

US EPA ARCHIVE DOCUMENT

ATTACHMENT H: FINANCIAL ASSURANCE DEMONSTRATION

Facility Name: FutureGen 2.0 Morgan County CO₂ Storage Site
IL-137-6A-0003 (Well #3)

Facility Contacts: Kenneth Humphreys, Chief Executive Officer,
FutureGen Industrial Alliance, Inc., Morgan County Office,
73 Central Park Plaza East, Jacksonville, IL 62650, 217-243-8215

Location of Injection Well: Morgan County, IL; 26–16N–9W; 39.80097°N and 90.07544°W

The FutureGen Alliance is providing financial responsibility pursuant to 40 CFR 146.85. FutureGen is using a **trust fund** to cover the costs of: corrective action, emergency and remedial response, injection well plugging, and post-injection site care and site closure.

The estimated costs of each of these activities, as provided in FutureGen’s permit application, are presented in Table 1:

Table 1. Cost Estimates for Activities to be Covered by Financial Responsibility

Activity	Estimated Cost (Millions, 2012\$)
Performing Corrective Action on Deficient Wells in AoR	\$0.62
Plugging Injection Wells	\$2.7
Post-Injection Site Care	\$18.3
Site Closure	\$3.4
Emergency and Remedial Response	\$26.7
Note: Values in this table are rounded. For exact costs used to determine the value of the Trust Fund, refer to Table 2.	

The instrument values included in this document are based on cost estimates provided during the permit application and review process. These values are 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. If the cost estimates change, FutureGen will adjust the value of the financial instruments.

Trust Fund

The Permittee is providing financial responsibility for the cost of corrective action (as described in Attachment B of this permit), injection well plugging (per Attachment D of this permit), and post-injection site care and site closure (per Attachment E), and Emergency and Remedial Response (per Attachment F) via a trust fund valued at \$51.7 million and established through the

attached Trust Agreement. The U.S. Bank National Association is the Trustee of the trust fund. The trust fund will be funded in a “phased approach” to account for the fact that certain covered activities will not be incurred until injection begins. For example, resources to cover the cost of plugging the well need to be in place prior to when drilling commences; however certain activities (e.g., corrective action that is performed on a phased basis, post-injection site care and monitoring, and site closure) will not need to be covered until closer to when injection begins.

Table 2 breaks down the activities and estimated costs according to when the payments would be required (i.e., at least 7 days after final permit issuance, at the start of the “Pre-Injection” phase, and within 1 year of final permit issuance or at least 7 days prior to the start of the “Injection and Post-Injection Phase,” whichever comes earlier), within two years of final permit issuance.

Table 2. Payment Schedule for Trust Fund

Funding	Activities	Costs (millions of dollars)	Amount to be Added Before Start of Phase (millions of dollars)
Pre-Injection (<i>within 7 days of final permit issuance</i>)	Plugging Injection and Monitoring Wells	2.723	2.723
	Emergency and Remedial Response	6.1	6.1
Injection and Post-Injection (<i>within 1 year of final permit issuance, or at least 7 days prior to injection, whichever comes first</i>)	AoR and Corrective Action	0.623	22.345
	Post-Injection Site Care (Includes Monitoring)	18.32	
	Closure	3.402	
Injection and Post-Injection (<i>within 2 years of final permit issuance</i>)	Emergency and Remedial Response	20.6	20.6

AMENDED AND RESTATED TRUST AGREEMENT

Amended and Revised Trust Agreement (Agreement), entered into as of March 28, 2014, by and between the FutureGen Industrial Alliance, Inc. (Alliance), a non-profit 501(c)(3) corporation organized under the laws of the State of Delaware, the Grantor, and U.S. Bank National Association, a national banking association, the Trustee.

Whereas, the United States Environmental Protection Agency (EPA), an agency of the United States Government, has established certain regulations applicable to the Grantor requiring that an owner or operator of an injection well shall provide assurance that funds will be available when needed for corrective actions, injection well plugging, post-injection site care and site closure, or emergency and/or remedial response of the FutureGen 2.0 Class VI (carbon dioxide [CO₂] geologic sequestration) injection wells,

Whereas, the Grantor has elected to establish a trust to provide all or part of such financial assurance for the facilities identified herein,

Whereas, the Grantor, acting through its duly authorized officers, has selected the Trustee to be the trustee under this agreement, and the Trustee is willing to act as trustee,

Now, therefore, the Grantor and the Trustee agree as follows:

Section 1. Definitions as used in this Agreement:

(A) The term "Grantor" means the owner or operator who enters into this Agreement and any successors or assigns of the Grantor.

