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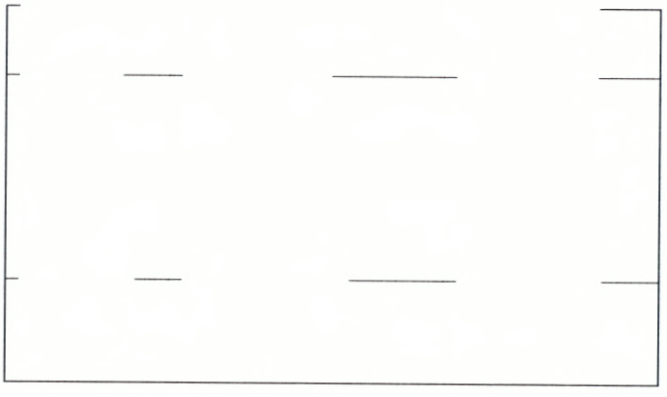

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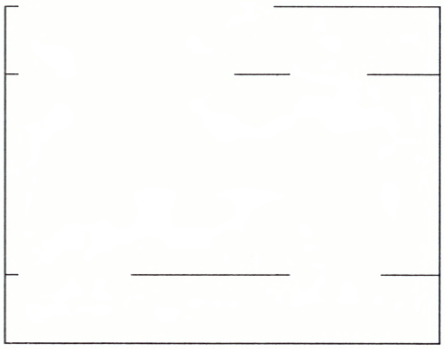

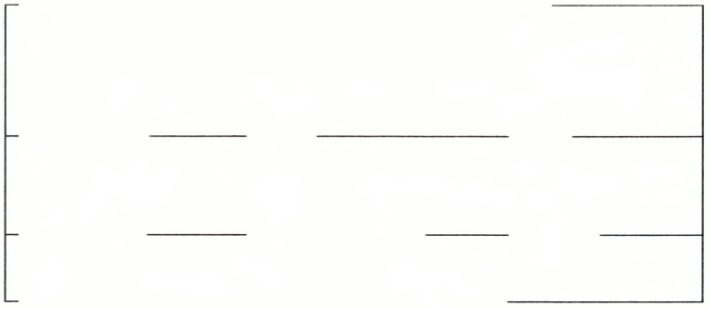

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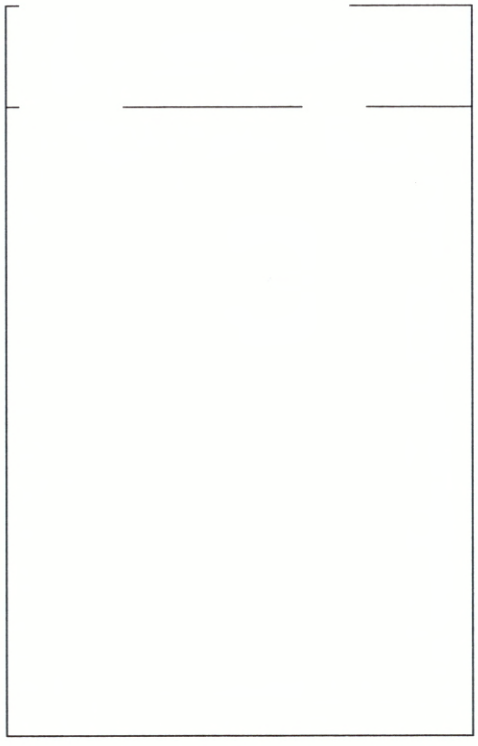

