# Department of Environmental Conservation Response to Comments

For

# Alaska Pollutant Discharge Elimination System

Individual Permit AK0055883 – Hilcorp Alaska, LLC Granite Point Platform Supplemental Production Drilling

Public Noticed April 26, 2019 – May 28, 2019

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Alaska Department of Environmental Conservation Wastewater Discharge Authorization Program 555 Cordova Street Anchorage, AK 99501

1	Intro	Introduction		
	1.1	Summary of Facility / Permit1		
	1.2	Opportunities for Public Participation1		
	1.3	Final Permit1		
2	Con	nment Received from Matanuska-Susitna Borough2		
3	Con	nment Received from Chickaloon Village Traditional Council		
	3.1	Comment Regarding the Authorization of Discharges		
4	Con	nments Received from RCAC		
	4.1	Comment Regarding the Review Period		
5	Con	nments Received from Inletkeeper		
	5.1	Comment Regarding the Review Period		
6	Con	nments Received from Hilcorp4		
	6.1	Comments Regarding the Individual Permit Schedule of Submissions		
	6.2	Comment Regarding Individual Permit Section 2.1.4.1 and Fact Sheet 6.1.4.1		
	6.3	Comment Regarding Individual Permit Section 2.2.1 and Fact Sheet Section 6.2.1		
	6.4	Comment Regarding Individual Permit Section 2.3 and Fact Sheet Section 6.3		
	6.5	Comment Regarding Individual Permit Section 2.5.1.1		
	6.6	Comment Regarding Individual Permit Section 2.5.1.2		
	6.7	Comments Regarding Fact Sheet Front Page		
	6.8	Comment Regarding Fact Sheet Section 1.1		
	6.9	Comment Regarding Fact Sheet Subsection Headers		
	6.10	Comment Regarding Fact Sheet Section 3.3		
	6.11	Comment Regarding Fact Sheet Section 4.3.1		
	6.12	Comment Regarding Fact Sheet Section 4.3.1.2		
	6.13	Comment Regarding Fact Sheet Section 8.4.2.1.3		
	6.14	Comment Regarding Fact Sheet Appendix C – Definitions		

# 1 Introduction

# 1.1 Summary of Facility / Permit

AK0055883 - Hilcorp Alaska, LLC, Granite Point Platform Supplemental Production Drilling (Permit) authorizes certain discharges and mixing zones to state waters in Cook Inlet. The Granite Point Platform (GPP) is an offshore platform associated with oil and gas development and is located at the west side of Cook Inlet in proximity to Granite Point. Hilcorp Alaska, LLC (Hilcorp) proposes to conduct production drilling operations at GPP to increase oil and gas production. The GPP Supplemental Production Drilling Project (GPP Project) will involve moving an oil and gas mobile offshore drilling unit (MODU) to the site. Because the MODU will be physically located over GPP, the associated discharges are considered to be from GPP. Two discharges, noncontact cooling water and uncontaminated ballast water, are not authorized for GPP under the administratively extended general permit AKG-31-5000. Although GPP is authorized to discharge graywater under AKG-31-5000, the MODU will discharge graywater from a separate treatment unit, which requires a separate APDES permit. As a result, these three wastewater discharges associated with the operation of the MODU require an individual APDES permit.

# 1.2 Opportunities for Public Participation

The Alaska Department of Environmental Conservation (DEC or Department) issued the Permit after considering all substantive public comments. To ensure public, agency, and tribal notification and opportunities for participation, DEC:

- Notified potentially affected tribes and local governments that DEC would be working on this permit via letter, fax and/or email;
- Posted the public notice on the Department's public notice web page April 26, 2019 for a 30-day public review on the Draft Permit and Fact Sheet;
- Posted the Draft permit and its associated fact sheet on-line April 26, 2019 and notified tribes, local governments and other agencies; and
- Sent email notifications via the APDES Program List Serve when the Draft permit documents were available for review.

