
**UNITED STATES
DEPARTMENT OF AGRICULTURE**

**INSTRUCTIONS FOR APPLICATION FOR LOAN GUARANTEE
Section 9003 Biorefinery Assistance Loan Guarantees**

OVERVIEW

Title IX of The Food, Conservation, and Energy Act of 2008 (2008 Farm Bill) authorizes the Secretary of Agriculture (Secretary) to make loan guarantees for the “development, construction, and retrofitting of commercial-scale biorefineries using eligible technology.” Accordingly, the Agency has established an application process that will require Lenders to submit project information in sufficient detail as to allow the Agency to undertake a thorough analysis of the project’s ability to repay the guaranteed loan, meet policy goals established under section 9003 of the 2008 Farm Bill, and meet Program guidelines. The process of reviewing Applications will consist of the following steps:

1. **Application:** Lenders must submit a complete application to be considered for a loan guarantee under this Program. A complete application must address each of the following areas:
 - Background information;
 - Feasibility study;
 - Technical assessment;
 - Economic analysis
 - Business plan;
 - Environmental information;
 - Lender’s analysis;
 - Financing information,
 - Loan Agreement;
 - Borrower information; and
 - Lender certifications.

Application guidance is provided in Attachment A and the application form is found in Attachment B.

2. **Project Evaluation:** During this period there may be extensive dialogue between the Agency and the Lender regarding all aspects of the project. Based on the information provided by the Lender, and the results of the Agency’s due diligence, the Agency will prepare a project evaluation report and make a recommendation to the Agency’s loan committee as to whether to issue a Conditional Commitment to the Lender.

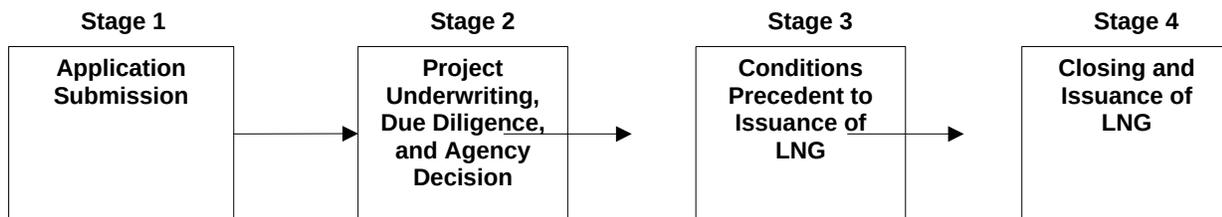
According to the Paperwork Reduction Act of 1995, an agency may not conduct or sponsor, and a person is not required to respond to a collection of information unless it displays a valid OMB control number. The valid OMB control number for this information collection is 0570-0063. The time required to complete this information collection is estimated to average 84 hours per response, , including the time for reviewing this application guide, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information.

3. **Conditional Commitment:** After favorable consideration by the Agency’s loan committee, a Conditional Commitment is prepared outlining the terms and conditions. If, after further discussion with the Lender, certain conditions of the Conditional Commitment cannot be met, the Lender and Borrower may propose alternate conditions for consideration by the Agency. Within the requirements of the applicable regulations and instructions and prudent lending practices, the Agency may negotiate with the Lender and the Borrower regarding any proposed changes to the Conditional Commitment.

4. **Closing and Issuance of the Loan Note Guarantee:** The Lender or its designated representative is responsible for loan closings, with the Lender and Borrower setting the closing date. If necessary, the Agency will require a pre-closing meeting with the Lender to review and discuss the loan closing documents and the requirements provided for in the Conditional Commitment, prior to loan closing. After all of terms and conditions of the Conditional Commitment have been met by the Lender and the Borrower, the Agency will execute the Loan Note Guarantee (LNG). With the execution of the Loan Note Guarantee, the Lender must pay the Guarantee Fee. A schedule of Program fee rates is provided in Attachment C.

APPLICATION PROCESS

Applications for loan guarantees under section 9003 Biorefinery Assistance Program shall be prepared according to the guidelines provided by the Agency (Attachment A). If elements of the application, including attachments thereto, contain information the Lender or Borrower consider to be a trade secret, confidential, privileged or otherwise exempt from disclosure under the Freedom of Information Act (FOIA), 5 U.S.C 552, the Lender and Borrower shall assert a claim of exemption at the time of application and clearly identify the text on the application that is subject to the claim of exemption. The same requirements shall apply to all submissions of project information. The following pages describe the process and requirements to apply for a biorefinery assistance loan guarantee. The process for submitting and reviewing applications involves three stages, which are shown and described below, concluding with a fourth stage (closing and issuance of the loan note guarantee):



Stage 1 - Application Submission

Stage 1 starts with the submission of a complete application. As per the Application Guidelines (Attachment A), the broad areas to be addressed are:

- Background information;
- Feasibility study;

- Technical assessment;
- Economic analysis;
- Environmental information;
- Business plan;
- Lender's analysis;
- Financing information,
- Loan Agreement; and
- Borrower information.

Based on the information provided in the applications, the Agency will identify those Borrowers seeking loan guarantees of less than \$125 million and those seeking loan guarantees of \$125 million or more. For those Borrowers seeking loan guarantees of \$125 million or more, the Agency will require an evaluation and credit rating of the total project's indebtedness, without consideration for a government guarantee, from a nationally-recognized rating agency.

Stage 2 - Project Underwriting, Due Diligence, and Agency Decision

This part of the application process will involve the Agency's detailed examination of the project, including reviews of the feasibility study, technical information, and proposed organizational structure and staffing. The Agency's due diligence will be conducted during this phase, based on the information provided in the application. As such, it is imperative that the Lender provide complete and detailed information in the application.

In reviewing each application, the Agency will utilize a panel of reviewers, including Rural Development field staff, National Renewable Energy Laboratory staff, and other Federal Agency staff, as required. Each application will be evaluated to confirm that the Lender, Borrower, and project are eligible, the project has technical merit, the minimum financial metric criteria are met, there is reasonable assurance of repayment, there is sufficient collateral and equity, and the proposed project complies with all applicable statutes and regulations.