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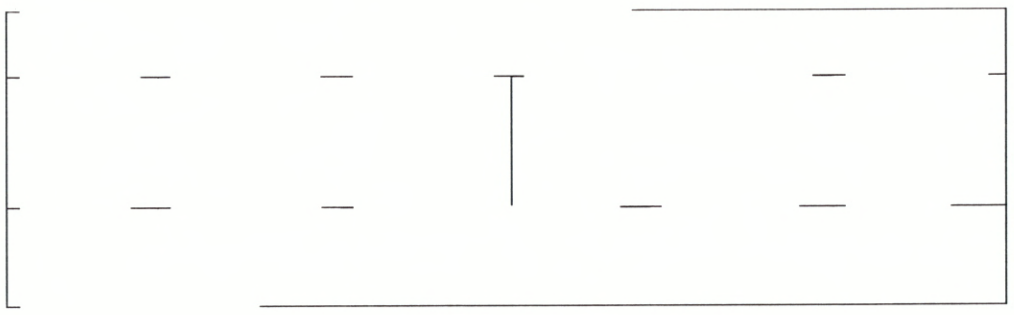

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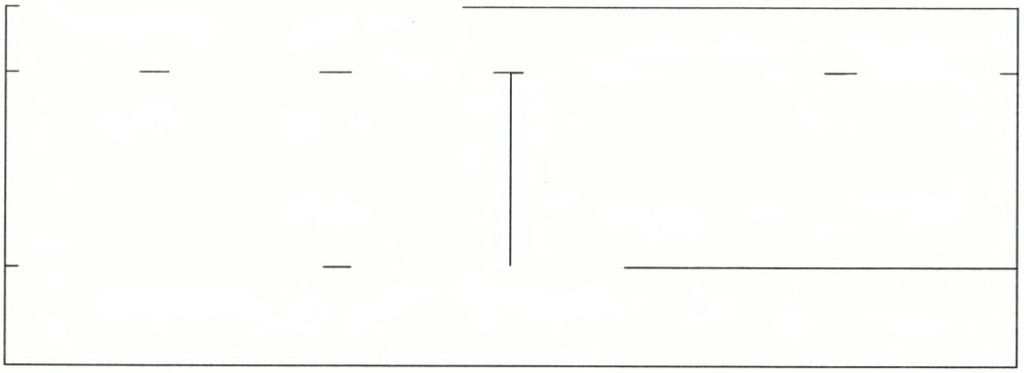

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Exemption 4

Applicant Name: Georgia Institute of Technology - Cumulative Award Number:

Budget Information - Non Construction Programs

OMB Approval No. 0348-0044

Section A - Budget Summary

Grant Program Function or Activity (a)	Catalog of Federal Domestic Assistance Number (b)	Estimated Unobligated Funds		New or Revised Budget		
		Federal (c)	Non-Federal (d)	Federal (e)	Non-Federal (f)	Total (g)
1. DE - FOA - 0000096	81.087			$912,040		
2.						
3.						
4.						
5. Totals		$0	$0	$912,040		

Exemption 4

Section B - Budget Categories

6. Object Class Categories	Grant Program, Function or Activity				Total (5)
	(1) DE - FOA - 0000096	(2)	(3)	(4)	
a. Personnel *					
b. Fringe Benefits *					
c. Travel *					
d. Equipment					
e. Supplies *					
f. Contractual University of Colorado (***GTchgs O/H on 1st $25K of contract year 1 only**)					
g. Construction					
h. Other					
i. Total Direct Charges (sum of 6a-6h)					
j. Indirect Charges (51%) (* indicates eligible for O/H)					
k. **Totals** (sum of 6i-6j)					
7. Program Income					$0

Exemption 4

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Section C - Non-Federal Resources

(a) Grant Program	(b) Applicant	(c) State	(d) Other Sources	(e) **Totals**
8. DE - FOA - 0000096		Exemption 4		
9.				
10.				
11.				
12. **Total** (sum of lines 8 - 11)	$0			

Section D - Forecasted Cash Needs

	Total for 1st Year	1st Quarter	2nd Quarter	3rd Quarter	4th quarter
13. Federal	$484,400	$154,398	$117,802	$117,802	$94,398
14. Non-Federal		Exemption 4			
15. **Total** (sum of lines 13 and 14)					

