



American  
Petroleum  
Institute



September 20, 2022

*Submitted via [www.regulations.gov](http://www.regulations.gov)*

US Environmental Protection Agency, Region 6  
ATTN: Evelyn Rosborough  
1201 Elm Street  
Dallas, TX 75270

RE: Joint Trade Association Comments  
Notice of Proposed NPDES General Permit for New and Existing Sources and New Dischargers in the Offshore Subcategory of the Oil and Gas Extraction Category for the Western Portion of the Outer Continental Shelf in the Gulf of Mexico (GMG290000)  
Docket ID No. EPA-R06-OW-2022-0603

The Offshore Operators Committee (OOC), the American Petroleum Institute (API), the National Ocean Industries Association (NOIA) and the Louisiana Mid-Continent Oil and Gas Association (LMOGA), hereinafter referred to as “the Joint Trades,” appreciate the opportunity to provide detailed comments on the above-captioned NPDES General Permit. Comments submitted on behalf of the Joint Trades are submitted without prejudice to any member’s right to have or express different or opposing views. It is from this perspective that these comments have been developed.

The Joint Trades represent oil and natural gas operators, drilling contractors, and service providers who conduct essentially all of the offshore oil and natural gas exploration and production activities on the Outer Continental Shelf (OCS). Our members recognize that offshore operations must be conducted safely and in a manner that protects the environment. The offshore industry has a long history of safe operations that have advanced the energy security of our nation and provided energy resources which are crucial to our nation’s economy.

### Comments

The Joint Trades’ detailed technical comments are included in the following attachments:

- Attachment A – Technical Comments on the Proposed Permit Language
- Attachment B – August 19, 2003 Letter from S. Wilson regarding Radioactive Tracers
- Attachment C – Comments on the Proposed Permit Appendices and Permit Supporting Documents
- Attachment D – Redline of the Permit Summary Table

The Joint Trades believe the information included in the attached comments is important and critical to providing a final permit that is protective of water quality in the GOM, as well as a practical permit that

allows the continued development of our nation's energy resources. The attached comments are structured to include suggested edits to the proposed permit language and justification for the suggested change.

#### Whole Effluent Toxicity (WET) Testing of Treatment, Completion and Workover (TCW) Fluids

One concern that the Joint Trades would like to highlight is the proposed requirements for TCW fluid WET testing and monitoring. The limitations for 48-hour acute WET testing and the monitoring requirements for 7-day chronic WET testing of TCW fluids should be removed from the permit. As discussed in detail in Attachment A, the use of 48-hour and 7-day testing regimens are overly conservative for short duration, intermittent, low volume discharges.

In addition, the industry-wide TCW fluids study concluded that:

- TCW fluid discharges are typically of short duration. 75% of the discharges sampled during the study were less than 2 hours in duration (median discharge time was 1-hour). A 48-hour or 7-day test exposure is extremely conservative and is not representative of the hazard and effects of these discharges in the marine environment.
- TCW fluid discharges are small volumes. TCW fluid discharges are estimated to be 0.01% of produced water discharge volumes.
- Of the substances evaluated during the study, no concentration was greater than conservative acute saltwater ecological thresholds.

TCW fluids do not pose an unreasonable risk to the aquatic environment, and additional WET testing does not provide any added environmental benefit. Implementation of WET testing requirements increases operational complexity and risk.

#### Compliance Implementation Periods for Several Proposed Requirements

The Joint Trades have also included a few recommendations for EPA to consider regarding the use of compliance implementation periods in our comments in Attachment A. These recommendations are made (details in Attachment A) for the following items:

- TCW fluid 48-hour acute WET testing
- TCW fluid 7-day chronic WET testing
- Radioactive tracers
- Continuous flow monitoring of cooling water intake systems

If these requirements are retained in the final permit, it is imperative that a compliance implementation period be included to allow operators time to establish procedures, processes and resources to achieve compliance. The Joint Trades strongly recommend that EPA establish a schedule of compliance for implementation of the new requirements as outlined in 40 CFR 122.47. Offshore facilities subject to these new requirements may require capital upgrades making immediate compliance with the new requirements impossible.

EPA granted a similar compliance implementation period for produced water chronic WET testing during the 2007 permit renewal. EPA included language in the 2007 permit that said:

*Compliance with sub-lethal effects must be achieved within two years after the effective date of this permit.*

The Joint Trades strongly encourage EPA to consider this type of implementation schedule for these requirements as well.

Planned Discussion for Further Explanation

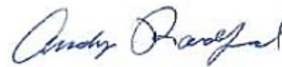
Also, the Joints Trades, through OOC, have set a meeting with EPA Region 6 staff, after the comment period closes, to review the attached technical comments, and answer any clarifying questions the agency may have regarding the information provided here.

The Joint Trades appreciate EPA's efforts regarding the draft permit, and look forward to working with the agency on the critical issues included in our comments as the permit is finalized. If you have any questions or require additional information, please contact Mr. Greg Southworth at [greg@theooc.org](mailto:greg@theooc.org).

Sincerely,



Greg Southworth  
Associate Director  
Offshore Operators Committee



Andy Radford  
Senior Policy Advisor  
American Petroleum Institute



Erik Milito  
President  
National Ocean Industries Association



Lori Leblanc  
Director, Offshore Committee  
Louisiana Mid-Continent Oil and Gas Association

cc (via email):

Environmental Protection Agency:

Michael S. Regan, Administrator  
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Bureau of Safety and Environmental Enforcement:

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TJ Broussard, Gulf of Mexico Regional Environmental Officer

Bureau of Ocean Energy Management:

Amanda Lefton, Director  
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**TECHNICAL COMMENTS ON PROPOSED OCS NPDES PERMIT GMG290000**  
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<b>Authorization to Discharge Under the National Pollutant Discharge Elimination System</b>	Operators located within the general permit area must submit an electronic Notice of Intent (NOI) that they intend to be covered. An operator must file one NOI for each facility to cover all discharges associated with the facility. An NOI must be updated as necessary to identify additional discharges needing (or existing discharges no longer needing) authorization under this permit. Operators who previously submitted an NOI to be covered under this permit are covered under this reissued permit until 60 days after the effective date of the reissued permit and must submit a new NOI prior to that date to retain coverage.	<p>The Joint Trades offer the following suggested revisions to the proposed permit language:</p> <p><i>Operators who previously submitted an NOI to be covered under this permit are covered under this reissued permit until 60 days after <b>either</b> the effective date of the reissued permit <b>or the date the eNOI system is available (whichever is later)</b> and must submit a new NOI prior to that date to retain coverage.</i></p> <p><b>Rationale:</b> The Joint Trades are requesting the additional language to this section of the permit to provide clarity in the event the eNOI system is unavailable.</p> <p>The Joint Trades respectfully request that EPA hold workshops in both Houston and New Orleans for the new eNOI system that are specific to the Region 6 OCS permit and reiterate there be a transitional period to assure the system is fully operational before its use becomes a requirement.</p>
<b>Part I.A.1.b</b>	<p>Limitations on Coverage: The following are not authorized under this permit:</p> <ul style="list-style-type: none"> <li>i) Discharges not described under Parts I.B.1-13</li> <li>ii) This general permit does not authorize discharges, including spills or leaks, caused by failures of equipment, blowout, damage of facility, or any form of unexpected discharge.</li> <li>iii) Historic Properties: 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.</li> <li>iv) Radioactive Materials Under the Jurisdiction of the Nuclear Regulatory Commission (NRC): Discharge of radioactive materials under the jurisdiction of the NRC are not independently authorized by this permit. Permittees must obtain separate authorization from NRC in order to include radioactive materials under the jurisdiction of the NRC in discharges authorized by this permit or for any other disposal of such materials.</li> </ul>	<p>The Joint Trades recommend moving this paragraph to Part I.C Other Discharge Limitations. The suggested revisions are as follows:</p> <p><i><b>Section C. Other Discharge Limitations</b></i></p> <ul style="list-style-type: none"> <li><i><b>8. Discharges not described under Parts I.B.1-13</b></i></li> <li><i><b>9. This general permit does not authorize discharges, including spills or leaks, caused by failures of equipment, blowout, damage of facility, or any form of unexpected discharge.</b></i></li> <li><i><b>10. Historic Properties: 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.</b></i></li> <li><i><b>11. Radioactive Materials Under the Jurisdiction of the Nuclear Regulatory Commission (NRC): Discharge of radioactive materials under the jurisdiction of the NRC are not independently authorized by this permit. Permittees must</b></i></li> </ul>

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		<p><i>obtain separate authorization from NRC in order to include radioactive materials under the jurisdiction of the NRC in discharges authorized by this permit or for any other disposal of such materials.</i></p> <p><b>Rationale:</b> Part I.C is the part of the permit where general discharge limitations and prohibitions are described. The limitations described in this proposed section are better aligned for inclusion in Part I.C.</p> <p>In addition, the Joint Trades are offering additional comments on item iv) radioactive tracers (see next comment).</p>
<b>Part I.A.1.b.iv</b>	<p>iv)Radioactive Materials Under the Jurisdiction of the Nuclear Regulatory Commission (NRC): Discharge of radioactive materials under the jurisdiction of the NRC are not independently authorized by this permit. Permittees must obtain separate authorization from NRC in order to include radioactive materials under the jurisdiction of the NRC in discharges authorized by this permit or for any other disposal of such materials.</p>	<p>The Joint Trades agree with EPA that nothing in this permit shall be construed to circumvent any applicable requirements imposed by the Nuclear Regulatory Commission (NRC) for the discharge of radioactive materials under the Atomic Energy Act. See 42 U.S.C. § 2012; see also 40 CFR § 122.2 (excluding radioactive materials regulated under the Atomic Energy Act from the definition of “pollutant.”). However, the language of the draft permit relating to radioactive materials under the jurisdiction of the Nuclear Regulatory Commission (NRC) could be interpreted as prohibiting all discharges of radioactive materials absent an explicit grant of authorization to the operator from the NRC. Accordingly, the Joint Trades recommend adding the following language to clarify that the NRC require NRC licensees to obtain authorization.</p> <p><i>Radioactive Materials Under the Jurisdiction of the Nuclear Regulatory Commission (NRC) <b>not authorized for discharge under an NRC License (if required):</b> Discharge of radioactive materials under the jurisdiction of the NRC are not independently authorized by this permit. <b>NRC licensees Permittees</b> must obtain separate authorization from NRC, <b>if required</b>, in order to include radioactive materials under the jurisdiction of the NRC in discharges authorized by this permit <del>or for any other disposal of such materials.</del> Compliance with this limitation must be achieved within two years after the</i></p>

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		<p><i>effective date of this permit.</i></p> <p>This is important as third-party vendors hold the NRC license for use of radioactive tracers, not the operators. The Joint Trades are committed to working with these vendors to understand what steps, if any, need to be taken for NRC to authorize discharges of radioactive materials.</p> <p>The Joint Trades further note that EPA’s past consideration of radioactive tracers weighs strongly against an outright prohibition against their discharge. For example, EPA “examined [radioactive tracer discharges] in the process of issuing National Effluent Limitations Guidelines and in our permit development.” See Attachment B Letter from S. Wilson dated August 19, 2003 for more information. EPA’s current proposal to prohibit the discharge presents no information to counter their own 2003 determination. (See also Avanti Corporation, <i>Ocean Discharge Criteria Evaluation for the NPDES General Permit for the Western Gulf of Mexico OCS</i>, EPA Contract No. 68-C9-0009 Work Assignment S-4-49(P), Task 161, prepared for USEPA Region 6, Dallas TX Dated August 9, 1993.)</p> <p>In preparation for the 2012 Permit Renewal, EPA proposed language requiring radioactive tracers to be separated from TCW and Produced Water discharges and sent to shore for disposal. In a letter from OOC to Mr. Isaac Chen, EPA Region 6 Permit Writer, dated December 15, 2011, OOC provided comments to strike the proposed language. As explained in this letter, excerpts of which are provided below, it would be prohibitively expensive and time consuming to filter these tracers from produced water, an undertaking not justified given the trivial levels of tracers present in the produced water. Mr. Chen agreed and the proposed language was not included in the final Permit, effectively approving discharge of radioactive tracers.</p> <p>EPA again considered and approved discharge of radioactive tracers in the 2017 NPDES Permit. Specifically, during the 2017 permit renewal process,</p>

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		<p>the OOC requested that EPA add the following language, underlined and in red, to the Miscellaneous Discharge section: “Mud, Cuttings, and Cement (including tracers) at the seafloor.” OOC explained its rationale for this request as follows:</p> <p><i>Being able to identify top of cement (TOC) behind a wellbore casing can sometimes be challenging given current (acoustic) cement evaluation logging technology. By being able to run tracers detectable by logging tools, the technical limits of acoustic logging tools are bypassed, thus allowing the operator another option that may more clearly identify TOC and ensure the cemented casing meets technical and HSE requirements for the well. The tracer in question would be a very small quantity (~ 1 mCi) of Sc-46 embedded in inert beads suspended in a gel (~1 cup by volume total), placed in the first 50 bbls of cement pumped (and so may extrude to sea floor for top hole casings). Sc-46 decays by beta emission (with detectable gamma), with a half-life of ~84 days (so effectively gone after 5 half-lives or 420 days). The beads will not float or disperse, rather we expect they will be encapsulated into the cement slurry as it solidifies (over 12-24 hours at the sea floor). Sc-46 beta emissions travel distance in water is estimated at 0.11 cm. The tenth thickness in concrete for the gamma emissions is 16 cm. Given these small distances, along with short half-life and cement encapsulation, we would not expect significant ecological risk from this tracer.</i></p> <p>EPA accepted OOC’s proposed language and added it to the current permit, which reads “Muds, Cuttings, and Cement (including cement tracer) at the Seafloor.”</p> <p>The radioactive tracers used in fracturing are the same as used in cementing, discussed above. They are tiny beads, similar in size to a proppant grain, which are injected to the slurry stream at a very low concentration while pumping the frac. The primary reason that radioactive</p>



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		<p>tracers are added to the frac slurry is to confirm the presence of an annular pack of proppant around the screens. Frac height confirmation is a secondary benefit of the tracers in sand control wells. In wells requiring sand control—which include most Gulf of Mexico wells—the proppant pack around the screens acts as an additional filter preventing sand production and protecting the integrity of the screens, tubulars and facilities. Without a complete proppant pack in place around the screens, the screens can quickly erode compromising screen integrity. The sand and proppant produced after the screens are compromised erode tubulars and facility piping. It can also foul the safety valve and subsea tree valves making them non-functional. Thus, the use of radioactive tracers in the frac slurry is important to the integrity and safety of the well.</p> <p>Given the above—i.e., EPA’s prior determinations, the proppant’s small size, the viscous matrix used to convey the proppant, and the expected trivial loss to produced water due to the well bore screen—USEPA should not prohibit discharge of insignificant levels of radioactive tracers. Should EPA intend to prohibit discharge of radioactive tracers, OOC requests:</p> <ol style="list-style-type: none"> <li>1. EPA demonstrate a cost/benefit analysis for requiring a prohibition of the discharge of radioactive tracers.</li> <li>2. OOC proposes the following language be added to this section of the permit: <b>“Compliance with this limitation must be achieved within two years after the effective date of this permit.”</b></li> </ol> <hr/> <p><b>Additional background information:</b>  Radioactive Tracers in Proppants Background (edited from OOC letter to Mr. Isaac Chen dated December 15, 2011):</p> <p><i>Propping agents are like grains of sand in size (&lt; 600 microns typically). Proppants or solids introduced into a gravel pack or fracture job are not themselves radioactive. Proppants are generally man made and composed of ceramic material. Occasionally a gravel pack may be tagged with a weak radioactive isotope in order to determine what the extent of the fracture height is. This isotope is</i></p>

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		<p><i>added to the main portion of the fluid which may or may not contain proppant [OOC realizes that the August 1, 2011, submittal to EPA was not clear on how trace radioactive materials were added to the proppant- the fluid is dosed with the tracer; radioactive material is not physically added into the proppant grains.]. For well completion applications the base fluid is viscosified with an organic biodegradable polymer and a chemically inert propping agent which is incorporated at varying concentrations. This slurry is pumped down the work string and hydraulically forced into the production zone. Any excess slurry is reversed out of the work string and returned to the surface. Pending a passing static sheen and oil and grease test, the slurry is discharged (if it does not contain priority pollutants above trace amounts). Once placed in the formation, the proppants will be retained therein by the well screen. This screen is of critical importance for sand control (to prevent excess erosion of piping which could result in a loss of hydrocarbon containment). The only proppant that is discharged is proppant which remains in the work string (tubing used to channel the proppant slurry to the formation face). As noted above this mixture is a very viscous gel (highly cross-linked). Because of this, separation of the proppant from this well fluid is not feasible without extensive or time-consuming treatment.</i></p> <p><i>This prohibition could also impact produced water discharges. Proppants may be returned with produced water. As discussed above, proppant application is into the formation, and prevented from return with the oil/gas by use of screens across the producing zones. As such, proppant levels in produced water will be trivial. Data from one major operator indicates that produced water discharged overboard contain relatively low volumes (approximately 25ppm) of solids with an average (D50) particle size of 25 micron based on limited sampling at a major platform in the Gulf. The Effluent Guidelines (Table IX-12) indicates solids loading on the order of</i></p>

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		<p><i>13.38-74.72 ug/l. Filtration of produced waters just prior to overboard discharge would require installation of suitable pumping capacity and elevated deck sections to accommodate the additional equipment and space for operator intervention and maintenance. Existing assets lack open deck space to accommodate this equipment. Filtration of produced water can be very problematic given oil has a “stickiness” property which would bridge over in time the filter screens requiring a solvent wash or steam cleaning. An initial estimate to filter a 10,000 bwpd produced water stream to &lt; 600 micron solids was made. The cost for engineering, filtration and pumping equipment would be on the order of \$750,000 [2011 estimate]. The cost for structural steel and offshore installation may require as much as 5000-man hours and cost an estimated \$4 million dollars [2011 estimate]. It is estimated to take 24 weeks to procure the required equipment. Additional time would be required for conducting the engineering on the facility to address weight, space and safety classification issues. Assuming this cost, given there are approximately 800 platforms [2011 estimate] discharging produce water, this yields a total industry cost of approximately \$3,800,000,000 [2011 estimate]. Finally, the solids recovered from the filtration system would have to be disposed onshore.</i></p> <p><i>The above is a rough estimate made in the limited time available. However, it does indicate that addition of filtration equipment to produced water streams is a significant undertaking in the offshore environment. As such, OOC feels it is difficult to justify such systems given the small chance some proppant grains/radioactive tracer particles are returned with the produced fluids. OOC notes that sand loss control is a critical design concern for a well as sand can erode piping and valves and result in loss of containment of the hydrocarbons. As such, great care is taken to ensure even fine grain sands/solids do not exit the formation. Certainly, very fine solids can and do come out and up into the topsides equipment.; However,</i></p>

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		<i>weight and space limitations make the addition of solids separating equipment quite challenging.</i>
<b>Part I.A.2</b>	A Notice of Intent (NOI) must be filed in advance to cover specific discharges prior to commencement of specified discharges. The primary operator must file an electronic Notice of Intent (eNOI) for discharges directly associated with oil/gas exploration, development, or production activities to be covered by this permit. A separate eNOI is required for each facility and that eNOI shall include all discharges controlled by the primary operator. Other operators or vessel operators must file an eNOI to cover discharges which are directly under their controls but are not covered by eNOIs filed by the primary operator. In a case-by-case circumstance, the primary operator may require day-to-day or vessel operators to file their own eNOIs for dual coverage. Individual coverage by this permit becomes effective when a complete eNOI is signed and submitted. Once an eNOI has been accepted for coverage a Permitted Feature ID numbers will be assigned.	<p>The Joint Trades recommend the following revised language:</p> <p><i>Once an eNOI has been accepted for coverage a <del>Permitted Feature ID</del> <b>Structure ID</b> number will be assigned.</i></p> <p><b>Rationale:</b> It is our understanding the Permitted Feature ID and Structure are synonymous and the terminology used in the permit should be consistent with the reporting systems.</p>
<b>Part I.A.2</b>	<p>A facility means either an exploratory facility, a development facility, or a production facility as defined in Part II.G of the permit. All well heads and infrastructures connected to the facility shall be considered parts of the host facility. For clarification purposes, following conditions apply:</p> <p>Note 1: A separate eNOI is required for each facility, and that eNOI shall include all discharges associated with that facility controlled by the primary operator.</p> <p>Note 2: An eNOI filed for a drilling vessel is valid for different drilling jobs within the same lease block from the originally filed location if drilling jobs are performed for the same designated operator. (Note: eNOI update is required to reflect well locations and associated information.) A separate eNOI is required for drilling jobs not within the same lease block, and/or if the Mobile Offshore Drilling Unit or drilling vessel moves to a new lease block.</p> <p>Note 3: While a drilling vessel is located in the leasing block permit area between drilling jobs, it may file an eNOI for coverage.</p>	<p>The Joint Trades recommend the proposed permit language be modified as follows:</p> <p><i>A facility means either an exploratory facility, a development facility, or a production facility as defined in Part II.G of the permit. All well heads, <del>pipelines, jumpers, and associated</del> infrastructure connected to the facility shall be considered parts of the host facility, <del>even where such infrastructure crosses lease block boundaries</del>. For clarification purposes, following conditions apply:</i></p> <p><i>Note 1: A separate eNOI is required for each facility, and that eNOI shall include all discharges associated with that facility controlled by the primary operator.</i></p> <p><i>Note 2: An eNOI filed for a <del>Mobile Offshore Drilling Unit or drilling-vessel</del> is valid for different <del>well drilling-jobs</del> within the same lease block <del>from the originally filed location</del> if <del>well drilling-jobs</del> are performed for the same designated operator. (Note: eNOI update is required to reflect well</i></p>