Hilcorp waived its right to review the preliminary draft and the proposed final permit documents, therefore the Preliminary Draft and the Proposed Final documents were not prepared. DEC requested comments on the Draft Permit and Fact Sheet from Hilcorp, Environmental Protection Agency, National Marine Fishery Services, United States Fish and Wildlife Service, and State agencies including, but not limited to, the Alaska Departments of Fish and Game and Natural Resources, as well as the City of Anchorage, Chickaloon Village Traditional Council, Cook Inlet Regional Citizens Advisory Council (RCAC), Eklutna Native Village, City of Homer, City of Kachemak, City of Kenai, Kenai Peninsula Borough, Kenaitze Indian Tribe, Knik Tribal Council, Matanuska-Susitna Borough, Native Village of Nanwalek, Ninilchik Traditional Council, Native Village of Port Graham, Village of Salamatof, Salamatof Native Association, City of Seldovia, Seldovia Village Tribe, City of Soldotna, and the Native Village of Tyonek. During the 30-day public review and comment period, the Department received comments on the Draft Permit and Fact Sheet from RCAC, the Matanuska-Susitna Borough and Trustees for Alaska on behalf of Cook Inletkeeper (Inletkeeper).

This document summarizes the comments submitted and the justification for any action taken or not taken by DEC in response to the comments received.

# **1.3 Final Permit**

The Final Permit was adopted by the DEC on June 7, 2019. There were minor changes from the Draft Permit and Fact Sheet to correct typographical and grammatical errors and to clarify or update

information. There were also some changes that were outgrowths from comments received. Comments received and the Department's response to comments (RTC) are presented in this document. Changes resulting from comments received are identified in this RTC document and are reflected in the Final Permit and Fact Sheet.

# 2 Comment Received from Matanuska-Susitna Borough

DEC received a comment on the Draft Permit and Fact Sheet from the Matanuska-Susitna Borough.

After reviewing documents related to this permit request, we have no objection to the request.

#### **DEC Response:**

DEC appreciates the no objection comment. No changes were made based on this comment.

# 3 Comment Received from Chickaloon Village Traditional Council

DEC received comments on the Draft Permit and Fact Sheet from the Chickaloon Village Traditional Council.

### **3.1** Comment Regarding the Authorization of Discharges

Our Traditional Territory includes Upper Cook Inlet. The fish and aquatic resources that we depend upon pass through Cook Inlet on their way to Upper Cook Inlet and the water quality of Cook Inlet impacts our fish and aquatic resources, and therefore the health of our Tribal citizens.

The Alaska Pollutant Discharge Elimination System (APDES) Individual Permit AK 0055883 allows for a mixing zone in Cook Inlet for graywater, noncontact cooling water and uncontaminated ballast water, including pollutants resulting from facility processes, waste streams and operations defined in the permit application process. These unspecific pollutants could negatively impact water quality even when in trace amounts. It is not appropriate for DEC to approve discharges that will knowingly contaminate, pollute, and negatively impact water quality in Alaska.

### **DEC Response:**

As described in Fact Sheet section 5.4, the existing uses of Cook Inlet, including those described within this comment, were considered during the development of the water quality-based effluent limits (WOBELs). When considering the impacts to the receiving water for discharges issued by the Department, DEC is obligated to ensure that the discharges comply with 18 AAC 70 - Alaska Water Quality Standards (WQS). WQS are comprised of use classifications for the waterbody, criteria that ensures protection of those uses, and an Antidegradation Policy. To ensure protection of existing or designated uses, DEC assumes that all uses in WQS apply to the coastal waters of Cook Inlet. While mixing zones may be authorized by the Department to allow for an initial zone of mixing of the effluent in order to meet criteria, the mixing zone authorization must be evaluated per 18 AAC 70.240 [2003 Version]. Fact Sheet Section 4 describes the mixing zone analysis compliant with the WQS. Furthermore, the mixing zones have been adequately sized to ensure that all water quality criteria are met at, and beyond, the boundary of the authorized mixing zones. Because criteria is developed to be protective of existing or designated uses of the receiving water, DEC has assumed all uses apply, and all criteria are being met at and beyond the mixing zone boundaries, the waterbody as a whole is being protected. Hence, the water quality in Upper Cook Inlet will not be negatively impacted by the authorized discharges.

No changes were made in either the Permit or Fact Sheet as a result of this comment.

# 4 Comments Received from RCAC

During the public notice of the Draft Permit and Fact Sheet, DEC received a request to extend the public notice period from RCAC for three separate, but related, Cook Inlet oil and gas permits that were simultaneously under public review. This extension request included two comments that DEC could not respond to at the time given the Draft Permit and Fact Sheet were still under public review. The following sections provide responses to those comments now that the public notice has officially closed.

