FACT SHEET AND SUPPLEMENTAL INFORMATION FOR THE FINAL REISSUANCE OF THE NPDES GENERAL PERMIT FOR NEW AND EXISTING SOURCES IN THE OFFSHORE SUBCATEGORY OF THE OIL AND GAS EXTRACTION POINT SOURCE CATEGORY FOR THE WESTERN AND CENTRAL PORTION OF THE OUTER CONTINENTAL SHELF OF THE GULF OF MEXICO (GMG290000)

May 10, 2023

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I. Legal Basis

The Clean Water Act (CWA or the Act) renders it unlawful to discharge pollutants to waters of the United States from any point source, except as authorized by the Act, which may include issuance of an NPDES permit. 33 U.S.C. §§ 1311(a), 1342(a). CWA section 402, 33 U.S.C. section 1342, authorizes the Environmental Protection Agency (EPA) to issue National Pollutant Discharge Elimination System (NPDES) permits allowing discharges on the condition they will meet certain requirements, including CWA sections 301, 304, 306, 401 and 403. Those statutory provisions require NPDES permits include effluent limitations for authorized discharges that: (1) meet standards reflecting levels of technological capability; (2) comply with the EPA-approved state water quality standards; (3) comply with other state requirements adopted under authority retained by states under CWA section 510, 33 U.S.C. section 1370; and, (4) cause no unreasonable degradation to the territorial seas, waters of the contiguous zone, or the oceans.

CWA section 301 requires compliance with "best conventional pollution control technology" (BCT) and "best available pollution control technology economically achievable" (BAT) no later than March 31, 1989. CWA section 306 requires compliance with New Source Performance Standards (NSPS) no later than the effective date of such standards. Accordingly, three types of technology-based effluent limitations are included in the proposed permit. With regard to conventional pollutants, i.e., pH, BOD, oil, and grease, TSS, and fecal coliform, CWA section 301(b)(1)(E) requires effluent limitations based on BCT. With regard to nonconventional and toxic pollutants, CWA section 301(b)(2)(A), (C), and (D) require effluent limitations based on BAT. For New Sources, CWA section 306 requires effluent limitations based on New Source Performance Standards (NSPS). Final effluent guidelines specifying BCT, BAT, and NSPS for the Offshore Subcategory of the Oil and Gas Point Source Category (40 CFR 435, Subpart A) were issued January 15, 1993, and were published at 58 FR 12454 on March 4, 1993. Those guidelines were modified on January 22, 2001 (see 66 FR 6850, January 22, 2001), to include technology based treatment standards for discharges associated with the industry's use of synthetic based drilling fluids.

II. Regulatory Background

On April 3, 1981 (see 46 FR 20284), the EPA published the final general NPDES permit, TX0085642, which authorized discharges from facilities located seaward of the outer boundary of the territorial seas (as defined by 33 U.S.C. 1362(8)) off Louisiana and Texas. The 1981 general permit implemented "Best Practicable Control Technology Currently Available" (BPT), as established by effluent guidelines for the Offshore Subcategory (see 40 CFR 435). The permits expired April 3, 1983.

The EPA reissued the general permit on September 15, 1983 (48 FR 41494), with an expiration date of June 30, 1984. The permit was issued for a short period of time because promulgation of National Effluent Limitations Guidelines for Best Available Technology Economically Achievable were expected by 1983 and again by 1984. The limitations contained

in the permit were unchanged in the 1984 reissuance; however, some changes were made for facilities located near the Flower Garden Banks.

On July 9, 1986 (51 FR 24897), the EPA reissued the general permit. In that action the EPA Region 6 issued a joint permit with Region 4 authorizing discharges from facilities located throughout the Gulf of Mexico seaward of the 3-mile Clean Water Act territorial seas. That permit, numbered GMG280000, prohibited discharge of oil based drilling fluids, oil contaminated drilling fluids, drilling fluids containing diesel oil, and drill cuttings generated using oil based drilling fluids. New limits were included in the permit for suspended particulate phase toxicity in drilling fluids, the drilling fluid discharge rate near areas of biological concern, and for free oil in drilling fluids and drill cuttings. The permit expired on July 1, 1991.

On November 19, 1992, the EPA Region 6 reissued the NPDES general permit for the Western Gulf of Mexico Outer Continental Shelf (57 FR 54642), GMG290000, covering operators of lease blocks in the Offshore Subcategory of the Oil and gas Extraction Point Source Category located seaward of the outer boundary of the territorial seas of Texas and Louisiana. As a part of that reissuance, new limits for produced water toxicity were added, as well as new limits for cadmium and mercury in stock barite, and a prohibition on the discharge of drilling fluids to which mineral oil has been added. That general permit was modified on December 3, 1993, to implement Offshore subcategory effluent limitations guidelines promulgated March 4, 1993 (58 FR 12504), and to include more accurate calculations of produced water critical dilutions. A general permit covering New Sources in that same area of coverage was issued and combined with the Western Gulf of Mexico Outer Continental Shelf general permit on August 9, 1996 (61 FR 41609). The permit expired on November 19, 1997 and was reissued in two parts on November 2, 1998 (63 FR 58722), and April 19, 1999 (64 FR 19156).

In the 1998 reissuance, the EPA Region 6 authorized new discharges of seawater and freshwater to which treatment chemicals, such as biocides and corrosion inhibitors, have been added. The maximum discharge rate limit for produced water was removed. To account for advances in drilling fluid technology, the permit was modified on December 18, 2001 (66 FR 65209), to authorize discharges associated with the use of synthetic based drilling fluids. Additional monitoring requirements were also included at that time to address hydrostatic testing of existing piping and pipelines and those discharges were authorized. That permit expired on November 3, 2003.

The general permit was reissued on October 7, 2004 (69 FR 60150). With that reissuance, the EPA included produced water monitoring requirements for facilities located in the hypoxic zone. The permit was issued for a three-year term rather than the typical five-year term so that the results from the produced water hypoxia study could be addressed in a timely manner if additional permit conditions were found to be warranted. In the 2007 permit reissuance (72 FR 31575), requirements to comply with new cooling water intake structure regulations were included. Sub-lethal effects were required to be measured for whole effluent toxicity testing. New testing methods were allowed for monitoring cadmium and mercury in stock barite. That permit expired September 30, 2012.

The EPA reissued the permit on September 28, 2012 (77 FR 61605). Operators are required to file electronic Notice of Intent and Discharge Monitoring Reports. The permit required characterization studies for produced water and water-based drilling fluids, respectively, so the EPA could evaluate whether those discharges might contribute heavy metals at a level toxic to aquatic life. Other major changes included toxicity testing requirements for hydrate control fluids, spill prevention best management practices, and allowing the discharge of limited amount of drilling fluids with cuttings due to the testing of subsea safety valves. The permit expired September 30, 2017.

The EPA reissued the permit on September 19, 2017 (82 FR 45845). The permit removed the requirements to submit eNOIs 24 hours prior to discharging, extended Notice of Termination (NOT) deadline to within one year after termination, allowed paper NOIs when the eNOI system is unavailable, allowed the primary operator to require day-to-day vessel operators to file eNOIs for their activities, increased the time to collect a produced water oil and grease sample from 30 minutes to 2 hours after a sheen is observed, reduced the cooing water intake velocity monitoring frequency, restored the monitoring exception for properly operated Marine Sanitation Devices (MSDs), increased the deadline to submit the Industry-wide Study Plan for well treatment, completion, and workover fluids was changed from 6 months to 18 months, and allowed submittal of SEAMAP data instead of entrainment monitoring for cooling water intake. Various other changes were included to clarify permit requirements. The permit expired on September 30, 2022.

The EPA proposed permit renewal in the Federal Register Notice on July 22, 2022. In the proposed permit renewal, the EPA proposed several major changes, discussed in the document entitled "Fact Sheet And Supplemental Information For The Proposed Reissuance Of The NPDES General Permit For New And Existing Sources In The Offshore Subcategory Of The Oil And Gas Extraction Point Source Category For The Western Portion Of The Outer Continental Shelf Of The Gulf Of Mexico (GMG290000)". A 60-day public comment period ending September 20, 2022, was provided. The EPA received comments from fourteen entities including: 1) the Joint Trades, 2) BP Exploration and Production Inc., 3) Beacon Offshore Energy, 4) Bureau of Safety and Environmental Enforcement - Gulf of Mexico OCS Region, 5) CETCO Energy Services, 6) Transocean Offshore Deepwater Drilling Inc., 7) International Association of Drilling Contractors, 8) Chevron U.S.A. Inc., 9) Shell Exploration & Production Company, 10) Anonymous, 11) Center for Biological Diversity (CBD), 12) Helen Kimball-Brooke, 13) Virginia Gomez, and 14) Daniel Gregg. While most of comments from regulated communities focused on operation requirements, comments from CBD mainly focused on regulatory requirements.