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		<p><i>locations and associated information.) A separate eNOI is required for well <del>drilling</del> jobs not within the same lease block, and/or if the Mobile Offshore Drilling Unit or <del>drilling</del> vessel moves to a new lease block.</i></p> <p><b>Rationale:</b> 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. In addition, the revised language in Note 2 broadens the types of operations a MODU or vessel may undertake. The term “drilling” does not address well completions, treatment, intervention or decommissioning operations.</p>
<b>Part I.A.2</b>	<p>Operators who filed eNOIs under the previous permit, issued on September 30, 2017, will be authorized to discharge by this reissued permit without submittal of an NOI up to 60 days after the effective date of the reissued permit. Operators must submit a new eNOI within 60 days of the effective date of the reissued permit, to retain coverage after that time. During any time the eNOI system is unavailable, operators may submit a short NOI via email to the Offshore Specialist or paper NOI via mail to:</p> <p>U.S. Environmental Protection Agency, Region 6  Water Enforcement Branch (ECD-WE)  ATTN: Offshore Specialist  1201 Elm Street, Suite 500  Dallas, Texas 75270</p> <p>The email/paper NOI shall include information a) through f) listed below. EPA will consider disruptions in both the eNOI and elecNOI registration systems (including waiting on EPA personnel to resolve issues) to fall under the meaning of the system being unavailable and thus allow the use of temporary NOIs if necessary. An email or a written and signed paper NOI mailed to EPA will be accepted as temporary coverage based on the postmark/email date. The temporary NOI is good for 14 days, unless an extension is granted by the Director. Official eNOIs shall be filed within 14 days of submitting a temporary NOI. EPA may deny an NOI</p>	<p>The Joint Trades offer the following suggested revisions to the proposed permit language:</p> <p><i>Operators who filed eNOIs under the previous permit, issued on September 30, 2017, will be authorized to discharge by this reissued permit without submittal of an NOI up to 60 days after <b>either</b> the effective date of the reissued permit <b>or the date the eNOI system is available (whichever is later)</b>. Operators must submit a new eNOI within 60 days of the effective date of the reissued permit, to retain coverage after that time.</i></p> <p><i>An email or a written and signed paper NOI mailed to EPA will be accepted as temporary coverage based on the postmark/email date. The temporary NOI is good for 14 days, unless an extension is granted by the Director. Official eNOIs shall be filed within 14 days of submitting a temporary NOI. <b>If the eNOI system remains unavailable, the temporary NOI coverage will be extended to 14 days after the system becomes functional.</b> EPA may deny an NOI within 45 days after the filing. All NOIs shall include the following information:</i></p>

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	within 45 days after the filing. All NOIs shall include the following information:	<p><b>Rationale:</b> The Joint Trades are requesting the change in the rare instance where the eNOI system is unavailable for an extended period of time, the permit should contain language to address such a situation.</p> <p>The Joint Trades respectfully request that EPA hold workshops in both Houston and New Orleans for the new eNOI system that are specific to the Region 6 OCS permit and reiterate there be a transitional period to assure the system is fully operational before its use becomes a requirement.</p>
<b>Part I.A.2</b>	<ul style="list-style-type: none"> <li>a) the legal names, company number and contact information of the designated operator registered with the Bureau of Ocean Energy Management (BOEM) or the Bureau of Safety and Environmental Enforcement (BSEE);</li> <li>b) the legal name, company number and contact information of the operator who files the eNOI;</li> <li>c) the permit number previously assigned to the operator;</li> <li>d) the lease block (including state tract) code and number assigned by BOEM/BSEE;</li> <li>e) the name and/or identification (BSEE Complex ID/API Number) and location including geographic coordinates (latitude and longitude) of the facility owned or operated by the operator;</li> <li>f) the types of discharges and associated sources (facilities or wells) under the control of the operator;</li> <li>g) expecting/actual drill/discharge commence date and well locations;</li> <li>h) the range of depth of water within the operation area or the estimated sea depths at wells;</li> <li>i) new facilities (defined as facilities for which construction was commenced after July 17, 2006): design intake capacity (million gallons per day as MGD) of each cooling water intake structure (CWIS), the maximum designed intake through-screen velocity (feet per second as ft/s) of each CWIS, and the percentage (%) of total intake water used for cooling purpose; (Note: A new facility which has designed intake capacity <math>\geq</math> 2 MGD must have designed intake through-screen velocity <math>\leq</math> 0.5 ft/s to be eligible for coverage under this general permit.) (Note: The operator shall keep the</li> </ul>	<p>The Joint Trades recommend the proposed permit language in item l) be modified as follows:</p> <p style="padding-left: 40px;">l) <i>any other information included in the eNOI to identify the nature and location of each discharge being authorized and any co-permittees, if applicable. <del>For each separate discharge point, the location volume and nature of the discharge.</del></i></p> <p><b>Rationale:</b> This change is recommended because the location, volume and nature of a discharge may change over time. In addition, item f) requires the operator to list the types of discharges (similar to nature of discharge) expected from the facility and item e) requires BSEE Complex ID/API Number and geographic coordinates (location). Not all authorized discharges listed in the permit have limitations or monitoring requirements related to discharge volume. For those permitted discharges that have requirements regarding discharge volume that information will be reported to EPA on an ongoing basis as stipulated by the permit.</p>

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	<p>record of detailed descriptions, calculations and drawings on site available for inspection, instead of submittal to EPA.)</p> <p>j) whether or not the operator’s activities are located in a lease block either in or immediately adjacent to “no activity” areas or require live bottom surveys;</p> <p>k) whether the NOI is being submitted to transfer coverage due to a merger or acquisition and if so, the identification of the affected parties, timing of the transfer of operational control, and confirmation that notice had been submitted to EPA; and,</p> <p>l) any other information included in the eNOI to identify the nature and location of each discharge being authorized and any co-permittees, if applicable. For each separate discharge point, the location volume and nature of the discharge.</p>	
<b>Part I.A.2</b>	<p>Permittees are required to make timely updates to the eNOI. Any change in name, location, address, contact or contact information must be updated within 30 days of the change.</p>	<p>The Joint Trades offer the following suggested edits to this paragraph:</p> <p><i>Permittees are required to make timely updates to the <b>Operators NPDES ID section in EPA’s CDX system</b> <del>eNOI</del>. Any change in name, address, contact or contact information must be updated within 30 days of the change.</i></p> <p><b><u>Rationale:</u></b> The Joint Trades request that this section clarify the updates to be made to the Operators NPDES ID section in EPA’s CDX system for contact information changes being that the CDX system is the repository for name, address, or contact information requested.</p>
<b>Part I.A.2</b>	<p>Please visit <a href="https://usepa.servicenowservices.com/oeca_icis">https://usepa.servicenowservices.com/oeca_icis</a> for eNOI/eNOT instructions.</p>	<p>The Joint Trades recommend that EPA ensure this link is functioning prior to the issuance of the final permit.</p>
<b>Part I.A.4</b>	<p>a) 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 (for all lease areas/blocks as well as their NPDES permit number. Final DMRs shall also be submitted) within 60 days of receiving confirmation that the new permittee has submitted the NOI.</p>	<p>The Joint Trades recommend the proposed language in paragraph a) be changed as follows:</p> <p><i>a) During the initial term of permit: <b>The surviving company of a merger between two offshore companies shall submit an NOI (or NOIs) prior to taking operational control. The company that will no longer operate shall submit a NOT within 60 days of relinquishing</b></i></p>

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		<p><i>operational control. The company that will no longer operate shall also submit final DMRs within 60 days of their NOT date(s).</i></p> <p><b>Rationale:</b> The proposed language creates unnecessary burden on the regulated community because the information requested in the proposed language is duplicative of the information provided in the NOI. In addition, linking the submission of an NOT for one operator to the submittal of an NOI for another operator ties permit compliance for one operator to another. The operator relinquishing operational control of a facility has no control over whether the company acquiring the facility will submit the required NOI. Therefore, the relinquishing company cannot achieve compliance independently and must rely on the acquiring company. Furthermore, the date that operational control is transferred between two companies is a logical date, negotiated between the two parties, which should drive submission of NOIs and NOTs. In addition, the date of transfer of operational control should also be the date when any non-compliances would begin once the surviving company assumes operational control.</p>
<b>Part I.A.4</b>	<p>b) 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 company name; the surviving NPDES permit number; and liability. This letter can be emailed to the Offshore Specialist or sent to the address below:</p>	<p>The Joint Trades recommend striking the proposed language:</p> <p><i><del>b) 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 company name; the surviving NPDES permit number; and liability. This letter can be emailed to the Offshore Specialist or sent to the address below:</del></i></p> <p><b>Rationale:</b> The proposed language creates unnecessary burden on the regulated community because the information requested in the proposed language is duplicative of the information provided in the NOI and NOT as listed in section 4.a. Furthermore, the date that operational control is transferred between two companies is a logical date, negotiated between</p>



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		the two parties, which should drive submission of NOIs and NOTs. In addition, the date of transfer of operational control should also be the date when any non-compliances would begin once the surviving company assumes operational control.
<b>Part I.A.4</b>	c) 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. This letter can be emailed to the Offshore Specialist or sent to the address below:	<p>The Joint Trades recommend the proposed permit be changed as follows:</p> <p><i>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. <del>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. This letter can be emailed to the Offshore Specialist or sent to the address below:</del></i></p> <p><b>Rationale:</b> The proposed language creates unnecessary burden on the regulated community because the information requested in the proposed language is duplicative of the information provided in the NOI. Furthermore, the date that operational control is transferred between two companies is a logical date, negotiated between the two parties, which should drive submission of NOIs and NOTs. In addition, the date of transfer of operational control should also be the date when any non-compliances would begin once the surviving company assumes operational control.</p>
<b>Part I.A.4</b>	<p>NOTE: Each company must collect and report their own samples. Samples from a company transferring coverage cannot be used by the receiving company. Transfer of coverage can be for a single lease area/block of multiple lease areas/blocks. Transfer of coverage during “Administratively Continued” status can only occur when the company who is transferring their coverage obtained that coverage on or before midnight of when the previous permit expired.</p> <p>The written and signed agreements shall be sent to the following address:</p> <p>U.S. Environmental Protection Agency, Region 6</p>	<p>The Joint Trades recommend that the following text be removed from the permit:</p> <p><del>NOTE: Each company must collect and report their own samples. Samples from a company transferring coverage cannot be used by the receiving company. Transfer of coverage can be for a single lease area/block of multiple lease areas/blocks. Transfer of coverage during “Administratively Continued” status can only occur when the company who is transferring their coverage obtained that coverage on or before midnight of when the previous permit expired.</del></p>

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	<p>Water Enforcement Branch (ECD-WE)  ATTN: Offshore Specialist  1201 Elm Street, Suite 500  Dallas, Texas 75270</p>	<p><b>Rationale:</b> The information listed in the “NOTE” is important for the regulated community to understand. However, the Joint Trades recommend that this information be included in guidance and/or instructions that support implementation of the permit requirements.</p>
<p><b>Part I.A.5</b></p>	<p>Note that if the 2022 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) and remain in force and effect for operators that were covered prior to its expiration. All operators authorized to discharge prior to the expiration date of the 2022 permit will automatically remain covered under the 2022 permit until the earliest of:</p> <ul style="list-style-type: none"> <li>a) The date the operator is authorized for coverage under a new version of the permit following the timely submittal of a complete and accurate NOI. Note that if a timely NOI for coverage under the reissued or replacement permit is not submitted, coverage will terminate on the date that the NOI was due; or</li> <li>b) The date of the submittal of a Notice of Termination; or</li> <li>c) Issuance of an individual permit for the facility’s discharge(s); or</li> <li>d) A final permit decision by EPA not to reissue the permit, at which time EPA will identify a reasonable time period for covered operators to obtain coverage under an alternative general permit or an individual permit. Coverage under the 2022 permit will terminate at the end of this time period.</li> </ul>	<p>The Joint Trades recommend adding the following:</p> <p><i>Note that if the 2022 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) and remain in force and effect for operators that were covered prior to its expiration. Operators with existing coverage may continue to submit NOIs during the period the permit is continued. All operators authorized to discharge prior to the expiration date of the 2022 permit will automatically remain covered under the 2022 permit until the earliest of:</i></p> <p><b>Rationale:</b> As proposed, the existing General Permit will be administratively continued for existing facilities if there is a delay, but discharges from new facilities and operations may not be covered under the existing permit (e.g., discharges from new drilling, completion, and abandonment operations and from new oil and natural gas platforms); therefore, those facilities and activities may need to obtain separate coverage for those associated discharges via a lengthy individual permit application. Furthermore, an administrative continuance of the General Permit could result in delays or cancellations of new projects and may further delay delivery of existing and planned energy resources to the market and the American people. To avoid these consequences, the Joint Trades request the addition of the above language clarifying that EPA will continue processing new Notices of Intent for coverage for new lease areas under the administrative continuance until the renewed General Permit becomes effective. This would allow the Agency time to carefully consider all comments and provide permittees the confirmation needed to continue to plan and execute necessary activities.</p>

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		<p>With 15% of U.S. oil production coming from the U.S. Gulf of Mexico, any disruption in that production or future development could be detrimental to an already imbalanced supply and demand market.</p>
<b>Part I.B.3.a</b>	<p><u>Free Oil.</u> No free oil shall be discharged, as determined by the visual sheen method on the surface of the receiving water. Monitoring shall be performed daily when discharging, during conditions when an observation of a visual sheen on the surface of the receiving water is possible in the vicinity of the discharge, and the facility is manned. If a sheen is observed at other times, in addition to the required daily monitoring, it must be recorded. The total number of days a sheen is observed must be recorded and reported.</p>	<p>The Joint Trades recommend revising the last sentence of this paragraph as follows:</p> <p style="text-align: center;"><i>The total number of days a sheen is observed must be recorded and reported <b>in accordance with Part II.D.7.c of this permit.</b></i></p> <p><b>Rationale:</b> Providing a specific reference for reporting increases clarity of the requirement and provides certainty to the regulated community.</p>
<b>Part I.B.4.a</b>	<p><u>Toxicity.</u> Toxicity shall be assessed through a 7-day chronic Whole Effluent Toxicity (WET) test in accordance with <i>Short Term Methods for Estimating the Chronic Toxicity of Effluents and Receiving Water to Marine and Estuarine Organisms</i> (EPA/821-R-02- 014), or the most current edition. In order to be in compliance with a WET limit, the No Observable Effect Concentration (NOEC) must be equal to or greater than the critical dilution concentration specified in Appendix D, Table 1 (1-A through 1-F) of this permit. The critical dilution to be used for each calendar year shall be determined during the month of December using Table 1 in Appendix D of this permit and is based on the highest estimated monthly flow rate recorded during the previous 12-months, discharge pipe diameter, and water depth between the discharge pipe and the bottom.</p> <p>The critical dilution shall be calculated when this permit becomes effective, using the previous 12 months, until recalculated in December and every end of calendar year thereafter.</p>	<p>The Joint Trades recommend EPA continue to use the language contained in the 2017 permit:</p> <p style="text-align: center;"><i>The critical dilution <b>shall be determined</b> using Table 1 in Appendix D of this permit and is based on the highest monthly average discharge rate for <b>the three months prior to the month</b> in which the test sample is collected, discharge pipe diameter, and water depth between the discharge pipe and the bottom.</i></p> <p>Alternatively, if EPA has rationale for discharge rate to be moved from three months prior to calendar year prior; the Joint Trades request revisions to the proposed permit language:</p> <p style="text-align: center;"><i>The critical dilution <b>to be used for each calendar year shall be determined during the month of December</b> using Table 1 in Appendix D of this permit and is based on the highest estimated monthly flow rate <b>recorded during the previous calendar year 12-months</b>, discharge pipe diameter, and water depth between the discharge pipe and the bottom.</i></p>

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		<p><i>The critical dilution shall be calculated when this permit becomes effective, using the previous calendar year. <del>12 months, until recalculated in December and every end of calendar year thereafter.</del></i></p> <p><b>Rationale:</b> The Joint Trades are requesting rationale from EPA for discharge rate to be moved from three months prior to calendar year prior. If language is moved to calendar year, the Joint Trades are requesting the language change to this section of the permit to provide clarity. Replacing “12 months” with calendar year will prevent operators from making varying interpretations and will help answer the following questions: Did EPA intend for a calendar year or rolling 12-month period from month sampled? If this is to be done in December, does the Operator include December since the month is not complete?</p>
<b>Part I.B.4.b</b>	<p><u>Oil and Grease.</u> Samples for oil and grease monitoring shall be collected and analyzed a minimum of once per month. If a sheen is observed during the required daily monitoring, the operator must record the sheen and assess the cause of the sheen. In addition, a produced water sample shall be collected, within two (2) hours of when a sheen is observed in the vicinity of the discharge or within two hours after startup of the system if it is shut down following a sheen discovery and analyzed for oil and grease. 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. The operator must keep records of findings and make the record available for inspector’s review. The operator must report number of days of sheen observed during the reporting period. Oil and grease samples collected for any sheen event must be included in the monthly average on DMRs. If only one sample is taken for any one month, it must meet both the daily maximum and monthly average limits. Samples for oil and grease monitoring shall be collected prior to the addition of any seawater to the produced water waste stream. The analytical method is that specified at 40 CFR Part 136.</p>	<p>The Joint Trades offer the following suggested revisions to the proposed permit language:</p> <p><i><u>Oil and Grease.</u> Samples for oil and grease monitoring shall be collected and analyzed a minimum of once per month. <del>If a sheen is observed during the required daily monitoring, the operator must record the sheen and assess the cause of the sheen.</del> In addition, a produced water sample shall be collected, within two (2) hours of when a sheen is observed in the vicinity of the discharge or within two hours after startup of the system if it is shut down following a sheen discovery and analyzed for oil and grease.</i></p> <p><i><del>The operator must keep records of findings and make the record available for inspector’s review. The operator must report number of days of sheen observed during the reporting period. Oil and grease samples collected for any sheen event must be included in the monthly average on DMRs.</del></i></p> <p><b>Rationale:</b> The proposed permit contains both a section dedicated to produced water oil and grease limitations and another section for produced</p>

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		water visual sheen requirements. It appears that the intent is to delineate the sampling and analytical component in the oil and grease section while defining the monitoring/recordkeeping obligations related specifically to sheens in the visual sheen section. Since the passages referring to sheen recording, recordkeeping, and cause identification are already included in the visual sheen portion, the Joint Trades recommend removing the duplication from the oil and grease section. The requirement listed in the oil and grease section to collect produced water samples within two (2) hours of observing a sheen is pertinent to the sampling and analytical portion of the produced water requirements and should remain in this section.						
Part I.B.4.b	<p><u>Toxicity.</u> Flow must be analyzed at the end of each calendar year (December). The flow used to determine the frequency of toxicity testing for the following calendar year shall be the highest estimated monthly flow rate recorded during the previous 12-months. The required frequency of testing shall be determined as follows:</p> <table><tr><td><u>Discharge Rate</u></td><td><u>Toxicity Testing Frequency</u></td></tr><tr><td>0 - 4,599 bbl/day</td><td>once per calendar year</td></tr><tr><td>4,600 bbl/day and above</td><td>once per calendar quarter</td></tr></table>	<u>Discharge Rate</u>	<u>Toxicity Testing Frequency</u>	0 - 4,599 bbl/day	once per calendar year	4,600 bbl/day and above	once per calendar quarter	<p>The Joint Trades recommend maintaining the language contained in the 2017 permit:</p> <p><i>Toxicity. The flow used to determine the frequency of toxicity testing shall be the highest monthly average flow for the three months prior to the month in which the test sample is collected.</i></p> <p>Alternatively, if EPA has rationale for discharge rate to be moved from three months prior to calendar year prior, the Joint Trades request revisions to the proposed permit language:</p> <p><i><u>Toxicity.</u> Flow must be analyzed at the end of each calendar year <del>(December)</del>. The flow used to determine the frequency of toxicity testing for the following calendar year shall be the highest estimated monthly flow rate recorded during the previous calendar year <del>12-months</del>. The required frequency of testing shall be determined as follows:</i></p> <p><b><u>Rationale:</u></b> The Joint Trades are requesting rationale from EPA for discharge rate to be moved from three months prior to calendar year prior. If language is moved to calendar year, the Joint Trades are requesting the language change in this section of the permit to provide clarity. Replacing</p>
<u>Discharge Rate</u>	<u>Toxicity Testing Frequency</u>							
0 - 4,599 bbl/day	once per calendar year							
4,600 bbl/day and above	once per calendar quarter							