### 4.1 Comment Regarding the Review Period

The Draft General Permit for Cook Inlet Oil and Gas was issued for a 90-day public review and then later, the Permit was also issued for a 30-day public review that closes in approximately the same timeframe. RCAC states that DEC provided insufficient explanation for the dual public notices and the complexities and the simultaneous review periods places an unrealistic expectation on the public to review, understand, and effectively participate.

#### **DEC Response:**

DEC did not extend the public comment period for the Permit because the Permit has just three discharges that are regulated equivalently in the Cook Inlet General Permit that was issued for a 90-day review. Furthermore, extending the public notice period for the Permit would negatively affect the scheduled drilling activities such that Hilcorp's plans for resource development could be postponed. The Permit is being issued separately from the Cook Inlet General Permit due to scheduled production drilling in July 2019 by the applicant. Whereas, the Cook Inlet General Permit will not become effective in time for the discharges from this activity as scheduled to be authorized under it. The Cook Inlet General Permit and the Permit were developed to have equivalent requirements for the overlapping discharges so the reviews would not be mutually exclusive. Hence, the public review of the general permit, which began 65 days earlier than the public review of the Permit, is directly applicable to these overlapping discharges and the comments are transferrable. There was insufficient rationale provided by RCAC for DEC to justify an extension given these circumstances. For more information, see DEC Response 5.1.

No changes were made to the Permit or Fact Sheet to as a result of this comment.

# 5 Comments Received from Inletkeeper

DEC received comments on the Draft Permit and Fact Sheet from Inletkeeper.

# 5.1 Comment Regarding the Review Period

Inletkeeper submitted a request for permit extension on behalf of Cook Inlet Keeper during the comment period for the Permit. This request included comments that DEC could not respond to at the time due to the comments being received during the formal public notice period; responses would violate the public procedures. The basis for the request was that there was insufficient time for the public to adequately understand the nuances of the different permits for the overlapping discharges between the Cook Inlet General Permit and the Permit. Inletkeeper also indicated they were confused as to why DEC is seeking to issue both an individual permit and a general permit simultaneously and this does not provide transparency or clarity for the public with respect to how the overlapping discharges will be treated or

monitored. Inletkeeper states further that it is more appropriate for DEC to regulated discharges using the Permit instead of the Cook Inlet General Permit and recommended removing these requirements from the general permit and informing the public of this decision.

#### **DEC Response:**

Because the limitations and other conditions of the Permit were developed to be equivalent using the same updated information and procedures as those for the Cook Inlet General permit, there are no anticipated nuances with respect to the three discharges authorized in the Permit. Accordingly, the comments provided for the Draft Cook Inlet General Permit should be transferrable to the Permit for those three discharges. Therefore, DEC determined that 30 days is sufficient for the Permit. See RCAC Comment Response 4.1 for the rationale for issuing the Permit and not extending the public comment period

DEC disagrees with the Inletkeeper statement that individual permits are more appropriate to regulate the three discharges authorized by the Permit. Given that the requirements in both the individual and general permit for these discharges are equivalent, the same level of protection is being attained in the receiving water. Although GPP is currently authorized for certain other discharges under the existing AKG-31-5000, the proposed discharges under the Permit are not included in those authorized discharges and there is no ability to obtain new authorizations under the expired AKG-31-500. Given the schedule for production drilling is in July 2019, pending authorizations for these discharges under a reissued Cook Inlet General Permit will not be available when needed by the applicant. Therefore, DEC has decided to issue the Permit to authorize the three discharges to support this short-term drilling program. Once the reissued Cook Inlet General Permit becomes effective, the applicant may seek coverage under the general permit and request termination of the Permit per 18 AAC 83.215(d). Accordingly, no changes were made to the Permit or Fact Sheet to as a result of this comment nor will DEC remove the ability for future coverage under the Cook Inlet General Permit for the GPP facility.

# 6 Comments Received from Hilcorp

DEC received comments on the Draft Permit and Fact Sheet from Hilcorp that focus on specific details in each document.

# 6.1 Comments Regarding the Individual Permit Schedule of Submissions

4.1.1 Section 2.3.3.6 is listed as the reference for "Substitution for Chronic Whole Effluent Toxicity (WET) Invertebrate Based on Availability". It is believed the correct reference is Section 2.3.1.

### **DEC Response:**

DEC concurs with this comment.