The Agency will undertake the following steps in the review process.

1. **Evaluate Feasibility Study:** This involves a thorough review of the information provided in the feasibility study, which addresses the economic, market, technical, financial, and management feasibility of the proposed project. Aspects of the review will involve:
 - Evaluate economic feasibility. The Agency will examine the economic feasibility by reviewing such factors as information related to the project site; the availability of trained or trainable labor; utilities; rail, air, and road service to the site; and the overall economic impact of the project.
 - Assess market feasibility. The Agency will assess marketing feasibility by reviewing such factors as information on the sales organization and management, nature and extent of market and market area, marketing plans for sale of projected output, extent of competition, and commitments from customers or brokers.
 - Determine technical feasibility. This evaluation will commence with a thorough review of the technical assessment. The Agency may utilize its internal technical resources as well as independent third-party advice in reviewing the project's technical feasibility. The Agency encourages each Borrower/Lender to be as

comprehensive as possible in the procurement of independent engineering advice. Determination of the technical merit of the project will be influenced by the quality of the technical assessment, including the scope of the undertaking and strength of the opinions provided.

- Assess financial feasibility. Based on the Agency's credit evaluation of the financing plan submitted with the application, and projections for future financial performance, the Agency will assess the financial viability of the project with specific emphasis on the Borrower's expected ability to repay the loan. An important consideration in the financial viability assessment will be an evaluation of the assumptions underlying projected revenues and expenses and the likelihood that assumed technical performance will be achieved.
- Evaluate management feasibility. The Agency will evaluate the experience and expertise of the management team, particularly as it relates to operation of the proposed project.
- Assess qualification. The Agency will examine the qualifications of the entity that prepared the feasibility study.

2. **Assess Lender's Analysis:** The Agency will carefully review the Lender's analysis to assess the strengths and weaknesses of the proposed project. As part of this review, the Agency will identify, assess and estimate the impact of risks associated with the project. Based on the outcome of the technical, financial and legal reviews, the analysis will seek to determine the types and magnitude of the risks associated with the project, proper risk allocation among the parties, and the extent to which risks have been mitigated.

The Agency will also assess the strengths and weaknesses of the Borrower. The Agency will examine the Borrower's investment to date and capability to implement the project as proposed from both financial and managerial perspectives. Specific considerations include, but are not limited to:

- The Borrower's track record in project development and in the specific technology proposed in the application;
- The Borrower's financial strength and resources;
- The strategic value of the project to the Borrower; and
- The experience and expertise of the management team, particularly as it relates to operation of the proposed project.

In addition, the Agency will examine the value of the collateral in detail. This evaluation will be based on the nature of the collateral pledged, appraiser reports submitted by the Lender, and expected cash availability under a default scenario.

3. **Analyze Environmental Impact:** Each proposal will be evaluated to determine the proper level of National Environmental Policy Act (NEPA) review on a case-by-case basis by the Agency's environmental staff. The Lender and Borrower must cooperate with the Agency in the preparation of the environmental review and are advised to contact the Agency to determine environmental requirements as soon as practicable after they decide to pursue any form of financial assistance directly or indirectly available through the Agency. Note that a Borrower taking any actions or incurring any obligations prior to or during application review and processing that would either limit the range of alternatives to be considered or that would have an adverse effect on the environment, such as the initiation of construction, may result in project ineligibility.

4. **Evaluate Project Risks:** As part of its review, the Agency will identify, assess and estimate the impact of risks associated with the project. Based on the outcome of the review of the feasibility analysis, the risk analysis will seek to determine the types and magnitude of the risks associated with the project, proper risk allocation among the parties, and the extent to which risks have been mitigated.
5. **Agency Approval/Disapproval:** The final step of Stage 2 will be the Agency decision process. This will involve the Agency review team providing their analysis and recommendation on an application to the Agency's loan committee. The Agency's loan committee will review the analysis and recommendation.

Stage 3 –Conditions Precedent to Issuance of the Loan Note Guarantee (LNG)

This stage will involve the issuance of the Conditional Commitment through the determination that all conditions identified in the Conditional Commitment have been satisfied prior to the Agency issuing the loan note guarantee. In addition, for those projects requiring a credit rating from a nationally recognized credit rating agency, the Agency will consult with the Office of Management and Budget (OMB) during this phase. OMB may require additional information in making its subsidy determination. Specific steps in Stage 3 will include:

1. **Obtain Credit Rating:** For those loans of \$125 million or more, the Lender shall deliver to the Agency a credit rating of the total project's indebtedness, without consideration for a government guarantee.
2. **Obtain Final Calculation of Credit Subsidy:** For those loans of \$125 million or more, upon delivery of the Borrower's credit rating, the Agency will consider this information in its final calculation of the credit subsidy amount, which will be determined by OMB.
3. **Prepare Signature Package for Administrator:** Once OMB has confirmed the credit subsidy amount, if applicable, the Agency will submit the transaction documents for the Administrator's signature.
4. **Conditional Commitment:** The Agency will issue the Lender a Conditional Commitment containing project specific conditions that must be met prior to the Agency's issuance of the LNG. The Conditional Commitment will cover such items as: loan purpose, percentage of guarantee, interest rates, collateral and appraisal requirements, insurance, loan agreement, environmental requirements, construction, and guarantee closing.
5. **Alternate Conditions:** If certain conditions of the Conditional Commitment cannot be met, the Lender and Borrower may propose alternate conditions. Within the requirements of the applicable regulations and instructions and prudent lending practices, the Agency may negotiate with the Lender and the Borrower regarding any proposed changes to the Conditional Commitment. .
6. **Develop Closing Checklist:** Based on the Conditional Commitment as established under steps 1 and 2 above, the Agency will develop a closing checklist, identifying each condition precedent and step required before issuance of the LNG can occur. This will involve actions required of the Lender/Borrower and steps that the Agency will need to take in coordinating its internal activities as well as activities of other agencies, such as OMB. The following table summarizes the required conditions to which the Lender must certify:

<input type="checkbox"/> No Major Changes in Lender's Conditions
<input type="checkbox"/> Planned acquisitions and development have been or will be substantially completed
<input type="checkbox"/> Conformity with Federal, state, and local codes
<input type="checkbox"/> Required insurance in effect
<input type="checkbox"/> Truth in Lending
<input type="checkbox"/> Equal credit opportunity
<input type="checkbox"/> Loan properly closed
<input type="checkbox"/> Marketable title to all collateral
<input type="checkbox"/> When required, entire funds for working capital disbursed, unless otherwise approve by the Agency
<input type="checkbox"/> All requirements of Conditional Commitment are met
<input type="checkbox"/> Required Liens obtained
<input type="checkbox"/> Loan proceeds advanced for approved purposes
<input type="checkbox"/> No adverse change in Borrower
<input type="checkbox"/> No financial interest by Lender in the Borrower
<input type="checkbox"/> Loan Agreement addresses environmental impacts

Stage 4 – Loan closing and issuance of loan note guarantee.

This stage addresses the closing of the loan and the issuance of the Loan Note Guarantee by the Agency to the Lender.

1. **Closing:** The Lender or its designated representative is responsible for loan closings. When loan closing plans are established, the Lender must notify the Agency in writing. At the same time, or immediately after loan closing, the Lender must provide the following to the Agency: (i) Lender's certifications as required by Conditions Precedent to Issuance of Loan Note Guarantee; (ii) An executed Form RD 4279-4, "Lender's Agreement"; (iii) An executed Form RD 1980-19, "Guaranteed Loan Closing Report," and (iv) appropriate guarantee fee.
2. **Issuance of the Loan Note Guarantee:** When the Agency is satisfied that all conditions for the guarantee have been met, the Agency will issue the Loan Note Guarantee; the Assignment Guarantee Agreement (if the Lender assigns the guaranteed portion of the loan to a holder); the Certificate of Incumbency; and copies of legal loan documents.

Attachment A

Application Guidance

**UNITED STATES
DEPARTMENT OF AGRICULTURE**

**APPLICATION GUIDANCE FOR FEDERAL ASSISTANCE
Section 9003 Biorefinery Loan Guarantees**

Background This guide reviews the information to be submitted under the Biorefinery Assistance Program (Program) for consideration of Agency financing under the Program. Section 9003 authorizes for the U.S. Department of Agriculture to issue loan guarantees for the development, construction, and retrofitting of commercial-scale biorefineries using eligible technology. The Agency will use the information submitted by Lenders to evaluate and select recipients for assistance as authorized under section 9003 of the 2008 Farm Bill. Lenders and Borrowers may be asked to provide additional information during the review process.

Format Lenders must provide all requested information following the standard format on page 2 of this guideline.

Submission The application must be submitted in hard copy form.

Selection Extension of a loan guarantee is subject to Agency credit review, due diligence, priority score, negotiation of definitive financing, guarantee and project documents on terms and conditions satisfactory in all respects to the Agency.

Information Requests If Borrower or Lender desires that any information submitted in the application not be released by the Agency to the public, at the time the information is provided, the Lender or Borrower must: (i) state this request in writing; (ii) clearly identify the information considered sensitive; and (iii) give the reason(s) why it is considered confidential and the competitive harm which could result from the release of such information. The Agency will keep such information confidential to the extent permitted by law.

Warning It is a crime to knowingly make false statements to a Federal agency. Penalties upon conviction can include a fine and imprisonment. For details, see 18 U.S.C. 1001. Misrepresentation of material facts may also be the basis for denial of financial assistance by the U.S. Department of Agriculture.

APPLICATION FORMAT

Section A: Background Information <input type="checkbox"/> 1. Application Form <input type="checkbox"/> 2. Project Title <input type="checkbox"/> 3. DUNS Number <input type="checkbox"/> 4. Project Eligibility
Section B: Feasibility Study <input type="checkbox"/> 1. Executive Summary <input type="checkbox"/> 2. Economic Feasibility <input type="checkbox"/> 3. Market Feasibility <input type="checkbox"/> 4. Technical Feasibility <input type="checkbox"/> 5. Financial Feasibility <input type="checkbox"/> 6. Management Feasibility <input type="checkbox"/> 7. Qualifications
Section C: Technical Assessment <input type="checkbox"/> 1. Qualifications of Project Team <input type="checkbox"/> 2. Agreements and Permits <input type="checkbox"/> 3. Resource Assessment <input type="checkbox"/> 4. Design and Engineering <input type="checkbox"/> 5. Project Development Schedule <input type="checkbox"/> 6. Equipment Procurement <input type="checkbox"/> 7. Equipment Installation <input type="checkbox"/> 8. Operations and Maintenance <input type="checkbox"/> 9. Decommissioning
Section D: Business Plan <input type="checkbox"/> 1. Ownership Structure and Management <input type="checkbox"/> 2. Operation of Proposed Project <input type="checkbox"/> 3. Financial Statements <input type="checkbox"/> 4. Use of Funds
Section E: Environmental Information
Section F: Lender's Analysis <input type="checkbox"/> 1. Written Credit Analysis <input type="checkbox"/> 2. Elements of Credit Quality <input type="checkbox"/> 3. Financials <input type="checkbox"/> 4. Financial Metrics <input type="checkbox"/> 5. Format <input type="checkbox"/> 6. Pre- or Post-construction Loan Guarantee
Section G: Financing Information <input type="checkbox"/> 1. Matching Funds <input type="checkbox"/> 2. Collateral <input type="checkbox"/> 3. Evaluation and Credit Rating