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		<p>“12 months” with calendar year will prevent operators from making varying interpretations and will help answer the following questions: Did EPA intend for a calendar year or rolling 12-month period from month sampled? If this is to be done in December, does the Operator include December since the month is not complete?</p>
<p><b>Part I.B.4.b</b></p>	<p>New discharges must perform initial toxicity tests as required by this permit within three months after discharge begins and continue on the appropriate calendar quarter or calendar year based on the highest monthly flow rate available.</p>	<p>The Joint Trades recommend revising the permit text as follows:</p> <p><i>New discharges must perform initial toxicity tests as required by this permit within three months after discharge begins and continue on the appropriate calendar quarter or calendar year based on the highest monthly <b>discharge</b> rate available.</i></p> <p><b>Rationale:</b> Adding the word “discharge” as noted above provides additional clarity.</p>
<p><b>Part I.B.4.b</b></p>	<p>Existing dischargers under the 2017 permit shall commence testing schedules in the 2022 permit as of the effective day of this permit. If the permittee qualified to monitor produced water toxicity at the reduced frequency of once per year under the 2017 permit, the required monitoring frequency shall remain at once per year as long as the discharge is compliant with the toxicity limits. Results of testing for any overlapping monitoring period that were done during the previous permit may also be used to satisfy that monitoring period under the 2022 permit. Flow rate for the purpose of determining the frequency of testing and critical dilution of the next calendar year shall be analyzed in the month of December following issuance of this permit.</p>	<p>The Joint Trades offer the following suggested revisions to the proposed permit language:</p> <p><i>Results of testing for any overlapping monitoring period that were done during the previous permit may also be used to satisfy that monitoring period under the <b>2022</b> permit. <del>Flow rate for the purpose of determining the frequency of testing and critical dilution of the next calendar year shall be analyzed in the month of December following issuance of this permit.</del></i></p> <p><b>Rationale:</b> If the permittee qualified to monitor produced water toxicity at the reduced frequency of once per year under the 2017 permit, the required monitoring frequency should remain at once per year as long as the discharge is compliant with the toxicity limits. Determining toxicity testing frequency for new discharges or existing discharges on a reduced monitoring period is covered in those respective sections of the permit. The Joint Trades are requesting to remove duplicate information from this section.</p>
<p><b>Part I.B.4.b</b></p>	<p>A minimum of three (3) samples shall be collected as grabs or composites. Test</p>	<p>The Joint Trades recommend revising the proposed text as follows:</p>

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	<p>Acceptability Criteria and reporting requirements can be found in Part I.D.3 of this permit.</p>	<p><del>A minimum of three (3) Samples shall be collected as grabs or composites. Test Acceptability Criteria and reporting requirements can be found in Part I.D.3 of this permit.</del></p> <p><b>Rationale:</b> EPA has not provided a justification for proposing that a “minimum of three samples” is necessary. Increasing the number of samples and, by default, the volume of samples introduces additional operational complexity; most notably increased weight for transport on helicopters. Larger sample volumes will also increase the amount of laboratory waste for disposal. Increasing waste volumes is in conflict with the regulated community’s sustainability principles to reduce wastes as much a practical.</p> <p>As an alternative, if EPA does not accept continuing to allow single grab samples for testing, the Joint Trades recommend that EPA adopt the following sampling methodology:</p> <ul style="list-style-type: none"> <li>• Discharges 24 hours or less in duration: 1 grab sample is required.</li> <li>• Discharges more than 24 hours in duration: 3 aliquots are required captured at evenly space time intervals over a 24 hour period or less.</li> </ul> <p>It is also important for EPA to include language in the permit that clarifies when sample holding times begin. Adding the following statement to the permit would provide additional clarification:</p> <p><i>As described in the National Pollutant Discharge Elimination System (NPDES) Compliance Inspection Manual, time of sample collection (holding time) begins when the last aliquot is dispensed into the composite sample container.</i></p> <p>Source: <a href="https://www.epa.gov/sites/default/files/2017-03/documents/npdesinspect-chapter-05.pdf">https://www.epa.gov/sites/default/files/2017-03/documents/npdesinspect-chapter-05.pdf</a></p>

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<b>Part I.B.4.b</b>	<p><u>Visual Sheen.</u> The permittee shall monitor free oil using the visual sheen test method on the surface of the receiving water. Monitoring shall be performed daily when discharging, during conditions when observation of a sheen on the surface of the receiving water is possible in the vicinity of the discharge, and when the facility is manned. If a sheen is observed in the course of required daily monitoring, or at any other time, the Operator must record the sheen and assess the cause of sheen. In addition, a produced water sample shall be collected, within two (2) hours of when a sheen is observed in the vicinity of the discharge or within two hours after startup of the system if it is shut down following a sheen discovery and analyzed for oil and grease. 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. The operator must keep records of findings and make the record available for inspector's review. The operator must report total number of days of sheen observed during the reporting period.</p>	<p>The Joint Trades offer the following suggested revisions to the proposed permit language:</p> <p><i>The permittee shall monitor free oil using the visual sheen test method on the surface of the receiving water. Monitoring shall be performed daily when discharging, during conditions when observation of a sheen on the surface of the receiving water is possible in the vicinity of the discharge, and when the facility is manned. If a sheen is observed in the course of required daily monitoring, or at any other time, the Operator must record the sheen and assess the cause of sheen. <del>In addition, a produced water sample shall be collected, within two (2) hours of when a sheen is observed in the vicinity of the discharge or within two hours after startup of the system if it is shut down following a sheen discovery and analyzed for oil and grease. 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.</del> The operator must keep records of findings and make the record available for inspector's review. The operator must report total number of days of sheen observed during the reporting period.</i></p> <p><b>Rationale:</b> The proposed permit contains sections dedicated to oil and grease and another for Visual Sheen. It appears that the intent is to delineate the sampling and analytical component in the oil and grease section while defining the visual monitoring/recordkeeping obligations related specifically to sheens in the visual sheen section. Since the passage referring to collection of produced water samples within two (2) hours of observing a sheen is already included in the oil and grease section, the Joint Trades recommend removing the duplication from the visual sheen section.</p>
<b>Part I.B.6.a</b>	<p><u>Free Oil.</u> No free oil shall be discharged. Monitoring shall be performed using the static sheen test method daily when discharging and the facility is manned. The total number of days a sheen is observed must be recorded and reported.</p>	<p>The Joint Trades recommend revising the last sentence of this paragraph as follows:</p>



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		<p><i>The total number of days a sheen is observed must be recorded and reported in accordance with Part II.D.7.c of this permit.</i></p> <p><b>Rationale:</b> Providing a specific reference for reporting increases clarity of the requirement and provides certainty to the regulated community.</p>
<b>Part I.B.6.a.1.a</b> 48-Hour Acute WET Limitation	<p>Toxicity shall be assessed through a 48-hour acute Whole Effluent Toxicity (WET) test in accordance with <i>Methods for Measuring the Acute Toxicity of Effluents and Receiving Water to Freshwater and Marine Organisms</i> (EPA/821-R-02-012), or the most current edition. The acute test is to be conducted using <i>Americamysis bahia</i> (formerly <i>Mysidopsis bahia</i> as referred to in Method 2007.0 and 1007.0, and DMRs), and <i>Menidia beryllina</i>, Method 2006.0. The WET limit applies to both species. In order to be in compliance with the WET limit, the No Observable Effect Concentration (NOEC) must be equal to or greater than the critical dilution concentration specified in Appendix D, Table 1 (1-A through 1-F) of this permit. The critical dilution shall be determined using Table 1 in Appendix D of this permit and is based on the estimated flow rate when the discharge occurs, discharge pipe diameter, and water depth between the discharge pipe and the bottom. A WET test must be conducted per discharge, and the limit applies to every discharge.</p>	<p>The Joint Trades are recommending 3 options for EPA to consider regarding 48-Hour Acute WET Limitations for TCW fluids. Those options, in order of priority, are:</p> <ol style="list-style-type: none"> <li>1. Removal of the limitations from the permit, or</li> <li>2. Modify the limitation to a monitoring requirement and allow 1 sample to accommodate both 48-hour acute testing and 7-day chronic testing, or</li> <li>3. Adding a compliance implementation period for the limitation and clarifying on how discharge rates are determined</li> </ol> <p>Each option is discussed below.</p> <p><b>1. Removal of the limitations from the permit</b></p> <p>A 48-hour Acute WET limitation for TCW fluids is not appropriate and the Joint Trades strongly recommend that this requirement be removed from the permit.</p> <p>The industry wide TCW fluid toxicity study forms the basis for this recommendation. The study concluded that several factors limit the potential for aquatic toxicity risks, including:</p> <ul style="list-style-type: none"> <li>• TCW fluid discharges are typically of short duration. 75% of the discharges sampled during the study were less than 2 hours in duration (median discharge time was 1-hour). A 48-hour test exposure is extremely conservative is not representative of the behavior of these discharges in the marine environment.</li> </ul>

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		<ul style="list-style-type: none"> <li>• TCW fluid discharges are small volumes. TCW fluid discharges are estimated to be 0.01% of produced water discharge volumes.</li> <li>• Of the substances evaluated during the study, no concentration was greater than conservative acute saltwater ecological thresholds.</li> </ul> <p>TCW fluids do not pose an unreasonable risk to the aquatic environment, and additional WET testing does not provide any added environmental benefit. Implementation of WET testing requirements increases operational complexity and risk. Some of the operational considerations include:</p> <ul style="list-style-type: none"> <li>• Increases in onshore waste volumes from fluids that may no longer be discharged.</li> <li>• Safety risks increase due to increased material handling and transfer of fluids.</li> <li>• Potential for increased risk for human exposure pathways due to waste being disposed of onshore.</li> <li>• Increases in GHG emissions due to increased vessel and ground transportation.</li> <li>• Burden on lab operations, impacting lab capacities and availability for testing, increase in testing materials/equipment, and increase in consumption of animals/organisms during testing. Currently, there are only 2-3 laboratories on the Gulf Coast that are capable of performing this type of WET testing.</li> <li>• Offshore operations have unique challenges in meeting WET test hold times. Experience from the industry-wide study shows that holding times required by the WET test method are extremely difficult and sometimes impossible to meet. Implementation of 48-hour WET testing for TCW fluids will result in added cost and burden to the regulated community in the form of “special order” flights and ground transportation.</li> <li>• Implementation of 48-hour testing significantly increases compliance uncertainty. Most TCW fluid discharges will have concluded before the sample reaches the laboratory. In the event of a sample not meeting</li> </ul>

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		<p>the toxicity limits there will be nothing for an operator to do to take corrective action (the discharge will be over). This uncertainty will likely result in many operators choosing not to discharge the fluids. In essence, EPA is establishing a “de facto” zero discharge limitation on these fluids.</p> <p>In addition, as noted the industry-wide study report, the critical dilutions listed in Appendix D Table are overly-conservative for assessing TCW fluid discharges. The industry-wide TCW fluid toxicity study concluded the following:</p> <p>“Recognizing that the median duration of the sampled TCW discharges was 1-h, a series of toxicity tests using a 2-h exposure was performed. These tests showed that toxicity for 2-h exposures was generally less than toxicity in 48-h exposure tests. This suggests that, since TCW discharges are of short duration, a comparison of a 48-h NOEC with a critical effluent dilution (CD) as an indicator of potential acute toxicity has a high degree of conservatism.”</p> <p>The conservative nature of existing Critical Dilution tables to TCW fluid discharges provides additional rationale for removing the WET testing requirements from the permit. TCW fluid discharges are not steady-state, continuous discharges. These discharges are intermittent, short duration and low volume discharges.</p> <p>In 2017 EPA acknowledged in their proposed permit’s fact sheet that the number of available, experienced, and qualified laboratories for WET testing is limited. We agree with this statement. Given the number of TCW discharges that will require testing, the available laboratories cannot manage the volume of toxicity analyses that EPA is proposing for TCW fluids. This in turn could cause quality control issues. Laboratories only culture a limited number of test age organisms. Increasing the number of required tests in a short time frame is not possible. There are only 2-3 laboratories</p>

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		<p>that can perform testing on offshore oil and gas discharges. Inability to predict extended platform downtime periods (i.e., intermittent production), logistics issues for these specific monitoring and testing requirements, and weather (i.e., hurricanes and other tropical storms) can also be problematic with an increase in testing. Increasing required toxicity testing would not only increase the burden on the operator and the testing laboratories, but it will increase the operator's risk for additional missed samples resulting in administrative non-compliances.</p> <p><b>2. Modify the limitation to a monitoring requirement and allow 1 sample to accommodate both 48-hour acute testing and 7-day chronic testing</b></p> <p>If EPA disagrees that the 48-hour acute WET limitations for TCW fluids should be removed, then the Joint Trades recommend that EPA provide the rationale and change the 48-hour acute limitation to a 48-hour acute monitoring requirement. As discussed in section 1 above, the industry-wide study concluded that several factors limit the potential for aquatic toxicity risks, including:</p> <ul style="list-style-type: none"> <li>• TCW fluid discharges are typically of short duration. 75% of the discharges sampled during the study were less than 2 hours in duration (median discharge time was 1-hour). A 48-hour test exposure is extremely conservative is not representative of the behavior of these discharges in the marine environment.</li> <li>• TCW fluid discharges are small volumes. TCW fluid discharges are estimated to be 0.01% of produced water discharge volumes.</li> <li>• Of the substances evaluated during the study, no concentration was greater than conservative acute saltwater ecological thresholds.</li> </ul> <p>TCW fluids do not pose an unreasonable risk to the aquatic environment. However, data collection through additional monitoring could provide a mechanism to further validate these conclusions.</p>

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		<p>In addition, a monitoring requirement may also present an opportunity for EPA and industry to collaborate on developing a more appropriate test procedure that better represents how these fluids are introduced into the marine environment. A test of less than 48-hours in duration would be more representative and less conservative.</p> <p>Lastly, if 48-hour acute monitoring and 7-day chronic monitoring are included in the final permit, the Joint Trades recommend that EPA include language that clarifies that a single sample can be utilized to obtain both acute and chronic test results. It is more efficient, but still technically appropriate, for operators to capture one sample of a TCW discharge and set up a 7-day chronic WET test. The 48-hour acute results can be obtained on Day 2 of the 7-day test. Therefore, the Joint Trades recommend the following language be added to the final permit:</p> <p style="color: red;"><i>A single grab or composite sample may be obtained to satisfy both the 48-hour acute and 7-day chronic monitoring. 48-hour acute test results may be obtained from the 7-day chronic test procedure.</i></p> <p><b>3. Adding a compliance implementation period for the limitation and clarifying how discharge rates are determined</b></p> <p>Finally, if 48 acute WET testing for TCW fluids is included in the final permit, it is imperative that a compliance implementation period be included to allow operators time to establish procedures, processes and resources to achieve compliance. The Joint Trades strongly recommend that EPA establish a schedule of compliance for implementation of the new requirements as outlined in 40 CFR 122.47. Offshore facilities subject to these new requirements may require capital upgrades (e.g., fabrication / installation of diffusers or seawater dilution systems) making immediate compliance with the new requirements impossible. Accordingly, should EPA require 48-hour WET testing, the Joint Trades request EPA include a compliance schedule of two years for permittees to determine how to</p>

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		<p>implement the new requirement. The Joint Trades propose the following language be added to this section of the permit:</p> <p><i>Compliance with 48-hour Acute WET testing must be achieved within two years of the effective date of the permit.</i></p> <p>This type of compliance implementation period would allow the regulated community to:</p> <ul style="list-style-type: none"> <li>• Train operational personnel on the new requirements,</li> <li>• Establish logistical plans and schedules to meet required holding times,</li> <li>• Identify the impacts to industry laboratories to determine what additional resources are needed to accommodate the new testing,</li> <li>• Allow for fabrication and installation of diffuser and/or seawater dilution systems if needed.</li> <li>• Allow for constructing, contracting, and/or acquisition of additional vessels capable of compliantly managing materials for disposal</li> <li>• Identify and plan for onshore disposal facility capacities and limitations and expansions as needed.</li> </ul> <p>In addition, the operational considerations listed above, a compliance implementation period will also allow the regulated community to seek alternative test procedures, if needed, under 40 CFR 136.5. During the industry-wide TCW fluids study, we learned that certain fluids may require additional stirring and be allowed to return to room temperature in order for the WET testing procedure to be executed. As noted in several other comments in this document, the Joint Trades strongly recommend EPA allow the regulated community to seek approval for alternative test procedures, if needed. A two-year implementation period will allow sufficient time for industry to determine if such procedures are needed, how test methods need to be modified and seek approval from EPA under the requirements of 40 CFR 136.5.</p>

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		<p>EPA granted a similar compliance implementation period for produced water chronic WET testing during the 2007 permit renewal. EPA included language in the 2007 permit that said:</p> <p style="padding-left: 40px;"><i>Compliance with sub-lethal effects must be achieved within two years after the effective date of this permit.</i></p> <p>The Joint Trades strongly encourage EPA to consider this type of implementation schedule for these requirements as well.</p> <p>Also, if the 48-hour acute testing limitations are included in the final permit, the Joint Trades recommend that EPA also add language that clarifies how flow rate used to determine critical dilutions is determined. As described above, most TCW fluid discharges are less than 2 hours in duration and are not continuous discharges. Therefore, it is important to explain how flow rate is estimated to determine the proper critical dilution. The flow rates in Appendix D Table 1 are listed in units of bbls/day. If a discharge lasts 24 hours or longer then the flow rate should be calculated using total volume discharged/number of days of discharge duration. However, if the discharge is less than 24 hours in duration the flow rate should be estimated as total volume discharged/1 day to provide a realistic estimate of the rate discharge during the 24 hour period. The following recommended language is proposed for consideration:</p> <p style="padding-left: 40px;"><i>The critical dilution shall be determined using Table 1 in Appendix D of this permit and is based on the estimated flow rate when the discharge occurs, discharge pipe diameter, and water depth between the discharge pipe and the bottom. Flow rate shall be determined as follows:</i></p> <ul style="list-style-type: none"> <li>• <i>For discharges greater than 24 hours in duration, flow rate=total volume discharged (bbls)/total duration of discharge (days)</i></li> </ul>

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		<ul style="list-style-type: none"> <li>• <i>For discharges of lasting 24 hours or less, flow rate=total volume discharged (bbls)/1 day</i></li> </ul> <p><i>A WET test must be conducted per discharge, and the limit applies to every discharge.</i></p> <p>EPA has stated in the draft Fact Sheet accompanying this proposed permit that:</p> <p>“46% of the samples collected showed acute toxicity for one or more species indicating there is a reasonable potential for acute toxicity stemming from well treatment, completion and workover fluid discharge.”</p> <p>However, if the actual volume discharged is used to determine the critical dilution for those discharges lasting less than 24 hours, then 25 of the 28 (89%) samples analyzed did not exhibit acute toxicity at the critical dilution. During the industry-wide TCW study estimated flow rates were calculated using the total volume discharged divided by discharge duration to determine an hourly discharge rate. When this hourly rate is extrapolated to a 24-hour day the estimated discharge rate is conservatively overestimated.</p> <p>For example, if 100 barrels of fluid are discharged in 1 hour, the discharge rate is 100 barrels/hour. Extrapolated to a “barrel per day” rate value, one could estimate a daily rate of 2400 barrels/day. However, this is not representative of what was actually discharged. 100 barrels was discharged in 1 hour and the discharge ceased, therefore, a more representative estimate of actual discharge rate is 100 barrels/day.</p> <p>This illustrates the importance of clearly defining how discharge rates are used to determine critical dilution, especially if EPA proceeds with these requirements as a compliance limitation. This type of approach, use of the</p>



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		total volume discharged for discharges lasting less than 24 hours, is consistent with how discharge rates are estimated for other short duration discharges authorized by the permit.
<b>Part I.B.6.a.1.b</b>	One composite sample representing the duration of the discharge, must be collected, and used in the initiation and renewal of the 48-hour test. The time composite sample must contain no fewer than 3 aliquots spaced out at constant time intervals throughout the compositing period. In order to assess compliance with the WET limit, no alternate test procedures are authorized, and the test must be conducted in accordance with the method.	<p>A 48-hour Acute WET Limitation for TCW fluids is not appropriate and the Joint Trades recommend that this requirement be removed from the permit.</p> <p>However, if the 48-hour WET testing requirements are finalized the use of 3 aliquots spaced out at constant time intervals in not feasible. As discussed above, the majority of TCW fluid discharges are less than 2 hours in duration. Capturing 3 aliquots from such short duration discharges does not provide any benefit to the testing methodology. During the industry-wide study, 4 of 28 discharges had durations longer than 4 hours. The remaining 24 discharges had a combined duration of 22.5 hours.</p> <p>The Joint Trades recommend revising the proposed text as follows:</p> <p><i>One <del>grab or one</del> composite sample representing the duration of the discharge, must be collected, and used in the initiation and renewal of the 48-hour test. The time composite sample must contain no fewer than 3 aliquots spaced out at constant time intervals throughout the compositing period. In order to assess compliance with the WET limit, <del>no alternate test procedures are authorized, and</del> the test must be conducted in accordance with the method.</i></p> <p><b><u>Rationale:</u></b> EPA has not provided a justification for grab samples not being representative of the discharge. Increasing the volume of samples through composite sampling introduces additional operational complexity; most notably increased weight for transport on helicopters. Larger sample volumes will also increase the amount of laboratory waste for disposal. Increasing waste volumes is in conflict with the regulated community's sustainability principles to reduce wastes as much a practical.</p>

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		<p>As an alternative, if EPA does not accept continuing to allow single grab samples for testing, the Joint Trades recommend that EPA adopt the following sampling methodology:</p> <ul style="list-style-type: none"> <li>• Discharges 24 hours or less in duration: 1 grab sample is required.</li> <li>• Discharges more than 24 hours in duration: 3 aliquots are required captured at evenly spaced time intervals over a 24 hour period or less.</li> </ul> <p>It is also important for EPA to include language in the permit that clarifies when sample holding times begin. Adding the following statement to the permit would provide additional clarification:</p> <p><i>As described in the National Pollutant Discharge Elimination System (NPDES) Compliance Inspection Manual, time of sample collection (holding time) begins when the last aliquot is dispensed into the composite sample container.</i></p> <p>Source: <a href="https://www.epa.gov/sites/default/files/2017-03/documents/npdesinspect-chapter-05.pdf">https://www.epa.gov/sites/default/files/2017-03/documents/npdesinspect-chapter-05.pdf</a></p> <p>As well, the Joint Trades believe that the phrase “no alternative test procedures are authorized” contradicts existing EPA regulations and should be removed from the permit.</p> <p>40 CFR 136.5 contains regulations for “Approval of alternate test procedures for limited use.” Paragraph (a) of 40 CFR 136.5 clearly states that:</p> <p>“Any person may request the Regional ATP Coordinator to approve the use of an alternate test procedure in the Region.”</p> <p>By pre-emptively stating that no alternate test procedures are authorized in the permit language, EPA is effectively removing the ability of the</p>

