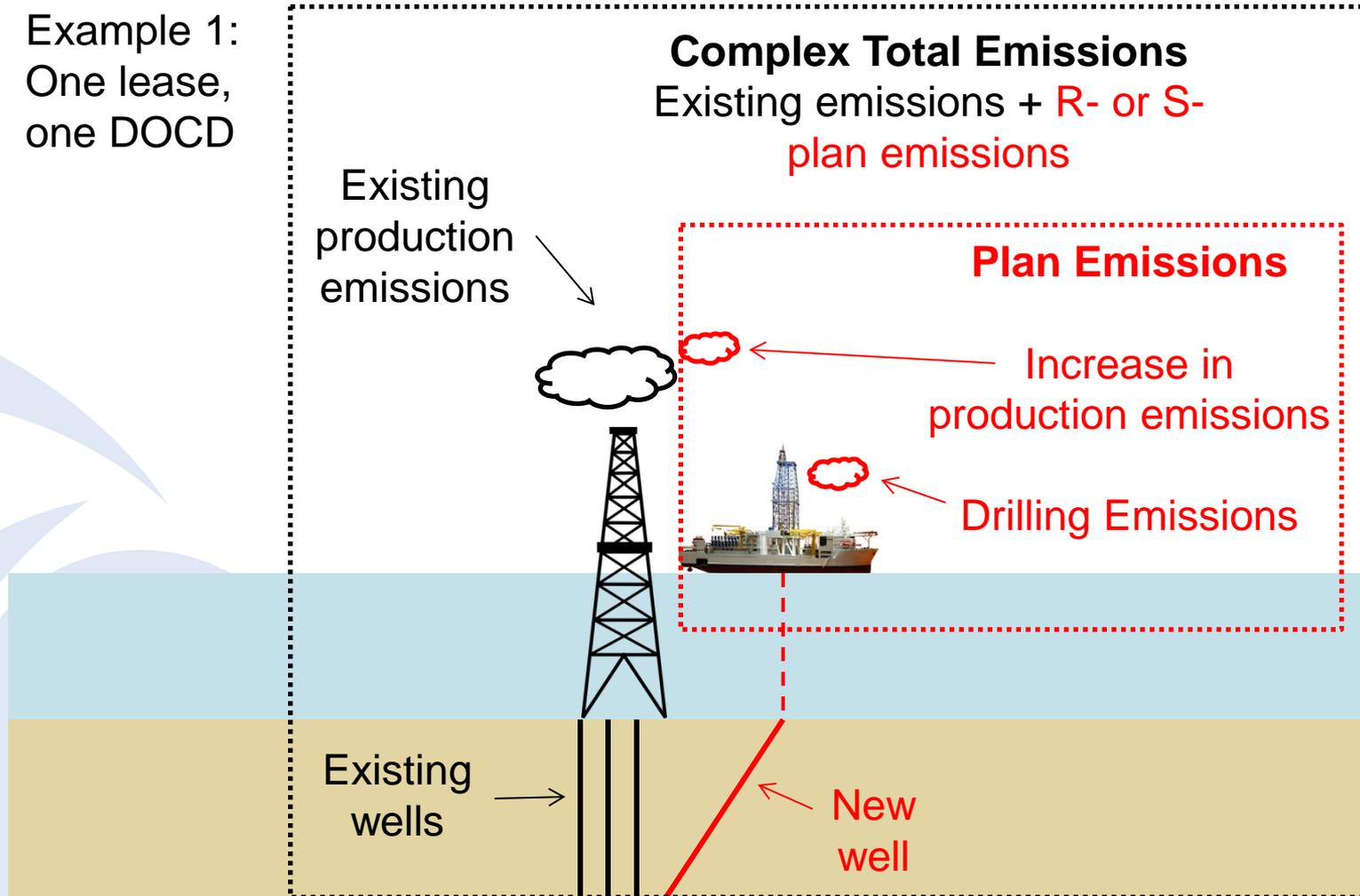
**Plan Emissions**

Increase in  
production emissions

Drilling Emissions

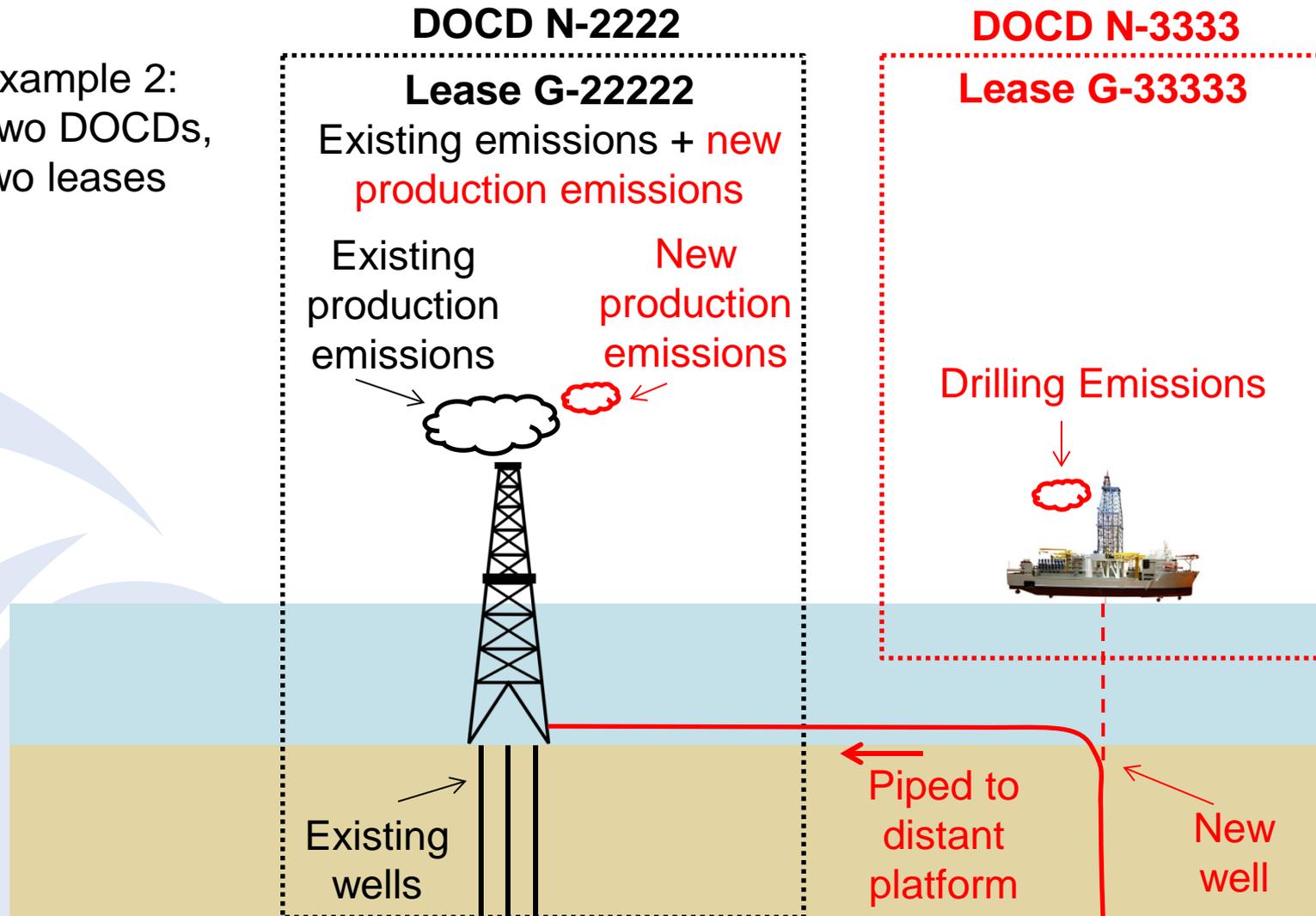
Existing  
wells

New  
well



# Plan vs. Complex Total Emissions

Example 2:  
Two DOCDs,  
two leases



# Plan vs. Complex Total Emissions

Example 3:  
One DOCD,  
multiple  
leases

**DOCD N-4444**

Existing emissions + **new production emissions** +  
**drilling emissions**