(B) The term "Trustee" means the Trustee who enters into this Agreement and any successor Trustee.

(C) "Facility" or "activity" means any underground injection well or any other facility or activity that is subject to regulation under the Underground Injection Control Program.

(D) EPA Water Division Director means the EPA Regional Water Division Director for Region V or an authorized representative.

Section 2. Identification of Facilities and Cost Estimates. This Agreement pertains to the facilities and cost estimates identified on attached Schedule A.

Section 3. Establishment of Fund. The Grantor and the Trustee hereby establish a CO₂ Storage Trust Fund (Fund) to satisfy the financial responsibility demonstration under the Class VI Underground Injection Control (UIC) regulations (40 CFR §§ 146.81 – 146.95) for the FutureGen 2.0 Project.. The Grantor and the Trustee acknowledge that the purpose of the Fund is to fulfill the Grantor's corrective action, injection well plugging, post-injection site care and site

closure, and emergency and/or remedial response obligations described at 40 CFR §§ 146.84 (Area of review and corrective action), 146.92 (Injection well plugging), 146.93 (Post-injection site care and site closure), and 146.94 (Emergency and remedial response), respectively. All expenditures from the Fund shall be to fulfill the legal obligations of the Grantor under such regulations, and not any obligation of EPA. The Grantor and the Trustee intend that no independent third-party have access to the Fund except as herein provided. The Fund is established initially as consisting of the property, which is acceptable to the Trustee, described in Schedule B attached hereto. Such property and any other property subsequently transferred to the Trustee is referred to as the Fund, together with all earnings and profits thereon, less any payments or distributions made by the Trustee pursuant to this Agreement. The Fund shall be held by the Trustee, IN TRUST, as hereinafter provided. The Trustee shall not be responsible nor shall it undertake any responsibility for the amount or adequacy of, nor any duty to collect from the Grantor, any payments necessary to discharge any responsibilities of the Grantor established by EPA regulations.

Section 4. Payment for Corrective Action, Injection Well Plugging, Post-Injection Site Care and Site Closure, and Emergency and/or Remedial Response. The Trustee shall make payments from the Fund only as the EPA Water Division Director shall direct, in writing, to provide for the payment of the costs of corrective actions, injection well plugging, post-injection site care and site closure, and/or emergency and remedial response of the injection wells covered by this Agreement. The Trustee shall use the Fund to reimburse the Grantor or other persons selected by the Grantor to perform work when the EPA Water Division Director advises in writing that the work will be or was necessary for the fulfillment of the Grantor's corrective actions, injection well plugging, post-injection site care and site closure, and/or emergency and remedial response obligations described at 40 CFR 146.84, 146.92, 146.93, and 146.94, respectively. All expenditures from the Fund shall be to fulfill the legal obligations of the Grantor under such regulations, and not any obligation of EPA, as the Agency is not a beneficiary of the Trust. The EPA Water Division Director may advise the Trustee that amounts in the Fund are no longer necessary to fulfill the Grantor's obligations under 40 CFR 146.85 and that the Trustee may refund the remaining funds to the Grantor. Upon refund, such funds shall no longer constitute part of the Fund as defined herein.

Section 5. Payments Comprising the Fund. Payments made to the Trustee for the Fund shall consist of cash or securities acceptable to the Trustee. Schedule C provides the amounts and timing of the Alliance payments (i.e., the pay-in periods).