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		<p>regulated community to avail itself of the procedures in 40 CFR 136.5, and thereby, contradicting EPA's regulations for NPDES permits.</p> <p>Removing the regulated community's ability to apply for alternate test procedures for the offshore oil and gas sector in the OCS General Permit puts the offshore oil and gas sector at a disadvantage compared to other industries and potentially creates unfair advantages for other industries.</p>
<b>Part I.B.6.a.2.a</b> 7-day Chronic WET Monitoring	<p>Toxicity shall be assessed through a 7-day chronic WET test in accordance with <i>Short-term Methods for Estimating the Chronic Toxicity of Effluents and Receiving Water to Marine and Estuarine Organisms</i> (EPA/821-R-02-014), or the most current edition. The chronic test is to be conducted using <i>Americamysis bahia</i> (formerly <i>Mysidopsis bahia</i> as referred to in Method 2007.0 and 1007.0, and DMRs), and <i>Menidia beryllina</i>, Method 1006.0. In order to pass a chronic test, the No Observable Effect Concentration (NOEC) must be equal to or greater than the critical dilution concentration specified in Appendix D, Table 1 (1-A through 1-F) of this permit. The critical dilution shall be determined using Table 1 in Appendix D of this permit and is based on the estimated flow rate when the discharge occurs, discharge pipe diameter, and water depth between the discharge pipe and the bottom. A chronic WET test must be conducted per discharge.</p>	<p>The Joint Trades are recommending 2 options for EPA to consider regarding 7-day chronic WET Limitations for TCW fluids. Those options are:</p> <ol style="list-style-type: none"> <li>1. Removal of the monitoring requirements from the permit, or</li> <li>2. Adding a compliance implementation period for the monitoring and include a minimum discharge duration of 4 days that require monitoring.</li> </ol> <p>Each option is discussed below.</p> <p><b>1. Removal of the monitoring requirements from the permit</b></p> <p>As discussed under the Joint Trades comments on 48-hour acute testing, most TCW fluid discharges are short duration, intermittent and low volume. The nature of these discharges brings into question the appropriateness of acute WET testing. The nature of these discharges certainly makes 7-day chronic testing unnecessary and not representative of how these discharges interact with the marine environment. Chronic testing is simply not appropriate for these types of discharges.</p> <p>In addition, chronic testing was not part of the industry-wide TCW fluids study. There is no evidence to support inclusion of chronic testing as a permit requirement. By including chronic testing in the permit EPA would be adding additional burden to the regulated community that is not based on scientific evidence. It is also an unnecessary use of vertebrate test organisms. Wherever possible the EPA should reduce, refine, and replace</p>

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		<p>all vertebrate testing for ethical reasons especially considering the industry-wide TCW fluids study found invertebrate test (<i>Americamysis bahia</i>) on average more sensitive than the vertebrate test (<i>Menidia beryllina</i>).</p> <p><b>2. Adding a compliance implementation period for the limitation and include a minimum discharge duration of 4 days that requires monitoring</b></p> <p>As discussed under the 48-hour acute testing limitations above, if 7-day chronic WET testing for TCW fluids is included in the final permit, it is imperative that a compliance implementation period be included to allow operators time to establish procedures, processes and resources to implement the monitoring. The Joint Trades strongly recommend that EPA provide justification of this monitoring requirement and establish a schedule of compliance for implementation of the new requirements as outlined in 40 CFR 122.47. The Joint Trades propose the following language be added to this section of the permit:</p> <p><i>Compliance with 7-day chronic WET monitoring requirements must be achieved within two years of the effective date of the permit.</i></p> <p>In addition, a compliance implementation period will also allow the regulated community to seek alternative test procedures, if needed, under 40 CFR 136.5. During the industry-wide TCW fluids study, we learned that certain fluids may require additional stirring and be allowed to return to room temperature in order for the WET testing procedure to be executed. As noted in several other comments in this document, the Joint Trades strongly recommend EPA allow the regulated community to seek approval for alternative test procedures, if needed. A two-year implementation period will allow sufficient time for industry to determine if such procedures are needed, how test methods need to be modified and seek approval from EPA under the requirements of 40 CFR 136.5.</p> <p>EPA granted a similar compliance implementation period for produced</p>

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		<p>water chronic WET testing during the 2007 permit renewal. EPA included language in the 2007 permit that said:</p> <p><i>Compliance with sub-lethal effects must be achieved within two years after the effective date of this permit.</i></p> <p>The Joint Trades strongly encourage EPA to consider this type of implementation schedule for these requirements as well.</p> <p>The Joint Trades also recommend that EPA also add language that clarifies a minimum duration of discharge that the 7-day monitoring would apply to. During the industry-wide study, only 4 of the 28 operations sampled had discharge durations longer than 38 hours. The remaining 24 operations had discharge durations of less than 2 hours. Applying 7-day chronic testing to discharges of less than 2 hours is inappropriate and misrepresents any potential environmental risks from these discharges. Therefore, we recommend that EPA include the following statement in the final permit if 7-day chronic monitoring is retained:</p> <p><i>Toxicity shall be assessed through a 7-day chronic WET test in accordance with Short-term Methods for Estimating the Chronic Toxicity of Effluents and Receiving Water to Marine and Estuarine Organisms (EPA/821-R-02-014), or the most current edition. <b>The 7-day chronic WET test shall only apply to those discharges lasting longer than 4 days in duration.</b></i></p> <p>Lastly, if 48-hour acute monitoring and 7-day chronic monitoring are included in the final permit, the Joint Trades recommend that EPA include language that clarifies that a single sample can be utilized to obtain both acute and chronic test results. It is more efficient, but still technically appropriate for operators to capture one sample of a TCW discharge and set up a 7-day chronic WET test. The 48-hour acute results can be obtained on Day 2 of the 7-day test. Therefore, the Joint Trades recommend the</p>

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		<p>following language be added to the final permit:</p> <p><i>A single grab or composite sample may be obtained to satisfy both the 48-hour acute and 7-day chronic monitoring. 48-hour acute test results may be obtained from the 7-day chronic test procedure.</i></p>
<b>Part I.B.6.a.2.b</b>	<p>Three (3) samples are to be collected for the chronic test. The samples may be collected as grab samples spaced out at constant time intervals throughout the duration of the discharge. Each sample must meet the holding time of 36 hours (up to 72 if required) for first use of the sample, and then the samples may be used to prepare renewals until test completion. In order to assess toxicity, no alternate test procedures are authorized, and the test must be conducted in accordance with the method.</p>	<p>As discussed in the previous comment, 7-Day Chronic WET testing monitoring requirements should be removed from the permit. However, if the 7-day chronic testing monitoring requirements are retained in the final permit, the monitoring should only be applicable to discharge durations of 4 days or more.</p> <p>If the 7-day chronic testing monitoring requirements are included in the final permit, the Joint Trades recommend modifying the proposed language in this paragraph as follows:</p> <p><i>Three (3) samples are to be collected for the chronic test. The samples may be collected as grab samples spaced out at constant time intervals throughout the duration of the discharge. Each sample must meet the holding time of <del>36 hours (up to 72 hours if required)</del> for first use of the sample, and then the samples may be used to prepare renewals until test completion. In order to assess toxicity, <del>no alternate test procedures are authorized, and</del> the test must be conducted in accordance with the method.</i></p> <p>The highlighted language regarding holding times is unclear. Is the holding time 36 hours or 72 hours? EPA should clarify this sentence so that it is clear as to the intent. Furthermore, the hold time for TCW samples should be adjusted to the maximum of 72 hours. A 36-hour hold-time will introduce significant logistical complexity to well workover, completion, and treatment operations by creating the need for operators to have multiple vessels and flights dedicated to sample transportation only. The increased number of vessel and helicopter trips between offshore facilities and shore will increase emissions, noise, and other environmental impacts. They will</p>

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		<p>also increase safety risks associated with landing/takeoff, vessel transport and transfer of samples. These risks will be more acute given a 36-hour time constraint. The requirement for additional flights/vessel trips will also increase costs, as operators compete for scarce supply of helicopters and fast vessels. Lastly, the competition for helicopters and fast vessels will result in project delays, which will further increase costs and result in additional environmental impacts.</p> <p>The Joint Trades also recommend that the phrase “no alternative test procedures are authorized” be struck as it contradicts existing EPA regulations.</p> <p>40 CFR 136.5 contains regulations for “Approval of alternate test procedures for limited use.” Paragraph (a) of 40 CFR 136.5 clearly states that:</p> <p style="padding-left: 40px;">“Any person may request the Regional ATP Coordinator to approve the use of an alternate test procedure in the Region.”</p> <p>By pre-emptively stating that no alternate test procedures are authorized in the permit language, EPA is effectively removing the ability of the regulated community to avail itself of the procedures in 40 CFR 136.5, and thereby, contradicting EPA’s regulations for NPDES permits.</p> <p>Removing the regulated community’s ability to apply for alternate test procedures for the offshore oil and gas sector in the OCS General Permit puts the offshore oil and gas sector at a disadvantage compared to other industries and potentially creates unfair advantages for other industries.</p>
<b>Part I.B.6.c</b>	Operators must conduct well treatment fluids, well completion fluids, and workover fluids assessments whenever they apply those fluids. Such assessments shall be conducted for each applicable well by operators either corporately or individually. The general information of a specific well treatment, well completion or workover fluid could be used for assessment purposes. Each fluid assessment	<p>The Joint Trades recommend the characteristic assessment requirements be removed from the permit.</p> <p><b>Rationale:</b> The Characteristic Assessment requirements retained from the 2017 permit were intended to apply to the industry-wide TCW fluid toxicity</p>

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	<p>shall include the following information:</p> <ol style="list-style-type: none"> <li>1) Lease and block number</li> <li>2) API well number</li> <li>3) Type of well treatment or workover operation conducted</li> <li>4) Date of discharge</li> <li>5) Time discharge commenced</li> <li>6) Duration of discharge</li> <li>7) Volume of well treatment</li> <li>8) Volume of completion or workover fluids used</li> <li>9) The common names and chemical parameters for all additives to the fluids</li> <li>10) The volume of each additive</li> <li>11) Concentration of all additives in the well treatment</li> <li>12) Concentration of all additives in the completion, or workover fluid</li> </ol>	<p>study, or individual studies for those operators that chose not to participate in the industry study. Now that the studies have concluded, these characteristic assessment requirements are not appropriate for routine, normal operations and should be removed from the 2022 permit. This type of detailed information is maintained by operators in well files and could be made available to EPA upon request.</p> <p>In addition, these requirements may create the risk of operators providing proprietary and/or trade secret information on well campaigns. This information is nearly always kept confidential. Experience with the industry-wide TCW study showed that trades secrets are a significant issue with regards to TCW campaigns. During the study, extraordinary measures were taken to ensure that trade secrets and proprietary information were protected. This included procedures to limit chemical analysis of fluid components to mitigate the risk of revealing proprietary information.</p>
<p><b>Part I.B.7.b</b></p>	<p><u>Residual Chlorine.</u> Total residual chlorine (TRC) is a surrogate parameter for fecal coliform. Discharge of TRC must meet a minimum of 1 mg/l and shall be maintained as close to this concentration as possible. A grab sample must be taken once per month and the concentration recorded. The approved methods are either Hach CN-66-DPD or EPA method specified in 40 CFR part 136 for TRC.</p>	<p>The Joint trades recommend the following revisions to the proposed language:</p> <p><i><u>Residual Chlorine.</u> Total residual chlorine (TRC) is a surrogate parameter for fecal coliform. Discharge of TRC must meet a minimum of 1 mg/l and shall be maintained as close to this concentration as possible. A grab sample must be taken once per month and the concentration recorded. The approved methods are either Hach CN-66-DPD or EPA method specified in 40 CFR part 136 for TRC.</i></p> <p><i><u>Equivalent Disinfection – Other Technologies.</u> The use of other disinfection technologies, including, but not limited to, bio-membrane filtration and ultra-violet light, are allowed as substitutes for total residual chlorine provided that those technologies result in equivalent or improved disinfection of the sanitary waste stream.</i></p> <p><b>Rationale:</b> The Joint Trades recommend that the EPA consider updating this standard to include additional types of disinfection technologies. Modern</p>



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		<p>sanitary treatment equipment may also utilize other means by which to disinfect sanitary waste, such as bio-membrane technology and ultra-violet light. The single standard for total residual chlorine may limit the use of such technologies. Such technologies are proven and have been utilized in the sanitary waste treatment for many years. In addition, USCG-approved MSDs are already in use that do not utilize chlorine for disinfection. These types of units are approved by the USCG and the International Maritime Organization (IMO).</p>
<b>Part I.B.7.b</b>	<p>[Exception] Any facility operator which properly operates and maintains a marine sanitation device (MSD) that complies with pollution control standards and regulations under section 312 of the Act shall be deemed in compliance with permit prohibitions and limitations for sanitary waste. The MSD shall be tested yearly for proper operation and the test results maintained for three years at the facility or at an alternate site if not practicable. The operator is required to demonstrate proper operation of MSD via US Coast Guard approval, annual inspections, Class/Flag State inspections and/or the International Sewage Pollution Prevention Certificate (ISPPC) and maintenance logs/records. Failure to comply with any of the aforementioned requirements for the U.S. Coast Guard must be included in a non-compliance report to EPA.</p>	<p>The Joint Trades recommend that the proposed permit language be revised as follows:</p> <p><i>[Exception] Any facility operator which properly operates and maintains a marine sanitation device (MSD) that complies with pollution control standards and regulations under section 312 of the Act shall be deemed in compliance with permit prohibitions and limitations for sanitary waste. The MSD shall be tested yearly for proper operation and the test results maintained for three years at the facility or at an alternate site if not practicable. The operator is required to demonstrate proper operation of MSD via US Coast Guard approval, annual inspections, Class/Flag State inspections and/or the International Sewage Pollution Prevention Certificate (ISPPC) and maintenance logs/records. Failure to comply with any of the aforementioned requirements for the U.S. Coast Guard must be included in a non-compliance report to EPA. <b>If an MSD is undergoing maintenance and/or is malfunctioning, then an operator may demonstrate compliance by maintaining disinfection capabilities. If the limitations are met this does not constitute a non-compliance.</b></i></p> <p><b>Rationale:</b> Based on discussions with EPA staff, it is our understanding that if an operator can demonstrate compliance with limitations during MSD maintenance and/or malfunction, then the operator remains in compliance with permit limitations. This should be clearly documented in the permit.</p>

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<b>Part I.B.8.a</b>	<p>[Exception] Any facility operator which properly operates and maintains a marine sanitation device (MSD) that complies with pollution control standards and regulations under section 312 of the Act shall be deemed in compliance with permit prohibitions and limitations for sanitary waste. The MSD shall be tested yearly for proper operation and the test results maintained for three years at the facility or at an alternate site if not practicable. The operator is required to demonstrate proper operation of MSD via US Coast Guard approval, annual inspections, Class/Flag State inspections and/or the International Sewage Pollution Prevention Certificate (ISPPC) and maintenance logs/records. Failure to comply with any of the aforementioned requirements for the U.S. Coast Guard must be included in a non-compliance report to EPA.</p>	<p>The Joint Trades recommend that the proposed permit language be revised as follows:</p> <p><i>[Exception] Any facility operator which properly operates and maintains a marine sanitation device (MSD) that complies with pollution control standards and regulations under section 312 of the Act shall be deemed in compliance with permit prohibitions and limitations for sanitary waste. The MSD shall be tested yearly for proper operation and the test results maintained for three years at the facility or at an alternate site if not practicable. The operator is required to demonstrate proper operation of MSD via US Coast Guard approval, annual inspections, Class/Flag State inspections and/or the International Sewage Pollution Prevention Certificate (ISPPC) and maintenance logs/records. Failure to comply with any of the aforementioned requirements for the U.S. Coast Guard must be included in a non-compliance report to EPA. <b>If an MSD is undergoing maintenance and/or is malfunctioning, then an operator may demonstrate compliance by maintaining disinfection capabilities. If the limitations are met this does not constitute a non-compliance.</b></i></p> <p><b>Rationale:</b> Based on discussions with EPA staff, it is our understanding that if an operator can demonstrate compliance with limitations during MSD maintenance and/or malfunction, then the operator remains in compliance with permit limitations. This should be clearly documented in the permit.</p>
<b>Part I.B.9.b</b>	<p><u>Solids</u>. Observation must be made during daylight in the vicinity of domestic waste outfalls. If floating solids are observed at other times in addition to the daily monitoring, it must be recorded and reported to EPA.</p>	<p>The Joint Trades recommend modifying the permit language for domestic waste monitoring as follows:</p> <p><u>Solids</u>. Observation must be made <b>daily</b> during daylight in the vicinity of domestic waste outfalls. If floating solids are observed at other times in addition to the daily monitoring, it must be recorded and reported to EPA.</p>

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		<p><b>Rationale:</b> Adding the word “daily” makes these requirements consistent with the sanitary waste monitoring requirements.</p>
<b>Part I.B.10</b>	<p>(iv) Subsea Discharges: Subsea Wellhead Preservation Fluid, Subsea Cleaning Fluids, Subsea Production Control Fluid, Umbilical Steel Tube Storage Fluid, Leak Tracer Fluid, Riser Tensioner Fluid, and Pipeline Brine (used as piping or equipment preservation fluids).</p> <p>Note 1: Brine and water-based mud discharge at the seafloor for temporary well abandonment” are permitted if such water based drilling fluid and brine have been demonstrated to comply with the permits conditions for their original use (e.g.: water based drilling fluids that have been shown to meet the permit’s limits for SPP toxicity, free oil, and cadmium and mercury in stock barite; and brine that has met limits for free oil, oil and grease concentrations, priority pollutants and toxicity requirements).</p>	<p>The Joint Trades support the addition of “Subsea Cleaning Fluids” to this section of the permit. However, we are recommending that a definition of “subsea cleaning fluids” be included in the permit. See our comments under Section G – Definitions.</p>
<b>Part I.B.10.a</b>	<p><u>Free Oil.</u> No free oil shall be discharged. Discharge is limited to those times that a visual sheen observation is possible unless the operator uses the static sheen method. Monitoring shall be performed using the visual sheen method on the surface of the receiving water every day when discharging, or by use of the static sheen method at the operator's option. Visual sheen observation must be made during daylight in the vicinity of outfalls. Observation of sheen must be recorded whenever a sheen is observed during the day. The total number of days a sheen is observed must be recorded and reported.</p>	<p>The Joint Trades recommend revising the last sentence of this paragraph as follows:</p> <p style="text-align: center;"><i>The total number of days a sheen is observed must be recorded and reported <b>in accordance with Part II.D.7.c of this permit.</b></i></p> <p><b>Rationale:</b> Providing a specific reference for reporting increases clarity of the requirement and provides certainty to the regulated community.</p>
<b>Part I.B.11</b>	<p>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.</p>	<p>The Joint Trades recommend the proposed permit language be revised as follows:</p> <p style="text-align: center;"><i>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,</i></p>

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		<p><i>Water used as piping or equipment preservation fluids, and Water used during Dual Gradient Drilling <b>and well operations.</b></i></p> <p><b>Rationale:</b> 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.</p>
<b>Part I.B.11.a</b>	<p><u>Free Oil.</u> No free oil shall be discharged. Discharge is limited to those times that a visible sheen observation is possible unless the operator uses the static sheen method. Monitoring shall be performed using the visual sheen method on the surface of the receiving water daily when discharging, or by use of the static sheen method daily at the operator's option. Visual sheen observation must be made during daylight in the vicinity of outfalls. Observation of sheen must be recorded whenever a sheen is observed during the day. The total number of days a sheen is observed must be recorded and reported.</p>	<p>The Joint Trades recommend revising the last sentence of this paragraph as follows:</p> <p><i>The total number of days a sheen is observed must be recorded and reported <b>in accordance with Part II.D.7.c of this permit.</b></i></p> <p><b>Rationale:</b> Providing a specific reference for reporting increases clarity of the requirement and provides certainty to the regulated community.</p>
<b>Part I.B.11.a</b>	<p>One composite sample representing the duration of the discharge, must be collected, and used in the initiation and renewal of the 48-hour test. The time composite sample must contain no fewer than 3 aliquots spaced out at constant time intervals throughout the compositing period.</p>	<p>The Joint Trades recommend revising the proposed text as follows:</p> <p><i>One <b>grab, or one</b> composite, sample representing the duration of the discharge, must be collected, and used in the initiation and renewal of the 48-hour test. The time composite sample must contain no fewer than 3 aliquots spaced out at constant time intervals throughout the compositing period.</i></p> <p><b>Rationale:</b> EPA has not provided a justification for grab samples not being representative of the discharge. Increasing the volume of samples through composite sampling introduces additional operational complexity; most notably increased weight for transport on helicopters. Larger sample volumes will also increase the amount of laboratory waste for disposal.</p>

