Department of Energy
Golden Field Office
1617 Cole Boulevard
Golden, Colorado 80401-3393

April 20, 2010

TO: Distribution List

SUBJECT: Notice of Scoping – INEOS New Planet BioEnergy Commercial Scale Integrated Demonstration Biorefinery, Indian River County, Florida (DOE/EA1773)

The U.S. Department of Energy (DOE) is proposing to provide federal funding to INEOS New Planet BioEnergy for the final design, construction, and initial start-up of a commercial scale integrated demonstration biorefinery near Vero Beach, Florida. The facility would produce 8 million gallons per year of bioethanol. Steam generated by the production of bioethanol would be used to power the biorefinery and to generate electricity. Details of the proposed project and its location are contained in the attachment to this letter. Pursuant to the requirements of the National Environmental Policy Act (NEPA), the Council on Environmental Quality regulations for implementing the procedural provision of NEPA (40 CFR Parts 1500-1508), and DOE's implementing procedures for compliance with NEPA (10 CFR 1021). DOE is preparing a draft Environmental Assessment (EA) to:

- Identify any adverse environmental effects that cannot be avoided should this proposed project be implemented.
- Evaluate viable alternatives to the proposed project.
- Describe the relationship between local short-term uses of the environment and the maintenance and enhancement of long-term productivity.
- Characterize any irreversible and irretrievable commitments of resources that would be involved should this proposed project be implemented.

Probable Environmental Effects/Issues Scoped for the Environmental Assessment

The EA will describe and analyze any potential impacts on the environment that would be caused by the project and will identify possible mitigation measures to reduce or eliminate those impacts that may result to:

- Land Use
- Air Quality
- Biological Resources
- Cultural Resources
- Noise and Odor
- Safety and Occupational Health
- Socioeconomics and Environmental Justice
- Utilities
- Traffic and Transportation
- Aesthetics
- Waste Management and Hazardous Materials
- Water Resources

Development of a Reasonable Range of Alternatives

DOE is required to consider a reasonable range of alternatives to the proposed action during an environmental review. The definition of alternatives is governed by the "rule of reason." An EA must consider a reasonable range of options that could accomplish the agency's purpose and need and reduce environmental effects. Reasonable alternatives are those that may be feasibly carried out based on environmental, technical, and economic factors.

The No Action Alternative will be addressed. The need for project redesign, or a project alternative, will be determined the course of environmental review.

Public Scoping

The DOE will make this letter available to all interested federal, state, and local agencies to provide input on issues to be addressed in the EA. Agencies are invited to identify the issues, within their statutory responsibilities that should be considered in the EA. The general public is also invited to submit comments on the scope of the EA.

No formal public scoping meeting is currently planned for this project. This letter as well as the draft EA, when it is available, will be posted in the DOE Golden Field Office online reading room: http://www.eere.energy.gov/golden/Reading_Room.aspx.

The DOE Golden Field Office welcomes your input throughout our NEPA process. Please provide any comments on this scoping letter on or before **May 21, 2010** to:

Kristin Kerwin
Department of Energy
1617 Cole Boulevard
Golden, Colorado 80401
kristin.kerwin@go.doe.gov

We look forward to hearing from you.

Sincerely,

Kristin Kerwin

Kristin Kerwin
NEPA Compliance Officer

Attachment

INEOS New Plant Biorefinery Proposed Project Description and Location

The U.S. Department of Energy (DOE) is proposing to provide up to $50 million to INEOS New Plant Biorefinery (INPB) for the final design, construction, and initial start-up of a commercial scale integrated demonstration biorefinery (proposed project) near Vero Beach, Florida. The project as proposed by INPB would utilize a process that would convert locally available, non-food, cellulosic waste materials into ethanol. The facility would produce 8 million gallons per year of ethanol and 2 megawatts of electricity for commercial use. This project would demonstrate key equipment at full commercial scale using wood and vegetative wastes and construction and demolition waste as feedstock.

The proposed project would be located on approximately 70 acres of a site that was used as a citrus processing facility until 2005. The proposed project site is located at 925 74th Avenue near Vero Beach, Indian River County at the southwest corner of 74th Avenue SW and 9th Street SW as shown in Exhibit 1. Land use in the vicinity of the proposed project is comprised mainly of agricultural and light industrial zones. The project site is zoned General Industrial and surrounding parcels are zoned Light Industrial, Agricultural, and General Commercial. There are two residential areas in the vicinity of the site. One is a single residence located approximately 0.25 mile west of the site along Oslo Road and the second is a group of houses located approximately 1 mile southwest, between Interstate 95 and 74th Avenue Southwest.

The project site is bordered on the north by a drainage canal, 9th Street SW and a cattle pasture; on the east by a drainage canal, 74th Avenue SW, the Indian River Exchange Packers, and citrus groves; to the south and southwest by the Indian River County Solid Waste Disposal District (IRC SWDD) landfill; and, to the west by a strip of undeveloped land. The relatively flat property contains portions of Portland cement concrete, asphaltic concrete and grass-covered surfaces, as well as a series of above-ground pipes and metal industrial structures from the citrus processing facility. The site also contains some scattered wetland areas and drainage ditches.