Section 6. Trustee Management. The Trustee shall invest and reinvest the principal and income of the Fund and keep the Fund invested as a single fund, without distinction between principal and income, in accordance with general investment policies and guidelines which the Grantor may communicate in writing to the Trustee from time to time, subject, however, to the provisions of this Section. In investing, reinvesting, exchanging, selling, and managing the Fund, the Trustee shall discharge its duties with respect to the trust fund solely in the interest of the Grantor and with the care, skill, prudence, and diligence under the circumstances then prevailing which persons of prudence, acting in a like capacity and familiar with such matters, would use in the conduct of an enterprise of a like character and with like aims; *except that:*

(A) Securities or other obligations of the Grantor, or any other owner or operator of the facilities, or any of their affiliates as defined in the Investment Company Act of 1940, as amended, 15 U.S.C. 80a-2.(a), shall not be acquired or held, unless they are securities or other obligations of the federal or a state government;

(B) The Trustee is authorized to invest the Fund in time or demand deposits of the Trustee, to the extent insured by an agency of the federal or state government; and

(C) The Trustee is authorized to hold cash awaiting investment or distribution un-invested for a reasonable time and without liability for the payment of interest thereon.

Section 7. Commingling and Investment. The Trustee is expressly authorized in its discretion:

(A) To transfer from time to time any or all of the assets of the Fund to any common, commingled, or collective trust fund created by the Trustee in which the Fund is eligible to participate, subject to all of the provisions thereof, to be commingled with the assets of other trusts participating therein; and

(B) To purchase shares in any investment company, except as specified in writing by the owner or operator, registered under the Investment Company Act of 1940, 15 U.S.C. 80a-1 *et seq.*, including one which may be created, managed, underwritten, or to which investment advice is rendered or the shares of which are sold by the Trustee. The Trustee may vote shares in its discretion.

Section 8. Express Powers of Trustee. Without in any way limiting the powers and discretions conferred upon the Trustee by the other provisions of this Agreement or by law, the Trustee is expressly authorized and empowered:

(A) To sell, exchange, convey, transfer, or otherwise dispose of any property held by it, by public or private sale. No person dealing with the Trustee shall be bound to see to the application of the purchase money or to inquire into the validity or expediency of any such sale or other disposition;

(B) To make, execute, acknowledge, and deliver any and all documents of transfer and conveyance and any and all other instruments that may be necessary or appropriate to carry out the powers herein granted;

(C) To register any securities held in the Fund in its own name or in the name of a nominee and to hold any security in bearer form or in book entry, or to combine certificates representing such securities with certificates of the same issue held by the Trustee in other fiduciary capacities, or to deposit or arrange for the deposit of such securities in a qualified central depository even though, when so deposited, such securities may be merged and held in bulk in the name of the nominee of such depository with other securities deposited therein by another person, or to deposit or arrange for the deposit of any securities issued by the United States Government, or any agency or instrumentality thereof, with a Federal Reserve bank, but the books and records of the Trustee shall at all times show that all such securities are part of the Fund;

(D) To deposit any cash in the Fund in interest-bearing accounts maintained or savings certificates issued by the Trustee, in its separate corporate capacity, or in any other banking institution affiliated with the Trustee, to the extent insured by an agency of the federal or state government; and

(E) To compromise or otherwise adjust all claims in favor of or against the Fund.

Section 9. Taxes and Expenses. All taxes of any kind that may be assessed or levied against or in respect of the Fund and all brokerage commissions incurred by the Fund shall be paid from the Fund. All other expenses incurred by the Trustee in connection with the administration of this Trust, including fees for legal services rendered to the Trustee, the compensation of the Trustee to the extent not paid directly by the Grantor, and all other proper charges and disbursements of the Trustee shall be paid from the Fund.

Section 10. Annual Valuation. The Trustee shall annually, at least 30 days prior to the anniversary date of establishment of the Fund, furnish to the Grantor and to the EPA Water Division Director a statement confirming the value of the Trust. Any securities in the Fund shall be valued at market value as of no more than 60 days prior to the anniversary date of establishment of the Fund. The failure of the Grantor to object in writing to the Trustee within 90 days after the statement has been furnished to the Grantor and the EPA Water Division Director shall constitute a conclusively binding assent by the Grantor, barring the Grantor from asserting any claim or liability against the Trustee with respect to matters disclosed in the statement.

Section 11. Advice of Counsel. The Trustee may from time to time consult with counsel, who may be counsel to the Grantor, with respect to any question arising as to the construction of this Agreement of any action to be taken hereunder. The Trustee shall be fully protected, to the extent permitted by law, in acting upon the advice of counsel.