Section H: Loan Agreement

- 1. Prohibition Against Assuming Liabilities
- 2. Restriction on Dividends
- 3. Limitation on the Purchase or Sale of Assets
- 4. Limitation on Compensation
- 5. Financial Covenants
- 6. Restrictions on Consolidations and Mergers
- 7. Limitations on Selling the Business
- 8. Repayment and Amortization of the Loan
- 9. List of Collateral and Lien Priority for the Loan
- 10. Type and Frequency of Financial Statements
- 11. Additional Agency Requirements
- 12. Necessary Mitigation Measures

Section I: Borrower Information

- 1. Borrower Eligibility
- 2. Legal Authority
- 3. Bioenergy Experience
- 4. Financial Information
- 5. Credit Reports
- 6. Judgments, Delinquencies, Debarment, and Suspension

Section J: Lender Capitalization and Certifications

- 1. Lender Capitalization Levels
- 2. Comprehensive Analysis of the Proposal
- 3. Repayment Assurance
- 4. Bioenergy Experience
- 5. Compliance with Applicable State and Federal Environmental Laws
- 6. Technical Merit
- 7. Additional Certification and Documentation (if requested)

Section K: Scoring Information

- 1. Established Market
- 2. Similar Facilities in Same Area
- 3. Feedstock Not Previously Used
- 4. Producer Associations and Cooperatives
- 5. Financial Participation
- 6. Positive Effect on Resource Conservation, Public Health, Environment
- 7. No Negative Impacts on Existing Facilities
- 8. Rural Economic Development Potential
- 9. Local Ownership
- 10. Replicability
- 11. "Unique" Technology

SECTION A: Background Information

1. **Application Form** Attach a current application form, including the mailing address of the Lender and Borrower and phone, fax and e-mail address of the project point of contact for the Agency.
2. **Project Title** Provide a descriptive title of the project.
3. **DUNS Number** Provide the Dunn and Bradstreet Number for the project if the borrower is other than an individual.
4. **Project Eligibility** Describe how the project meets the Program's eligibility criteria. These criteria are:
 - (a) The project must be located in a State of the United States.
 - (b) The project must be for either the development and construction of commercial-scale biorefineries using eligible technology or the retrofitting of existing facilities, including, but not limited to, wood products facilities and sugar mills, with eligible technology.
 - (c) The project must use an eligible feedstock for the production of advanced biofuels and biobased products. Eligible feedstocks include, but are not limited to, renewable biomass, including municipal solid waste consisting of renewable biomass, biosolids, treated sewage sludge, and byproducts of the pulp and paper industry. For the purposes of this subpart, recycled paper is not an eligible feedstock.
 - (d) The majority of the biorefinery production must be an advanced biofuel. Unless otherwise approved by the Agency, and determined to be in the best financial interest of the government, the advanced biofuel must be sold as a biofuel. The following will be considered in determining what constitutes the majority of production:
 - (1) When the biorefinery produces a biobased product and, if applicable, byproduct that has an established BTU content from a recognized Federal source, majority biofuel production will be based on BTU content of the advanced biofuel, the biobased product, and, if applicable, the byproduct, or
 - (2) When the biorefinery produces a biobased product or, if applicable, byproduct that does not have an established BTU content, then majority biofuel production will be based on output volume, using parameters announced by the Agency in periodic Notices in the Federal Register, of the advanced biofuel, the biobased product, and, if applicable, the byproduct.
 - (e) An advanced biofuel that is converted to another form of energy for sale will still be considered an advanced biofuel.
 - (f) The project must provide cash funds of not less than 20 percent of eligible project costs.
 - (g) Refinancing only when the refinancing is either (1) permanent financing used to refinance interim construction financing of the proposed project only if the application for the guaranteed loan under this subpart was approved prior to closing the interim

loan for the construction of the facility or (2) is no more than 20 percent of the loan for which the Agency is guaranteeing and the purpose of the refinance is to enable the Agency to establish a first lien position with respect to pre-existing collateral subject to a pre-existing lien and the refinancing would be in the best financial interests of the Federal Government.

This description is to provide the reader with a frame of reference for reviewing the rest of the application. Clearly state whether the application is for the construction and development of a biorefinery or for the retrofitting of an existing facility and provide a brief description of the project. Provide results from demonstration or pilot facilities that prove the technology proposed to be used meets the definition of eligible technology. Additional project description information will be needed later in the application.

SECTION B: FEASIBILITY STUDY

Submit a feasibility study on the proposed project. Elements in an acceptable feasibility study include, but are not limited to, the elements outlined in this section. In addition, as part of the feasibility study, a technical assessment of the project is required. This assessment is discussed in detail in Section D.

1. **Executive Summary** Provide an introduction and overview of the project. In the overview, describe the nature and scope of the proposed project, including purpose, project location, design features, capacity, and estimated total capital cost. Include a summary of each of the elements of the feasibility study, including:
 - Economic feasibility determinations
 - Market feasibility determinations
 - Technical feasibility determinations
 - Financial feasibility determinations
 - Management feasibility determinations

In addition, include a section on recommendations for implementation of the proposed project.

2. **Economic Feasibility** Provide information regarding project site; the availability of trained or trainable labor; and the availability of infrastructure, including utilities, and rail, air and road service to the site. Discuss feedstock source management, including feedstock collection, pre-treatment, transportation, and storage, and risks to the feedstock; and provide estimates of feedstock volumes and costs. Discuss the proposed project's potential impacts on existing manufacturing plants or other facilities that use similar feedstock if the proposed biofuel production technology is adopted. Provide projected impacts of the proposed project on resource conservation, public health, and the environment. Provide a detailed analysis and description of project costs including project management, resource assessment, project design, project permitting, land agreements, equipment, site preparation, systems installation, startup and shakedown, warranties, insurance, financing, professional services, and operations and maintenance costs. Provide an overall economic impact of the project including any additional markets created for agricultural and forestry products and agricultural waste material and potential for rural economic development. Provide feasibility/plans of project to work with producer associations or cooperatives including estimated amount of annual feedstock and biofuel and byproduct dollars from producer associations and cooperatives. If applicable to the proposed project, document that woody biomass feedstock from National Forest system lands or public lands cannot be used for a higher-value product.