The proposed project, shown in Exhibit 2, would operate up to 330 days per year. The process technology of the proposed project would combine thermochemical and biochemical processes. There are four main process steps: feedstock gasification, synthesis gas fermentation, ethanol recovery, and power generation. The technology has been successfully developed, demonstrated and optimized through six years of operation in the large, fully integrated pilot plant located at INEOS Bio's Fayetteville, Arkansas technology center.

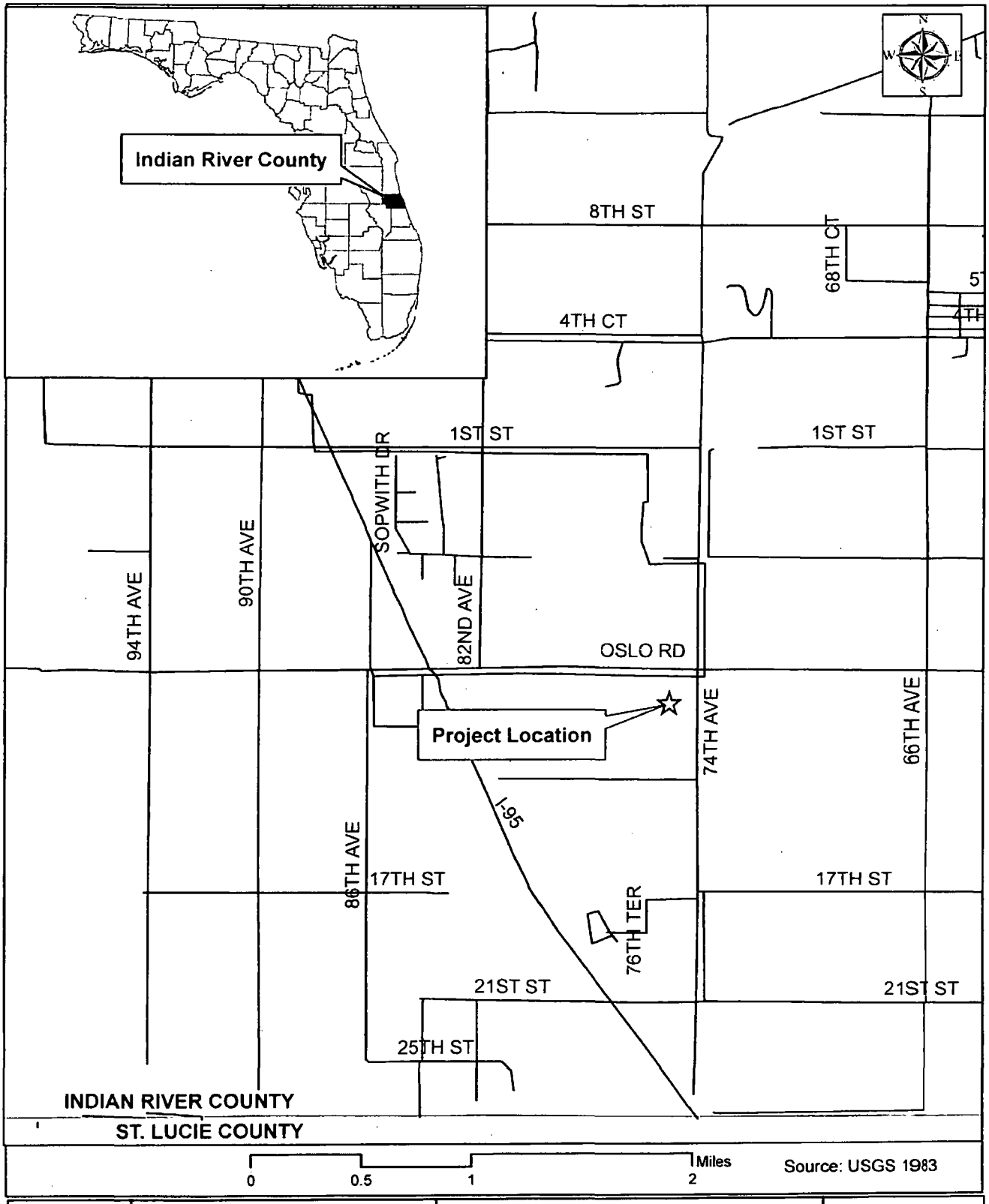
The feedstock for this proposed project would be primarily vegetative yard waste and construction and demolition debris. It is expected that, on an annual average basis, the feedstock would be a combination of approximately 80 percent vegetative waste and 20 percent clean woody construction debris. The feedstock system design would process approximately 425 tons per day of raw feedstock. As a demonstration facility, the proposed project would be used to test the compatibility of the process with municipal solid waste. It is expected that up to one month of operation could be devoted to municipal solid waste testing.