Section 12. Trustee Compensation. The Trustee shall be entitled to reasonable compensation for its services as agreed upon in writing from time to time with the Grantor.

Section 13. Successor Trustee. The Trustee may resign or the Grantor may replace the Trustee, but such resignation or replacement shall not be effective until the Grantor has appointed a successor trustee and this successor accepts the appointment. The successor trustee shall have the same powers and duties as those conferred upon the Trustee hereunder. Upon the successor trustee's acceptance of the appointment, the Trustee shall assign, transfer, and pay over to the successor trustee the funds and properties then constituting the Fund. If for any reason the Grantor cannot or does not act in the event of the resignation of the Trustee, the Trustee may apply to a court of competent jurisdiction for the appointment of a successor trustee or for instructions. The successor trustee shall specify the date on which it assumes administration of the trust in a writing sent to the Grantor, the EPA Water Division Director, and the present Trustee by certified mail 10 days before such change becomes effective. Any expenses incurred by the Trustee as a result of any of the acts contemplated by this Section shall be paid as provided in Section 9.

Section 14. Instructions to the Trustee. All orders, requests, and instructions by the Grantor to the Trustee shall be in writing, signed by such persons as are designated in the attached Exhibit A or such other designees as the Grantor may designate by amendment to Exhibit A. The Trustee shall be fully protected in acting without inquiry in accordance with the Grantor's orders, requests, and instructions. All orders, requests, and instructions by the EPA Water Division Director to the Trustee shall be in writing, signed by the EPA Water Division Director, and the Trustee may rely on these instructions to the extent permissible by law. The Trustee shall have the right to assume, in the absence of written notice to the contrary, that no event constituting a change or a termination of the authority of any person to act on behalf of the Grantor or EPA hereunder has occurred. The Trustee shall have no duty to act in the absence of such orders, requests, and instructions from the Grantor and/or EPA, except as provided for herein.

Section 15. Notice of Nonpayment. The Trustee shall notify the Grantor and the EPA Water Division Director, by certified mail within 10 days following the expiration of the 30-day period after the anniversary of the establishment of the Trust, if no payment is received from the Grantor during that period. After the pay-in period is completed, the Trustee shall not be required to send a notice of nonpayment.

Section 16. Amendment of Agreement. This Agreement may be amended by an instrument in writing executed by the Grantor, the Trustee, with the concurrence of the EPA Water Division Director, or by the Trustee and the EPA Water Division Director if the Grantor ceases to exist. Provided, however, that EPA may not be named as a beneficiary of the Trust, receive funds from the Trust, or direct that Trust funds be paid to a particular entity selected by EPA.

Section 17. Cancellation, Irrevocability and Termination. Subject to the right of the parties to amend this Agreement as provided in Section 16, this Trust shall be irrevocable and shall continue until terminated at the written agreement of the Grantor, the Trustee, with the concurrence of the EPA Water Division Director, or by the Trustee and the EPA Water Division Director if the Grantor ceases to exist. Upon termination of the Trust, all remaining trust property, less final trust administration expenses, shall be delivered to the Grantor, or if the Grantor is no longer in existence, at the written direction of the EPA.

Section 18. Immunity and Indemnification. The Trustee shall not incur personal liability of any nature in connection with any act or omission, made in good faith, in the administration of this Trust, or in carrying out any directions by the Grantor issued in accordance with this Agreement. The Trustee shall be indemnified and saved harmless by the Grantor or from the Trust Fund, or both, from and against any personal liability to which the Trustee may be subjected by reason of any act or conduct in its official capacity, including all expenses reasonably incurred in its defense in the event the Grantor fails to provide such defense. EPA does not indemnify either the Grantor or the Trustee due to the restrictions imposed by the Anti-Deficiency Act, 31 U.S.C. 1341. Rather, any claims against EPA are subject to the Federal Tort Claims Act, 28 U.S.C. 2671, 2680.

Section 19. Choice of Law. This Agreement shall be administered, construed, and enforced according to the laws of the State of Illinois with regard to claims by the Grantor or Trustee. Claims involving EPA are subject to federal law.