3. **Market Feasibility** Provide information on the sales organization and management. Discuss the nature and extent of market and market area and provide marketing plans for sale of projected output, including both the principle products and the by-products. Discuss the extent of competition including other similar facilities in the market area. Identify commitments from customers or brokers for both the principle products and the by-products. Discuss all risks related to the advanced biofuel industry, including industry status, specific market risks, and competitive threats and advantages.

4. **Technical Feasibility** Discuss the suitability of the selected site for the intended use, including the information documents Form RD 1940-20 and required narrative in the 1940-G Exhibit H format.

Describe the scale of development for which the process technology has been proven, i.e. lab or bench, pilot, demonstration, or semi-work scale; and identify the specific volume of the process (expressed either as volume of feedstock processed – tons per unit of time, or as product – gallons per unit of time).

Identify and estimate project operation and development costs and specify the level of accuracy of these estimates and the assumptions on which these estimates have been based. Discuss the ability of the proposed system to be Commercially Replicated.

Discuss all risks related to construction of the advanced biofuel plant; advanced biofuel production; regulation and governmental action; and design-related factors that may affect the technical feasibility of the project.

5. **Financial Feasibility** Discuss the reliability of the financial projections and assumptions on which the financial statements are based including all sources and uses of project capital, both private or public, such as Federal funds. Provide a detailed analysis and description of projected balance sheets, income and expense statements, and cash flow statements over the useful life of the project. Provide a detailed description of applicable investment incentives, productivity incentives, loans, and grants, and other project authorities and subsidies that affect the project. Describe any constraints or limitations in the financial projections. Discuss the ability of the business to achieve the projected income and cash flow. Provide an assessment of the cost accounting system. Discuss the availability of short-term credit or other means to meet reasonable business costs and the adequacy of raw materials and supplies. Provide a sensitivity analysis, including feedstock and energy costs, product/by-product prices. Discuss all risks related to: the Project, Borrower financing plan, the operational units, and tax issues.

6. **Management Feasibility** Identify Borrower and/or management's previous experience concerning biofuel production; acquisition of feedstock; marketing and sale of off-take; and the receipt of federal financial assistance, including amount of funding, date received, purpose, and outcome. Describe the management plan for procurement of feedstock and labor, marketing of the off-take, and management succession. Discuss all risks related to the Borrower as a Company (e.g., Development-Stage), conflicts of interest, including appearances of conflicts of interest, and management strengths and weaknesses.

7. **Qualifications** Provide a resume or statement of qualifications of the author of the feasibility study, including prior experience.

SECTION C: Technical Assessment

As part of the feasibility study, a detailed technical assessment is required for each project. The technical assessment must demonstrate that the design, procurement, installation, startup, operation and maintenance of the project will permit it to operate or perform as specified over its

useful life in a reliable and a cost effective manner, and must identify what the useful life of the project is. The technical assessment must also identify all necessary project agreements, demonstrate that those agreements will be in place at or before the time of loan closing, and demonstrate that necessary project equipment and services will be available over the useful life of the project. The technical assessment must be based upon verifiable data and contain sufficient information and analysis so that a determination can be made on the technical feasibility of achieving the levels of income or production that are projected in the financial statements. All technical information provided must follow the format specified in this section. Supporting information may be submitted in other formats. Design drawings and process flow charts are required as exhibits. A discussion of a topic identified in this section is not necessary if the topic is not applicable to the specific project. Questions identified in the Agency's technical review of the project must be answered to the Agency's satisfaction before the application will be approved.

All projects require the services of an independent third-party professional engineer. The Project engineer is considered an independent party provided neither the principals of the firm nor any individual of the firm who participates in the technical feasibility report has a financial interest in the project if no other individual or firm with the expertise necessary to make such a determination is reasonably available to perform the function, an individual or firm that is not independent may be used.

1. **Qualifications of project team** The project team will vary according to the complexity and scale of the project. The project team must have demonstrated expertise in similar advanced biofuel technology development, engineering, installation, and maintenance. Authoritative evidence that project team service providers have the necessary professional credentials or relevant experience to perform the required services for the development, construction, and retrofitting, as applicable, of technology for producing advanced biofuels must be provided. In addition, authoritative evidence that vendors of proprietary components can provide necessary equipment and spare parts for the biorefinery to operate over its useful life must be provided. The application must:

- Discuss the proposed project delivery method. Such methods include a design-bid-build method, where a separate engineering firm may design the project and prepare a request for bids and the successful bidder constructs the project at the Borrower's risk, and a design-build method, often referred to as turnkey, where the Borrower establishes the specifications for the project and secures the services of a developer who will design and build the project at the developer's risk;
- Discuss the manufacturers of major components of advanced biofuels technology equipment being considered in terms of the length of time in business and the number of units installed at the capacity and scale being considered;
- Discuss the project team members' qualifications for engineering, designing, and installing advanced biofuels refineries including any relevant certifications by recognized organizations or bodies. Provide a list of the same or similar projects designed, installed, or supplied and currently operating, with references if available; and
- Describe the advanced biofuels refinery operator's qualifications and experience for servicing, operating, and maintaining such equipment or projects. Provide a list of the same or similar projects designed, installed, or supplied and currently operating, with references if available.

2. **Agreements and permits** All necessary agreements and permits required for the project and the status and schedule for securing those agreements and permits, including the items specified below, must be identified in the application.