III. Coverage of Facilities and Locations

A facility means a platform, rig, ship, and any surface/sub-surface fixed or mobile structure from where exploration, development, or production operations are performed. The permit coverage area consists of lease areas that are located in and discharging to Federal waters in the Gulf of Mexico specifically located in the Central to Western portions of the Gulf of Mexico (GMG290000). The lease areas under Region 6 that begin in the Central portion include: Chandeleur, Chandeleur East, Breton Sound, Main Pass, Main Pass South and East, Viosca Knoll (but only those blocks under Main Pass South and East; the Viosca Knoll blocks between Main Pass and Mobile are under the EPA Region 4 jurisdiction), South Pass, South Pass South and East, West Delta, West Delta South, Mississippi Canyon, Atwater Valley, Lund, and Lund South. These named lease areas and all lease areas westward are part of Region 6. If facilities located in the Louisiana or Texas territorial seas want to discharge to areas beyond the 3-mile territorial seas as defined under the Clean Water Act, operators need to file Notice of Intent (NOI) under the authority of this permit, GMG290000. But, facilities located in the Louisiana or Texas territorial seas must be covered under LAG260000 or TXG260000, respectively. Facilities located in the Louisiana or Texas are not authorized to discharge drilling fluids and drill cuttings pursuant to the Offshore Subcategory guidelines (40 CFR 435.13 and 435.14).

IV. Types of Discharges Covered

The discharges proposed to be authorized by the reissued permit are listed below. The definitions of the waste streams are based on those given in the Offshore Subcategory Effluent Limitations Guidelines (40 CFR 435, Subpart A), except for miscellaneous discharges which were not covered by those guidelines. Most of the authorized waste streams are retained from the current 2012 issued permit.

A. Drilling fluids - the circulating fluid (mud) used in the rotary drilling of wells to clean and condition the hole and to counterbalance formation pressure. Classes of drilling fluids are:

(a) "Water-Based Drilling Fluid" means the continuous phase and suspending medium for solids is a water-miscible fluid, regardless of the presence of oil.

(b) "Non-Aqueous Drilling Fluid" means the continuous phase and suspending medium for solids is a water-immiscible fluid, such as oleaginous materials (*e.g.*, mineral oil, enhanced mineral oil, paraffinic oil, C₁₆-C₁₈ internal olefins, and C₈-C₁₆ fatty acid/2-ethylhexyl esters).

(i) "Oil-Based" means the continuous phase of the drilling fluid consists of diesel oil, mineral oil, or some other oil, but contains no synthetic material or enhanced mineral oil.

(ii) "Enhanced Mineral Oil-Based" means the continuous phase of the drilling fluid is enhanced mineral oil.

(iii) "Synthetic-Based" means the continuous phase of the drilling fluid is a synthetic material or a combination of synthetic materials.

B. Drill cuttings - the particles generated by drilling into subsurface geologic formations including cured cement carried out from the wellbore with the drilling fluid. Examples of drill cuttings include small pieces of rock varying in size and texture from fine silt

to gravel. Drill cuttings are generally generated from solids control equipment and settle out and accumulate in quiescent areas in the solids control equipment or other equipment processing drilling fluid (*i.e.*, accumulated solids).

(a) "Wet Drill Cuttings" means the unaltered drill cuttings and adhering drilling fluid and formation oil carried out from the wellbore with the drilling fluid.

(b) "Dry Drill Cuttings" means the residue remaining in the retort vessel after completing the retort procedure specified in Appendix 7 of 40 CFR 435, Subpart A.

C. Deck drainage - any waste resulting from deck washings, spillage, rainwater, and runoff from gutters and drains including drip pans and work areas within facilities subject to this permit. A use of biocide for sump/drain systems to comply with proper operation and maintenance requirements is permitted and toxicity test for such a discharge of drainage is not required.

D. Produced water - the water brought up from the hydrocarbon-bearing strata during the extraction of oil and gas, and can include formation water, injection water, and any chemicals added downhole or during the oil/gas/water separation process.

Produced water generated from the monoethylene glycol (MEG) reclamation processes including salt slurry generated from the salt centrifuge unit is regulated as produced water. However, separate monitoring requirements must be complied with if such salt slurry is not mixed and discharged with produced water waste stream.

E. Produced sand - slurried particles used in hydraulic fracturing, the accumulated formation sands, and scale particles generated during production. Produced sand also includes desander discharge from produced water waste stream and blowdown of water phase from the produced water treatment system.

F. Well treatment, completion fluids and workover fluids (TCW Fluids) - well treatment fluids are any fluids used to restore or improve productivity by chemically or physically altering hydrocarbon-bearing strata after a well has been drilled; well completion fluids are salt solutions, weighted brines, polymers, and various additives used to prevent damage to the well bore during operations which prepare the drilled well for hydrocarbon production; and workover fluids are salt solutions, weighted brines, polymers, or other specialty additives used in a producing well to allow for maintenance, repair or abandonment procedures.

Packer fluids, low solids fluids between the packer, production string and well casing, are considered to be workover fluids and must meet the effluent requirements imposed on workover fluids. The 2012 permit clarified that propping agents returned with well treatment fluids or produced water meet the definition of produced sands. Fracking fluids are considered well treatment fluids under this permit.

G. Sanitary waste - human body waste discharged from toilets and urinals.

H. Domestic waste - material discharged from galleys, sinks, showers, safety showers, eye wash stations, hand washing stations, fish cleaning stations, and laundries.

I. Miscellaneous discharges -

Aqueous film forming foam (AFFF) - AFFF must be collected and stored for onshore disposal unless the vessel uses a non-fluorinated or alternative foaming agent.

Blowout preventer control fluid - fluid used to actuate the hydraulic equipment on the blow-out preventer. This permit action clarifies that this discharge includes fluid from the subsea wireline "grease-head."

Boiler blowdown - discharges from boilers necessary to minimize solids build-up in the boilers, including vents from boilers and other heating systems.

Bulk transfer operations powder - de minimis amounts of bulk product (e.g., barite, cement, etc.) that may be released during transfers from supply boats to a drilling rig.

Desalinization unit discharge - wastewater associated with the process of creating freshwater from seawater.

Diatomaceous earth filter media - filter media used to filter seawater or other authorized completion fluids and subsequently washed from the filter.

Excess cement slurry - the excess mixed cement pumped to wells, including additives and wastes from equipment washdown, after a cementing operation. Mixed cement for equipment testing purposes does not meet the definition of excess cement slurry.

Hydrate control fluids - fluids used to prevent, retard, or mitigate the formation of hydrates in and on drilling equipment, process equipment and piping.

Mud, cuttings and cement at the sea floor - discharges that occur at the seafloor prior to installation of the marine riser and during marine riser disconnect, well abandonment and plugging operations.

Pipeline brines - brines used for pipeline/equipment preservation.

Source water and source sand - water from non-hydrocarbon bearing formations for the purpose of pressure maintenance or secondary recovery including the entrained solids.

Subsea cleaning fluids – acidic cleaning agents used to dissolve marine deposits on subsea equipment during subsea maintenance and intervention activities to assure proper seating of equipment operating and to avoid ingress of extremely high subsea pressures and egress (losses of containment) of fluids to the environment

Subsea production discharges - include: subsea wellhead preservation fluids, subsea production control fluid, umbilical steel tube storage fluid, leak tracer fluid, and riser tensioner fluids.

Uncontaminated or treated ballast/bilge water - seawater added or removed to maintain proper draft (ballast water) or water from a variety of sources that accumulates in the lowest part of the vessel/facility (bilge water) without contact with or addition of chemicals, oil, or other wastes, or being treated for removal of contaminants prior to discharge. These definitions are modified from the current definitions to distinguish ballast water and bilge water and to add the treated ballast water and bilge water to the definition. **Uncontaminated freshwater -** freshwater which is discharged without the addition or contact of treatment, chemicals, oil, or other wastes; included are: (1) discharges of excess freshwater that permit the continuous operation of fire control and utility lift pumps; (2) excess freshwater from pressure maintenance and secondary recovery projects; (3) water used during training and testing of personnel in fire protection; and (4) water used to pressure test new piping.

Uncontaminated seawater - seawater which is returned to the sea without the addition or contact of treatment chemicals, oil, or other wastes. Included are: (1) discharges of excess seawater which permit the continuous operation of fire control and utility lift pumps; (2) excess seawater from pressure maintenance and secondary recovery projects; (3) water released during the training and testing of personnel in fire protection; (4) seawater used to pressure test piping; (5) once through noncontact cooling water which has not been treated with biocides, and (6) seawater not treated by chemicals used during Dual Gradient Drilling.

J. Chemically Treated Seawater and Freshwater - seawater or freshwater to which corrosion inhibitors, scale inhibitors, and/or biocides have been added. The existing permitted discharges in the current permit include:

- 1. Excess seawater which permits the continuous operation of fire control and utility lift pumps,
- 2. Excess seawater from pressure maintenance and secondary recovery projects,
- 3. Water released during training of personnel in fire protection,
- 4. Seawater used to pressure test piping and pipelines,
- 5. Ballast water,
- 6. Once through non-contact cooling water,
- 7. Seawater used as piping or equipment preservation fluids, and
- 8. Seawater used during Dual Gradient Drilling.
- 9. Well operations other than those covered by the other sections of Part I.B of the permit.

The seawater used during Dual Gradient Drilling (DGD) is a practice of maintaining two effective fluid gradients in the wellbore annulus while drilling. The denser gradient is below the sea floor and the less dense gradient is above the sea floor. There are two discharges associated with DGD: one is seawater used to provide hydraulic power to Mud Lift Pump; and another is seawater used to provide static head in riser during DGD. Depending on the system design, corrosion inhibitors and biocides may need to be used to prevent corrosion and properly operate and maintain the DGD system.