"2.3.3.6" has been replaced with "2.3.1" as the referenced section for "Substitution for Chronic WET Invertebrate Based on Availability" as shown below:

2.3.1	Substitution for Chronic WET Invertebrate Based on Availability	As needed	Based on Laboratory Corroboration of Availability	Р
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4.1.2 For written noncompliance notifications, the current due date states five business days. Appendix A Section 3.4.1.2 indicates within five days. The five business days requirement is appreciated and it is recommended to indicate the requirements as such.

### **DEC Response:**

Appendix A provides Standard Conditions that are applicable to all APDES permits. The Standard Conditions that are based on requirements in 18 AAC 83 cannot be changed to differ between permits. The

The Schedule of Submissions has been corrected by striking "business" to be consistent with the Standard Conditions and the requirements of 18 AAC 83.410(f)(1)(B), as shown below:

	Appendix A, 3.4.1Written documentation of noncompliance	As Needed	Within 5 days aft permittee becomes of noncomplia	s aware	C at Appendix A, Part 1.1.2.	
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# 6.2 Comment Regarding Individual Permit Section 2.1.4.1 and Fact Sheet 6.1.4.1

Permit Section 2.1.4 addresses Total Residual Chlorine (TRC) Maximum, but subsection 2.1.4.1 addresses Best Management Practices for other prohibited discharges such as floating solids, foam, and garbage, and oil and grease, in addition to TRC. Recommended renumbering this as section 2.1.5.

This comment also applies to Fact Sheet Section 6.1.4.1.

### **DEC Response:**

DEC concurs with this comment.

Permit subsection 2.1.4.1 has been renumbered as section 2.1.5, as shown below.

2.1.5 Discharge-Specific BMPs

To support the narrative limits for floating solids, foam, garbage, and oil and grease the permittee must develop specific housekeeping BMPs to minimize introduction of deleterious substances at the source. For graywater discharges treated with MSDs, the permittee must also develop specific BMPs to ensure proper operation and maintenance of the dechlorination system.

Fact Sheet subsection 6.1.4.1 has been renumbered as section 6.1.5, as shown below:

### 6.1.5 Discharge Specific BMPs

To support the narrative limits for floating solids, foam, garbage, and oil and grease the permittee must develop specific housekeeping BMPs to minimize introduction of deleterious substances at the source. For graywater discharges treated with MSDs, the permittee must also develop specific BMPs to ensure proper operation and maintenance of the dechlorination system.

### 6.3 Comment Regarding Individual Permit Section 2.2.1 and Fact Sheet Section 6.2.1

To align with Section 2.3.3, 2.2.4, and Sections 2.6.5 and 2.6.6 of the Draft AKG315200 General Permit, it is recommended to modify the third sentence of this section to: "For noncontact cooling water (009), if chemicals have been added and the discharge volume is greater than 10,000 gallons per day (gpd) or 0.010 million gallons per day (mgd), the permittee..."

This comment also applies to Fact Sheet Section 6.2.1.

### **DEC Response:**

DEC concurs with the recommended modifications in this comment as it more appropriately aligns with the definition of "daily discharge" per 18 AAC 83.990(18). In addition, DEC also adds clarify text on the frequency of chronic WET monitoring upon exceeding threshold discharge volumes containing chemicals.

Permit section 2.2.1 has been modified and now reads:

"For noncontact cooling water (009), if chemicals have been added and the maximum daily discharge volume is greater than 10,000 gallons per day (gpd) or 0.010 mgd, the permittee must conduct chronic WET monitoring by collecting a grab sample that is representative of the chemically treated effluent per Section 2.3.3.1 at a frequency described in Section 2.3.2 and conduct a chemical inventory per Section 2.2.3."

Fact Sheet section 6.2.1 has been modified and now reads:

"For noncontact cooling water (009), if chemicals have been added and the maximum daily discharge volume is greater than 10,000 gpd or 0.010 mgd, the permittee must conduct chronic WET monitoring by collecting a grab sample that is representative of the chemically treated effluent per Section 6.2.4 at a frequency of once per year and conduct a chemical inventory per Section 6.2.3."

# 6.4 Comment Regarding Individual Permit Section 2.3 and Fact Sheet Section 6.3

Similar to the above comment, it is recommended to modify this section to: "Chronic WET monitoring applies to noncontact cooling water discharges if chemical additives are used and greater than 0.010 mgd (10,000 gpd) is discharged, including discharges that may be commingled and discharged accumulatively (see Section 1.3.9)."