The proposed process would convert feedstock to syngas (a synthetic gas composed primarily of hydrogen and carbon monoxide) using two gasifiers. The syngas would be fermented and converted to ethanol by bacteria. Ethanol would be purified by distillation, denatured and stored until transported off-site by truck. Waste heat and vent gas streams would be used to generate steam and electric power in sufficient quantities that the proposed facility would be energy self-sufficient during stable operation and excess renewable electricity would be available for export to the electric power grid.

Project location maps of the proposed site location are attached.

Exhibit 1 – Proposed site location map
Exhibit 2 – Proposed facility site layout

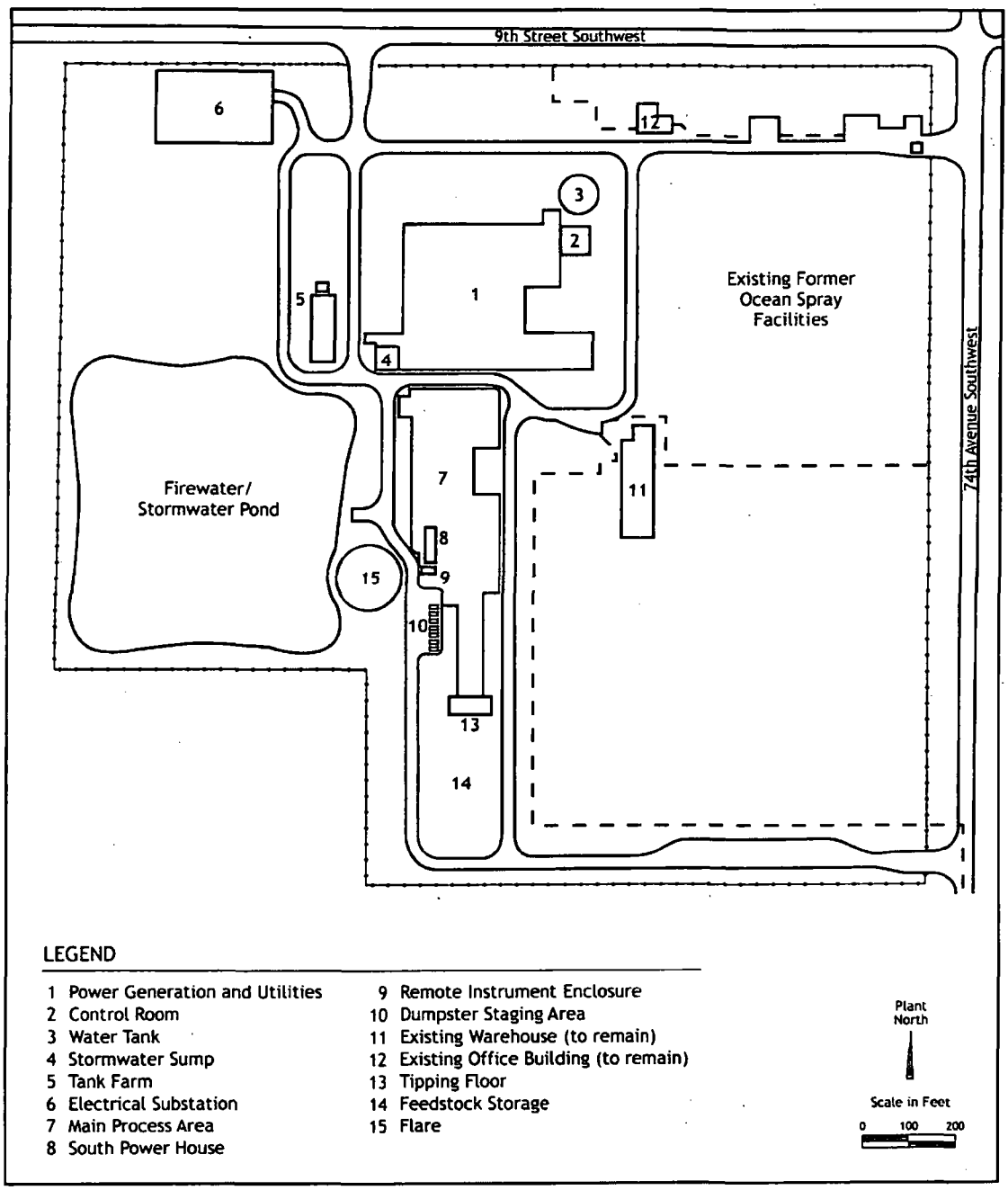
Exhibit 1



CDM	INP Bioenergy Indian River County, FL	Site Location Map	

Exhibit 2

Proposed Facility Site Layout



LEGEND

1 Power Generation and Utilities
2 Control Room
3 Water Tank
4 Stormwater Sump
5 Tank Farm
6 Electrical Substation
7 Main Process Area
8 South Power House
9 Remote Instrument Enclosure
10 Dumpster Staging Area
11 Existing Warehouse (to remain)
12 Existing Office Building (to remain)
13 Tipping Floor
14 Feedstock Storage
15 Flare

Plant North

Scale in Feet
0 100 200