For a sub-sea discharge of chemically treated seawater or freshwater used for piping and equipment preservation, where to collect discharge samples is not practical, the EPA authorizes those discharges by permitting the operator to conduct the required toxicity tests prior to the use of the product. The EPA, in 2012, determined that toxicity tests are not required for miscellaneous discharges treated by bromide, chlorine, or hypochlorite. But, uses of bromide, chlorine, or hypochlorite are still required to be in compliance with the technology-based quantity limits.

V. Significant Changes from the Proposed Permit

Significant changes from the proposed permit include.

- 1. Well, heads, pipelines, jumpers, and associated infrastructures connected to the facility are considered part of the host facility even when the infrastructure crosses lease block boundaries.
- 2. NOI requirements allow for all vessels, to be able to file one valid NOI when performing jobs in the same lease block, if jobs are performed for the same designated operator.
- 3. Operators who filed under the previous permit have an additional 30 days to submit eNOI, if the system is unavailable during the 60 day renewal period. These operators are covered under the reissued permit for up to 90 days.
- 4. Only new operators, not covered under the previous permit, can submit temporary NOIs when system is unavailable. Due date and coverage for temporary NOI extended 14 days, after the system becomes available, if the system remains unavailable after 14 days.
- 5. Removed continuous monitoring language from cooling water intake requirements.
- 6. Removed the additional requirements for a signed agreement for transfers.
- 7. Flow rate monitoring for Well Treatment Fluids, Completion Fluids, and Workover Fluids.
- 8. Characteristic Assessment requirements for Well Treatment Fluids, Completion Fluids, and Workover Fluids have been removed.
- 9. For Sanitary Waste, all limits must be complied with, in the event the Marine Sanitation Device is not properly operating or not operating.
- 10. Cooling water intake structure operation for New Fixed Facilities that Employ Sea Chests as Intake Structures and New Fixed Facilities that do not employ sea chests as intake structures, require development, and implementation of operation and maintenance plans, with reporting requirements for numeric exceedances.
- 11. All facilities are subject to monitoring requirements if they discharged during said monitoring period, regardless of whether the discharge lasted the full period
- 12. Methods and/or calculations for estimated flow must be documented.
- 13. Sample type for oil and grease is grab or composite.
- 14. The use of other disinfection technologies, including, but not limited to, biomembrane filtration and ultra-violet light are allowed as substitutes for systems that use chlorine, provided that the MSD is approved by the U.S. Coast Guard and results in equivalent or improved disinfection of the Sanitary Waste stream to that considered in the ELG. TRC monitoring is not required for alternative MSDs that do not use chlorine, when the system is not properly operating or not operating, unless a chlorine based product is used as a backup disinfectant.

- 15. Operators must flush and capture the materials contained in pipelines, umbilicals, and other equipment prior to disconnection. No releases or discharges of fluid from pipelines, umbilicals, and/or other equipment that have not been fully flushed prior to being disconnected or cut from the facility are authorized under this NPDES permit.
- 16. Calculation for WET critical dilutions and testing frequencies is based on calendar year
- 17. Waiver for the minimum number of samples to be collected for WET tests, should the effluent cease discharging for produced water.
- 18. For Treatment, Completion, and Workover discharges, acute WET results can be derived from chronic WET test.
- 19. Compliance schedule for WET acute limits related to Treatment, Completion, and Workover discharges and sample holding time of 72 hours.
- 20. No approved Alternative Test Procedure (ATP) for WET, however they can be requested at any time following 40 CFR 136.5.
- 21. 72 hour hold time for WET samples for Chemically Treated Miscellaneous Discharges
- 22. For Chemically Treated Miscellaneous Discharges, non-continuous discharges are discharges that occur less than or equal to once per week and last less than 24 hours. These discharges shall be monitored once per discharge.
- 23. State general permit or state individual permit may be required in addiiton to authorization under this permit.
- 24. Defines decommissioning and Subsea Cleaning Fluids.
- 25. 7-day chronic toxicity requirements for Well Treatment Fluids, Completion Fluids, and Workover Fluids has been moved from limitations to monitoring section, to provide clarity that chronic is monitoring only.
- 26. Free oil language has been updated to reference DMRs and twenty-four hour reporting requirements.
- 27. Part I.C. reflects Other Limitations, Prohibitions and Discharges not Authorized. Moved Limitations on Coverage section in Part I.A.1 to Part I.C for Prohibitions and Discharges Not Authorized.
- 28. Permit does not authorize radioactive materials that are under the jurisdiction of the Nuclear Regulatory Commission (NRC).
- 29. Miscellaneous Discharges of Water Which Have Been Chemically Treated includes discharges from well operations other than those covered by other sections of Part I.B of the permit.
- 30. Corrections to the Permit Summary Table. Table is for reference only
- 31. Corrected data for Discharge Monitoring Reports (DMRs) and Other Reports must be submitted as soon as the error has been identified but no later than the following quarter. Submittal of corrected data does not excuse any permit violation.
- 32. If Offshore 24-Hour Reporting Application Portal is not available, an email shall be sent within 24 hours of occurrence of specified violations and electronic report shall be submitted within 14 days of the system becoming available.

- 33. A facility map that delineates authorized discharge locations and type must be submitted, as an attachment, when filing the eNOI.
- 34. Updated language to provide clarity that timely updates to "CDX" are required, in lieu of "eNOI".
- 35. Numeric exceedances of maximum through-screen design intake velocity and dates must also be included on DMRs, for all new facilities required to comply with intake structure monitoring requirements.
- 36. Definition of Mobile Offshore Drilling Unit (MODU) has been removed from the permit because it does not exist in the Code of Federal Regulations. Part I.A.2 has been updated to provide examples of MODUs.
- 37. Civil and administrative penalty amounts have been updated to reflect updated statutory amounts.
- 38. Once a month temperature monitoring for produced water.

Change 1. Well, heads, pipelines, jumpers and associated infrastructures connected to the facility are considered part of the host facility even when the infrastructure crosses lease block boundaries. The Joint Trades requested that the proposed permit include language to clarify that well, heads, pipelines, jumpers and associated infrastructures connected to the facility be considered part of the host facility even when the infrastructure crosses lease block boundaries. The recommended revised language provides additional clarity on the types of equipment and infrastructure associated with a host facility and provides additional context for the regulated community to understand the intent of the permit. EPA recognizes that this practice was allowed in the previous permit, therefore, to provide clarity, EPA updated the description of infrastructure as stated above.

Change 2. NOI requirements allow for all vessels, to be able to file one valid NOI when performing jobs in the same lease block, if jobs are performed for the same designated operator. The Joint Trades requested that EPA broaden the NOI requirements to allow for all vessels, and not specifically drilling vessels, to be able to file one valid NOI when performing well jobs (not specifically drilling jobs) within the same lease block in order to broaden the types of operations a MODU or vessel may undertake. The EPA updated the language to address the filing of NOIs for vessels performing operations other than drilling. For the final permit, vessels that move are only required to file an eNOI for jobs if the new location is in a new lease block, if jobs are performed for the same designated operator.

Change 3. Operators who filed under the previous permit have an additional 30 days to submit eNOI, if the system is unavailable during the 60 day renewal period. These operators are covered under the reissued permit for up to 90 days. The industry requested that EPA extend the timeframe in which NOIs, covered under the previous permit, must be submitted to retain coverage under the new permit in the event that the system is unavailable. The industry noted that the system was unavailable during the last permit reissuance. EPA expects that the system will be available upon permit issuance but does recognize that there have been periods in the past when it has been unavailable, as a result the final permit includes an additional 30 days to submit eNOIs, to retain coverage upon reissuance, if the system is available during the 60 day renewal period.

Change 4. Only new operators, not covered under the previous permit, can submit temporary NOIs when system is unavailable. Due date and coverage for temporary NOI extended 14 days, after the system becomes available, if the system remains unavailable after 14 days. The industry requested that the temporary NOI coverage be extended an additional 14 days, after the system becomes available if the system is down for more than a period of 14 days. EPA recognizes that there is a potential for the

system to be down for an extended period of time and therefore modified the final permit to grant an additional 14 days of coverage to submit an eNOI, when the system is down for more than 14 days, and a temporary NOI has been submitted. In addition, the intent of temporary NOI was to allow new permittees/operators to gain coverage in the event that the system is unavailable. Because current permittees/operators have likely already filed an eNOI in the previous permit term, EPA believes that temporary NOIs are only necessary for new dischargers and has updated the final permit as such.

Change 5. Removed continuous monitoring language from cooling water intake requirements. In the July 22, 2022, proposal, EPA included language in regard to Cooling Water Intake that included the word continuous. The industry commented that continuous intake flow velocity monitoring would require possibly significant upgrades to existing intake flow velocity monitoring systems including routing of signals to process computers for automatic logging. Monitoring frequencies allow permittees to manually log the intake flow velocity if continuous monitoring systems are not feasible. EPA recognizes this challenge but also notes that the intent of the language added was not to change Cooling Water Intake velocity monitoring frequencies, and as such has updated the final permit with the word "continuous" removed in regard to velocity monitoring.