- Advanced biofuels refineries must be installed in accordance with applicable local, State, and national codes and applicable local, State, and national regulations. Identify zoning and code requirements and necessary permits and the schedule for meeting those requirements and securing those permits.
 - Identify licenses where required and the schedule for obtaining those licenses.
 - Identify land use agreements required for the project, the schedule for securing those agreements, and the term of those agreements.
 - Identify any permits or agreements required for solid, liquid, and gaseous emissions or effluents and the schedule for securing those permits and agreements.
 - Identify available component warranties for the specific project location and size.
 - Identify all environmental issues, including environmental compliance issues, associated with the project.
3. **Resource assessment** Adequate and appropriate evidence of the availability of the feedstocks required for the advanced biofuels refinery to operate as designed must be provided in the application. Indicate the type and quantity of the feedstock, and discuss storage of the feedstock, where applicable, and competing uses for the feedstock. Indicate shipping or receiving methods and required infrastructure for shipping, and other appropriate transportation mechanisms. For proposed projects with an established resource, provide a summary of the resource.
4. **Design and engineering** Authoritative evidence that the advanced biofuels refinery will be designed and engineered so as to meet its intended purposes, will ensure public safety, and will comply with applicable laws, regulations, agreements, permits, codes, and standards must be provided in the application. Projects shall be engineered by a qualified entity. Each biorefinery must be engineered as a complete, integrated facility. The engineering must be comprehensive including site selection, systems and component selection, and systems monitoring equipment. Biorefineries must be constructed by a qualified entity.
- The application must include a concise but complete description of the project including location of the project; resource characteristics, including the kind and amount of feedstocks; biorefinery specifications; kind, amount, and quality of the output; and monitoring equipment. Address performance on a monthly and annual basis. Describe the uses of or the market for the advanced biofuels produced by the biorefinery. Discuss the impact of reduced or interrupted feedstock availability on the biorefinery's operations.
 - The application must include a description of the project site that addresses issues such as site access, foundations, and backup equipment when applicable.
 - The application must include a completed Form RD 1940-20 and an environmental assessment prepared in accordance with Exhibit H of 7 CFR part 1940, subpart G. Identify any unique construction and installation issues.
 - Sites must be controlled by the eligible Borrower for at least the financing term of the loan note guarantee.
5. **Project development schedule** Each significant task, its beginning and end, and its relationship to the time needed to initiate and carry the project through startup and shakedown must be described in the application. Provide a detailed description of the project timeline including resource assessment, project and site design, permits and agreements, equipment procurement, and project construction from excavation through startup and shakedown.

6. **Equipment procurement** A demonstration that equipment required by the biorefinery is available and can be procured and delivered within the proposed project development schedule must be provided in the application. Biorefineries may be constructed of components manufactured in more than one location. Provide a description of any unique equipment procurement issues such as scheduling and timing of component manufacture and delivery, ordering, warranties, shipping, receiving, and on-site storage or inventory.
7. **Equipment installation** A full description of the management of and plan for site development and systems installation, details regarding the scheduling of major installation equipment needed for project construction, and a description of the startup and shakedown specification and process and the conditions required for startup and shakedown for each equipment item individually and for the biorefinery as a whole must be provided in the application.
8. **Operations and maintenance** The operations and maintenance requirements of the biorefinery necessary for the biorefinery to operate as designed over its useful life must be provided in the application. The application must also include:
 - Information regarding available biorefinery and component warranties and availability of spare parts;
 - A description of the routine operations and maintenance requirements of the proposed biorefinery, including maintenance schedules for the mechanical, piping, and electrical systems and system monitoring and control requirements, as well as provision of information that supports expected useful life of the biorefinery and timing of major component replacement or rebuilds;
 - A discussion of the costs and labor associated with operating and maintaining the biorefinery and plans for in-sourcing or outsourcing. A description of the opportunities for technology transfer for long term project operations and maintenance by a local entity or owner/operator; and
 - Provision and discussion of the risk management plan for handling large, unanticipated failures of major components.
9. **Decommissioning** When the project is uninstalled or removed, a description of the decommissioning process must be included in the application. A description of any issues, requirements, and costs for removal and disposal of the biorefinery.

SECTION D: Business Plan

Submit a business plan that clearly presents the information requested in this section. Any or all of the information in the business plan may be omitted if the information is included in the feasibility study.

1. **Ownership structure and management** Describe the Borrower's ownership structure and management, including experience and succession planning; discusses, if applicable, the Borrower's parent, affiliates, and subsidiaries, including their names and a description of the relationship.
2. **Operation of proposed project**; Discuss how the Borrower will operate the proposed project. In this discussion, address each of the following elements:
 - The borrower's business strategy;

- possible vendors and models of major system components;
 - the availability of the resources (e.g., labor, raw materials, supplies) necessary to provide the planned product and services;
 - site location and its relation to product distribution (e.g., rail lines or highways) and any land use or other permits necessary to operate the facility; and
 - the market for the product and its competition, including any and all competitive threats and advantages.
3. **Financial Statements** Present projected balance sheets, income and expense statements, and cash flow statements for a period of not less than 3 years of stabilized operation of the project.
4. **Use of funds** Describe the proposed use of funds.

SECTION E: Environmental Information

Submit Form RD 1940-20, "Request for Environmental Information;" omitting the attachments specified in the instructions to the form; and attach an environmental assessment completed pursuant to 7 CFR part 1940, subpart G, Exhibit H.

SECTION F: Lender's Analysis

1. **Written credit analysis.** Submit the Lender's complete written analysis of the project. This analysis will include but not limited to the following elements:
- a summary of the technology to be used in the project;
 - the viability of such technology for the particular project application;
 - the development type (e.g., installation, construction, retrofit);
 - Borrower's management;
 - terms and conditions;
 - any debt refinancing; and
2. **Elements of Credit Quality.** In addition, the Lender's analysis must include a credit evaluation to determine the credit quality of the Borrower. This evaluation must address all elements of credit quality, including the following:
- **Cash flow.** A borrower's ability to produce sufficient cash to repay the loan as agreed.
 - **Collateral.** Collateral must have documented value sufficient to protect the interest of the Lender and the Agency, as determined by the Agency, and the discounted collateral values must be at least equal to the loan amount.