This comment also applies to Fact Sheet Section 6.3.

### **DEC Response:**

DEC concurs with the recommended modifications in this comment.

Permit section 2.3 has been modified and now reads:

"Chronic WET monitoring applies to noncontact cooling water discharges if chemical additives are used and the maximum daily discharge volume is greater than 0.010 mgd (10,000 gpd), including discharges that may be commingled and discharged accumulatively (See Section 1.3.9)."

Fact Sheet section 6.3 has been modified and now reads:

"Chronic WET monitoring applies to the discharge of noncontact cooling water if chemical additives are used and the maximum daily discharge volume is greater than 10,000 gpd (0.010 mgd), including discharges that may be commingled and discharged accumulatively."

# 6.5 Comment Regarding Individual Permit Section 2.5.1.1

Recommend modifying to: "...shall use bottles and sampling procedures provided or approved by a laboratory when taking samples..."

#### **DEC Response:**

DEC concurs with this comment and has modified Permit Section 2.5.1.1 as follows:

"The permittee shall use current calibrated equipment when taking field measurements and shall use bottles and sampling procedures provided, or approved by, a laboratory when taking samples for laboratory analysis."

### 6.6 Comment Regarding Individual Permit Section 2.5.1.2

Recommend removing this section entirely as it creates confusion.

#### **DEC Response:**

DEC does not concur with this comment because it repeats, verbatim, the last sentence in Standard Conditions Section 3.1.

No changes were made based on this comment.

### 6.7 Comments Regarding Fact Sheet Front Page

The identified facility is incorrect. It should be Granite Point Platform.

Recommend modifying the following sentence to: "This fact sheet explains the nature of potential discharges from oil and gas facilities operating in state waters..."

#### **DEC Response:**

DEC concurs with the comment.

The facility name has been corrected to the following

<u>Facility</u>	Receiving Water	Latitude	Longitude
Granite Point Platform	Cook Inlet	60.957603	-151.333698

In addition, the description of the discharge has been modified to more clearly describe the nature of potential discharges to the following:

"This fact sheet explains the nature of potential discharges from a mobile offshore drilling unit while conducting production drilling at the Granite Point Platform operating in state waters in Cook Inlet and the development of the Permit including:..."

### 6.8 Comment Regarding Fact Sheet Section 1.1

The correct zip code is 99524-4027

#### **DEC Response:**

The zip code has been corrected as requested as shown below:

Mailing Address: PO Box 244027, Anchorage, AK 99524-4027

### 6.9 Comment Regarding Fact Sheet Subsection Headers

Subsection headers [3, 4, 5, 6, and 10] appear to be formatted incorrectly. For example, the subsection 3.1 header is not displayed.

#### **DEC Response:**

DEC concurs with the comment.

The headings and subsection headings have been reformatted to correctly display.

### 6.10 Comment Regarding Fact Sheet Section 3.3

It is recommended to modify the first sentence to: "...setting the MODU legs onto the sea floor prior to drilling."

#### **DEC Response:**

DEC concurs with the comment and has eliminated the word exploration in the first sentence that now reads:

"Ballast water is seawater that is taken into a vessel hull to maintain the proper floater level and ship draft for stabilization in deeper waters, or for setting the MODU legs onto the sea floor prior to exploration drilling."

### 6.11 Comment Regarding Fact Sheet Section 4.3.1

For clarity, it is recommended to modify the fifth sentence of the first paragraph to: "...maximum TRC concentration of 1 mg/L, which is consistent with an appropriately operated MSD that dechlorinates prior to discharge."

#### **DEC Response:**

DEC concurs with the comment.

The fifth sentence has been modified and now reads:

"Lastly, given that graywater is being treated using an MSD, DEC authorizes acute and chronic mixing zones for graywater that are sized based on a maximum TRC concentration of 1 mg/L, which is consistent with representing an appropriately operated MSD that dechlorinates prior to discharge."

### 6.12 Comment Regarding Fact Sheet Section 4.3.1.2

It is recommended to modify the fourth sentence in the first paragraph to: "...modeling conducted by Kinnetic Laboratories, Inc. in support of the Sabre project..."

#### **DEC Response:**

The first reference to Kinnetic Laboratories, Inc. occurs in section 4.3.1 where DEC abbreviated the name to "Kinnetic" at that reference. The use of "Kinnetic" as a reference to Kinnetic Laboratories, Inc. has been added with occurrences of the reference corrected in other locations in the document.