Change 6. Removed the additional requirements for a signed agreement from transfers. The proposed permit included additional requirements when performing transfers and mergers, which required a signed agreement along with other additional information to enhance compliance. The industry commented that this requirement would create an unnecessary burden on the regulated community because the information is duplicative of NOI information, and proposed changes to the language. While EPA recognizes that some of the information is redundant, the information required in the permit is integral to determining liability in instances when mergers occur. The final permit removed the additional requirements for a signed agreement for transfers but retained these requirements for mergers. Language was also updated to reflect that NOT must be filed within 60 days of relinquishing operational control because EPA recognizes that operators/permittees do not have control over when other companies submit their NOI.

Change 7. Flow rate monitoring for Well Treatment Fluids, Completion Fluids, and Workover Fluids (TCW Fluids). In the permit proposal, EPA included acute WET limits for TCW discharges. Industry requested EPA provide clarity on the calculation of critical dilutions for TCW dischargers for WET purposes. As a response, and to provide clarity on critical dilutions, EPA added daily flow monitoring requirements, when discharging, for TCW fluids.

Change 8. Characteristic Assessment requirements for Well Treatment Fluids, Completion Fluids, and Workover Fluids have been removed. Industry commented that the Characteristic Assessment requirements retained from the 2017 permit were intended to apply to the industry-wide TCW fluid toxicity study, or individual studies for those operators that chose not to participate in the industry study. EPA recognizes that the study has concluded (and has included WET limits and monitoring for these discharges as a result) and that this information is maintained by operators and can be made available upon request, therefore the Characteristic Assessment requirements for TCW Fluids have been removed from the final permit.

Change 9. Added language to Sanitary Waste language to ensure that all limits are complied with in the event the Marine Sanitation Device is not properly operating or not operating. Bureau of Safety and Environmental Enforcement (BSEE) provided comments on MSD permit requirements specifying that the permit should clarify that DMRs are required when the system is not operating or not properly operating. EPA recognizes that it is a requirement to do so, and as a result, to provide permit clarity,

added language to the final permit to specify that limitations and prohibitions apply to MSDs, when not operating or not properly operating, and directs permittees to submit corresponding DMRs and keep records when systems are down.

Change 10. Cooling water intake structure operation for New Fixed Facilities that Employ Sea Chests as Intake Structures and New Fixed Facilities that do not employ sea chests as intake structures require development, and implementation of operation and maintenance plans, with reporting requirements for numeric exceedances. Per the fact sheet for the proposed permit, EPAs intent was to add development, and implementation of operation and maintenance plans, with reporting requirements for numeric exceedances, to all facilities subject to cooling water intake requirements to enhance compliance with Cooling Water Intake requirements. EPA received various comments on this language but has retained the language in the final permit and also corrected a typographical error that excluded some facilities from these requirements. As a result, the final permit applies these requirements to all facilities subject to 316(b).

Change 11. All facilities are subject to monitoring requirements if they discharged during said monitoring period, regardless of whether the discharge lasted the full period. EPA received a comment that the requirements in the proposed permit that were specific to MODUs was unclear. To provide clarity in the final permit, EPA updated the language in this section to clarify that all facilities are subject to monitoring requirements if they discharged during said monitoring period, regardless of whether the discharge lasted the full period.

Change 12. Methods and/or calculations for estimated flow must be documented. Comments were received from BSEE, on methods of estimation of flow. EPA recognizes that while the permit does not specify any one method to estimate flow, EPA does provide a handbook (Handbook for Sampling and Sample Preservation of Water and Wastewater and the NPDES Compliance Flow Measurement Manual) that includes acceptable methods. However, EPA does recognize the value in knowing methods of flow estimation per permittee. As a result, the final permit includes requirements for permittees to document methods/calculations.

Change 13. Sample type for oil and grease is grab or composite. Comments were received from BSEE, in regard to oil and grease sampling methods. EPA reviewed method 1664A (which includes either grab or an average or four or more grab samples, individual analyzed and averaged or manually composited prior to analysis) and as a result included the composite method in the final permit as a sampling method for oil and grease.

Change 14. The use of other disinfection technologies, including, but not limited to, bio-membrane filtration and ultra-violet light are allowed as substitutes for systems that use chlorine, provided that the MSD is approved by the U.S. Coast Guard and results in equivalent or improved disinfection of the Sanitary Waste stream to that considered in the ELG. TRC monitoring is not required for alternative MSDs that do not use chlorine, when the system is not properly operating or not operating, unless a chlorine based product is used as a backup disinfectant. EPA received comments on disinfection methods for MSDs, which stated that many MSDs employ disinfection methods, other than chlorine. EPA recognizes that the U.S. Coast Guard approves MSDs that use these many alternative methods and as a result has authorized these MSDs to be used by the permit, as long as they are approved by the Coast Guard and in addition has waived any sampling requirements for chlorine when the system does not use chlorine, unless chlorine is used as a backup disinfectant.

Change 15. Operators must flush and capture the materials contained in pipelines, umbilicals, and other equipment prior to disconnection. No releases or discharges of fluid from pipelines, umbilicals, and/or other equipment that have not been fully flushed prior to being disconnected or cut from the facility are authorized under this NPDES permit. EPA received comment from BSEE on decommissioning/abandonment activities that requested that pipelines and umbilicals be flushed, and material captured prior to disconnection, as such releases are not covered by the permit. EPA recognizes that it is important that pipelines be flushed before decommissioning to prevent leaking of fluids during specified operations and as a result included these requirements in the permit.

Change 16. Calculation for WET critical dilutions and testing frequencies for Produced Water is based on calendar year. The proposed permit included a calculation of flow, which would base the critical dilution and frequency of WET testing on a 12 month period. Through comments, industry requested that 12 months be replaced with calendar year to prevent misinterpretations and that the flow be analyzed at the end of the calendar year, in addition. EPA agreed with the changes to provide clarity to operators/permittees when determining WET critical dilutions and frequencies.

Change 17. Waiver for the minimum number of samples to be collected for WET tests, should the effluent cease discharging for Produced Water. Comments were received stating that some discharges last less than 24 hours, which would make the requirement to have a minimum of three samples for WET testing for Produced Water difficult to achieve. EPA understands that discharges are not always continuous. As a result, the final permit includes language that allows a single grab sample to be acceptable, in the case the effluent ceases to discharge abruptly, and the test has been initiated as long as the 24 hour period is representative of the discharge throughout the testing period.

Change 18. For Treatment, Completion, and Workover discharges, acute WET results can be derived from a chronic WET test. EPA received various comments requesting that the permit be modified to allow one sample to accommodate for both chronic and acute tests for TCW discharges, to reduce complexity and provide efficiency while still being technically appropriate. Industry also commented that increasing the number of samples would cause increased transport and laboratory waste disposals. EPA recognizes these challenges and as a result, the final permit was modified to allow one sample to accommodate both 48-hour acute testing and 7-day chronic testing.

Change 19. Compliance schedule for WET acute limits related to Treatment, Completion, and Workover discharges and sample holding time of 72 hours. An acute WET limit was added to the proposed permit. The industry requested a 2 year compliance period, through comments, stating that they needed time to determine how to implement the new requirement. The compliance period would also allot for time to train new personnel, planning, identify impacts to laboratories, and install necessary systems. EPA understand the challenges associated with including the new limit in the permit and as a result, modified the final permit to include a two year compliance period for acute WET testing for TCW wastes.

Change 20. No approved Alternative Test Procedure (ATP) for WET, however they can be requested at any time following 40 CFR 136.5. EPA received comments from the industry that the language in the previous permit barred them from seeking alternative test procedures for WET, as the permit stated no alternative test procedures are authorized. To clarify, that the industry can request an ATP through procedures specified in the regulations, the final permit language has been updated to reflect this.

Change 21. 72 hour hold time for WET samples for Chemically Treated Miscellaneous Discharges. EPA received several comments that holding times were unclear, in addition to comments explaining the logistical complexities, including increased vessel and helicopter trips, and safety risks of meeting a 36 hour hold time. The proposed permit had sample holding times of 36 hours but up to 72 if required for TCW Fluids and Chemically Treated Miscellaneous Discharges. EPA understands the increased risks and complexities with meeting a 36 hour hold time for WET testing for these specified discharges and as a result the final permit allots for a 72 hour hold time for WET samples for TCW Fluids and Chemically Treated Miscellaneous Discharges.

Change 22. For Chemically Treated Miscellaneous Discharges, non-continuous discharges are discharges that occur less than or equal to once per week and last less than 24 hours. These discharges shall be monitored once per discharge. EPA received comments asking for clarity on continuous and non-continuous discharges in relation to Chemically Treated Miscellaneous Discharges. EPA recognizes that this portion of the permit was unclear, which could prevent operators/permittees from correctly determining toxicity testing frequency, as it is a function of duration of discharge for these discharges that occur less than or equal to once per week and lasts less than 24 hours and shall be monitored once per discharge.