Section 20. Interpretation. As used in this Agreement, words in the singular include the plural and words in the plural include the singular. The descriptive headings for each Section of this Agreement shall not affect the interpretation or the legal efficacy of this Agreement.

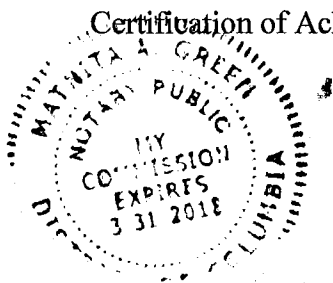
Section 21. Integration. This Agreement supersedes the previously executed Trust Agreement between the parties hereto dated March 20, 2014.

In Witness Whereof the parties have caused this Agreement to be executed by their respective officers duly authorized and attested as of the date first above written.

Signature of Grantor's Authorized Representative: Kenneth K. Humphreys, Jr.
 Name of Grantor's Authorized Representative: Kenneth K. Humphreys, Jr.
 Title: Chief Executive Officer

Attest:

Signature: Carole Plowfield
 Name of Attester: Carole Plowfield
 Title of Attester: Executive Administrator



Certification of Acknowledgement of Notary:

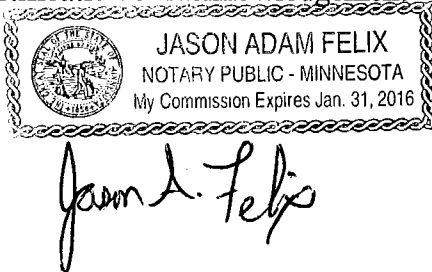
District of Columbia : SS
 Subscribed and Sworn to before me
 this 27th day of March, 2014
Matwita A. Green
 Notary Public, D.C.
 My commission expires 3/31/2018

Signature of Trustee's Authorized Representative: [Signature]
 Name of Trustee's Authorized Representative: Thomas S. Maple III
 Title: Vice President

Attest:

Signature: [Signature]
 Name of Attester: Judith L. Foley
 Title of Attester: Vice President

Certification of Acknowledgement of Notary:



Schedule A: Facilities and Cost Estimates to Which the Trust Agreement Applies

Because the four injection wells covered by this Agreement will be similarly constructed and drilled from a single well pad, the CO₂ injected through the four wells will form one commingled CO₂ plume. Therefore, funds noted in the table below apply to all four injection wells as one integrated facility.

Facility	Corrective Action (\$ million)	Injection Well Plugging (\$ million)	Post-injection Site Care and Site Closure (\$ million)	Emergency and Remedial Response (\$ million)
EPA Identification Number IL-137-6A-0001 Morgan County Class VI UIC Well #1 73 Central Park Plaza E Jacksonville, IL 62650	\$0.623	\$2.723	\$21.722	\$26.7
EPA Identification IL-137-6A-0002 Morgan County Class VI UIC Well #2 73 Central Park Plaza E Jacksonville, IL 62650				
EPA Identification Number IL-137-6A-0003 Morgan County Class VI UIC Well #3 73 Central Park Plaza E Jacksonville, IL 62650				
EPA Identification Number IL-137-6A-0004 Morgan County Class VI UIC Well #4 73 Central Park Plaza E Jacksonville, IL 62650				

Schedule B: Trust Fund Property

Because the four injection wells covered by this Agreement will be similarly constructed and drilled from a single well pad, the CO₂ injected through the four wells will form one co-mingled CO₂ plume. Therefore, funds noted in the table below apply to all four injection wells as one integrated facility.

Facility	Funding Value for Activities
EPA Identification Number IL-137-6A- 0001 Morgan County Class VI UIC Well #1 73 Central Park Plaza E Jacksonville, IL 62650	\$51,768,000.00
EPA Identification Number IL-137-6A- 0002 Morgan County Class VI UIC Well #2 73 Central Park Plaza E Jacksonville, IL 62650	
EPA Identification Number IL-137-6A- 0003 Morgan County Class VI UIC Well #3 73 Central Park Plaza E Jacksonville, IL 62650	
EPA Identification Number IL-137-6A- 0004 Morgan County Class VI UIC Well #4 73 Central Park Plaza E Jacksonville, IL 62650	