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		<p>Increasing waste volumes is in conflict with the regulated community's sustainability principles to reduce wastes as much a practical.</p> <p>As an alternative, if EPA does not accept continuing to allow single grab samples for testing, the Joint Trades recommend that EPA adopt the following sampling methodology:</p> <ul style="list-style-type: none"> <li>• Discharges 24 hours or less in duration: 1 grab sample is required.</li> <li>• Discharges more than 24 hours in duration: 3 aliquots are required captured at evenly spaced time intervals over a 24 hour period or less.</li> </ul> <p>It is also important for EPA to include language in the permit that clarifies when sample holding times begin. Adding the following statement to the permit would provide additional clarification:</p> <p><i>As described in the National Pollutant Discharge Elimination System (NPDES) Compliance Inspection Manual, time of sample collection (holding time) begins when the last aliquot is dispensed into the composite sample container.</i></p> <p>Source: <a href="https://www.epa.gov/sites/default/files/2017-03/documents/npdesinspect-chapter-05.pdf">https://www.epa.gov/sites/default/files/2017-03/documents/npdesinspect-chapter-05.pdf</a></p>
<b>Part I.B.11.a</b>	<p>If the effluent fails the survival endpoint at the critical dilution, the permittee shall be considered in violation of this permit limit. Also, when the testing frequency stated above is less than monthly and the effluent fails the survival endpoint at the critical dilution, the monitoring frequency for the affected species will increase to monthly until compliance with the NOEC limit (critical dilution) is demonstrated for a period of three consecutive months. After compliance is demonstrated for three consecutive months, the permittee may return to the testing frequency in use at the time of the initial test failure. During the period the permittee is out of compliance, test results shall be reported on the DMR that includes this period. Reporting instructions can be found in Part II.D.4 of this permit.</p>	<p>The Joint Trades recommend modifying the proposed language in this paragraph to improve clarity. The recommended language is as follows:</p> <p><i>For continuous discharges, if a test fails the survival or sub-lethal endpoint at the critical dilution in any test, the operator must perform monthly retest until it passes three consecutive monthly tests. Failing the toxicity test is considered violation of the permit. After compliance is demonstrated for three consecutive months, the permittee may return to the testing frequency in use at the time of the initial test failure.</i></p>

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		<b>Rationale:</b> For non-continuous discharges, this language regarding frequency is not applicable since those discharges require monitoring once per discharge.								
<b>Part I.B.11.b</b>	<p><u>Toxicity.</u> The required frequency of testing for continuous discharges occurring more than once per week shall be determined as follows:</p> <table><tr><td><u>Discharge Rate</u></td><td><u>Toxicity Testing Frequency</u></td></tr><tr><td>0 - 499 bbl/day</td><td>once per calendar year</td></tr><tr><td>500 - 4,599 bbl/day</td><td>once per calendar quarter</td></tr><tr><td>4,600 bbl/day and above</td><td>once per calendar month</td></tr></table>	<u>Discharge Rate</u>	<u>Toxicity Testing Frequency</u>	0 - 499 bbl/day	once per calendar year	500 - 4,599 bbl/day	once per calendar quarter	4,600 bbl/day and above	once per calendar month	<p>The Joint Trades recommend the following changes to the proposed permit language:</p> <p><i><u>Toxicity.</u> The required frequency of testing for continuous discharges <del>occurring more than once per week</del> shall be determined as follows:</i></p> <p><b>Rationale:</b> The phrase “occurring more than once per week” as applied to continuous discharges is confusing. If a discharge is “continuous” then, by its nature, it is an ongoing discharge and not limited to a weekly timeframe.</p>
<u>Discharge Rate</u>	<u>Toxicity Testing Frequency</u>									
0 - 499 bbl/day	once per calendar year									
500 - 4,599 bbl/day	once per calendar quarter									
4,600 bbl/day and above	once per calendar month									
<b>Part I.B.11.b</b>	Intermittent or batch discharges that occur less than or equal to once per week and lasts less than 24 hours shall be monitored once per discharge but are required to be monitored no more frequently than the corresponding frequencies shown above for continuous discharges. Test Acceptability Criteria can be found in Section Part II.D.4 of this permit.	<p>The Joint Trades recommend the proposed permit language be revised as follows:</p> <p><i><del>Intermittent or batch Non-continuous</del> discharges that occur less than or equal to once per week and last less than 24 hours shall be monitored once per discharge <del>but are required to be monitored no more frequently than the corresponding frequencies shown above for continuous discharges.</del> Test Acceptability Criteria can be found in Section Part II.D.4 of this permit.</i></p> <p><b>Rationale:</b> The Joint Trades recommend that the phrase “intermittent or batch discharges” be changed to “non-continuous discharges” to improve clarity as well as improve consistency with the previous paragraph discussing continuous discharges.</p> <p>In addition, the language referencing the corresponding frequencies for continuous discharges is unnecessary. Non-continuous discharges are sampled as they occur and are not continuous. Therefore, a determining test frequency based on discharge rate or volume is not needed.</p>								

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Part I.B.12.b.1).i	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 Joint Trades recommend that EPA consider the comments submitted by the International Association of Drilling Contractors (IADC) regarding cooling water intake structures on non-fixed facilities.																
Part I.B.12.b.1).ii	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.	The Joint Trades recommend that EPA consider the comments submitted by the International Association of Drilling Contractors (IADC) regarding cooling water intake structures on non-fixed facilities.																
Part I.B.12.c.1).ii	<p>Velocity monitoring. The operator must monitor intake flow velocity across the intake screens on a continuous basis to ensure the maximum intake flow velocity does not exceed 0.5 ft/s. The intake flow velocity shall be monitored according to the following frequencies:</p> <table><tr><td>If the Most recent intake flow velocity (ft/s)</td><td>Then Monitoring Frequency</td></tr><tr><td>&lt;0.300</td><td>Quarterly</td></tr><tr><td>0.300 – 0.38</td><td>Monthly</td></tr><tr><td>&gt;0.38</td><td>Daily</td></tr></table>	If the Most recent intake flow velocity (ft/s)	Then Monitoring Frequency	<0.300	Quarterly	0.300 – 0.38	Monthly	>0.38	Daily	<p>The Joint Trades propose to strike “on a continuous basis” as it directly conflicts with the below monitoring frequencies.</p> <p><i>iii. Velocity monitoring. The operator must monitor intake flow velocity across the intake screens <del>on a continuous basis</del> to ensure the maximum intake flow velocity does not exceed 0.5 ft/s. The intake flow velocity shall be monitored according to the following frequencies:</i></p> <table><tr><td><i>If the Most recent intake flow velocity (ft/s)</i></td><td><i>Then Monitoring Frequency</i></td></tr><tr><td><i>&lt;0.300</i></td><td><i>Quarterly</i></td></tr><tr><td><i>0.300 – 0.38</i></td><td><i>Monthly</i></td></tr><tr><td><i>&gt;0.38</i></td><td><i>Daily</i></td></tr></table> <p><b>Rationale:</b> The Joint Trades request all intake flow velocity monitoring proposed as “continuous” be struck. 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 in the table allow permittees to manually log the intake flow velocity if continuous monitoring systems are not feasible.</p> <p>EPA agreed with this request in their Response to Comments for the 2012 GMG290000 permit renewal, “OOC requested that EPA change the flow monitoring frequency from continuous to daily because continuous monitoring may require significant upgrades to the existing flow system.</p>	<i>If the Most recent intake flow velocity (ft/s)</i>	<i>Then Monitoring Frequency</i>	<i>&lt;0.300</i>	<i>Quarterly</i>	<i>0.300 – 0.38</i>	<i>Monthly</i>	<i>&gt;0.38</i>	<i>Daily</i>
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		<p><u>Response:</u> EPA has revised the permit language. Daily monitoring frequency will be used for flow monitoring. EPA has also changed the frequency for screen monitoring to daily based on the same reason for changing flow monitoring.”</p> <p>EPA again agreed with this request in the 2017 GMG290000 permit renewal when they included the tiered monitoring frequencies in the current permit and did not include continuous intake flow velocity monitoring.</p> <p><u>2017 Rationale:</u> Velocity monitoring consists of a demonstration requirement based on the facilities’ proposed design and a compliance monitoring requirement that verifies the velocity limitation is being met. There is agreement with the purpose of inspection, but not the frequency. The tiered velocity monitoring approach is based upon a statistical analysis of six separate CWIS operated in the GOM during 2015. The analysis is based on the rate-of-change in daily velocity monitoring data (attached as Appendix D). An ANOVA indicates no statistical difference in the rate of change in intake velocity among the five intakes (<math>P &lt; 0.05</math>). The data are approximately normally distributed with a mean change in velocity equal to 0.0001 (ft/s)/day and a standard deviation equal to 0.0106 (ft/s)/day. Based on these data, there is a 95% probability that the mean velocity increase over any 30-day period will be less than 0.11 (ft/s)/day; and a 95% probability that the mean velocity increase over any 90-day period will be less than 0.20 (ft/s)/day. Therefore, 95% of all monthly intake velocity measurements will be less than 0.5 ft/s provided that the previous month’s velocity measurement was less than 0.39 ft/s. Similarly, 95% of all quarterly velocity measurements will be less than 0.5 ft/s provided that the previous quarter’s measurement was less than 0.30 ft/s.</p> <p>We note this data makes sense relative to visual inspection information presented elsewhere the rate of biogrowth on intakes is quite low and so the rate of change of intake velocity would also be expected to be quite low,</p>



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		<p>hence allowing for reduced monitoring frequencies (using a tiered approach to ensure compliance with the 0.5 fps standard for any CWIS design).</p> <p>Related to this issue, EPA must allow for the fact that some affected facilities have been constructed between July 2006 and October 2022 with intake flow velocity monitoring designs based on initial and quarterly/monthly/daily flow monitoring. These facilities may require capital upgrades to reach a continuous intake flow velocity monitoring capability.</p> <p>Should EPA require continuous monitoring, The Joint Trades propose the following language be added to this section of the permit:</p> <p><i>Compliance with continuous intake flow velocity monitoring must be achieved within two years after the effective date of this permit.</i></p>																
<b>Part I.B.12.c.2).iii</b>	<p>Velocity monitoring. The operator must monitor intake flow velocity across the intake screens on a continuous basis to ensure the maximum intake flow velocity does not exceed 0.5 ft/s. The intake flow velocity shall be monitored according to the following frequencies:</p> <table><tr><td>If the Most recent intake flow velocity (ft/s)</td><td>Then Monitoring Frequency</td></tr><tr><td>&lt;0.300</td><td>Should be Quarterly</td></tr><tr><td>0.300 – 0.38</td><td>Monthly</td></tr><tr><td>&gt;0.38</td><td>Daily</td></tr></table>	If the Most recent intake flow velocity (ft/s)	Then Monitoring Frequency	<0.300	Should be Quarterly	0.300 – 0.38	Monthly	>0.38	Daily	<p>The Joint Trades propose to strike “on a continuous basis” as it directly conflicts with the below monitoring frequencies.</p> <p><i>iv. Velocity monitoring. The operator must monitor intake flow velocity across the intake screens <del>on a continuous basis</del> to ensure the maximum intake flow velocity does not exceed 0.5 ft/s. The intake flow velocity shall be monitored according to the following frequencies:</i></p> <table><tr><td><i>If the Most recent intake flow velocity (ft/s)</i></td><td><i>Then Monitoring Frequency</i></td></tr><tr><td><i>&lt;0.300</i></td><td><i>Should be Quarterly</i></td></tr><tr><td><i>0.300 – 0.38</i></td><td><i>Monthly</i></td></tr><tr><td><i>&gt;0.38</i></td><td><i>Daily</i></td></tr></table> <p><b>Rationale:</b> The Joint Trades request all intake flow velocity monitoring proposed as “continuous” be struck. Continuous intake flow velocity monitoring would require possibly significant upgrades to existing intake flow velocity monitoring systems including routing of signals to process</p>	<i>If the Most recent intake flow velocity (ft/s)</i>	<i>Then Monitoring Frequency</i>	<i>&lt;0.300</i>	<i>Should be Quarterly</i>	<i>0.300 – 0.38</i>	<i>Monthly</i>	<i>&gt;0.38</i>	<i>Daily</i>
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		<p>computers for automatic logging. Monitoring frequencies in the table allow permittees to manually log the intake flow velocity if continuous monitoring systems are not feasible.</p> <p>EPA agreed with this request in their Response to Comments for the 2012 GMG290000 permit renewal, "OOC requested that EPA change the flow monitoring frequency from continuous to daily because continuous monitoring may require significant upgrades to the existing flow system.</p> <p><u>Response:</u> EPA has revised the permit language. Daily monitoring frequency will be used for flow monitoring. EPA has also changed the frequency for screen monitoring to daily based on the same reason for changing flow monitoring."</p> <p>EPA again agreed with this request in the 2017 GMG290000 permit renewal when they included the tiered monitoring frequencies in the current permit and did not include continuous intake flow velocity monitoring.</p> <p><u>2017 Rationale:</u> Velocity monitoring consists of a demonstration requirement based on the facilities' proposed design and a compliance monitoring requirement that verifies the velocity limitation is being met. There is agreement with the purpose of inspection, but not the frequency. The tiered velocity monitoring approach is based upon a statistical analysis of six separate CWIS operated in the GOM during 2015. The analysis is based on the rate-of-change in daily velocity monitoring data (attached as Appendix D). An ANOVA indicates no statistical difference in the rate of change in intake velocity among the five intakes (<math>P &lt; 0.05</math>). The data are approximately normally distributed with a mean change in velocity equal to 0.0001 (ft/s)/day and a standard deviation equal to 0.0106 (ft/s)/day. Based on these data, there is a 95% probability that the mean velocity increase over any 30-day period will be less than 0.11 (ft/s)/day; and a 95% probability that the mean velocity increase over any 90-day period will be less than 0.20 (ft/s)/day. Therefore, 95% of all monthly intake velocity</p>

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		<p>measurements will be less than 0.5 ft/s provided that the previous month's velocity measurement was less than 0.39 ft/s. Similarly, 95% of all quarterly velocity measurements will be less than 0.5 ft/s provided that the previous quarter's measurement was less than 0.30 ft/s.</p> <p>We note this data makes sense relative to visual inspection information presented elsewhere the rate of biogrowth on intakes is quite low and so the rate of change of intake velocity would also be expected to be quite low, hence allowing for reduced monitoring frequencies (using a tiered approach to ensure compliance with the 0.5 fps standard for any CWIS design).</p> <p>Related to this issue, EPA must allow for the fact that some affected facilities have been constructed between July 2006 and October 2022 with intake flow velocity monitoring designs based on initial and quarterly/monthly/daily flow monitoring. These facilities may require capital upgrades to reach a continuous intake flow velocity monitoring capability.</p> <p>Should EPA require continuous monitoring, The Joint Trades propose the following language be added to this section of the permit:</p> <p><i>Compliance with continuous intake flow velocity monitoring must be achieved within two years after the effective date of this permit.</i></p>
<b>Part I.D.3</b>	The approved test methods for permit compliance are identified in 40 CFR Part 136. No alternative test procedures are authorized.	<p>The Joint Trades believe that the sentence "No alternative test procedures are allowed" contradicts existing EPA regulations and should be removed from the permit.</p> <p>40 CFR 136.5 contains regulations for "Approval of alternate test procedures for limited use." Paragraph (a) of 40 CFR 136.5 clearly states that:</p> <p>"Any person may request the Regional ATP Coordinator to approve the use of an alternate test procedure in the Region."</p>

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		<p>By pre-emptively stating that no alternate test procedures are authorized in the permit language, EPA is effectively removing the ability of the regulated community to avail itself of the procedures in 40 CFR 136.5, and thereby, contradicting EPA's regulations for NPDES permits.</p> <p>Removing the regulated community's ability to apply for alternate test procedures for the offshore oil and gas sector in the OCS General Permit puts the offshore oil and gas sector at a disadvantage compared to other industries and potentially creates unfair advantages for other industries.</p>																																	
<b>Part I.D.3.f</b>	<p>Test Acceptability Criteria</p> <p>The permittee shall repeat a test, including the control and all effluent dilutions, if the procedures and quality assurance requirements defined in the test methods or in this permit are not satisfied, including the following additional criteria:</p> <table border="1"> <thead> <tr> <th>Condition/Criteria</th><th><i>Americamysis bahia</i></th><th><i>Menidia beryllina</i></th></tr> </thead> <tbody> <tr> <td>Test Duration</td><td>7 days</td><td>7 days</td></tr> <tr> <td># of replicates per concentration</td><td>8</td><td>4</td></tr> <tr> <td># of organisms per replicate</td><td>5</td><td>10</td></tr> <tr> <td># of organisms per concentration</td><td>40</td><td>40</td></tr> <tr> <td># of test concentrations per effluent</td><td>5 and a control</td><td>5 and a control</td></tr> <tr> <td>Holding time *</td><td>36 hours for first use</td><td>36 hours for first use</td></tr> <tr> <td>Sampling Requirement *</td><td>Minimum of 3 samples</td><td>Minimum of 3 samples</td></tr> <tr> <td>Test Acceptability Criteria</td><td>           ≥80% survival of all control organisms.             Average dry weight per surviving organism in control ≥0.2mg.         </td><td>           ≥80% survival of all control organisms.             Average dry weight per surviving unpreserved organism in the control must be ≥0.5mg when test starts with 7d old larvae, or, ≥0.43mg or greater after no more than 7days if preserved.         </td></tr> <tr> <td>Coefficient of Variation**</td><td>40% or less, unless significant effects are exhibited.</td><td>40% or less, unless significant effects are exhibited.</td></tr> <tr> <td>Percent Minimum Significant Difference (PMSD range) for Sublethal Endpoint **</td><td>11 - 37</td><td>11 - 28</td></tr> </tbody> </table>	Condition/Criteria	<i>Americamysis bahia</i>	<i>Menidia beryllina</i>	Test Duration	7 days	7 days	# of replicates per concentration	8	4	# of organisms per replicate	5	10	# of organisms per concentration	40	40	# of test concentrations per effluent	5 and a control	5 and a control	Holding time *	36 hours for first use	36 hours for first use	Sampling Requirement *	Minimum of 3 samples	Minimum of 3 samples	Test Acceptability Criteria	≥80% survival of all control organisms.  Average dry weight per surviving organism in control ≥0.2mg.	≥80% survival of all control organisms.  Average dry weight per surviving unpreserved organism in the control must be ≥0.5mg when test starts with 7d old larvae, or, ≥0.43mg or greater after no more than 7days if preserved.	Coefficient of Variation**	40% or less, unless significant effects are exhibited.	40% or less, unless significant effects are exhibited.	Percent Minimum Significant Difference (PMSD range) for Sublethal Endpoint **	11 - 37	11 - 28	<p>The Joint Trades recommend that some of the values listed in the Test Acceptability Criteria table be changed to align with WET testing protocols and methods.</p> <p>For <i>Menidia beryllina</i>, we recommend the following changes:</p> <ul style="list-style-type: none"> <li>• # of replicates per concentration should be 5; not 4.</li> <li>• # of organisms per replicate should be 8; not 10.</li> </ul> <p>In addition, to align with our recommendations on TCW fluids 48-hour acute WET testing, Sample Requirements for both <i>Americamysis bahia</i> and <i>Menidia beryllina</i> should be modified to:</p> <p><i>1 grab sample for discharges of 24 hours or less, or 3 aliquots at evenly spaced time intervals over a 24-hour period for discharges greater than 24-hours in duration.</i></p> <p>The rationale for this recommendation is discussed above in previous comments.</p> <p><u>Regarding PMSD Limits:</u> PMSD limits are protective of the environment and permittees. Upper PMSD limits prevent highly variable data that decreases the power of the required statistical methods from being used to</p>
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	<p>* If the flow from the outfall(s) being tested ceases during the collection of effluent samples, the requirements for the minimum number of effluent samples and the minimum number of effluent portions are waived during that sampling period. However, the permittee must collect an effluent composite sample volume during the period of discharge that is sufficient to complete the required toxicity tests with daily renewal of effluent, and must meet the holding time between collection and first use of the sample. When possible, the effluent samples used for the toxicity tests shall be collected on separate days. The effluent composite sample collection duration and the static renewal protocol associated with the abbreviated sample collection must be documented in the full report required in Item 3 of this section.</p> <p>**Test failure may not be construed or reported as invalid due to a coefficient of variation value of greater than 40%, or a PMSD value greater than the higher value on the range provided.</p>	<p>demonstrate permit compliance. Lower PMSD limits prevent data sets with very low variability, hyper-sensitive data sets, from failing. If the PMSD for a sub-lethal data set is less than the lower PMSD limit and the required statistical methods indicate a statistically significant difference between the control and a treatment, this difference must be confirmed by calculating relative differences between the control and each treatment.</p> <p>Growth data are based on biomass: dry weight of survivors from each replicate divided by the number of organisms exposed not the number surviving. Any mortalities exacerbate sublethal biomass variability. If the replicate dry weight is for one surviving organism, it must be divided by the number originally exposed! If a treatment fails survival it is excluded from sub-lethal data analyses. If the survival and growth data are near perfect and clearly passing except at the highest concentration tested (low survival and high variability between replicates), the required statistical methods (Steel's Many-One Rank Test in particular) may not pick up &gt;40% mortality as statistically significant. This can lead to the upper biomass PMSD limit being exceeded and an invalid test, even though the lower sample dilutions are statistically equivalent in survival and biomass to the concurrent control.</p> <p>Including the 2017 permit language for chronic tests could prevent resampling and retesting clearly passing data sets:</p> <p><i>If the conditions of Test Acceptability are met in Item 3.f. above and the percent survival of the test organism is equal to or greater than 80% in the critical dilution concentration and all lower dilution concentrations, the survival test shall be considered to be passing and the permittee shall report a survival NOEC of not less than the critical dilution for the DMR reporting requirements found below.</i></p> <p>And adding similar language for sublethal biomass data:</p>