Change 23. State general permit or state individual permit may be required in addition to authorization under this permit. In a letter from Texas Commission on Environmental Quality (TCEQ), dated October 11, 2022, in regards to Texas Coastal Management Plan Consistency Determination for Proposed EPA Reissuance of NPDES Permit No. GMG290000, TCEQ stated "To ensure protection of coastal natural resource areas and compliance with Texas Surface Water Quality Standards (30 TAC Chapter 307) that apply to surface waters in the state, including the Gulf of Mexico inside the territorial limits of the state, the TCEQ requires that all facilities with discharges to state waters authorized under proposed NPDES permit no. GMG290000 must also seek coverage under TCEQ state general permit no. WQG280000, once issued, or an individual permit if authorization under the general permit is not feasible." As a result, EPA has added language to the final permit to specify that a state general or individual permit may also be required, independent from this general permit, for authorization.

Change 24. Defines decommissioning and subsea cleaning fluid. Commenters requested that these definitions be added to the final permit to provide clarity of discharges and operations. As a result, the final permit includes the aforementioned definitions.

Change 25. 7-day chronic toxicity requirements for Well Treatment Fluids, Completion Fluids, and Workover Fluids has been moved from limitations to monitoring section, to provide clarity that chronic is monitoring only. The proposed permit included acute WET limits for TCW discharges and chronic monitoring requirements, however EPA mistakenly placed both of these requirements under limitations for TCW fluids. To provide clarity that acute WET limits apply, and only chronic monitoring applies for these discharges, EPA has moved the chronic requirements from the limitations section to the monitoring section for TCW discharges.

Change 26. Free oil language has been updated to reference DMRs and twenty-four hour reporting requirements. In the proposed permit, EPA added a requirement for sheens to be reported via a new 24-hour reporting portal, in addition to DMR requirements. The industry commented that it was unclear that 24-hour reporting was required for sheens. As a result, EPA modified sheen the language for free oil to reference both DMRs and the 24-hour reporting language in the permit.

Change 27. Part I.C. reflects Other Limitations, Prohibitions and Discharges not Authorized. Moved Limitations on Coverage section in Part I.A.1 to Part I.C for Prohibitions and Discharges **Not Authorized.** EPA received comments on Part I.A.1 and I.C of the permit. To provide clarity EPA has updated the title of Part I.C. to accurately categorize the context of this section of this permit. In addition, EPA has also moved limitations on coverage section in Part I.A.1 to Part I.C for prohibitions for clarity.

Change 28. Permit does not authorize radioactive materials that are under the jurisdiction of the NRC. EPA received comments on this prohibition. In addition, requirements were clarified with the NRC in regard to Radioactive Materials. As a result, language was modified in the final permit to clarify that this permit does not authorize radioactive materials that are under the jurisdiction of the NRC.

Change 29. Miscellaneous Discharges of Water Which Have Been Chemically Treated includes discharges from well operations other than those covered by other sections of Part I.B of the permit. The industry commented that seawater and fresh water used for fluid displacement in well operations is drawn from chemically treated and uncontaminated sources. The chemically treated water sources are the same as, or similar to, those sources used for water released during training of personnel in fire protection, ballast water, once through non-contact cooling water, water used as piping or equipment preservation fluids, and water used during Dual Gradient Drilling. The change provides clarity and would be more inclusive of current operations in industry. EPA recognizes that adding well operations other than those covered in Part I.B. of the permit will be more inclusive of current operations, other than those covered by other sections, of the permit to these discharges.

Change 30. Corrections to the Permit Summary Table. Table is for reference only. Comments were received requesting that the Permit Summary Table be updated to reflect current permit limitations. Corrections were made to the Permit Summary Table to accurately reflect permit limitations. Statement "For Reference Only: In the event of a discrepancy, the language in the text of the permit is the enforceable condition.)" was added.

Change 31. Corrected data for Discharge Monitoring Reports (DMRs) and Other Reports must be submitted as soon as the error has been identified but no later than the following quarter. Submittal of corrected data does not excuse any permit violation. EPA received comments requesting a definitive timeline be provided for submitting corrected DMRs and Other Reports. As a result, EPA included additional language to address this issue and also specified that it is a violation of the permit to submit no discharge reports when discharge has occurred.

Change 32. If Offshore 24-Hour Reporting Application Portal is not available, an email shall be sent within 24 hours of occurrence of specified violations and electronic report shall be submitted within 14 days of the system becoming available. In the comments, the industry requested a secondary method if submitting these reports in the event that the online system is available. EPA recognizes that these challenges and as a result included the aforementioned language.

Change 33. A facility map that delineates authorized discharge locations and type must be submitted, as an attachment, when filing the eNOI. BSEE requested, in comments, that each discharge point for each limit set be delineated. To provide clarity, the final permit has been updated to require permittees/operators to submit a facility map as an attachment, when filing the NOI, that delineates authorized discharge locations and discharge type.

Change 34. Updated language to provide clarity that timely updates to "CDX" are required, in lieu of "eNOI". Language was updated to clarify where updated shall be provided.

Change 35. Numeric exceedances of maximum through-screen design intake velocity and dates must also be included on DMRs, for all new facilities required to comply with intake structure monitoring requirements. To provide clarity on Cooling Water Intake reporting, language has been updated to add that exceedances and dates must be reported on DMRs.

Change 36. Provided definition of Mobile Offshore Drilling Unit (MODU) has been removed from the permit because it does not exist in the Code of Federal Regulations. Part I.A.2 has been updated to provide examples of MODUs. Because the definition provided in the draft permit did not exist in the Code of Federal Regulations, the definition was removed from the permit.

Change 37. Civil and administrative penalty amounts have been updated to reflect updated statutory amounts. Regulatory amounts were updated to account for inflation. Corresponding changes were made to the permit.

Change 38. Once a month temperature monitoring for produced water. Center for Biological Diversity commented that EPA should set a temperature limit for produced water and other discharges. To collect data on produced water discharges, produced water monitoring for temperature has been included in the final permit at a frequency of once per month. Temperature monitoring is relatively inexpensive and simple.

VI. Summary of Significant Changes from the Current (2017) Permit

Subject	2017 Permit Conditions	Changes for 2022 Permit	Rationale for Change
NOIs	7 day temporary NOI coverage. eNOI must be submitted when system becomes available. Temporary NOI can be provided by mail.	14 day temporary NOI coverage and for submission of eNOI for new operators only. An additional 14 days of coverage and to submit eNOI, from the time the system is available again, when the system is still down after 14 days. Temporary NOI can be provided by mail or email.	See Section V. Change 4 above
NOIs	Operators who filed eNOIs under the previous permit, issued on September 28, 2012, will be authorized to discharge by this reissued permit without submittal of an NOI up to April 1, 2018.	60 day renewal period for operators who filed eNOIs under the previous permit. Should the eNOI system not be available during this 60 day period, operators may submit the eNOI the latter of 60 days after the effective date of the permit or 30 days from the date the system was restored. Permittees/operators are covered by the reissued permit during this period for up to 90 days.	See Section V. Change 3 above
NOIs	An eNOI filed for a drilling vessel is valid for different drilling jobs within the same	An eNOI filed for a Mobile Offshore Drilling Unit or vessel is valid for different well jobs within the same	See Section V. Change 2 above

The following Table provides a quick comparison of the 2017 permit with this 2022 permit.

	lease block from the originally	lease block, indicated on the eNOI, if	
	filed location if drilling jobs are	jobs are performed for the same	
	performed for the same	designated operator. A separate	
	designated operator.	eNOI is required for well jobs not	
		within the same lease block, and/or	
		if the Mobile Offshore Drilling Unit	
		or vessel moves to a new lease	
		block.	
NOIs	A facility means either an	A facility means either an	See Section
	exploratory facility, a	exploratory facility, a development	V. Change 1
	development facility, or a	facility, or a production facility as	above
	production facility as	defined in Part II.G of the permit.	
	defined in Part II.G of the permit.	All well heads, pipelines, jumpers	
	All well heads and infrastructures	and associated and infrastructures	
	connected to the facility shall be	connected to the facility shall be	
	considered parts of the host	considered parts of the host facility,	
	facility.	even where such infrastructure	
		crosses lease block boundaries.	
NOIs: additional	N/A	A facility map that delineates	See Section
information		authorized discharge locations and	V. Change
		type must be submitted, as an	33 above
		attachment, when filing the eNOI.	
Decommissioning/	N/A	Operators must flush and capture the	See Section
Abandonment		materials contained in pipelines,	V. Change
Prohibitions		umbilicals, and other equipment	15 above
		prior to disconnection. No releases	
		or discharges of fluid from pipelines,	
		umbilicals, and/or other equipment	
		that have not been fully flushed prior	
		to being disconnected or cut from the	
		facility are authorized under this	
		NPDES permit.	
Operations	N/A	Authorization under a state general	See Section
Covered and		or individual permit may also be	V. Change
Discharges		required to discharge.	23 above
Authorized			
Operations	N/A	Lists Operations Covered and	See Section
Covered and	1 V 4 X	Discharges Authorized included	V. Change
Discharges		limitations on coverage which	27 above
Authorized		references section I.C which	27 400 40
		includes Other Limitations,	
		Prohibitions and Discharges not	
		Authorized.	
NOI	N/A	Permittees are required to make	See
	17/23	timely updates to the CDX system.	discussion
		Any change in name, location,	below
		address, contact or contact	UCIUW
		address, contact of contact	