- **Equity.** Borrowers shall demonstrate the ability to provide equity in the project of not less than 20 percent of eligible project costs at the time the loan is closed. For existing biorefineries, the fair market value of project equity (including the guaranteed loan being applied for) in real property and equipment and the value of qualified intellectual property based on the audited financial statements in accordance with Generally Accepted Accounting Principles may be substituted in whole or in part to meet the equity requirement. However, the appraisal completed to establish the fair market value of the real property and equipment must not be more than 1 year old (the Agency may request a more recent appraisal in order to reflect current market conditions) and must conform to the requirements of § 4279.244. Otherwise, equity must be in the form of cash and cannot include other direct Federal funding (i.e., direct loans and grants).
 - **Credit worthiness.** Those financial qualities that generally make the borrower more likely to meet its obligations as demonstrated by the credit reports of the Borrower, its principals, and any parent, affiliate, or subsidiary.
 - **Conditions.** The general business environment and status of the borrower's industry.
3. **Financials.** The credit analysis must also include spreadsheets of the balance sheets and income statements of the Borrower for the 3 previous years (for existing businesses), pro forma balance sheets at startup, and projected yearend balance sheets and income statements for a period of not less than 3 years of stabilized operation, with appropriate ratios and comparisons with industrial standards (such as Dun & Bradstreet or Robert Morris Associates) to the extent industrial standards are available.
4. **Financial Metrics** The borrower must meet the financial metric criteria specified below. These criteria must be calculated from the realistic information in the pro forma statements or Borrower financial statements of a typical operating year after the project is completed and stabilized.
- A debt coverage ratio of 1.0 or higher;
 - A debt-to-tangible net worth ratio of 4:1 or lower for start-up businesses and of 9:1 or lower for existing businesses.
 - A loan-to-value ratio of no more than 1.0.
5. **Format.** All data must be shown in total dollars and also in common size form, obtained by expressing all balance sheet items as a percentage of assets and all income and expense items as a percentage of sales.
6. **Pre- or Post-Construction Guarantee** Indicate whether the loan note guarantee is being requested prior to construction or after completion of construction of the project.

SECTION G: Financial Information

1. **Matching Funds** Submit a spreadsheet identifying sources, amounts, and availability of matching funds. The spreadsheet must also include a directory of matching funds source contact information. Attach any applications, correspondence, or other written communication between Borrower and matching fund source.

- 2. Collateral** Describe and value all assets to serve as collateral for the Guaranteed Obligations. Lenders will discount collateral consistent with sound loan-to-value policy. The Agency may consider the value of qualified intellectual property, as defined in § 4279.2, arrived at in accordance with GAAP standards. The value of the intellectual property may not exceed 30 percent of the total value of all collateral. If there is an established market for the intellectual property, the value of the intellectual property will be valued according to the lender's standard discounting practice for intellectual property for determining adequacy of collateral. If there is no established market for the intellectual property, the value of the intellectual property will be valued not greater than 25 percent, as determined by the Agency, for determining adequacy of collateral. All appraisals will include consideration of the potential effects from a release of hazardous substances or petroleum products or other environmental hazards on the market value of the collateral. A complete self-contained appraisal must be conducted. Lenders must complete at least a Transaction Screen Questionnaire for any undeveloped sites and a Phase I Environmental Site Assessment (ESA), on existing business sites in accordance with ASTM standards, which should be provided to the appraiser for completion of the self-contained appraisal. Lenders shall use specialized appraisers unless waived by the Agency. The Agency will only waive this requirement if a specialized appraiser does not exist in a specific industry or hiring one will cause an undue financial burden to the borrower.
- 3. Evaluation and Credit Rating** For loans of \$125 million or more,, provide an evaluation and credit rating of the total project's indebtedness from a nationally recognized rating agency. The evaluation and credit rating shall examine the project as structured, but in the absence of a loan guarantee from the Agency and shall identify any material assumptions utilized by the rating agency in its analysis.

SECTION H: Loan Agreement

Include the proposed loan agreement (or a sample loan agreement) with an attached list of the proposed loan agreement provisions. The following must be addressed in the loan agreement:

- Prohibition against assuming liabilities or obligations of others;
- Restriction on dividend payments;
- Limitation on the purchase or sale of equipment and fixed assets;
- Limitation on compensation of officers and owners;
- Financial covenants regarding working capital or current ratio requirement, and maximum debt-to-net worth ratio;
- Restrictions concerning consolidations, mergers, or other circumstances;
- Limitations on selling the business without the concurrence of the lender;
- Repayment and amortization of the loan;
- List of collateral and lien priority for the loan;
- Type and frequency of financial statements to be required for the duration of the loan.

- A section for the later insertion of any additional requirements imposed by the Agency in its Conditional Commitment; and
- A section for the later insertion of any necessary mitigation measures by the Borrower to avoid or reduce adverse environmental impacts from this proposal's construction or operation.

SECTION I: Borrower Information

- **Borrower Eligibility** Describe the type of Borrower and provide supporting documentation to verify that the Borrower is an eligible Borrower.
- **Legal Authority** Describe the legal authority of the Borrower to carry out the proposed project activities. The Borrower must have, or obtain before loan closing, the legal authority necessary to construct, operate, and maintain the proposed facility and services and to obtain, give security for, and repay the proposed loan. Provide supporting documentation.
- **Bioenergy Experience** Describe the Borrower's, including principals', prior experience in bioenergy projects and the receipt of Federal financial assistance, including amount of funding, date received, purpose, and outcome, for such projects.
- **Financial Information** Provide a current (not more than 90 days old) balance sheet; a *pro forma* balance sheet at startup; and projected balance sheets, income and expense statements, and cash flow statements for a period of not less than 3 years of stabilized operation. Projections should be supported by a list of assumptions showing the basis for the projections.
- **Credit Reports** Include a personal credit report from an Agency-approved credit reporting company for individuals (e.g., proprietor (owner), partner, officer, director, key employee, stockholder) owning 20 percent or more interest in the Borrower or any owner with more than 10 percent ownership interest in the borrower if there is no owner with more than 20 percent ownership interest in the borrower, except for those corporations listed on a major stock exchange. Also include commercial credit reports obtained by the Lender on the Borrower and any parent, affiliate, and subsidiary firms. The Agency may request additional documentation as part of the project evaluation process.
- **Judgments, Delinquencies, Debarment, and Suspension** Disclose whether the Borrower, any owner with more than 20 percent ownership interest in the Borrower, or, if there is no owner with more than 20 percent ownership interest in the borrower, any owner with more than 3 percent ownership interest in the borrower: (1) has any outstanding judgments obtained by the U.S. in a Federal Court (other than U.S. Tax Court), (2) is delinquent on the payment of Federal income taxes, (3) is delinquent on Federal debt, or (4) is debarred or suspended from receiving Federal assistance.