Schedule C: Pay-in Periods

The CO₂ Trust Fund will be funded according to when the financial risks are incurred on the FutureGen 2.0 Project in four distinct activities:

- **Pre-Injection:** Once an injection or monitoring well is drilled, plugging costs will eventually need to be incurred. Therefore, the trust account will be funded with the cost of plugging injection and monitoring wells prior to drilling the wells. The Alliance's estimated cost of this activity is \$2.723 million.
- **Injection:** As soon as injection of CO₂ 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. The Alliance's estimated cost of this activity is \$22.345 million.
- **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 EPA Water Division Director). For example, once wells have been plugged, their corresponding plugging costs may be subtracted from the total value of the trust account.
- **Emergency and remedial response:** Prior to authorization from EPA to begin injecting CO₂ under the Class VI well permit(s), the Alliance must be prepared to undertake any emergency or remedial response actions, although such actions are unlikely to be needed. The Alliance estimated the cost of the most severe incident to be \$6.1 million, which is the amount that will be placed into the trust fund prior to drilling the injection well(s). However, to ensure that sufficient funds will be available in the highly unlikely event that multiple incidents occurred over the entire period of injection and post-injection operations, the Alliance will add \$20.6 million to the trust fund for emergency and remedial response (for a total of \$26.7 million) prior to EPA's authorization of the start of CO₂ injection.

Within seven calendar days after the issuance of final Class VI UIC permits for the Morgan County injection wells, the Alliance will ensure that \$2.723 million is in the CO₂ Trust Fund to cover the cost of plugging injection and monitoring wells in the Pre-Injection Period. In addition, the Alliance will ensure that \$6.1 million is in the CO₂ Trust Fund to cover the cost of emergency and remedial response during the construction period and prior to the start of CO₂ injection.

On or before the one-year anniversary of the issuance of the final Class VI UIC permits for the Morgan County injection wells, and at least seven calendar days prior to EPA authorization for the start of CO₂ injection in any of the wells (whichever is earlier), the Alliance will ensure that an additional \$22.345 million is in the CO₂ Trust Fund to cover the costs of the Injection and Post-Injection Periods. The total value of the trust at the beginning of the Injection Period will be

\$31.168 million. An additional \$20.6 million will be added on or before the two-year anniversary of the issuance of the final Class VI UIC permit(s) for the Morgan County injection well(s), completing the phase-in of financial responsibility payments for emergency and remedial response. The Alliance may also elect to substitute another mechanism to demonstrate financial responsibility for emergency and remedial response for the injection and post-injection phases. If EPA approves such a substitution, this Agreement will be amended accordingly.

These amounts are based on the third-party cost estimate submitted by the Alliance in its *Supporting Documentation: Underground Injection Control Class VI Injection Well Permit Applications for FutureGen 2.0 Morgan County Wells 1, 2, 3, and 4*, dated March 2013 (Appendix C) and on EPA's independent evaluation of the cost estimates. These costs are subject to review and approval by EPA and may be adjusted for inflation or any change to the cost estimate in accordance with 40 CFR § 146.85(c)(2).

Table 1 shows 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

Funding	Activities	Costs (millions of dollars)	Amount to be Added Before Start of Phase (millions of dollars)
Pre-Injection (<i>within 7 days of final permit issuance</i>)	Plugging Injection and Monitoring Wells	2.723	2.723
	Emergency and Remedial Response	6.1	6.1
Injection and Post-Injection (<i>within 1 year of final permit issuance, or at least 7 days prior to injection, whichever comes first</i>)	AoR and Corrective Action	0.623	22.345
	Post-Injection Site Care (Includes Monitoring)	18.32	
	Closure	3.402	
Injection and Post-Injection (<i>within 2 years of final permit issuance</i>)	Emergency and Remedial Response	20.6	20.6

Exhibit A FutureGen Industrial Alliance, Inc. Designee Authorized to Instruct Trustee

Kenneth K. Humphreys, Jr.
Chief Executive Officer
FutureGen Industrial Alliance, Inc.
73 Central Park Plaza East
Jacksonville, Illinois 62650
217/243-8215

The FutureGen Industrial Alliance, Inc., as Grantor, may designate other designees by amendment to this Exhibit.