		information must be updated within 30 days of the change.	
Termination of NPDES Coverage	In the case of temporary operations such as hydrostatic testing, well or facility abandonment or any other contractual or legal requirement, the NOT shall be submitted within one year of termination of operations.	In the case of temporary operations such as hydrostatic testing, well or facility decommissioning/ abandonment or any other contractual or legal requirement, the NOT shall be submitted within one year of termination of operations.	See Section V. Change 15 above
Transfers & Mergers	During the initial term of permit: The new operator shall submit an NOI prior to taking operational control and the old operator shall submit a NOT within 60 days of receiving confirmation that the new permittee has submitted the NOI. During any "administratively continued" term of the permit following the indicated expiration date: The new operator shall submit an NOI at least 30 days prior to taking operational control and the old operator shall submit a NOT within 60 days of receiving confirmation that the new permittee has submitted the NOI. The new operator shall submit a written agreement between the new and old permittees concerning the date of the transfer of permit responsibility, coverage, and liability between themselves. report number of days with sheens observed.	During the initial term of permit: The new or surviving operator shall submit an NOI prior to taking operational control and the old operator shall submit a NOT (for all lease areas/blocks as well as their NPDES permit number) within 60 days of relinquishing operational control. The old operator shall submit final DMRs within 60 days of NOT. Companies involved in a merger must also submit a written and signed agreement between the companies identifying: the names of the two offshore companies and their assigned NPDES permit number; the agreement between the two companies for the merger; the effective date of the merger; the lease area(s)/block(s) involved in the merger; the surviving NPDES permit number; and liability. This letter can be emailed to the Offshore Specialist or sent to the address below. During any "administratively continued" term of the permit following the indicated expiration date: The new operator shall submit an NOI at least 30 days prior to taking operational control and the old operator shall submit a NOT within 60 days of relinquishing operational control. The new operator shall submit a written agreement between the new and old permittees concerning the date of the merger of permit responsibility, coverage, and liability. NOTE: Each company	See Section V. Change 6 above and discussion below

Continuation of Coverage for Existing Operators After the Permit Expires Free Oil Limitations	N/A If a sheen is observed at other times, in addition to the required daily monitoring, it must be recorded. The number of days a sheen is observed must be	must collect and report their own samples. Samples from a company transferring coverage cannot be used by the receiving company. If the permit is not reissued or replaced prior to the expiration date, it will be administratively continued in accordance with section 558(c) of the Administrative Procedure Act (see 40 CFR 122.6). The total number of days a sheen is observed must be recorded and reported on DMRs and to the twenty-four hour noncompliance portal.	See discussion below See Section V. Change 26 above
Cooling water Intake Structure Operations Requirements	Recorded. The cooling water intake structure must be designed and constructed so that the maximum through- screen design intake velocity is 0.5 ft/s; The operator must minimize impingement mortality of fish and shellfish through cooling water intake design and construction technologies or operational measures for New Fixed Facilities with See Chests and non-Fixed Facilities. The operator must minimize impingement mortality of fish and shellfish and minimize entrainment of entrainable life stages of fish and shellfish through the use of cooling water intake design and construction technologies or operational measures for New Fixed Facilities without Sea Chests	The cooling water intake structure(s) must be designed, constructed, operated, and maintained so that the maximum through-screen design intake velocity shall not exceed 0.5 ft/s; The permittee must develop and implement an Operation and Maintenance plan to minimize impingement mortality of fish and shellfish through use of cooling water intake design and construction technologies or operational measures.	See Section V. Change 10 above.
Cooling Water Intake Reporting Requirements	Intake velocity monitoring: Number of days on which the maximum intake velocity is greater than 0.5 ft/s for each month	Intake velocity monitoring: Identify the dates on which the maximum intake velocity is greater than 0.5 ft/s for each month and include the numeric exceedance for each date identified. Exceedances and dates must also be reported on DMRs.	See discussion below and See Section V. Change 35 above
Monitoring and Records: Reporting during periods of natural	N/A	NODI codes for various disasters/incidents. Operators have 30 days from the incident to submit DMRs or other required reporting.	See discussion below

disasters, environmental conditions, or weather related incidents			
Requirements for Monitoring when Discharging for Less than a Full Monitoring Period	N/A	Sample(s) must be collected and analyzed to meet annual, quarterly, monthly, weekly, and daily monitoring requirements even if discharging for less than that full monitoring period, provided discharges occur at any time during that monitoring period. If no discharges occurred during the monitoring period, reporting "No Discharge" on the DMR satisfies this requirement	See discussion below and See Section V. Change 11 above
Radioactive Materials under jurisdiction of NRC	N/A	Discharge of radioactive materials under the jurisdiction of the NRC are not independently authorized by this permit.	See discussion below and See Section V. Change 28 above
Twenty-Four Hour Reporting Requirements	Noncompliances which endanger health or environment shall be reported to R6GENPERMIT@epa.gov within 24 hours from the time the permittee becomes aware of the circumstances.	Noncompliances which endanger health or environment shall be reported to the Offshore 24-Hour Reporting Application Portal. If system is unavailable, an email should be sent to the offshore coordinator and report must be submitted to online portal within 14 days of the system becoming available again	See discussion below and See Section V. Change 32 above.
Produced Water: Toxicity	Flow for the purpose of calculating a critical dilution (the toxicity limit) and the toxicity testing frequency, analyzed on a quarterly basis. Toxicity data submitted per quarterly. Minimum of one sample shall be collected.	Flow for the purpose of calculating a critical dilution (the toxicity limit) and the toxicity testing frequency, analyzed per calendar year at the end of the year. Toxicity data submitted per quarterly, but per month. A minimum of three samples shall be collected as grab or composite.	See discussion below
Produced Water: Temperature Monitoring	N/A	Once/Month	See Section V. Change 38 above.
WET testing	Invertebrate species for WET testing: <i>Mysidopsis bahia</i>	Invertebrate species for WET testing: <i>Americamysis bahia</i>	See discussion below

Wall Tractor ant	Industry Wide Study Dequirer out	A outo WET limitations and two	See
Well Treatment, Completion and	Industry Wide Study Requirement	Acute WET limitations and two year compliance period. Chronic WET	discussion
Workover Fluids:		monitoring requirements.	below
Toxicity		montoring requirements.	
Definitions	No definitions for Operator,	Operator, barrel, manned facility,	See
	barrel, manned facility, floating	floating offshore facility, discharge	discussion
	offshore facility, discharge of	of pollutant, decommissioning and	below.
	pollutant, decommissioning and	subsea fluids definitions are in the	
	subsea fluids	final permit.	
	Produced Water" means the water	"Produced Water" means the water	
	(brine) brought up from the	(brine) brought up from the	
	hydrocarbon-bearing strata during	hydrocarbon-bearing strata during	
	the extraction of oil and gas, and	the extraction of oil and gas, and can	
	can include formation water,	include formation water, injection	
	injection water, and any chemicals	water, and any chemicals added	
	added downhole or during the	downhole or during the oil/water	
	oil/water separation process.	separation process. Note for the	
	"Workover Fluids" mean salt	purposes of this permit Produced	
	solutions, weighted brines,	Water is interpreted to include	
	polymers, and other specialty	oil/gas/water separation processes. "Workover Fluids" mean salt	
	additives used in a producing well to allow safe repair and	solutions, weighted brines, polymers,	
	maintenance or abandonment	and other specialty additives used in	
	procedures. High solids drilling	a producing well, associated	
	fluids used during workover	producing well infrastructure (e.g.,	
	operations are not considered	flowlines, manifolds), or latched up	
	workover fluids by definition and	workover system to allow safe repair	
	therefore must meet drilling fluid	and maintenance or abandonment	
	effluent limitations before	procedures. High solids drilling	
	discharge may occur. Packer	fluids used during workover	
	fluids, low solids fluids between	operations are not considered	
	the packer, production string and	workover fluids by definition and	
	well casing, are considered to be	therefore must meet drilling fluid	
	workover fluids and must meet	effluent limitations before discharge	
	only the effluent requirements	may occur. Packer fluids, low solids	
	imposed on workover fluids.	fluids between the packer,	
		production string and well casing,	
		are considered to be workover fluids	
		and must meet only the effluent	
		requirements imposed on workover	
All Sonitary	The energy is required to	fluids.	
All Sanitary Waste Facilities	The operator is required to	The operator is required to	
waste racinties	demonstrate proper operation of MSD via U.S. Coast Guard	demonstrate proper operation of	
	approval, annual inspections,	MSD via U.S. Coast Guard approval, annual inspections, Class/Flag State	
	Class/Flag State inspections and/or	inspections and/or the International	
	the International Sewage Pollution	Sewage Pollution Prevention	
	Prevention Certificate (ISPPC)	Certificate (ISPPC) and maintenance	
	and maintenance	logs/records. Failure to comply must	
		1000 neverabilit anale to comply must	

	logs/records.	be included in a non-compliance report to EPA.	
Sanitary Waste (Facilities Continuously Manned for 30 or more consecutive days by 10 or More Persons)	Chlorine only for disinfection. TRC minimum of 1 mg/l.	Equivalent Disinfection – Other Technologies. The use of other disinfection technologies, including, but not limited to, bio-membrane filtration and ultra-violet light are allowed as substitutes for systems that use chlorine, provided that the MSD is approved by the U.S. Coast Guard and results in equivalent or improved disinfection of the sanitary waste stream to that considered in the ELG. For alternative MSDs that do not use chlorine, monitoring for TRC limitations is not required when the system is not properly operating or not operating.	See Section V. Change 14 above
Oil and Grease Sampling	The sample type for all oil and grease monitoring shall be grab.	The sample type for all oil and grease monitoring shall be grab or a composite which consists of the arithmetic average of the results of four (4) or more grab samples collected at even intervals during a period of 24-hours or less.	See Section V. Change 13 above
Miscellaneous Discharges of Water Which Have Been Chemically Treated	Excess water which permits the continuous operation of fire control and utility lift pumps, Excess water from pressure maintenance and secondary recovery projects, Water released during training of personnel in fire protection, Water used to pressure test new and existing piping and pipelines, Ballast water, Once through non-contact cooling water, Water used as piping or equipment preservation fluids, and Water used during Dual Gradient Drilling	Added Well operations other than those covered by other sections of Part I.B of the permit to Miscellaneous Discharges of Water Which Have Been Chemically Treated.	See Section V. Change 29 above
Miscellaneous Discharges of Water Which Have Been Chemically Treated: Toxicity	In cases where the discharge point for hydrostatic test water is subsea, such as the subsea end of a pipeline, and it is impractical to collect a sample at the discharge point, operators may collect a sample for this monitoring requirement prior to use of the fluid.	Replaced hydrostatic test water with chemically treated miscellaneous seawater or freshwater.	See discussion below