Based on the new reference in Section 4.3.1 and corrections made elsewhere, no modification to the fourth sentence in the first paragraph in Section 4.3.1.2 was necessary.

# 6.13 Comment Regarding Fact Sheet Section 8.4.2.1.3

Recommend modifying this section to: "Ballast water discharged during setting the legs of the MODU originates from Cook Inlet and is stored in dedicated tanks that do not contain contaminated ballast water. Hence, the discharge has the same water quality as the surrounding receiving water and does not lower the water quality."

#### **DEC Response:**

DEC concurs that clarification regarding the ballast water and the associated tanks are needed in this section.

The section has been modified to read:

"Ballast water discharged during setting the legs of the MODU originates from Cook Inlet and is stored in dedicated tanks that do not contain contaminants. Hence, the discharge has the same water quality as the surrounding receiving water and does not lower the water quality."

### 6.14 Comment Regarding Fact Sheet Appendix C – Definitions

Recommend modifying the following definitions:

6.14.1 For the definition of fixed platform, it is recommended to edit the second sentence to read: "For this Permit, mobile offshore drilling units (MODUs) that are periodically used at or near a fixed platform are considered part of the fixed platform."

#### **DEC Response:**

DEC does not concur with the modification of this definition. The definition currently allows for a MODU to be covered under the permit of a fixed platform when performing drilling and well plugging and abandonment activities for the fixed facility. The recommended modification broadens the definition and leaves open the possibility of a MODU obtaining coverage for other unintended reasons not specified and could cause confusion with other permits (e.g., the existing Mobile Exploration General Permit or the Vessel General Permit).

No changes were made as a result of this comment.

6.14.2 Mobile Offshore Drilling Unit – Mobile Offshore Drilling Units (MODUS) are semisubmersibles, drilling vessels, jack-up rigs, submersibles, ultra-deep water units, etc. that are used in drilling operations. For this permit, MODUs used at or near a fixed facility to perform oil and gas operations are considered part of the fixed facility once the MODU is secured to the seafloor. When operations are complete and the securing mechanism (i.e., legs or anchor) is raised, the MODU is no longer considered part of the fixed facility.

#### **DEC Response:**

DEC does not concur with all of the recommended modifications in the comment as it broadens the application of MODUs beyond drilling wells similar to the comment for Fixed Platforms in Comment 6.1.4.1. However, it is possible that a MODU could be used at a fixed facility other than a platform (e.g., subsea completion components) for conducting drilling. Therefore, the definition of MODU has been modified to read as follows:

"Mobile Offshore Drilling Units (MODUs) are semi-submersibles, drilling vessels, jackups rigs, submersibles, ultradeepwater units, etc. that are used in drilling operations. For this Permit, MODUs that are connected to or set near a fixed facility for exploration, development, production drilling, or well plugging and abandonment are considered part of the fixed facility while connected or while the MODU is secured to the seafloor near the fixed facility."

6.14.3 Production Facility – For this Permit means any mobile or fixed structure, or other structures such as subsea completion components of onshore facilities, involved in the active recovery of hydrocarbons from production formations. These operations may occur simultaneously with or following development operations, and include well plugging and abandonment activities.

#### **DEC Response:**

DEC does not concur with the all of the recommended modifications in the comment. The definition must align with the definition in the Effluent Limitation Guidelines (ELGs) in 40 CFR 435.41(cc). However, while upholding the definition in the ELGs, DEC has modified the definition to include well plugging and abandonment and sequencing with development operations as proposed:

"For this Permit means any mobile or fixed structure, or other structure such as subsea completion components of onshore facilities, that is either engaged in well completion or used for active recovery of hydrocarbons from producing formations. It includes well plugging and abandonment activities and hydrocarbon fluids separation even if located separately from wellheads. These operations may occur simultaneously with or following development operations."

# 6.14.4 For the definition of 'twice per year', it is recommended to modify this to Jan-June and July-Dec to align with a calendar year.

#### **DEC Response:**

#### Current Response:

DEC does not concur with the modification of this definition. While maybe not apparent, the twice per year frequency may be applied to receiving water sampling as well as effluent. The existing definition attempts to account for seasonal variations in the receiving water that would not be accounted for in a calendar year definition.

No changes were made as a result of this comment.