Internal Revenue Service

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Department of the Treasury

Washington, DC 20224

Contact Person:

Telephone Number:

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Re:

Partnership A =

Partnership B =

Partnership C =
State A =
State B =
State C =
Company A =
Company B =
Company C =
Company D =
Process =
Licensee =
Location =

Dear

This letter responds to the ruling request of Partnership A, dated April 14, 1998, as supplemented with information submitted on behalf of Partnership A. Three rulings are requested: (1) Partnership A will produce a qualified fuel within the meaning of section 29(c)(1)(C) of the Internal Revenue Code; (2) the contracts, as modified, with Company A for the engineering, procurement and construction of the facilities satisfy the requirement in section 29(g) for a "binding written contract" before January 1, 1997; and (3) Partnership A will be entitled to the tax credit under section 29(a) on the qualified fuel sold to unrelated persons, provided the facilities producing the fuel were placed in service by the deadline in section 29(g) (June 30, 1998) for placing facilities in service to qualify for the tax credit.

We understand the facts as presented by Partnership A's authorized representative to be as follows:

Partnership A is a limited partnership formed for the purpose of raising capital to build four facilities for producing synthetic fuel (two facilities in State A, one facility in State B, and one facility in State C). The general partner will be Partnership B with a 0.1 percent interest and the limited partners will be four institutional investors with 99.9 percent of the interests.

Each facility in State B and State C is owned by a separate project limited liability company. The two facilities in State A are owned by the same project limited liability company. All project limited liability companies are owned by Partnership A. The reason for separate project limited liability companies is to ensure that creditors of one project do not have a claim against the other projects. Each project limited liability company is classified as a disregarded entity for federal income tax purposes.

Each project limited liability company signed a binding written contract with Company A before January 1, 1997, for the engineering, procurement and construction of the facilities on a turnkey basis. Each construction contract provides for liquidated damages of at least 5 percent of the contract price, a description of the facility to be constructed, a completion date, and a maximum price for the facility. The contracts have been modified to subcontract the work to Company B, to refine configuration and equipment, and to change the locations of the facilities. Partnership A represents that the construction contracts are binding written contracts under applicable state law.

Partnership C sold the interests in the project limited liability companies to Partnership A on June 29, 1998, to raise capital. Partnership A agreed to pay Partnership C for each project limited liability company as follows: (1) an amount of cash at closing and (2) contingent installment payments over time equal to a percentage of the section 29 credits on fuel sold through 2007 by the project limited liability company.

The partners in Partnership A will contribute capital to Partnership A to pay the purchase price to Partnership C and the operating costs of the project limited liability companies.

The contingent installment payments to Partnership C will be subordinated for each project limited liability company where

there is a deficit in operating cash flow for the combined projects. Any subordinated amounts plus interest will be paid on or before January 1, 2009, regardless of cash availability.

Partnership B has an option to purchase the project limited liability companies during a six-month period in 2008 from Partnership A for fair market value.

Company C is the site lessor for the facilities in State B and State C. Company C is also supplying a few supervisory employees to help the project limited liability companies manage the facilities. Company C is supplying coal fines for the facilities. Additional coal fines may be purchased from other sources. An affiliate of Company C is acting as broker for selling the output from the facilities in the spot market.

Company D is the site lessor for the facilities in State A. Company D is also the operator of the facilities. Company D is supplying the high-moisture, low-sulphur, low-Btu, sub-bituminous coal for the facilities. Currently, Company D is buying the output from the facilities on a spot basis. In the future, it is expected that the output will be sold under contract to a large utility at an arm's-length price.

Partnership A represents that the Licensee has a license authorizing it to use a patented process called the Process for converting coal feedstock into synthetic fuel. Licensee sublicensed the use of the Process to each project limited liability company. The sublicense grants each project limited liability company the right to use the Process at designated locations in exchange for royalty payments.

According to Partnership A, the Process was developed to upgrade lower-ranked coals and coal waste material by chemically converting them into a synthetic fuel without the need to subject the coal feedstock to high heat (i.e., pyrolysis). Partnership A claims that the chemical reaction yields a fuel that differs significantly in chemical composition from the coal feedstock used to produce it. The Process uses a quinoline-based chemical reagent that reacts with the feedstock in a manner that reduces oxygen content, reduces inherent moisture, makes the coal less reactive, increases volatile matter, and raises the fuel's heating value (Btu content).