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		<p><i>If the conditions of Test Acceptability are met in Item 3.f. except that the PMSD upper limit is exceeded, then if the mean dry weight of surviving control organisms is equal to or greater than the limit in the test method, and the biomass data for the critical dilution and all lower dilutions are not more than the PMSD lower limit (11% for both species) less than the concurrent control, the growth test shall be considered to be passing and the permittee shall report a growth NOEC of not less than the critical dilution for the DMR reporting requirements found below.</i></p>
<b>Part I.D.3.g</b>	<p>Statistical Interpretation</p> <p>The statistical analyses used to determine if there is a significant difference between the control and the critical dilution shall be in accordance with the methods for determining the No Observed Effect Concentration (NOEC) as described in the appropriate method manual listed above, or the most recent update.</p>	<p>The Joint Trades offer the following comments on statistical interpretation:</p> <p>PMSD limits are protective of the environment and permittees. Upper PMSD limits prevent highly variable data that decreases the power of the required statistical methods from being used to demonstrate permit compliance. Lower PMSD limits prevent data sets with very low variability, hyper-sensitive data sets, from failing. If the PMSD for a sub-lethal data set is less than the lower PMSD limit and the required statistical methods indicate a statistically significant difference between the control and a treatment, this difference must be confirmed by calculating relative differences between the control and each treatment.</p> <p>Growth data are based on biomass: dry weight of survivors from each replicate divided by the number of organisms exposed not the number surviving. Any mortalities exacerbate sublethal biomass variability. If the replicate dry weight is for one surviving organism, it must be divided by the number originally exposed! If a treatment fails survival it is excluded from sub-lethal data analyses. If the survival and growth data are near perfect and clearly passing except at the highest concentration tested (low survival and high variability between replicates), the required statistical methods (Steel's Many-One Rank Test in particular) may not pick up &gt;40% mortality as statistically significant. This can lead to the upper biomass PMSD limit being exceeded and an invalid test, even though the lower sample dilutions</p>

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		<p>are statistically equivalent in survival and biomass to the concurrent control.</p> <p>Including the 2017 permit language for chronic tests could prevent resampling and retesting clearly passing data sets:</p> <p><i>If the conditions of Test Acceptability are met in Item 3.f. above and the percent survival of the test organism is equal to or greater than 80% in the critical dilution concentration and all lower dilution concentrations, the survival test shall be considered to be passing and the permittee shall report a survival NOEC of not less than the critical dilution for the DMR reporting requirements found below.</i></p> <p>And adding similar language for sublethal biomass data:</p> <p><i>If the conditions of Test Acceptability are met in Item 3.f. except that the PMSD upper limit is exceeded, then if the mean dry weight of surviving control organisms is equal to or greater than the limit in the test method, and the biomass data for the critical dilution and all lower dilutions are not more than the PMSD lower limit (11% for both species) less than the concurrent control, the growth test shall be considered to be passing and the permittee shall report a growth NOEC of not less than the critical dilution for the DMR reporting requirements found below.</i></p>
<b>Part I.D.3.h</b>	<p>Dilution Water</p> <p>Dilution water used in the toxicity tests shall be receiving water collected as close to the point of discharge as possible but unaffected by the discharge. The permittee shall substitute synthetic dilution water of similar salinity closest to the point of discharge if the receiving water shows toxicity and fails to meet acceptability criteria for the control.</p>	<p>The Joint Trades strongly recommend removing the requirements for the use of receiving waters as dilution water for the purposes of WET testing. There are several technical and operational reasons for concern.</p> <p><b>1. WET Testing Methods Recommendations</b></p> <p>EPA's <i>Methods for Measuring the Acute Toxicity of Effluents and Receiving Waters to Freshwater and Marine Organisms, Fifth Edition</i> contains the following recommendations regarding types of dilution water,</p>

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		<p>“7.1.1.1 If the objective of the test is to estimate the absolute acute toxicity of the effluent, a synthetic (standard) dilution water is used.”</p> <p>As well as,</p> <p>“7.1.2 An acceptable dilution water is one which is appropriate for the objectives of the test; supports adequate performance of the test organisms with respect to survival, growth, reproduction, or other responses that may be measured in the test (i.e., consistently meets test acceptability criteria for control responses); is consistent in quality; and does not contain contaminants that could produce toxicity.”</p> <p>Method 1007.0: Mysid, <i>Mysidopsis bahia</i>, Survival, Growth and Fecundity Test: Chronic Toxicity contains the following requirement,</p> <p>“14.6.11.1 Saline test and dilution water -- The salinity of the test water must be in the range of 20‰ to 30‰.”</p> <p>Gulf of Mexico receiving waters mean annual sea-surface salinity ranges from 33‰ to greater than 36‰ as shown in the figure below from Vinogradov, S., <i>The use of ocean tomographic observations in numeric simulation of mesoscale oceanic circulation in the northern Gulf of Mexico, 2005.</i></p>



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		<div data-bbox="1163 272 1955 834"> </div> <p data-bbox="1157 878 1969 1013">Gulf of Mexico receiving waters are higher than the recommended salinities in Method 1007.0 and therefore may not “support adequate performance of the test organisms with respect to survival, growth, reproduction, or other responses that may be measured in the test.”</p> <p data-bbox="1157 1057 1780 1084"><b>2. Impracticably of Capturing Receiving Water Samples</b></p> <p data-bbox="1157 1128 1969 1300">The proposed permit language states that “Dilution water used in the toxicity tests shall be receiving water collected as close to the point of discharge as possible but unaffected by the discharge.” It is unclear how operators are to determine if the receiving water collection point is unaffected by the discharge. The requirement is vague and ambiguous.</p> <p data-bbox="1157 1344 1969 1403">In addition, capturing samples of receiving water for use as dilution water would potentially require the launching and operation of small fast rescue</p>

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		<p>craft from the platform. Most platforms do not have such craft available or installed. Launching of such craft requires lower the vessel 150-200 feet via cables to the water's surface with people on board. This is a high risk activity that is conducted only when it is absolutely necessary (i.e., responding to an emergency). This requirement to use receiving water as dilution water increases the risks and hazards to offshore personnel.</p> <p>If receiving water was collected for use as dilution water, approximately 40 gallons would be needed per test. That would require transport of more than 320 lbs. of water, ice and containers.</p> <p>Additional helicopter flights would be required as well as additional ground transport. As noted in other comments contained in this document, increased transportation results in significantly higher greenhouse gas emissions, higher costs to the regulated community and additional burden in the form of increased scheduling and planning.</p> <p>The use of synthetic dilution water eliminates all of these concerns and provides a practical, sound alternative to the use of receiving water.</p> <p><b>3. Synthetic Dilution Water Has a Proven History</b></p> <p>Synthetic dilution water has been used for Gulf of Mexico dilution water since the inception of the General Permit. There are decades of data that provide ample evidence that synthetic dilution water is appropriate for WET testing. If EPA has identified concerns or issues with the historical use of synthetic dilution water based upon this historical data, then that information should be shared with the regulated community and the public to justify the need for this proposed change.</p> <p>Based on the rationale discussed in items 1-3, the Joint Trades recommend that this proposed paragraph be removed from the permit.</p>

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<b>Part I.D.3.1</b>	<p>The testing frequency is assessed at the end of every calendar year and established for the following year. However, monthly reporting of toxicity data is required regardless of the testing frequency. This is to allow a space in the DMR to report data under a fluctuating frequency. If a test is not conducted every month, then the permittee must report “NODI 9” for toxicity data.</p>	<p>The Joint Trades recommend the following changes to the proposed permit language to improve clarity. In addition, we recommend removing the references to NODI codes from the permit as this type of language is better suited for DMR instructions instead of permit language.</p> <p><i>The testing frequency is assessed at the end of every calendar year and established for the following year. However, Monthly reporting of toxicity data is required regardless of the testing frequency. This is to allow a space in the DMR to report data under a fluctuating frequency. If a test is not conducted every month, then the permittee must report “NODI 9” for toxicity data.</i></p>																							
<b>Part I.D.3.1</b>	<p>Compliance with the WET limit is established when both the sublethal and lethal NOEC of a WET test is greater than or equal to the critical dilution. Compliance is represented by a “0” in the DMR. In accordance with Part II.D.4 of this permit, if the (sublethal or lethal) NOEC for <i>Menidia beryllina</i> is less than the permittee’s critical dilution, this constitutes a violation of the WET limit and a “1” should be entered under parameter 51712 of the DMR. If the NOEC is greater than or equal to the critical dilution, a “0” should be entered in the DMR. If the (lethal or sublethal) NOEC for <i>Americamysis bahia</i> (formerly <i>Mysidopsis bahia</i> as referred to in Method 2007.0 and 1007.0, and DMRs) is less than the permittee’s critical dilution, this constitutes a violation of a WET limit and a “1” should be entered under parameter 51713. If the NOEC is greater than or equal to the critical dilution, a “0” should be entered in the DMR. For each toxicity test conducted, the permittee shall also report the results as follows:</p> <table border="1"> <thead> <tr> <th rowspan="2">Reporting Requirement</th><th colspan="2">Parameter STORET CODE</th></tr> <tr> <th><i>Americamysis bahia</i></th><th><i>Menidia beryllina</i></th></tr> </thead> <tbody> <tr> <td>Enter a “1” if either the sublethal or lethal NOEC is less than the critical dilution, otherwise enter a “0”.</td><td>51713</td><td>51712</td></tr> <tr> <td>Report the NOEC value for survival</td><td>TOP3E</td><td>TOP6J</td></tr> <tr> <td>Report the LOEC value for survival</td><td>TXP3E</td><td>TXP6J</td></tr> <tr> <td>Report the NOEC value for growth or reproduction</td><td>TPP3E</td><td>TPP6J</td></tr> <tr> <td>Report the LOEC value for growth</td><td>TYP3E</td><td>TYP6J</td></tr> <tr> <td>Report the critical dilution used for the test</td><td>51726</td><td>51726</td></tr> </tbody> </table>	Reporting Requirement	Parameter STORET CODE		<i>Americamysis bahia</i>	<i>Menidia beryllina</i>	Enter a “1” if either the sublethal or lethal NOEC is less than the critical dilution, otherwise enter a “0”.	51713	51712	Report the NOEC value for survival	TOP3E	TOP6J	Report the LOEC value for survival	TXP3E	TXP6J	Report the NOEC value for growth or reproduction	TPP3E	TPP6J	Report the LOEC value for growth	TYP3E	TYP6J	Report the critical dilution used for the test	51726	51726	<p>The Joint Trades recommend revising the paragraph preceding the STORET codes table as follows:</p> <p><i>Compliance with the WET limit is established when both the sublethal and lethal NOEC of a WET test is greater than or equal to the critical dilution. Compliance is represented by a “0” in the DMR. In accordance with Part II.D.4 of this permit, if the (sublethal or lethal) NOEC for Menidia beryllina is less than the permittee’s critical dilution, this constitutes a violation of the WET limit and a “1” should be entered under parameter 51712 of the DMR. If the NOEC is greater than or equal to the critical dilution, a “0” should be entered in the DMR. If the (lethal or sublethal) NOEC for Americamysis bahia (formerly Mysidopsis bahia as referred to in Method 2007.0 and 1007.0, and DMRs) is less than the permittee’s critical dilution, this constitutes a violation of a WET limit and a “1” should be entered under parameter 51713. If the NOEC is greater than or equal to the critical dilution, a “0” should be entered in the DMR. For each toxicity test conducted, the permittee shall also report the results as follows:</i></p> <p><b>Rationale:</b> The type of information highlighted above for removal from the paragraph is better suited for DMR instructions rather than permit language.</p>
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		<p>In addition, the following STORET CODE Corrections are needed to this table for M. Beryllina:</p> <ul style="list-style-type: none"> <li>• Survival NOEC TOP6B</li> <li>• Survival LOEC TXP6B</li> <li>• Growth NOEC TPP6B</li> <li>• Growth LOEC TYP6B</li> </ul>																							
<b>Part I.D.3.2</b>	<p>A chronic test shall be conducted per discharge. For each test, the permittee shall report the results as follows:</p> <table border="1"> <thead> <tr> <th rowspan="2">Reporting Requirement</th><th colspan="2">Parameter STORET CODE</th></tr> <tr> <th><i>Americamysis bahia</i></th><th><i>Menidia beryllina</i></th></tr> </thead> <tbody> <tr> <td>Enter a "1" if the NOEC for survival is less than the critical dilution, otherwise enter a "0".</td><td>TLP3E</td><td>TLP6J</td></tr> <tr> <td>Report the NOEC value for survival</td><td>TOP3E</td><td>TOP6J</td></tr> <tr> <td>Report the LOEC value for survival</td><td>TXP3E</td><td>TXP6J</td></tr> <tr> <td>Enter a "1" if the NOEC for growth or reproduction is less than the critical dilution, otherwise enter a "0".</td><td>TWP3E</td><td>TWP6J</td></tr> <tr> <td>Report the NOEC value for growth or reproduction</td><td>TPP3E</td><td>TPP6J</td></tr> <tr> <td>Report the LOEC value for growth</td><td>TYP3E</td><td>TYP6J</td></tr> </tbody> </table>	Reporting Requirement	Parameter STORET CODE		<i>Americamysis bahia</i>	<i>Menidia beryllina</i>	Enter a "1" if the NOEC for survival is less than the critical dilution, otherwise enter a "0".	TLP3E	TLP6J	Report the NOEC value for survival	TOP3E	TOP6J	Report the LOEC value for survival	TXP3E	TXP6J	Enter a "1" if the NOEC for growth or reproduction is less than the critical dilution, otherwise enter a "0".	TWP3E	TWP6J	Report the NOEC value for growth or reproduction	TPP3E	TPP6J	Report the LOEC value for growth	TYP3E	TYP6J	<p>As recommended in these comments, chronic toxicity testing for TCW fluids should be removed from the permit.</p> <p>However, if the requirement is retained, the following STORET CODE Corrections are needed to this table:</p> <ul style="list-style-type: none"> <li>• M. Beryllina 51712</li> <li>• Survival NOEC TOP6B</li> <li>• Survival LOEC TXP6B</li> <li>• Growth NOEC TPP6B</li> <li>• Growth LOEC TYP6B</li> <li>• CD 51726</li> <li>• A. Bahia 51713</li> <li>• Survival NOEC TOP3E</li> <li>• Survival LOEC TXP3E</li> <li>• Growth NOEC TPP3E</li> <li>• Growth LOEC TYP3E</li> <li>• CD 51726</li> </ul>
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Report the LOEC value for survival	TXP3E	TXP6J																							
Enter a "1" if the NOEC for growth or reproduction is less than the critical dilution, otherwise enter a "0".	TWP3E	TWP6J																							
Report the NOEC value for growth or reproduction	TPP3E	TPP6J																							
Report the LOEC value for growth	TYP3E	TYP6J																							
<b>Part I.D.4</b>	<p>The approved test methods for permit compliance are identified in 40 CFR Part 136. No alternative test procedures are authorized.</p>	<p>The Joint Trades believe that the sentence "No alternative test procedures are allowed" contradicts existing EPA regulations and should be removed from the permit.</p> <p>40 CFR 136.5 contains regulations for "Approval of alternate test procedures for limited use." Paragraph (a) of 40 CFR 136.5 clearly states that:</p>																							

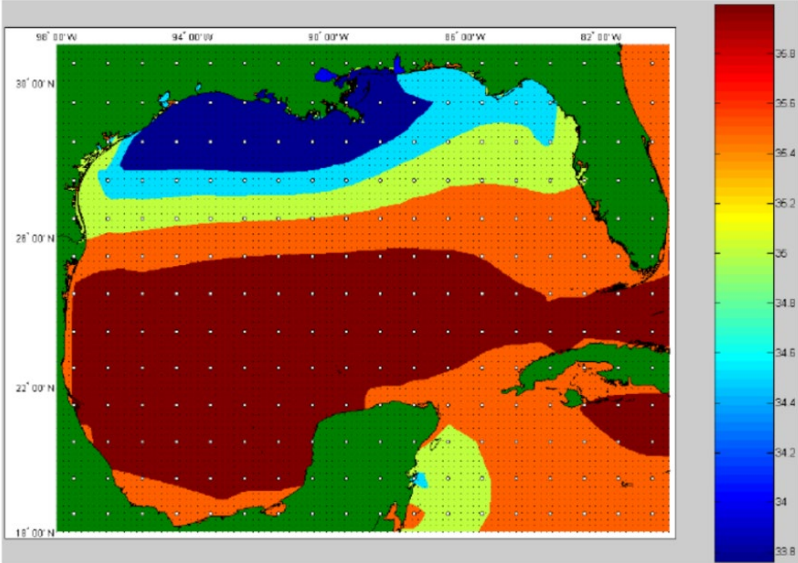
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		<p>“Any person may request the Regional ATP Coordinator to approve the use of an alternate test procedure in the Region.”</p> <p>By pre-emptively stating that no alternate test procedures are authorized in the permit language, EPA is effectively removing the ability of the regulated community to avail itself of the procedures in 40 CFR 136.5, and thereby, contradicting EPA’s regulations for NPDES permits.</p> <p>Removing the regulated community’s ability to apply for alternate test procedures for the offshore oil and gas sector in the OCS General Permit puts the offshore oil and gas sector at a disadvantage compared to other industries and potentially creates unfair advantages for other industries.</p>															
<b>Part I.D.4.f</b>	<p>Test Acceptability Criteria</p> <p>The permittee shall repeat a test, including the control and all effluent dilutions, if the procedures and quality assurance requirements defined in the test methods or in this permit are not satisfied, including the following additional criteria:</p> <table border="1" data-bbox="268 883 1123 1110"> <thead> <tr> <th>Condition/Criteria</th><th><i>Americamysis bahia</i></th><th><i>Menidia beryllina</i></th></tr> </thead> <tbody> <tr> <td># of replicates per concentration</td><td>2</td><td>2</td></tr> <tr> <td># of organisms per replicate</td><td>10</td><td>10</td></tr> <tr> <td># of organisms per concentration</td><td>20</td><td>20</td></tr> <tr> <td># of test concentrations per effluent</td><td>5 and a control</td><td>5 and a control</td></tr> </tbody> </table>	Condition/Criteria	<i>Americamysis bahia</i>	<i>Menidia beryllina</i>	# of replicates per concentration	2	2	# of organisms per replicate	10	10	# of organisms per concentration	20	20	# of test concentrations per effluent	5 and a control	5 and a control	<p>The Joint Trades recommend that some of the values listed in the Test Acceptability Criteria table be changed to align with WET testing protocols and methods.</p> <p>For both species, we recommend the following changes:</p> <ul style="list-style-type: none"> <li>• # of replicates per concentration should be 5; not 2.</li> <li>• # of organisms per replicate should be 8; not 10.</li> <li>• # of organisms per concentration should be 40; not 20.</li> </ul> <p>NOEC values cannot be achieved with less than 4 replicates.</p>
Condition/Criteria	<i>Americamysis bahia</i>	<i>Menidia beryllina</i>															
# of replicates per concentration	2	2															
# of organisms per replicate	10	10															
# of organisms per concentration	20	20															
# of test concentrations per effluent	5 and a control	5 and a control															
<b>Part I.D.4.f</b>	<p>* If the flow from the outfall(s) being tested ceases during the collection of effluent samples, the requirements for the minimum number of effluent samples and the minimum number of effluent portions are waived during that sampling period. However, the permittee must collect an effluent composite sample volume during the period of discharge that is sufficient to complete the required toxicity tests with daily renewal of effluent, and must meet the holding time between collection and first use of the sample.</p>	<p>The Joint Trades recommend that the following sentence be removed from the permit:</p> <p><del>When possible, the effluent samples used for the toxicity tests shall be collected on separate days.</del></p> <p><b>Rationale:</b> Collection of samples on separate days creates unnecessary burden on the regulated community, including:</p>															

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	<p>When possible, the effluent samples used for the toxicity tests shall be collected on separate days. The effluent composite sample collection duration and the static renewal protocol associated with the abbreviated sample collection must be documented in the full report required in Item 3 of this section.</p>	<ul style="list-style-type: none"> <li>• Increase difficulty in meeting required holding times leading to “special order” flights and ground transportation.</li> <li>• Safety risks increase due to increased material handling and additional helicopter flights.</li> <li>• Increased air pollutants and GHG emissions due to increased vessel and ground transportation.</li> </ul>
<b>Part I.D.4.f</b>	<p><b>**</b>Test failure may not be construed or reported as invalid due to a coefficient of variation value of greater than 40%, or a PMSD value greater than the higher value on the range provided.</p>	<p>The Joints Trades recommend that the reference to PMSD values be removed from this section of the permit. PMSD limits do not apply to 48-hour tests.</p>
<b>Part I.D.4.h</b>	<p>Dilution Water</p> <p>Dilution water used in the toxicity tests shall be receiving water collected as close to the point of discharge as possible but unaffected by the discharge. The permittee shall substitute synthetic dilution water of similar salinity closest to the point of discharge if the receiving water shows toxicity and fails to meet acceptability criteria for the control.</p>	<p>Comments made above regarding dilution water are repeated here.</p> <p>The Joint Trades strongly recommend removing the requirements for the use of receiving waters as dilution water for the purposes of WET testing. There are several technical and operational reasons for concern.</p> <p><b>1. WET Testing Methods Recommendations</b></p> <p><i>EPA’s Methods for Measuring the Acute Toxicity of Effluents and Receiving Waters to Freshwater and Marine Organisms, Fifth Edition</i> contains the following recommendations regarding types of dilution water,</p> <p>“7.1.1.1 If the objective of the test is to estimate the absolute acute toxicity of the effluent, a synthetic (standard) dilution water is used.”</p> <p>As well as,</p> <p>“7.1.2 An acceptable dilution water is one which is appropriate for the objectives of the test; supports adequate performance of the test organisms with respect to survival, growth, reproduction, or other responses that may be measured in the test (i.e., consistently meets test acceptability criteria for control responses); is consistent in quality; and does not contain contaminants that could produce toxicity.”</p>

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		<p>Method 1007.0: Mysid, <i>Mysidopsis bahia</i>, Survival, Growth and Fecundity Test: Chronic Toxicity contains the following requirement,</p> <p>“14.6.11.1 Saline test and dilution water -- The salinity of the test water must be in the range of 20‰ to 30‰.”</p> <p>Gulf of Mexico receiving waters mean annual sea-surface salinity ranges from 33‰ to greater than 36‰ as shown in the figure below from Vinogradov, S., <i>The use of ocean tomographic observations in numeric simulation of mesoscale oceanic circulation in the northern Gulf of Mexico, 2005</i>.</p>  <p>Gulf of Mexico receiving waters are higher than the recommended salinities in Method 1007.0 and therefore may not “support adequate performance</p>