Miscellaneous Discharges of Water Which Have Been Chemically Treated: Toxicity	Required frequency of testing for continuous discharges shall be determined as follows: Discharge Rate 0 - 499 bbl/day – once/year, 500 - 4,599 bbl/day – once/quarter 4,600 bbl/day and above once/ month. Intermittent or batch discharges shall be monitored once per discharge but are required to be monitored no more frequently than the corresponding frequencies shown above for continuous discharges.	The required frequency of testing for continuous discharges shall be determined as follows: Discharge Rate 0 - 499 bbl/day – once/year, 500 - 4,599 bbl/day – once/quarter, 4,600 bbl/day and above – once/month. Non- continuous discharges (occur less than or equal to once per week and lasts less than 24 hours) shall be monitored once per discharge.	See Section V. Change 22 above
Miscellaneous Discharges of Water Which Have Been Chemically Treated: Toxicity	Sample holding time 36 hours, up to 72 hours.	Sample holding time 72 hours.	See Section V. Change 21 above
Flow Measurement	Appropriate flow measurement devices and methods consistent with accepted scientific practices shall be selected and used to ensure the accuracy and reliability of measurements of the volume of monitored discharges.	Appropriate flow measurement devices and methods consistent with accepted scientific practices shall be selected and used to ensure the accuracy and reliability of measurements of the volume of monitored discharges. Flow estimation methods and/or calculations must be documented.	See Section V. Change 12 above
Permit Summary Table		Corrections were made to the table to accurately reflect limitations.	See Section V. Change 30 above
Reporting requirements for Discharge Monitoring Reports (DMRs) and Other Reports	N/A	Corrected data for Discharge Monitoring Reports (DMRs) and Other Reports must be submitted as soon as the error has been identified but no later than the following quarter. Submittal of corrected data does not excuse any permit violation.	See Section V. Change 31 above
Civil and Administrative Penalties	Civil Penalties The Act provides that any person who violates a permit condition implementing sections 301, 302, 306, 307, 308, 318, or 405 of the Act is subject to a civil penalty not to exceed \$64,618. \$52,414 per day for each violation. Administrative Penalties	Civil Penalties The Act provides that any person who violates a permit condition implementing sections 301, 302, 306, 307, 308, 318, or 405 of the Act is subject to a civil penalty not to exceed \$64,618 per day for each violation.	See Section V. Change 37 above
	Class I Penalty	Administrative Penalties Class I Penalty	

maximum amount exceed amount exceed \$323,081.			Not to exceed \$25,847 per violation nor shall the maximum amount exceed \$64,618. Class II penalty Not to exceed \$25,847 per day for each day during which the violation continues nor shall the maximum amount exceed \$323,081.	
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Permittees are required to make timely updates to the CDX system. Any change in name, location, address, contact or contact information must be updated within 30 days of the change. Language has been added to the permit to ensure that system maintains accurate contact information.

Continuation of Coverage for Existing Operators After the Permit Expires. Previous permit does not provide language for coverage in the event the permit expires before re-issuance. Standard Administrative Continuance language has been added to the renewal. This section also clarifies for permittees that new operators are not eligible for coverage during any administrative continuance period and that existing permittees may not submit new NOIs during this period.

Transfers and Mergers. The previous permit did not clarify the manner in which to execute a transfers and mergers, which are separate processes. In the renewal, language has been provided to clarify that a merger requires a signed agreement and provides detail on the information that should be provided in a letter to EPA. In addition, language has been added to specify to that each company must collect and report their own samples.

Well Treatment Fluids, Completion Fluids, and Workover Fluids: Toxicity. As a result of the industry-wide toxicity study that was completed as a requirement of the 2017 permit, EPA removed the industry wide study alternative and included acute toxicity limits to discharges of Well Treatment, Completion, and Workover Fluids. Data from the study indicated there is reasonable potential for acute toxicity stemming from these discharges. Therefore, in accordance with 40 CFR §122.44 (d)(1)(iv), acute WET limits were included. Chronic toxicity monitoring was also required to assess potential for chronic effects. A two year compliance period for acute toxicity limits was also added.

Invertebrate species for WET testing: *Americamysis bahia.* The previous permit did not include the appropriate invertebrate species for toxicity testing in seawater. As a result, this permit replaced the use of *Mysidopsis bahia* with *Americamysis bahia*, which is the more appropriate invertebrate species that should be used when conducting toxicity testing in seawater environments.

Produced Water: Toxicity. The final permit analyzes flow on a calendar year basis to provide clarity and consistency in the flow calculation process. Previous permit required a quarterly determination, which created confusion. In addition, the renewal permit requires toxicity data to be submitted on a monthly basis in quarterly reports, regardless of the testing frequency, to allow a space in the DMR to report data under a fluctuating frequency. The previous permit required a minimum of only one sample for toxicity testing. The final permit requires a minimum of three samples as grabs or composites, per method.

Noncompliances which endanger health or environment shall be reported to the Offshore 24-Hour Reporting Application Portal. EPA has developed an electronic reporting system for twenty-four hour reporting which will enhance and streamline reporting. As a result, the permit has been updated to reflect this change.

Discharge of radioactive materials under the jurisdiction of the NRC are not independently authorized by this permit. The previous permit did not address the discharge of radionuclides. EPA was made aware that radioactive materials under the jurisdiction of the Nuclear Regulatory Commission (NRC), e.g., Iridium-192 and Scandium-46, are being used in small amounts in conjunction with proppants. EPA does not have authority to authorize discharges of radioactive materials that fall under the jurisdiction of the NRC. As a result, the final permit added language to clarify that radionuclide discharges that fall under the jurisdiction of the NRC cannot be authorized by this permit.

Requirements for Monitoring when Discharging for Less than a Full Monitoring Period. In the previous permit, it was unclear that facilities are required to meet testing requirements during the time that they are operational, even if the operations are active for less than the full monitoring period. As a result, language was added to clarify this.

Monitoring and Records: Reporting during periods of natural disasters, environmental conditions, or weather related incidents. The previous permit did not clarify how and when to report during periods of natural disasters, environmental conditions, or weather related incidents. The final permit provides NODI codes to use when reporting these issues and gives operators 30 days from incident to submit DMR's or other required reporting documents.

Cooling Water Intake Reporting Requirements. The change clarifies reporting requirements for cooling water intake velocity exceedances and provides enhanced compliance in the final permit. Exceedances and dates must also be reported on DMRs.

Definitions. Aforementioned definitions were added to enhance compliance and mirror current offshore operations.

All Sanitary Waste Facilities. Language is included in the final permit to ensure that EPA is made aware when U.S. Coast Guard requirements are not met. Failure to comply with MSD requirements mentioned in the permit must be submitted to EPA in a non-compliance report.

Miscellaneous Discharges of Water Which Have Been Chemically Treated: Toxicity. Hydrostatic test water was replaced with chemically treated miscellaneous seawater or freshwater to allow toxicity samples to be collected for all subsea fluids under this section. This will simply compliance with toxicity testing for multiple subsea discharge activities and allow for subsea sampling beyond hydrostatic test waters.

Section VII. Supplemental Information for Other Statutory and Regulatory Requirements

State Water Quality Standards and State Certification. The permit does not authorize discharges to State waters; therefore, the state water quality certification provisions of the Clean Water Act (CWA or 'the Act') Section 401 do not apply to this proposed action.

Coastal Zone Management Act. The Environmental Protection Agency determined that activities authorized by this reissued permit are consistent with the local and state Coastal Zone Management Plans. Both the Louisiana Department of Natural Resources and Texas Commissions on Environmental Quality (TCEQ) concurred with the EPA's consistency determination. TCEQ required "To ensure protection of coastal natural resource areas and compliance with Texas Surface Water Quality Standards (30 TAC Chapter 307) that apply to surface waters in the state, including the Gulf of Mexico inside the territorial limits of the state, the TCEQ requires that all facilities with discharges to state waters authorized under proposed NPDES permit no. GMG290000 must also seek coverage under TCEQ state general permit no. WQG280000, once issued, or an individual permit if authorization under the general permit is not feasible." EPA added language to the final permit to specify that a state general or individual permit may also be required, individual from this general permit, for authorized.

