ATTACHMENT 13

AR # 129

E-mail re: Pay-in Period Options

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McDonald, Jeffrey

om: McDonald, Jeffrey
nt: Tuesday, January 28, 2014 11:39 AM
To: 'Gilmore, Tyler J'
Cc: Lucinda Swartz; Paul Champagne; Jaime Rooke; Shari Ring; Bayer, MaryRose; Greenhagen, Andrew; McAuliffe, Mary; Krueger, Thomas
Subject: FR Trust Fund feedback
Attachments: FR Pay-In Period Options 012814.docx; Review of Insurance Policy 01-28-14.docx

Importance: High

Tyler,

We want to give you these before our call this afternoon. The first covers the issue of a phased funding of a trust fund. I hope it lends some clarity to the Agency's opinion.

The second is regarding the use of insurance for some aspects of FR.

Also, the instrument submittals should clearly identify each well covered by an instrument and the respective instrument amounts and covered activities associated with each well (e.g., the cost to plug each individual well). The Class VI Guidance provides example language on how to specify wells and costs covered. See Sections 2 and 3 on page B-3 for sample Trust Agreement language. See the Certificate of Insurance on page B-17 for example Insurance Policy language.

anks,

Jeff

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Options for Trust Fund Pay-in Period

This document presents a payment plan option for FutureGen's trust fund. *Note that the cost amounts provided herein are based on the cost estimates in FutureGen's permit application, and are subject to final review.* Additionally, the exact payment amounts will be subject to change during the course of the project to account for inflation of costs and any changes to the project that affect the cost of the covered activities. The payment option is designed based on the financial risks during each phase of the GS project and based on the recommendations in the Trust Fund section of the Class VI Financial Responsibility Guidance (p. 26).

Requirements and Recommendations

Under 40 CFR 146.85(f), the UIC Program Director must approve the use and length of pay-in periods for trust funds. Additional recommendations for a pay-in period are provided in Chapter 5, Part A.2 of the Class VI Financial Responsibility Guidance and include a formula-based payment schedule and a three-year pay-in period.

Breakdown of Phases

The trust fund must be funded according to when the financial risks are incurred on the project in three distinct activities:

- **Pre-Injection:** Once an injection or monitoring well is drilled, plugging costs will eventually need to be incurred. Therefore, the trust account should be funded with the cost of plugging injection and monitoring wells as soon as drilling the well begins.
- **Injection:** As soon as injection of CO_2 begins in the Class VI well(s), certain activities will necessarily need to occur (corrective action that is performed on a phased basis, post-injection site care and monitoring, and site closure). Therefore, the trust account should be funded with the costs associated with these activities.
- **Post-Injection:** While all costs must be covered at the start of the post-injection phase, the trust account may phase out these costs as the activities are completed (with approval from the UIC Program Director). For example, once wells have been plugged, their corresponding plugging costs may be subtracted from the total value of the trust account.

Table 1 breaks down the activities and estimated costs according to when the payments would be required (i.e., at the start of the "Pre-Injection" phase or at the start of the "Injection and Post-Injection Phase").

Table 1: Payment Schedule for Option 1

Phase	Activities	Costs (millions of dollars)	Total Value of Trust at the Start of Phase (millions of dollars)
Pre-Injection	Plugging Injection and Monitoring Wells	2.723	2.723
Injection and Post-Injection	Plugging Injection and Monitoring Wells	2.723	25.068
	AoR and Corrective Action	0.623	
	Post-Injection Site Care (Includes Monitoring)	18.32	
	Closure	3.402	

Pay-In Period Option: Lump Sum Payment of Pre-Injection Costs and Fixed Payment Schedule for Remaining Costs

The Class VI Financial Responsibility Guidance provides a formula for calculating payments of a pay-in period:

$$\textit{Next Payment} = (CE - CV)/Y$$

where CE is the current cost estimate, CV is the current value of the trust fund, and Y is the number of years remaining in the pay-in period. The Guidance recommends a pay-in period of three years, with the first payment made prior to the start of injection. Subsequent payments should be made no later than 30 days after each anniversary date of the first payment. Furthermore, the exact payment values will depend on the cost estimates (CE), and may change from year to year.

This option requires initial payment of the costs associated with the risks after the injection and monitoring wells have been drilled but before injection begins ($2.723 million for plugging injection and monitoring wells), and it allows for a pay-in period for the costs associated with the risks after injection begins ($22.345 million for phased corrective action, post-injection site care and monitoring, and site closure). Table 2 summarizes the payment schedule with a three-year pay-in period (as defined in the Class VI FR Guidance). Initial payment for plugging activities should be made before drilling begins, and the next payment (year 1) must be made before injection begins.

Table 2: Payment Schedule using a 3-Year Pay-In Period

Payment Year	Payment Value (millions of dollars)	Total Value of Trust (millions of dollars)
Initial Payment (before drilling)	2.723	2.723
Year 1 (before injection)	7.448	10.171
Year 2	7.448	17.620
Year 3	7.448	25.068

Preliminary Review of Insurance Policy

This document includes requests for additional information and questions regarding FutureGen's proposed insurance policy as a financial responsibility instrument. The requests and questions below are based on the review of the "Specimen" insurance policy provided in the Class VI permit application, requirements defined under 40 CFR 146.85 and recommendations in the Class VI Financial Responsibility Guidance. The exact coverage amounts have not yet been assessed and are still subject to change based on the full evaluation of the cost estimates provided in the permit application. The intent of this preliminary assessment is to provide feedback to the permittee in the effort to establish an acceptable insurance policy.