SECTION J: Lender Capitalization and Certifications

In submitting an Application for financial assistance under the Agency's Loan Guarantee Program, Lenders must:

1. Demonstrate the minimum acceptable levels of capital as follows:
 - a. Total Risk-Based Capital ratio of 10 percent or higher;
 - b. Tier 1 Risk-Based Capital ratio of 6 percent or higher; and
 - c. Tier 1 Leverage Capital ratio of 5 percent or higher.
2. Provide a certification stating that the Lender has completed a comprehensive analysis of the proposal, the Borrower is eligible, the loan is for an eligible project, and there is reasonable assurance of repayment ability based on the Borrower's history, projections and equity, and the collateral to be obtained. In addition, the Lender must submit a certification that the lender concludes that the project has technical merit. The Agency may require that Lenders provide additional certifications or supporting documentation as part of the project evaluation process.
3. Defined Terms.
 - Total risk-based capital ratio. This term has the meaning given it under applicable Federal Deposit Insurance Corporation regulations.
 - Tier 1 risk-based capital ratio. This term has the meaning given it under applicable Federal Deposit Insurance Corporation regulations.
 - Tier 1 leverage capital ratio. This term has the meaning given it under applicable Federal Deposit Insurance Corporation regulations.

SECTION K: Scoring Information

The Application must contain information that is responsive to the criteria that the Agency will use to score the application. The information, which must be provided in a format that is responsive to these scoring information, must address:

- Whether the borrower has established a market for the advanced biofuel and the byproducts produced;
- Whether the area in which the borrower proposes to place the biorefinery, defined as the area that will supply the feedstock to the proposed biorefinery, has any other similar advanced biofuel facilities;
- Whether the borrower is proposing to use a feedstock not previously used in the production of advanced biofuels;
- Whether the borrower is proposing to work with producer associations or cooperatives;
- The level of financial participation by the borrower, including support from non-

Federal government sources and private sources;

- Whether the borrower has established that the adoption of the process proposed in the application will have a positive effect on three impact areas: resource conservation (e.g., water, soil, forest), public health (e.g., potable water, air quality), and the environment (e.g., compliance with the U.S. Environmental Protection Agency's renewable fuel standard(s), greenhouse gases, emissions, particulate matter);
- Whether the borrower can establish that, if adopted, the biofuels production technology proposed in the application will not have any economically significant negative impacts on existing manufacturing plants or other facilities that use similar feedstocks;
- The potential for rural economic development;
- The level of local ownership of the biorefinery proposed in the application;
- Whether the project can be replicated; and
- Whether the project uses a particular technology, system, or process that is not currently operating in the advanced biofuel market as of October 1 of the fiscal year for which the funding is available.

Attachment B

Application Form

UNITED STATES
DEPARTMENT OF AGRICULTURE

APPLICATION GUIDANCE FOR FEDERAL ASSISTANCE
Section 9003 Biorefinery Loan Guarantees

This Program utilizes RD Form 4279-1, Application for Loan Guarantee, which is currently used for the Business and Industry and Section 9006 loan guarantee programs. However, in order to use this form for Section 9003 BioRefinery Assistance loan guarantees, additional instructions are required. These instructions follow.

1. All references to the Business and Industry program or the Section 9006 program in whatever manner, and whether referenced singularly or jointly, are deemed to be references to the BioRefinery Assistance Program described in this Guide.
2. All references to the Business and Industry or Section 9006 regulations in whatever manner, whether general or specific, whether singularly or jointly, and whether or not specific Code of Federal Regulation citations are used, are deemed to be a reference to the requirements of the Biorefinery Assistance Program described in this Guide.
3. Part A, Block 10, Type of Borrower, do not fill out if your entity is not listed.
4. Part A, Block 11. Fill in the businesses NAICS.
5. Part A, Block 20. The instruction to provide information on persons or corporations that will have guaranteed the loan is not applicable.
6. Part A, Block 21, Business Plan. Comply with the Program's business plan requirements rather than in Block 21.
7. Part A, Block 22 is not applicable.
8. Part A, Block 24 is not applicable because the Agency will obtain the form from the public domain.
9. Part A, Block 26, Independent Feasibility Study. Comply with the Program's feasibility study requirements rather than in Block 26.
10. Part A, Block 29, Financial Statements. Comply with the Program's financial statement requirements rather than in Block 29.
11. Part A, Block 32 is not applicable.
12. Part A, Block 33, Technical Report. Replace Technical Report with Feasibility Study, which will include a technical assessment of the project.
13. Part B, Block 20. A sample loan agreement is also acceptable.
14. Part B, Block 22, which addresses the Lender's analysis. Attach the Lender's analysis.

Attachment C

Fee Rate Schedule

**UNITED STATES
 DEPARTMENT OF AGRICULTURE**

FEE SCHEDULE FOR LOAN GUARANTEE
Section 9003 Biorefinery Assistance Loan Guarantees

LOAN GUARANTEE FEE RATE STRUCTURE:

Type of Fee	Percent Guarantee is XX of Total Project Costs	Fee Rate
I. <u>Guarantee Fee</u>	90%	3%
	>75% and less than 90%	2%
	>65% and less than or equal to 75%	1.5%
	65% or less	1%
II. <u>Annual Renewal Fee</u>	>75%	1%
	>65% and less than or equal to 75%	0.75%
	65% or less	0.5%