National Historic Preservation Act. Facilities which adversely affect properties listed or eligible for listing in the National Register of Historic Places are not authorized to discharge under this permit.

Oil Spill Requirements. Section 311 of the Clean Water Act, (CWA or the Act), prohibits the discharge of oil and hazardous materials in harmful quantities. Discharges that are authorized by NPDES permits are excluded from the provisions of Section 311. However, the permit does not preclude the institution of legal action or relieve permittees from any responsibilities, liabilities, or penalties for other, unauthorized discharges of oil and hazardous materials which are covered by Section 311 of the Act. This permit does not authorize spills or any uncontrolled discharges.

Ocean Discharge Criteria Evaluation. For discharges into waters of the territorial sea, contiguous zone, or oceans, CWA Section 403(c) requires the EPA to consider guidelines for determining potential degradation of the marine environment when issuing NPDES permits. These Ocean Discharge Criteria (40 CFR 125, Subpart M) are intended to "prevent unreasonable degradation of the marine environment and to authorize imposition of effluent limitations, including a prohibition of discharge, if necessary, to ensure this goal" (45 FR 65942, October 3, 1980). The EPA Region 6 determined that discharges in compliance with the Outer Continental Shelf (OCS) general permit would not cause unreasonable degradation of the marine environment.

Marine Protection, Research, and Sanctuaries Act. The Marine Protection, Research and Sanctuaries Act (MPRSA) of 1972 regulates the transportation for dumping of materials into ocean waters and establishes permit programs for ocean dumping. This reissued permit does not authorize dumping under MPRSA.

In addition to the MPRSA establishes the Marine Sanctuaries Program, implemented by the National Oceanographic and Atmospheric Administration (NOAA), which requires NOAA to designate certain ocean waters as marine sanctuaries for the purpose of preserving or restoring their conservation, recreational, ecological, or aesthetic values. Pursuant to the Marine Protection and Sanctuaries Act, NOAA has designated the Flower Garden Banks, an area within the coverage of the OCS general permit, a marine sanctuary. The OCS general permit prohibits

discharges in areas of biological concern, including marine sanctuaries. The permit authorizes discharges incidental to oil and gas production from a facility which predates designation of the Flower Garden Banks National Marine Sanctuary as a marine sanctuary. EPA has previously worked extensively with NOAA to ensure that authorized discharges are consistent with regulations governing the National Marine Sanctuary.

National Environmental Policy Act. Pursuant to the National Environmental Policy Act (NEPA) (42 U.S.C. 4321-4307h), the Council on Environmental Quality's NEPA regulations (40 CFR part 15), and EPA's regulations for implementing NEPA (40 CFR part 6), EPA has determined that the 2023 reissuance of the OCS General Permit is eligible for a categorical exclusion requiring documentation under 40 CFR 6.204(a)(1)(iv). This category includes "actions involving reissuance of a NPDES permit for a new source providing the conclusions of the original NEPA document are still valid, there will be no degradation of the receiving waters, and the permit conditions do not change or are more environmentally protective." . In connection with its oil and gas leasing programs under the Outer Continental Shelf Lands Act, the Bureau of Ocean Energy Management of the Department of Interior (BOEM) has prepared and published an environmental impact statement (EIS) on potential impacts of oil and gas operations in the Central and Western Gulf of Mexico for the 2017 - 2022 period. The analysis and conclusions regarding the potential environmental impacts, reasonable alternatives, and potential mitigation included in the EIS are still valid for the 2023 reissuance of the OCS General Permit because the proposed permit conditions are either the same or more environmentally protective. Actions may be categorically excluded if the action fits within a category of action that is eligible for exclusion and the proposed action does not involve any extraordinary circumstances. EPA has reviewed the proposed action and determined that the 2023 reissuance of the OCS General Permit does not involve any extraordinary circumstances listed in 6.204(b)(1) through (10).

Magnuson-Stevens Fisheries Conservation and Management Act. The Magnuson-Stevens Fisheries Conservation and Management Act requires that federal agencies proposing to authorize actions that may adversely affect essential fish habitat (EFH) consult with the National Marine Fisheries Service (NMFS). The entire Gulf of Mexico has been designated as EFH. The EPA prepared an Essential Fish Habitat Assessment Report and determined that the minimal short-term impacts associated with the permitted NPDES discharges would not result in substantial adverse effects on EFH or managed species in any life history stage, either immediate of cumulative, in the project area. NMFS concurred with the EPA's assessment and agreed that the proposed mitigation measures to be incorporated into the permit will minimize adverse impacts to EFH or federally managed fisheries species.

Endangered Species Act (ESA). On March 13, 2020, National Marine Fisheries Service issued an Endangered Species Act Section 7 Biological Opinion on the Federally Regulated Oil and Gas Program Activities in the Gulf of Mexico. EPA initiated a review with National Marine Fisheries Service to ensure that all activities are consistent with those described in the Biological Opinion. The main changes to the permit include new intake structure requirements and more stringent whole effluent toxicity limits based on sub-lethal effects, in additional to other more stringent requirements. Since those changes would increase the level of protection, EPA determined that

reissuance of the permit was not likely to adversely affect any listed threatened or endangered species or their critical habitat.

By email received by the EPA on August 12, 2022, NMFS concluded that the proposed General Permit GMG290000 remained within scope of the 2020 biological opinion, associated appendices and subsequent amendments. NMFS agreed that the activities described in the permit application are unlikely to result in additional effects beyond those previously considered in the BiOp.

Paperwork Reduction Act. The information collection required by this permit will reduce paperwork significantly through implementation of electronic reporting requirements. The EPA is working on an electronic notice of intent (eNOI) system which will allow applicants to file their NOIs online. The EPA estimates that it takes 10 to 15 minutes to fill in all information required by the eNOI for each lease block. It also takes much less time to add, delete, or modify eNOIs. In addition to the eNOI system, the EPA will incorporate an electronic discharge monitoring report (NetDMR) requirement into the permit. The time necessary for NetDMR preparation will be much less than that for paper DMR preparation. Both electronic filing systems will significantly reduce the mailing costs.

The information collection activities in this permit will be submitted to OMB, see "ICR Supporting Statement Information Collection Request for National Pollutant Discharge Elimination System (NPDES) Program (Renewal)' (EPA ICR No. 0229.25, OMB Control No. 2040-0004). The current ICR is approved through April 30, 2023. EPA submitted a timely renewal ICR to OMB and may continue to collect information under this ICR while the submission is pending before OMB.

Impact on Small Businesses. EPA analyzed the potential impact of today's permit on small entities and concludes that this permit reissuance will not have a significant impact on a substantial number of small entities. As discussed in Section VI. Summary of Significant Changes from the Current (2012) Permit, all changes from the 2012 permit results in either no or negligible incremental cost and no or negligible operational and/or economical burdens. In addition, there are not a substantial number of small entities affected by this permit as EPA understands that there are few, if any, small businesses that are owners or operators of facilities subject to this permit. EPA did not conduct a quantitative analysis of impacts for this permit, as that would only be appropriate if the permit may affect a substantial number of small entities.

Additionally, EPA previously found that the promulgation of the Offshore Subcategory guidelines on which many of the permit's effluent limitations are based did not have a significant impact on a substantial number of small entities. (58 FR 12492, 1993). The permit also contains limits based on CWA 403(c) Ocean Discharge Criteria evaluation, but these limits did not change from the 2017 permit limits based on that analysis.

Regulatory Flexibility Act. The Regulatory Flexibility Act, 5 U.S.C. 601 et seq, requires that EPA prepare a regulatory flexibility analysis for regulations that have a significant impact on a substantial number of small entities. As indicated below, the permit reissuance proposed today is

not a "rule" subject to the Regulatory Flexibility Act. EPA prepared a regulatory flexibility analysis, however, on the promulgation of the Offshore Subcategory guidelines on which many of the permit's effluent limitations are based. That analysis shows that reissuance of this permit will not have a significant impact on a substantial number of small entities.

Clean Water Act. The Clean Water Act ("CWA") establishes a comprehensive program "to restore and maintain the chemical, physical, and biological integrity of the Nation's waters." 33 U.S.C. § 1251(a). The CWA also includes the objective of attaining "water quality which provides for the protection and propagation of fish, shellfish and wildlife and ... recreation in and on the water." 33 U.S.C. § 1251(a)(2)). To achieve these goals, the CWA requires EPA to control point source discharges of pollutants to Waters of the United States through the issuance of National Pollutant Discharge Elimination System ("NPDES") permits.

NPDES permits issued for oil and gas exploration, development, and production discharges are required under Section 402(a)(1) of the CWA to include conditions for meeting technologybased effluent limits established under Section 301 and, where applicable, Section 306. Once an effluent limitations guideline or new source performance standard is promulgated in accordance with these sections, NPDES permits issued by the NPDES permitting authorities must incorporate requirements based on such limitations and standards. See 40 CFR 122.44(a)(1). Effluent limitation guidelines for the Offshore Subcategory of the Oil and Gas Extraction Point Source Category are found at 40 CFR 435, Subpart A.