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		<p>of the test organisms with respect to survival, growth, reproduction, or other responses that may be measured in the test.”</p> <p><b>2. Impracticability of Capturing Receiving Water Samples</b></p> <p>The proposed permit language states that “Dilution water used in the toxicity tests shall be receiving water collected as close to the point of discharge as possible but unaffected by the discharge.” It is unclear how operators are to determine if the receiving water collection point is unaffected by the discharge. The requirement is vague and ambiguous.</p> <p>In addition, capturing samples of receiving water for use as dilution water would potentially require the launching and operation of small fast rescue craft from the platform. Most platforms do not have such craft available or installed. Launching of such craft requires lower the vessel 150-200 ft via cables to the water’s surface with people on board. This is a high risk activity that is conducted only when it is absolutely necessary (i.e., responding to an emergency). This requirement to use receiving water as dilution water increases the risks and hazards to offshore personnel.</p> <p>If receiving water was collected for use as dilution water, approximately 40 gallons would be needed per test. That would require transport of more than 320 lbs. of water, ice and containers.</p> <p>Additional helicopter flights would be required as well as additional ground transport. As noted in other comments contained in this document, increased transportation results in higher greenhouse gas emissions, higher costs to the regulated community and additional burden in the form of increased scheduling and planning.</p> <p>The use of synthetic dilution water eliminates all of these concerns and provides a practical, sound alternative to the use of receiving water.</p>



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		<p><b>3. Synthetic Dilution Water Has a Proven History</b></p> <p>Synthetic dilution water has been used for Gulf of Mexico dilution water since the inception of the General Permit. There are decades of data that provide ample evidence that synthetic dilution water is appropriate for WET testing. If EPA has identified concerns or issues with the historical use of synthetic dilution water based upon this historical data, then that information should be shared with the regulated community and the public to justify the need for this proposed change.</p> <p>Based on the rationale discussed in items 1-3, the Joint Trades recommend that this proposed paragraph be removed from the permit.</p>
<b>Part I.D.4.1</b>	<p>Monthly reporting of toxicity data is required regardless of the testing frequency. This is to allow a space in the DMR to report data under a fluctuating frequency. If a test is not conducted every month, then the permittee must report "NODI 9" for toxicity data.</p>	<p>The Joint Trades recommend removing the references to NODI codes from the permit as this type of language is better suited for DMR instructions instead of permit language. The recommended permit text is as follows:</p> <p><i>Monthly reporting of toxicity data is required regardless of the testing frequency. This is to allow a space in the DMR to report data under a fluctuating frequency. <del>If a test is not conducted every month, then the permittee must report "NODI 9" for toxicity data.</del></i></p>
<b>Part I.D.4.1</b>	<p>Compliance with the WET limit is established when the NOEC of a WET test is greater than or equal to the critical dilution. Compliance is represented by a "0" in the DMR. In accordance with Part II.D.4 of this permit, if the (sublethal or lethal) NOEC for <i>Menidia beryllina</i> is less than the permittee's critical dilution, this constitutes a violation of the WET limit and a "1" should be entered under parameter 51712 of the DMR. If the NOEC is greater than or equal to the critical dilution, a "0" should be entered in the DMR. If the (lethal or sublethal) NOEC for <i>Americamysis bahia</i> (formerly <i>Mysidopsis bahia</i> as referred to in Method 2007.0 and 1007.0, and DMRs) is less than the permittee's critical dilution, this constitutes a violation of a WET limit and a "1" should be entered under parameter 51713. If the NOEC is greater than or equal to the critical dilution, a "0" should be entered in the DMR. For each toxicity test conducted, the permittee shall also report the results as follows:</p>	<p>The Joint Trades recommend revising the paragraph prior to the STORET codes table as follows:</p> <p><i>Compliance with the WET limit is established when the NOEC of a WET test is greater than or equal to the critical dilution. <del>Compliance is represented by a "0" in the DMR. In accordance with Part II.D.4 of this permit, if the (sublethal or lethal) NOEC for Menidia beryllina is less than the permittee's critical dilution, this constitutes a violation of the WET limit and a "1" should be entered under parameter 51712 of the DMR. If the NOEC is greater than or equal to the critical dilution, a "0" should be entered in the DMR. If the (lethal or sublethal) NOEC for Americamysis bahia (formerly Mysidopsis bahia as referred to in Method 2007.0 and 1007.0, and DMRs) is less than</del></i></p>

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Section	2022 Proposed Permit Language	Joint Trades Comments														
	<table border="1"> <thead> <tr> <th rowspan="2">Reporting Requirement</th><th colspan="2">Parameter STORET CODE</th></tr> <tr> <th><i>Americamysis bahia</i></th><th><i>Menidia beryllina</i></th></tr> </thead> <tbody> <tr> <td>Enter a "1" if the NOEC for survival is less than the critical dilution, otherwise enter a "0".</td><td>51712</td><td>51713</td></tr> <tr> <td>Report the NOEC value for survival</td><td>TOM3E</td><td>TOM6J</td></tr> <tr> <td>Report the Critical Dilution used for the test</td><td>51726</td><td>51726</td></tr> </tbody> </table>	Reporting Requirement	Parameter STORET CODE		<i>Americamysis bahia</i>	<i>Menidia beryllina</i>	Enter a "1" if the NOEC for survival is less than the critical dilution, otherwise enter a "0".	51712	51713	Report the NOEC value for survival	TOM3E	TOM6J	Report the Critical Dilution used for the test	51726	51726	<p><del>the permittee's critical dilution, this constitutes a violation of a WET limit and a "1" should be entered under parameter 51713. If the NOEC is greater than or equal to the critical dilution, a "0" should be entered in the DMR. For each toxicity test conducted, the permittee shall also report the results as follows:</del></p> <p><b>Rationale:</b> The type of information included in the paragraph is better suited for DMR instructions rather than permit language.</p> <p>In addition, the following STORET CODE Corrections are needed to this table:</p> <ul style="list-style-type: none"> <li>• A. bahia 51713</li> <li>• Survival NOEC TOM3E</li> <li>• M. beryllina 51712</li> <li>• Survival NOEC TOM6B</li> </ul>
Reporting Requirement	Parameter STORET CODE															
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Report the NOEC value for survival	TOM3E	TOM6J														
Report the Critical Dilution used for the test	51726	51726														
<b>Part I.D.4.2</b>	<p>A chronic test shall be conducted per discharge. For each test, the permittee shall report the results as follows:</p> <table border="1"> <thead> <tr> <th rowspan="2">Reporting Requirement</th><th colspan="2">Parameter STORET CODE</th></tr> <tr> <th><i>Americamysis bahia</i></th><th><i>Menidia beryllina</i></th></tr> </thead> <tbody> <tr> <td>Enter a "1" if the NOEC for survival is less than the critical dilution, otherwise enter a "0".</td><td>51712</td><td>51713</td></tr> <tr> <td>Report the NOEC value for survival</td><td>TOM3E</td><td>TOM6J</td></tr> <tr> <td>Report the Critical Dilution used for the test</td><td>51726</td><td>51726</td></tr> </tbody> </table>	Reporting Requirement	Parameter STORET CODE		<i>Americamysis bahia</i>	<i>Menidia beryllina</i>	Enter a "1" if the NOEC for survival is less than the critical dilution, otherwise enter a "0".	51712	51713	Report the NOEC value for survival	TOM3E	TOM6J	Report the Critical Dilution used for the test	51726	51726	<p>This section of the permit describes reporting requirements for acute testing. The paragraph should be changed as follows:</p> <p><del>An acute chronic</del> test shall be conducted per discharge. For each test, the permittee shall report the results as follows:</p> <p>In addition, the following STORET CODE Corrections are needed to this table:</p> <ul style="list-style-type: none"> <li>• A. bahia 51713</li> <li>• Survival NOEC TOM3E</li> <li>• CD 51726</li> <li>• M. beryllina 51712</li> <li>• Survival NOEC TOM6B</li> <li>• CD 51726</li> </ul>
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<b>Part II.C.2</b>	Samples and measurements taken for the purpose of monitoring shall be representative of the monitored activity. If a representative sample is not possible	The Joint Trades recommend the following language be removed from the permit:														

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	<p>due to a natural disaster, environmental conditions, or weather, the facility should use one of the following NODI Codes: K – Natural disaster (declared by President) T – Environmental conditions- monitoring not possible (hurricanes that are not declared by President, high tides) V – Weather related (thunderstorms, hail, wind, etc.). Facilities have 30 days after a weather event/national disaster occurs to submit DMRs or other required reporting documents.</p>	<p><i>Samples and measurements taken for the purpose of monitoring shall be representative of the monitored activity. <del>If a representative sample is not possible due to a natural disaster, environmental conditions, or weather, the facility should use one of the following NODI Codes: "K – Natural disaster (declared by President) T – Environmental conditions- monitoring not possible (hurricanes, high tides) V – Weather related (storms, hail, wind, etc.). Facilities have 30 days after a weather event/national disaster occurs to submit DMRs or other required reporting documents.</del></i></p> <p><b>Rationale:</b> The strikethrough sentences above are more suited for updated guidance and DMR instructions. If such language is included in the permit and NODI codes change during the permit term, then the permit will be outdated and potentially contain incorrect information. Whereas guidance and/or DMR instructions can more easily be updated than permit language. Therefore, the Joint Trades recommend updating 2007 Permit Offshore Discharge Monitoring Reports <i>INSTRUCTIONS FOR COMPLETING DISCHARGE MONITORING REPORTS (DMRs) UNDER OFFSHORE GENERAL PERMIT GMG290000</i>.</p> <p>In addition, the listed NODI codes require additional clarification because the code descriptions overlap. For example, Code K is for natural disasters, which may be a hurricane in the Gulf of Mexico. However, Code V is described as Weather-Related including storms. It is unclear to the regulated community what the appropriate code should be for a hurricane/tropical storm.</p>
<b>Part II.D.4</b>	<p>Permittees shall be responsible for submitting accurate monitoring results for all facilities which they have permit coverage. The monitoring results for each facility shall be reported on DMRs for each individual permitted feature authorized that has a monitoring requirement. Each individual permitted feature may authorize multiple points of discharge or outfalls. Points of discharge will be assigned limit sets based on discharge.</p>	<p>The Joint Trades offer the following suggested revisions to the proposed permit language:</p> <p><i>Permittees shall be responsible for submitting accurate monitoring results for all facilities which they have permit coverage. The monitoring results for each facility shall be reported on DMRs for each</i></p>

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		<p><i>individual permitted feature authorized that has a monitoring requirement. Each individual permitted feature may authorize multiple points of discharge or outfalls. <del>Points of discharge will be assigned limit sets based on discharge.</del></i></p> <p><b>Rationale:</b> The Joint Trades are requesting the language change to this section of the permit to provide clarity. The final sentence of this paragraph creates ambiguity, and descriptions such as the assignment of limit sets is better suited for permit guidance and instructions.</p>
<b>Part II.D.4</b>	<p>If discharge is not applicable for a facility, "no discharge" must be reported for that facility until an NOT is submitted. If a permittee or facility submits a "no discharge" DMR for a reporting period in which a discharge occurred, it is a violation of this permit, and the permittee shall submit corrected data as soon as the error is identified.</p>	<p>The Joint Trades recommend the following changes to the proposed permit language:</p> <p><i>If discharge is not applicable for a facility, "no discharge" must be reported for that facility until an NOT is submitted. If a permittee or facility submits a "no discharge" DMR for a reporting period in which a discharge occurred, it is a violation of this permit, and the permittee shall submit corrected data <b>no later than the following quarter.</b></i></p> <p><b>Rationale:</b> A definitive timeframe provides clarity to both the regulated community and the agency. In addition, correction of such an error may require operators to validate the information submitted on the DMR and obtain the necessary signatures of the responsible corporate official. This approach is consistent with other sections of the permit, particularly Part II.D.4.</p>
<b>Part II.D.7.a</b>	<p>The permittee shall report any noncompliance which may endanger health or the environment. Any information shall be reported to the Offshore 24-Hour Reporting Application Portal at the following address <a href="https://caedext.epa.gov/ords/caedext/f?p=OFFSHOREINCIDENT">https://caedext.epa.gov/ords/caedext/f?p=OFFSHOREINCIDENT</a> within 24 hours of the time the permittee becomes aware of the circumstances. A detailed report shall be submitted with the quarterly NetDMR. The report shall contain the following information:</p>	<p>The Joint Trades strongly recommend that EPA hold a training seminar and provide instructions for the regulated community on the new reporting system prior to the permit becoming effective.</p>
<b>Part II.D.7.c</b>	<p>All sheen events associated with Miscellaneous Discharges, Miscellaneous Discharges of seawater and freshwater to which treatment chemicals have been</p>	<p>The Joint Trades recommend the proposed permit language be changed as follows:</p>

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	<p>added, Well Treatment Fluids, Completion Workover Fluids, Pipeline Brine, Produced Water, Deck Drainage, Drill Cuttings, and Drilling Fluids must be reported under the twenty-four hour reporting requirements.</p>	<p><i>All sheens on the receiving water from permitted discharge points with free oil limitations must be reported under the twenty-four hour reporting requirements. If the online reporting system is not available or functioning, operators may submit the required notification via email to: INSERT EMAIL ADDRESS.</i></p> <p><b>Rationale:</b> The suggested red text above adds clarity that EPA is referring to discharges subject to the requirements of the permit. Sheens from other, non-permitted sources (typically traditional oil spills) are currently required to be reported immediately to the National Response Center. In addition, EPA has proposed language for produced water discharges for operators to document the cause of produced water sheens and that documentation of those sheens be available for inspection, as well as reported on DMRs.</p> <p>By restricting the 24-hour reporting requirements to discharges with free oil limitations, duplicative reporting and complexity of requirements is eliminated.</p> <p>However, if produced water is retained in the final permit as a sheen that requires 24-hour reporting, then EPA should provide some clarification that a sheen from produced water discharges may not be a non-compliance based on the outcome of the required sheen sampling.</p> <p>Similarly, treatment, completion, workover fluids are required to meet free oil limitations using the static sheen test. Often, the static sheen test is run prior to fluid discharge. If the fluid does not pass the static sheen test, then it is not discharged. Therefore, the Joint Trades are requesting that EPA clarify that if an effluent stream does not pass a static sheen test and, as a result, is not discharged to the receiving water then 24-hour reporting is not required.</p>

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		<p>Lastly, the regulated community needs a secondary method of submitting the required report in the event that the online reporting system is unavailable.</p>
<b>Part II.G.71</b>	<p>"Produced Water" means the water (brine) 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/water separation process.</p>	<p>The Joint Trades recommend the following changes to the proposed permit language:</p> <p><i>"Produced Water" means the water (brine) 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 <del>oil/water</del> oil/gas/water separation process.</i></p> <p><b>Rationale:</b> The definition change to provide clarity, be more inclusive and a more realistic approach with what we believe is current operations in industry. The basic separation process at any offshore production facility is designed to separate oil, natural gas and produced water into 3 distinct streams for processing, handling and/or treatment.</p>
<b>Part II.G</b>	NEW PROPOSED DEFINITION	<p>The Joint Trades recommend adding a new definition to the permit:</p> <p><i>"Subsea cleaning fluids" means acidic cleaning agents used to dissolve marine deposits on subsea equipment during subsea maintenance and intervention activities to assure proper sealing of operating equipment and to avoid ingress of extremely high subsea pressures and egress (losses of containment) of fluids to the environment.</i></p> <p><b>Rationale:</b> EPA provided this definition in the 2022 draft Fact Sheet that accompanied the proposed permit. The Joint Trades believe this definition is appropriate and should be included in the permit.</p>

ATTACHMENT B

August 19, 2003 Letter from S. Wilson regarding Radioactive Tracers



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION 6  
1445 ROSS AVENUE, SUITE 1200  
DALLAS, TX 75202-2733

AUG 19 2003

COPY

Mr. Tom Hampton  
President  
Pro Technics  
6316 Windfern, Room 310  
Houston, TX 77040

Dear Mr. Hampton:

Thank you for meeting with me on August 15, 2003 and supplying information on your product and its use in offshore oil and gas operations.

Based on the information you have presented, it appears that the discharge of well treatment fluids which contain Iridium-192 and Scandium-46 as propping agents would be in compliance with the requirements of the Western Gulf of Mexico Outer Continental Shelf NPDES General Permit for the Offshore Oil and Gas Subcategory (GMG290000). Use of such radioactive elements in very low concentrations has been examined in the process of issuing National Effluent Limitations Guidelines and in our permit development. I understand that Iridium-192 and Scandium-46 are generally used in concentrations less than 0.1 ppm (2000 pCi/gm) and they are likely to be further diluted by other constituents involved in the process. The discharge of such well treatment fluids is presently allowed under the NPDES general permit with no additional monitoring requirements other than for oil and grease and free oil.

Again, it was good to meet with you and obtain more information on your industry. Should you have additional questions please feel free to contact me by telephone at (214) 665-7511 or by E-mail at: [wilson.js@epa.gov](mailto:wilson.js@epa.gov).

Sincerely,

A handwritten signature in dark ink, appearing to read "J. Scott Wilson".

J. Scott Wilson  
Acting Chief  
NPDES Permits Section

## Comments on Permit Appendices and Permit Supporting Documents

The Joint Trades are offering the following comments on the proposed permit appendices and permit supporting documents.

### A. Appendix F – Permit Summary Table

The Joint Trades request that the permit summary table should be deleted from the permit. The permit summary table is not necessary since it is repetitive of the permit limitations and requirements described in the permit itself. The information in the permit summary table is better suited for permit guidance and instructions. Inclusion of this type of information in the permit itself creates opportunities for discontinuity and misalignment with the permit text.

However, if the permit summary table is retained, it must be updated to align with the permit language. The Joint Trades have attached (Attachment D) a “redline” version of the proposed permit summary table that highlights areas where we believe there is inconsistency and inaccuracies in the table.

Most importantly, if the permit summary table is retained in the final permit, it is imperative that a statement be added to the permit summary table that states that the permit language, not the table, is the enforceable requirements of the permit.

### B. Fact Sheet

The Joint Trades would like to note one item regarding the proposed Fact Sheet. The Fact Sheet includes the following statement regarding the industry-wide treatment, completion and workover fluids toxicity study:

*46% of the samples collected showed acute toxicity for one or more species indicating that there is reasonable potential for acute toxicity stemming from well treatment, completion and workover fluid discharge. Therefore, in accordance with 40 CFR §122.44 (d)(1)(iv), acute WET limits are included the proposed permit. Chronic toxicity monitoring will be a requirement of the proposed permit to assess potential for chronic effects.*

However, if the actual volume discharged is used to determine the critical dilution for those discharges lasting less than 24 hours, then 25 of the 28 (89%) samples analyzed did not exhibit acute toxicity at the critical dilution. During the industry-wide TCW study estimated flow rates were calculated using the total volume discharged divided by discharge duration to determine an hourly discharge rate. When this hourly rate is extrapolated to a 24-hour day the estimated discharge rate is conservatively overestimated.

For example, if 100 barrels of fluid are discharged in 1 hour, the discharge rate is 100 barrels/hour. Extrapolated to a “barrel per day” rate value, one could estimate a daily rate of 2400 barrels/day. However, this is not representative of what was actually discharged. 100 barrels was discharged in 1 hour and the discharge ceased, therefore, a more representative estimate of actual discharge rate is 100 barrels/day.

This illustrates the importance of clearly defining how discharge rates are used to determine critical dilution, especially if EPA proceeds with these requirements as a compliance limitation. This type of approach, use of the total volume discharged for discharges lasting less than 24 hours, is consistent with how discharge rates are estimated for other short duration discharges authorized by the permit.



### C. Ocean Discharge Evaluation Criteria

The Joint Trades offer two observations regarding the Ocean Discharge Evaluation Criteria.

1. *Evaluation of discharges* – The Ocean Discharge Evaluation Criteria does not appear to provide a full evaluation of all discharge streams authorized by the permit. Produced water and drilling fluids are discussed extensively, but other authorized discharges such as deck drainage, sanitary waste, and miscellaneous discharges are not addressed. EPA should consider a more comprehensive review to better align the criteria with the authorized discharges.
2. *List of threatened and endangered species* – The Joint Trades recommend that the list of threatened and endangered species in the Ocean Discharge Evaluation Criteria be reviewed to determine if the list is consistent with other documents describing Gulf of Mexico threatened and endangered species. The Joint Trades have identified 3 resources that may be helpful:
  - a. NOAA Fisheries [Threatened and Endangered Species List Gulf of Mexico](#)
  - b. NOAA Fisheries [Biological Opinion on the Federally Regulated Oil and Gas Program Activities in the Gulf of Mexico](#) (also known as “the BiOp).
  - c. BOEM’s 2023-2028 National Outer Continental Shelf Oil and Gas Leasing Program [Draft Programmatic Environmental Impact Statement](#).

### D. Essential Fish Habitat Assessment

The Essential Fish Habitat Assessment includes the same statement as the Fact Sheet regarding the industry-wide treatment, completion and workover fluids toxicity study:

*46% of the samples collected showed acute toxicity for one or more species indicating that there is reasonable potential for acute toxicity stemming from well treatment, completion and workover fluid discharge. Therefore, in accordance with 40 CFR §122.44 (d)(1)(iv), acute WET limits are included the proposed permit. Chronic toxicity monitoring will be a requirement of the proposed permit to assess potential for chronic effects.*

However, if the actual volume discharged is used to determine the critical dilution for those discharges lasting less than 24 hours, then 25 of the 28 (89%) samples analyzed did not exhibit acute toxicity at the critical dilution. During the industry-wide TCW study estimated flow rates were calculated using the total volume discharged divided by discharge duration to determine an hourly discharge rate. When this hourly rate is extrapolated to a 24-hour day the estimated discharge rate is conservatively overestimated.