Coverage Amounts:

After further consideration, the two-tiered coverage plan may be acceptable to cover the relevant emergency and remedial response (E&RR) risks (i.e., a low coverage amount to cover E&RR during the well construction phase, and a significantly higher coverage amount to cover the E&RR costs before commencement of injection). However, the insurance provider must be identified and a policy must be in place prior to approval of the permit application. The first coverage tier must be active before drilling begins, and the second tier must be active before injection begins. The exact values of coverage proposed in the permit application have not been assessed in detail and are subject to change.

Type of Coverage

The permit application provides definitions of key terms that ultimately determine the events and costs will be covered by the insurance policy (see section 9.4.2.1 of the application). These definitions appear reasonable to protect USDWs, as required at CFR 40 146.85(a)(3), with the exception that the events listed in the application do not include migration of fluids potentially damaging to USDWs other than CO_2 and brine. It is recommended that the policy clearly state that it covers adverse impacts associated with the migration of any fluids damaging to USDWs.

Required Specifications for Insurance Policy:

1. Cancellation [40 CFR 146.85(4)]: Insurance policy may not cancel, terminate or fail to renew except for failure to pay the financial instrument. The financial institution must provide written notification to the owner or operator and the UIC Program Director 120 days prior to cancellation.

   Inconsistencies with this requirement:

   a. The policy requires written notification only 90 days prior to cancellation (and only 10 days for nonpayment of the premium). This timeframe is not in compliance with the rule and should be expanded to 120 days. [Section VI "Conditions," part G "Cancellations" of the policy.]

b. The policy allows for cancellation in the event of material misrepresentation by the insured, or upon the insured's failure to comply with the conditions of the policy (the insured will have 30 days to cure such failure). This condition may leave open the possibility that the policy could be cancelled and financial protection removed.

c. Furthermore, the policy allows for cancellation upon "a change in use or a change in operations which is different from the uses or operations identified" during the underwriting process. This condition is not in compliance with the rule. It is reasonable for GS projects to change over the course of the project. Please explain what is meant by "change in use or change in operations" and its implications for continued coverage of E&RR costs.

d. The policy should specify that written notice of cancellation will be provided to the insured and the UIC Program Director. [40 CFR 146.85(a)(4)(i)(A) and Chapter V, Section E of the Class VI FR Guidance]

2. Renewal [40 CFR 146.85(a)(4)]: The owner or operator must renew the insurance policy for the term of the GS project.

    a. The permit application specifies that insurance providers are likely to offer policies for terms of 3 to 5 years (page D.4). To comply with the Class VI rule, the owner or operator must negotiate renewal of the policy with the insurance company prior to the completion of the term specified in the policy. If the insurance company fails to renew the policy, then the insurance company must provide written notice of this decision to the owner or operator and the UIC Program Director at least 120 days prior to the end of the policy. The owner or operator must then establish an alternative insurance policy or another form of financial responsibility within 60 of the notice not to renew the existing policy [40 CFR 146.85(a)(4)(i)(A)].

3. Strength of Insurance Company [40 CFR 146.85(a)(6)(ii)]: Upon selecting an insurance provider, the applicant must provide proof of the insurance company's financial strength before the financial responsibility instrument can be approved.

4. Proof of Third Party Standing [40 CFR 146.85(a)(6)(vii)]: Upon selecting an insurance provider, the owner or operator must demonstrate that the insurance company is an independent third party before the financial responsibility instrument can be approved.

Additional Concerns

1. EPA requests that the permittee submit a Certificate of Insurance. Suggested wording of this document can be found in the Class VI FR Guidance on page B.17.

2. The Specimen insurance policy includes several exclusions for noncompliance. Specifically, Section II "Exclusions;" part G "Intentional Noncompliance;" and Endorsement Part 6 "Non-Compliance with Permit." These exclusions indicate that the insurance policy does not apply to

any costs arising in the insured's non-compliance with regulations or the permit for injection. Also, Section VI "Conditions," part I "Concealment or Fraud" renders the policy void if the insured has concealed or misrepresented information. Of particular concern is that many events that could lead to the need for an emergency response would technically be violations of the Class VI rule or the permit, e.g., failure to maintain mechanical integrity.

3. A bankruptcy provision is briefly mentioned in Section VI "Conditions," part C "Action Against Company." If the insured files for bankruptcy after injection has begun and can no longer cover the costs associated with E&RR, does this bankruptcy provision ensure that the insurance provider will pay the value of the insurance policy or cover E&RR costs?

4. Section V "Limits of Liability and Deductible," part F "Deductible" specifies that the Insured is responsible for paying the value of the deductible. Currently, the deductible is estimated at $250,000 (2.5% of the value of the policy, 40% of the estimated annual premium). EPA recommends that the policy has no deductible (to provide full coverage for the E&RR costs as required by rule). However, it is likely that this is unattainable, and the policy should be written with the lowest deductible possible.