The coal feedstock will consist of waste coal, such as "coal pond fines" and coarse coal refuse recovered from "gob" piles, or coal from conventional supply sources, such as the Location, that can be significantly upgraded using the Process. Pond fines are small particles of waste coal (usually less than ¼" in diameter) rejected from coal cleaning operations and stored in settling ponds. Pond fines contain significant amounts of recoverable coal, but are difficult to process because of their size and high moisture content. The high moisture content and small particle size of coal pond fines make them unsuitable for use as a fuel or feedstock for carbonization, liquefaction and gasification applications. The Process overcomes these limitations by reducing the moisture content of the feedstock material and chemically bonding it into a useable solid.

The total moisture content of coal includes surface moisture acquired from exposure to moisture in the environment and inherent moisture (also known as "equilibrium moisture") that is ionically (i.e., chemically) bonded to the coal. The Process reagent reacts with the coal structure to produce a chemically active solid that rejects surface moisture. The Process eliminates the ionic bonding between inherent moisture and coal, resulting in synthetic fuel that has a much lower inherent moisture content. By contrast, thermal drying cannot permanently eliminate ionically-bound moisture because thermally-dried coal rapidly absorbs moisture from the air to return the ionically-bound moisture to its original level.

By removing oxygen functional groups, the Process results in a synthetic fuel that has a much lower inherent moisture content. The Process also alters the ionic structure of the surface of the synthetic coal pellet making the synthetic fuel "hydrophobic" (rejects surface moisture) as opposed to coal's natural "hydrophilic" state (attracts surface moisture). Thus, the Process permanently removes inherent moisture from the feedstock material and causes the synthetic fuel to reject surface moisture so that the synthetic fuel produced by the Process maintains its low total moisture content even when exposed to rain or groundwater. Partnership A claims that both of these effects result from chemical changes to the coal feedstock.

The Process converts the coal feedstock into a synthetic fuel by use of the following five steps: In step one, mineral matter is removed from the coal feedstock and the feedstock is sized to form coal particles no larger than ⅛" in diameter. The

coal feedstock is stockpiled next to the fuel production plant. In step two, the prepared coal feedstock is transported from the stockpile to the mixing apparatus using a specially-designed bin and feeder system that can handle high-moisture fine-sized coal. The feeder system controls the rate of delivery of the feedstock to the plant and monitors the feed rate with a weight belt. This system also is equipped with variable feed drivers to maintain accurate control of the feed rate. The weight and moisture content of the feedstock is monitored. Data are fed to a computerized process control system that controls the mixing time and the reagent feed rate.

According to Partnership A, step three of the Process initiates the chemical change by uniformly blending the Process reagent and the coal feedstock in a high-efficiency mixer. The coal feedstock is fed continuously into the reactor (i.e., the mixing apparatus) by the conveyor and feeder system and the Process reagent is fed at a controlled rate and is uniformly mixed with the feedstock. To reduce viscosity, the reagent is heated to 200° F to form an emulsion before it is fed into the reactor. The concentration and rate of feed of the reagent for a given coal feedstock are determined in the laboratory prior to the processing. The reagent dosage is sensitive to the coal rank, particle size of the feedstock, coal structure, and the feed rate of the unprocessed material.

The chemical reaction in the third step continues for 92 hours. Partnership A represents that no heat or pressure is necessary for the chemical reaction to occur. The process works equally well with low- and high-rank coals, as well as waste coals including pond fines of coal ranks. However, the effects are most dramatic with pond fines and low-rank coals because of their high total moisture and oxygen content. In addition, the chemical reaction between the Process reagent and coal feedstock causes the coal to become bonded. Bonding occurs without the use of traditional reforming equipment such as briquetting or pelletizing equipment to form a hard mass.

Step four involves reforming the chemically altered output from the reactor to increase the ease of handling of the final product. The output from the reactor is fed into a reforming apparatus to produce briquettes, pellets or extrusions. Water rejected from the reformed synfuel is collected and drained. Step five involves conveying the synthetic fuel to a curing pile where the desiccation (non-thermal drying) and agglomeration

(binding) processes continue until completed in 92 hours. The desiccated synthetic fuel can then be stored or shipped to customers without risk of spontaneous combustion.

Partnership A represents that comparing coal samples before and after the Process reveals significant chemical changes in all elemental components as well as in total moisture, which includes surface and ionically bound moisture. The most significant changes occur in oxygen content, moisture content, and heating value.

Section 29(a) of the Code allows a credit for qualified fuels sold by the taxpayer to an unrelated person during the tax year, the production of which is attributable to the taxpayer. The credit for the tax year is an amount equal to $3.00 (adjusted for inflation) multiplied by the barrel-of-oil equivalent of qualified fuels sold.

Section 29(c)(1)(C) of the Code defines "qualified fuels" to include liquid, gaseous, or solid synthetic fuels produced from coal (including lignite), including such fuels when used as feedstocks.