For example, if 100 barrels of fluid are discharged in 1 hour, the discharge rate is 100 barrels/hour. Extrapolated to a “barrel per day” rate value, one could estimate a daily rate of 2400 barrels/day. However, this is not representative of what was actually discharged. 100 barrels was discharged in 1 hour and the discharge ceased, therefore, a more representative estimate of actual discharge rate is 100 barrels/day.

This illustrates the importance of clearly defining how discharge rates are used to determine critical dilution, especially if EPA proceeds with these requirements as a compliance limitation. This type of approach, use of the total volume discharged for discharges lasting less than 24 hours, is consistent with how discharge rates are estimated for other short duration discharges authorized by the permit.

## **ATTACHMENT D**

Redline of the Permit Summary Table

## Appendix F

Table 1. Effluent Limitations, Prohibitions and Monitoring Requirements (Samples collected and prepared for analyses must be representative of the monitored activities. The following are enforceable permit limits and a violation of this appendix is a violation of the permit and/or the Clean Water Act:)

For Reference Only. In the event of a discrepancy, the language in the text of the permit is the enforceable condition.

Monitoring Requirement				
Discharge	Regulated & Monitored Parameter	Discharge Limitation/ Prohibition	Measurement Frequency	Sample Type/Method Recorded Value(s)
Drilling Fluids...	Free Oil.....	No free oil.....	Once/week (*1) XXXX when discharging	Static sheen See Part I.D.6 Number of days sheen observed
	Toxicity (*2) (*1)	30,000 ppm daily min	Once/month.....	Grab..... 96-hr LC50
	96-hr LC50	30,000 ppm monthly avg min	Once/end of well (*3) (*2)	Grab..... 96-hr LC50
			Once/month.....	Grab..... 96-hr LC50
	Discharge Rate....	Maximum discharge rate of 1,000 barrels/hour..... Refer to Part I.B.1.b for facilities with proximity to areas of biological concern.	Once/hour (*1) XXXX when discharging	Estimate..... Max. hourly rate
	Discharge Rate for controlled areas	(*4).....	Once/hour (*1).....	Measure..... Max. hourly rate
	Mercury and cadmium in barite	No discharge. of drilling fluids to which barite has been added, if such barite contains mercury in excess of 1.0 mg/kg or cadmium in excess of 3.0 mg/kg (dry weight)	Once prior to drilling each well (*6) (*3)	Absorption Spectrophotometry See Part I.B.1.b mg mercury/kg barite mg cadmium/kg barite
	Oil Based or Inverse Emulsion Drilling Fluids	No discharge		
	Oil Contaminated... Drilling Fluids	No discharge (*34) (*4)		
	Diesel Oil.....	No discharge of drilling fluids to which diesel oil has been added as a lubricant		
	Mineral Oil.....	Mineral oil may be used only as a carrier fluid, lubricity additive, or pill		
	Non aqueous Based.. Fluids	No discharge except that which adheres to drill cuttings and small volume discharges (*5)		

Table 1. (Continued)

Discharge	Regulated & Monitored Parameter	Discharge Limitation/ Prohibition	Measurement Frequency	Monitoring Requirement	
				Sample Type/Method	Recorded Value(s)
All Drill Cuttings Free oil.XXXXXXX	No free oil.XXXXXXX.	Once/week(*).XXX	Static sheen.XXX	Number of Days sheen observed	
	Free Oil	No free oil.	Once/week when discharging	Static Sheen See Part I.D.6	Number of Days Sheen Observed
	Toxicity(*)(2) 96-hr LC50 (*1)	No discharge of cuttings generated using drilling fluids which exhibit a toxicity of less than 30,000 ppm daily min. or 30,000 ppm monthly avg. min.			
	Mercury and cadmium..... in barite	No discharge. if generated using drilling fluid to which barite is added which contains mercury in excess of 1.0 mg/kg or cadmium in excess of 3.0 mg/kg			
	Cuttings generated using Oil Contaminated Drilling Fluids	No discharge			
	Cuttings generated using drilling fluids to which Diesel Oil has been added	No discharge			
	Cuttings generated using drilling fluids to which Mineral Oil has been added	Mineral oil may be used only as a carrier fluid, lubricity additive, or pill			

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Table 1. (Continued)

Discharge	Regulated & Monitored Parameter	Discharge Limitation/ Prohibition	Measurement Frequency	Monitoring Requirement	
				Sample Type/Method	Recorded Value(s)
Stock Limits for Drill Cuttings Generated using Non aqueous Based Drilling Fluids	Polynuclear Aromatic.. Hydrocarbons (PAH)	0.00001 grams PAH per gram of base fluid	Once/year on each base fluid blend	PAH content of Oil by HPLC or EPA Method 1631 (see 40 CFR 435.11(a))	gram PAH / gram stock base fluid
	Sediment Toxicity.....	Ratio of 10-day LC50s not to exceed 1.0(*5)	Once/year on each base fluid blend	ASTM method E1367-99(*8)	Ratio of C16-C18 to LC50 to stock base fluid LC50
	Biodegradation Rate...	Ratio of cumulative gas productions Biodegradation rate ratio.. not to exceed 1.0 (*9) (*7)	Once/year on each base fluid blend	See Parts I.D.7 and I.D.9 Modified ISO 11734:1995 (*10) XXXXXXXX	Ratio of C16-C18 to Biodeg to stock base fluid biodeg
Discharge Limits for Cuttings Generated using Non aqueous Based Drilling Fluids	Sediment Toxicity.....	Ratio of 4-day LC50s not to exceed 1.0(*6)	Once/month(*35) (*8)	See Parts I.D.8 and I.D.9 Modified ASTM Method E1367-99(*12) XXXXXX	Ratio of C16-C18 to LC50 to stock base fluid LC50
	Formation Oil.....	No Discharge.....	Once prior to drilling	GCMS (*13)	Pass/Fail
			Once/week.....	RPE (*14)	Pass/Fail
	Base Fluids Retained on Cuttings	6.9% for drilling fluids which meet stock limitations for C16-C18 internal olefin; 9.4% for drilling fluids which meet stock limitations for C12-C14 ester or C8 ester	Once/day (*17) (*9)	See Part I.D.12 Retort Test Method (*18) See Part I.D.13	Percent retained

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Table 1. (Continued)

Discharge	Regulated & Monitored Parameter	Discharge Limitation/ Prohibition	Measurement Frequency	Monitoring Requirement	
				Sample Type/ Method	Recorded Value(s)
Deck Drainage.....	Free Oil.....	No free oil.....	Daily(*19,XXX,XX)(*10)	Visual sheen... See Part I.D.5	Number of days sheen observed
Produced Water.....	Oil and grease.....	42 mg/l daily max.,... 29 mg/l monthly avg.	Once/month.....	Grab(*20)XXX Grab/Composite (*11)	Daily max., monthly average
	Toxicity.....	0 (*21)X (*12)	Rate Dependent (*13) Twice/Year(*28) See Part I.B.4.b	Grab/Composite (*37) (*11)	See Part I.D.3
	Free Oil.....	Monitor.....	Daily (*19,*29) (*10)	Visual sheen... See Part I.D.5	Number of days sheen observed
	Flow (bbl/day).....	Monitor.....	Once/month.....	Estimate.....	Monthly Average
Produced Sand (includes propping agent).....	No Discharge, including propping agents		Once/year(*37)XXX	EstimateXXX	Highest monthly flow
Well treatment fluids, completion fluids, workover fluids (includes packer fluids), and pipeline fluids(*22)XXX (*14)	Free oil.....	No free oil.....	Daily(*1)XXX when discharging	Static sheen.... See Part I.D.6	Number of days sheen observed
	Oil & Grease.....	42 mg/l daily max., 29 mg/l monthly avg.	Once/month.....	Grab(*20)XXX	Daily max., monthly average
	Toxicity 48 Hour Acute	0 (*21)X (*12)	Per Discharge	Composite....	See Part I.D.4
	Toxicity 7-day NOEC	Report	Per Discharge	Grab.....	See Part I.D.3
Sanitary waste(*24) continuously manned for 30 or more days by 10 or more persons	Residual chlorine(*25)X (*15)	1 mg/l (minimum).....	Once/month..... (*16)	Grab.....	Concentration
	Solids.....	No Floating Solids...	Daily..... (*16)	Observation(*27) (*17)	Number of days solids observed
Sanitary waste(*24) continuously manned for thirty or more days by 9 or fewer persons or intermittently by any number	Solids.....	No floating solids...	Daily..... (*16)	Observation(*27) (*17)	Number of days solids observed
Domestic waste(*26)X..... (*18)	Solids.....	No floating solids or foam	Daily.....	Observation(*27) (*17)	Number of days observed

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**Redline of the Permit Summary Table**

Table 1. (Continued)

Discharge	Regulated & Monitored Parameter	Discharge Limitation/ Prohibition	Measurement Frequency	Monitoring Requirement	
				Sample Type/ Method	Recorded Value(s)
<b>All</b> Miscellaneous discharges: <del>Desalination unit discharge; blowout preventer fluid; uncontaminated ballast water; uncontaminated bilge water; uncontaminated freshwater; mud; cuttings and cement at seafloor; uncontaminated seawater; boiler blowdown; source water and sand; diatomaceous earth filter media; excess cement slurry; bulk pipeline brine; transfer powdersub sea wellhead preservation fluids; subsea cleaning fluids; sub-sea production control fluid; umbilical steel tube storage fluid; leak tracer fluid; riser tensioner fluids. (See Part I.B.10 for more restrictions and reporting requirements for unused cement slurry)</del> <b>Unused Cement Slurry</b>	Free oil.....	No free oil.....	Daily <del>(*)</del> <b>(*)19</b>	Visual sheen.. or Static Sheen	Number of days sheen observed
	Toxicity..... <sup>(*)20</sup>	7-day NOEC < 50 mg/l (product-specific NOEC for powder dye)  <b>(*)22</b>	Once/Year.....	Grab.....	See Part I.D.3
	Treatment chemicals	Most stringent of: EPA label registration, maximum manufacturers recommended dose, or 500 mg/l.			
	Flow Volume.	Monitor.....	Once/month....	Estimate.....	Monthly Average
<del>excess seawater which permits the continuous operation of fire control and utility lift pumps; excess seawater from pressure maintenance and secondary recovery projects; water released during training of personnel in fire protection; seawater 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; water used during Dual Gradient Drilling</del>	Free oil.....	No free oil.....	<del>Once/week... Daily</del>	Visual Sheen.. <b>(*)22</b> <b>(*)23</b> or Static Sheen	Number of days sheen observed
	Toxicity.....	0 <del>(*)20</del> <b>(*)24</b>	Rate Dependent <b>(*)21</b> See Part I.B.11.b	Grab.....	See Part I.D.4
<b>Hydrate Control Fluids (if discharge alone)</b>	Toxicity <sup>(*)23</sup> ... <b>(*)21</b>	7-day NOEC (Product-specific NOEC)..... <del>product-specific NOEC for powder dye</del>	Once/year	Grab.....	See Part I.D.3 <b>3</b>
<b>Pipeline Brines</b>	Free Oil Oil & Grease Priority Pollutants Toxicity	No Free Oil. 29 mg/l maximum No content except in trace amounts. 7-day NOEC (or 48-hour if duration of total discharge is a shorter period of duration)	Daily Once prior to applying as preservation fluids  Per Discharge	Visual Sheen or Static Sheen	See Part I.D.3

During a fire emergency, no permit limitations.

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Table 1 (Continued)

		Monitoring Requirement			
<u>Discharge</u>	<u>Regulated &amp; Monitored Parameter</u>	<u>Discharge Limitation/ Prohibition</u>	<u>Measurement Frequency</u>	<u>Sample Type/Method</u>	<u>Recorded Value(s)</u>
Cooling Water Intake Structure					
Non-Fixed and Fixed with Sea Chest	Intake Screen Velocity	Maximum not to exceed 0.5 ft/sec	Continuous	Measuring Device	Maximum value
	Visual/remote Inspection	Report (*25)	<del>Once/month(*38)</del> Once every 6 months	Observation	Fish number
Fixed without Sea Chest					
	Intake Screen Velocity	Maximum not to exceed 0.5 ft/sec	Continuous	Measuring Device	Maximum value
	Visual/remote Inspection	Report (*25)	<del>Once/month(*38)</del> Once every 6 months	Observation	Fish number
	Entrainment Study /Sampling (*26)	.....	..... Dependent on the depth of the intake structure	..... 24-hour entrainment samples from water withdrawn at all CWISs	..... Entrainment per sample event; Total annual entrainment



Footnotes

~~\*1 XXXXXXXXXXXXXXXX~~

\*1 ~~\*2X~~ Suspended particulate phase (SPP) with *Americamysis bahia* (formerly *Mysidopsis bahia* as referred to in Method 2007.0 and 1007.0, and DMRs) following approved test method. The sample shall be taken beneath the shale shaker; or if there are no returns across the shaker then the sample must be taken from a location that is characteristic of the overall mud system to be discharged.

\*2 ~~\*3X~~ Sample shall be taken after the final log run is completed and prior to bulk discharge.

~~\*4 XXXXXXXXXXXXXXXX~~

~~\*5 XXXXXXXXXXXXXXXX~~

\*3 ~~\*6X~~ Analyses shall be conducted on each new stock of barite used. ~~If more than one well is being drilled at a site, new analyses are not required for subsequent wells, provided that no new supplies of barite have been received since the previous analysis.~~

\*5 ~~\*7X~~ ~~The ratio of the 10-day LC50 of C16-C18 internal olefin divided by the 10-day LC50 of the base fluid shall not exceed 1.0. See Part I.B.2.c.1 of this permit.~~  
The ratio of the 10-day LC50 of C16-C18 internal olefin or C12-C14 or C8 ester reference fluid divided by the 10-day LC50 sediment toxicity test with *Leptocheirus plumulosus* of the base fluid shall not exceed 1.0.

~~\*8 XXXXXXXXXXXXXXXX~~

\*7 ~~\*9X~~ ~~The ratio of the cumulative gas production (ml) of C16-C18 internal olefin divided by the cumulative gas production (ml) of stock base fluid, both at 275 days, shall not exceed 1.0. See Part I.B.2.c.1 of this permit.~~  
The ratio of the cumulative gas production (ml) of C16 - C18 internal olefin or C12-C14 or C8 ester reference fluid divided by the cumulative gas production (ml) of stock base fluid, both at 275 days, shall not exceed 1.0. See Part I.B.2.c.1 of this permit.

~~\*10 XXXXXXXXXXXXXXXX~~

\*6 ~~\*11X~~ ~~The ratio of the 4-day LC50 of C16-C18 internal olefin divided by the 4-day LC50 of the base fluid shall not exceed 1.0. See Part I.B.2.c.2 of this permit.~~  
The ratio of the 4-day LC50 of C16 - C18 internal olefin reference drilling fluid divided by the 4-day LC50 of the drilling fluids, removed from cuttings at the solids control equipment, shall not exceed 1.0.

~~\*12 XXXXXXXXXXXXXXXX~~

~~\*13 XXXXXXXXXXXXXXXX~~

~~\*14 XXXXXXXXXXXXXXXX~~

\*8 ~~\*15 XXXX~~ Drilling fluids which meet the stock base fluid limitations for C16-C18 internal olefins. Monitoring shall be performed at least once per month on drilling fluids which meet the stock limitations for a C16-C18 internal olefin. For drilling fluids which meet stock limitations for C12-C14 ester or C8 ester, monitoring shall be performed at least once per well at the end of drilling with nonaqueous based drilling fluids.

~~\*16 XXXX~~ Drilling fluids which meet the stock limitations for C12-C14 ester or C8 ester.

\*9 ~~\*17X~~ Except when meeting the conditions for the Best Management Practices described in Part I.B.2.c of this permit. Operators conducting fast drilling shall collect and analyze samples once per 500 feet or a maximum of three per day.

~~\*18 XXXXXXXXXXXXXXXX~~

\*10 ~~\*19X~~ When discharging and facility is manned. Monitoring shall be accomplished during times when observation of a visual sheen on the surface of the receiving water is possible in the vicinity of the discharge.

\*11 ~~\*20X~~ May be based on either a grab sample or a composite which consists of the arithmetic average of the results of grab samples collected at even intervals during a period of 24-hours or less. (Example: If four samples are collected within a 24-hour period, samples must be 6 hours apart)

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- \*12 ~~\*21X~~ See Appendix D, Table 1 of this permit for critical dilutions. A permittee is in compliance with the WET limit when the NOEC is equal to or greater than the permittee's critical dilution, and this is reported as a "0" in the DMR. A WET violation happens when the NOEC is less than the permittee's critical dilution, and this is reported as "1" in the DMR.
- \*14 ~~\*22X~~ No discharge of priority pollutants except in trace amounts. Information on the specific chemical composition shall be recorded but not reported unless requested by EPA.
- \*19 ~~\*23X~~ When discharging for muds, cuttings, and cement at the seafloor, blowout preventer fluid, subsea cleaning fluids, sub sea wellhead preservation fluids, subsea production control fluid, umbilical steel tube storage fluid, leak tracer fluid, and riser tensioner fluids. All other miscellaneous discharges: when discharging, discharge is authorized only during times when visual sheen observation is possible, unless the static sheen method is used. Uncontaminated seawater uncontaminated freshwater, source water and source sand, uncontaminated bilge water, and uncontaminated ballast water from platforms on automatic purge systems may be discharged without monitoring from platforms which are not manned.
- \*16 ~~\*24X~~ Any facility operator which properly operates and maintains a marine sanitation device (MSD) that complies with pollution control standards and regulations under section 312 of the Act shall be deemed to be in compliance with permit limitations for sanitary waste. The MSD shall be tested yearly for proper operation, and test results maintained at the facility.
- \*15 ~~\*25X~~ Hach method CN-66 DPD approved. Minimum of 1 mg/l and maintained as close to this concentration as possible.
- \*18 ~~\*26X~~ The discharge of food waste is prohibited within 12 nautical miles from nearest land. Comminuted food waste able to pass through a 25 mm mesh screen (approximately 1 inch) may be discharged more than 12 nautical miles from nearest land.
- \*17 ~~\*27X~~ Monitoring shall be accomplished during daylight by visual observation of the surface of the receiving water in the vicinity of sanitary and domestic waste outfalls. Observations shall be made following either the morning or midday meals at a time of maximum estimated discharge.
- ~~\*28XXXXTwice per calendar year. Tests must be at least 90 days apart.~~
- ~~\*29XXXXSee Part C.B.4.B of this permit.~~
- \*24 ~~\*30X~~ See Appendix D, Table 2 of this permit for critical dilutions. A permittee is in compliance with the WET limit when the NOEC is equal to or greater than the permittee's critical dilution, and this is reported as a "0" in the DMR. A WET violation happens when the NOEC is less than the permittee's critical dilution, and this is reported as "1" in the DMR.
- ~~\*31XXXXSee Part C.B.4.B of this permit.~~
- \*23 ~~\*32X~~ Monitoring for free oil on discharges from existing piping and existing pipelines shall be performed at least three times per discharge as follows: 1) within thirty minutes after commencement of discharge; 2) at the estimated middle of the discharge; and 3) within fifteen minutes before or after the discharge has ceased.
- \*21 ~~\*33X~~ Toxicity test is waived if the discharge of methanol is less than 20 bbl within a 7-day period or the discharge of ethylene glycol is less than 200 bbl within a 7-day period.
- \*4 ~~\*34X~~ The discharge of drilling fluids which contain waste engine oil, cooling oil, gear oil or any lubricants which have been previously used for purposes other than borehole lubrication, is prohibited.

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*8	<del>35X</del>	For drilling fluids which meet stock limitations for C12-C14 ester or C8 ester, monitoring shall be performed at least once per well at the end of drilling with non-aqueous based drilling fluids.	Monitoring shall be performed at least once per month on drilling fluids which meet the stock limitations for a C16-C18 internal olefin. For drilling fluids which meet stock limitations for C12-C14 ester or C8 ester, monitoring shall be performed at least once per well at the end of drilling with nonaqueous based drilling fluids.
	<del>36X</del>	A minimum of three (3) samples shall be collected as grabs or composites.	
*13	<del>37X</del>	Highest monthly flow shall be reported in the month of December.	At the end of each calendar year (December), the highest estimated monthly flow rate recorded during the previous 12 months will be used to determine the frequency of toxicity testing for the following calendar year.
*25	<del>38X</del>	Number of fish/shellfish impinged and estimated screen area blockage for each screen for months when inspections are conducted.	
	<del>26X</del>	The permittees who completed or participated in the previous "Gulf of Mexico Cooling Water Intake Structure Entrainment Monitoring Study" or have performed entrainment monitoring for two years, may submit Southeast Area Monitoring and Assessment Program (SEAMAP) data, instead.	
	<del>20X</del>	Fluids which are used as subsea wellhead preservation fluids, subsea production control fluids, umbilical steel tube storage fluids, leak tracer fluids made without powder dye, and riser tensioning fluids shall have a 7-day No Observable Effect Concentration (NOEC) of no less than 50 mg/l prior to the discharge. For leak tracer fluid made from powder dye, the maximum concentration to be discharged shall be no greater than is the 7-day NOEC for that specific powder dye; the 50 mg/l NOEC limit rule does not apply to leak tracer fluid made from powder dye.	
	<del>22X</del>	Discharges of unused cement slurry due to equipment failure during the cementing job are limited to once per calendar year per facility. Discharges of unused cement slurry due to off-specification during the cementing job are limited to one discharge per well.	