Section 29(d)(5) of the Code defines the term "barrel-of-oil equivalent" with respect to any fuel as that amount of the fuel which has a Btu content of 5.8 million, with certain exceptions not applicable here. Section 29(d)(6) defines "barrel" to mean 42 United States gallons.

Sections 29(f)(1)(B) and (f)(2) of the Code provide that section 29 applies with respect to qualified fuels which are produced in a facility placed in service after December 31, 1979, and before January 1, 1993, and which are sold before January 1, 2003.

Section 29(g)(1) of the Code modifies section 29(f) in the case of a facility producing qualified fuels described in section 29(c)(1)(C), which qualified fuels include solid synthetic fuels produced from coal or lignite. Section 29(g)(1)(A) provides that for purposes of section 29(f)(1)(B), such a facility is to be treated as placed in service before January 1, 1993, if the facility is placed in service before July 1, 1998, pursuant to a binding, written contract in effect before January 1, 1997. Section 29(g)(1)(B) provides that if the facility is originally placed in service after December 31, 1992, section 29(f)(2) is to

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be applied by substituting for the date therein January 1, 2008. The effect of this provision is to extend to December 31, 2007, the time during which the production of the facility meeting the above binding-contract rule and is placed in service after December 31, 1992, may be sold and qualify for the credit.

In Rev. Rul. 86-100, 1986-2 C.B. 3, the Internal Revenue Service ruled that the definition of the term "synthetic fuel" under section 48(l) of the Code and its regulations are relevant to the interpretation of the term under section 29(c)(1)(C). Former section 48(l)(3)(A)(iii) provided a credit for the cost of equipment used for converting an alternate substance into a synthetic liquid, gaseous, or solid fuel. The ruling notes that both section 29 and former section 48(l) contain almost identical language and have the same overall congressional intent, namely to encourage energy conservation and aid development of domestic energy production. Under section 1.48-9(c)(5)(ii) of the Income Tax Regulations, a synthetic fuel "differs significantly in chemical composition," as opposed to physical composition, from the alternate substance used to produce it. Coal is an alternate substance under section 1.48-9(c)(2)(i).

Based on the representations of Partnership A, including the preponderance of proffered data on the significant difference in the chemical composition of the fuel to be produced from that of the coal, the fuel to be produced using the Process will be a solid synthetic fuel from coal within the meaning of Rev. Rul. 86-100 and section 1.48-9(c)(5)(ii) of the regulations. Accordingly, the Process produces a qualified fuel as defined in section 29(c)(1)(C) of the Code.

A construction contract is binding only if it is enforceable under local law against a taxpayer and it does not limit damages to a specified amount, e.g., by use of a liquidated damages provision. A contract containing a provision limiting damages to an amount equal to at least five percent of the total contract price, for example, should be treated as not limiting damages. The construction contracts were executed prior to January 1, 1997. The contracts include such essential features as a description of the facilities to be constructed, a completion date, and a maximum price. It is represented that the contracts are binding under applicable state law and that the contracts provide for liquidated damages of at least five percent of the contract price.

Accordingly, based on the facts as presented by Partnership A and Partnership A's authorized representative, we conclude as follows:

1. Partnership A, with use of the Process in the facilities, will produce a "qualified fuel" within the meaning of section 29(c)(1)(C) of the Code.

2. The contracts, as modified, with Company A for the engineering, procurement and construction of the facilities satisfy the requirements of section 29(g) of the Code for a "binding written contract" before January 1, 1997.

3. Partnership A will be entitled to the credit, pursuant to section 29(a) of the Code on the qualified fuel sold to unrelated persons, provided the facilities were placed in service by the deadline in section 29(g) (June 30, 1998) for placing facilities in service to qualify for the tax credit.

This ruling is directed only to the taxpayer who requested it. Section 6110(k)(3) of the Code provides that it may not be used or cited as precedent. Temporary or final regulations pertaining to one or more of the issues addressed in this ruling have not been adopted. Therefore, this ruling will be modified or revoked by the adoption of temporary or final regulations to the extent the regulations are inconsistent with any conclusions in the ruling. See section 12.04 of Rev. Proc. 99-1, 1999-1 I.R.B. 6, 47. However, when the criteria in section 12.05 of Rev. Proc. 99-1 are satisfied, a ruling is not revoked or modified retroactively, except in rare or unusual circumstances.

In accordance with the power of attorney on file with this office, the original of this letter is being sent to Partnership A's first-named authorized representative, and a copy is being sent to Partnership A.

Sincerely yours,

Harold E. Burghart

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