Section E - Budget Estimates of Federal Funds Needed for Balance of the Project

	Future Funding Periods (Years)			
(a) Grant Program	(b) First	(c) Second	(d) Third	(e) Fourth
16. DE - FOA - 0000096	$427,600			
17.				
18.				
19.				
20. **Total** (sum of lines 16-19)	$427,600	$0	$0	$0

Section F - Other Budget Information

21. Direct Charges	22. Indirect Charges

23. Remarks

Applicant Name: Georgia Institute of Technology - Year1 Award Number:

Budget Information - Non Construction Programs

OMB Approval No. 0348-0044

Section A - Budget Summary

Grant Program Function or Activity (a)	Catalog of Federal Domestic Assistance Number (b)	Estimated Unobligated Funds		New or Revised Budget		
		Federal (c)	Non-Federal (d)	Federal (e)	Non-Federal (f)	Total (g)
1. DE - FOA - 0000096	81.087			$484,400	Exemption 4	
2.						
3.						
4.						
5. Totals		$0	$0	$484,400		

Section B - Budget Categories

6. Object Class Categories	Grant Program, Function or Activity				Total (5)
	(1) DE - FOA - 0000096	(2)	(3)	(4)	
a. Personnel *	Exemption 4				
b. Fringe Benefits *					
c. Travel *					
d. Equipment					
e. Supplies *					
f. Contractual University of Colorado (***GTchgs O/H on 1st $25K of contract year 1 only**)					
g. Construction					
h. Other					
i. Total Direct Charges (sum of 6a-6h)					
j. Indirect Charges (51%) (* indicates eligible for O/H)					
k. **Totals** (sum of 6i-6j)					
7. Program Income					$0

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Section C - Non-Federal Resources

(a) Grant Program	(b) Applicant	(c) State	(d) Other Sources	(e) **Totals**
8. DE - FOA - 0000096		Exemption 4		
9.				
10.				
11.				
12. **Total** (sum of lines 8 - 11)	$0			

Section D - Forecasted Cash Needs

	Total for 1st Year	1st Quarter	2nd Quarter	3rd Quarter	4th quarter
13. Federal	$484,400	$154,398	$117,802	$117,802	$94,398
14. Non-Federal	Exemption 4				
15. **Total** (sum of lines 13 and 14)					

Section E - Budget Estimates of Federal Funds Needed for Balance of the Project

	Future Funding Periods (Years)			
(a) Grant Program	(b) First	(c) Second	(d) Third	(e) Fourth
16. DE - FOA - 0000096	$427,600			
17.				
18.				
19.				
20. **Total** (sum of lines 16-19)	$427,600	$0	$0	$0

Section F - Other Budget Information

21. Direct Charges	22. Indirect Charges

23. Remarks

Applicant Name: Georgia Institute of Technology - Year 2 Award Number:

Budget Information - Non Construction Programs

OMB Approval No. 0348-0044

Section A - Budget Summary

Grant Program Function or Activity (a)	Catalog of Federal Domestic Assistance Number (b)	Estimated Unobligated Funds		New or Revised Budget		
		Federal (c)	Non-Federal (d)	Federal (e)	Non-Federal (f)	Total (g)
1. DE - FOA - 0000096	81.087			$427,640	Exemption 4	
2.						
3.						
4.						
5. Totals		$0	$0	$427,640		

Section B - Budget Categories

6. Object Class Categories	Grant Program, Function or Activity				Total (5)
	(1) DE - FOA - 0000096	(2)	(3)	(4)	
a. Personnel	Exemption 4				
b. Fringe Benefits					
c. Travel					
d. Equipment (see below)					
e. Supplies					
f. Contractual					
g. Construction					
h. Other					
i. Total Direct Charges (sum of 6a-6h)					
j. Indirect Charges (51%)					
Equipment (no indirect costs)					
Subcontract (University of Colorado)					
k. **Totals** (sum of 6i-6j)					
7. Program Income					$0

SF-424A (Rev. 4-92)

Section C - Non-Federal Resources					
(a) Grant Program		(b) Applicant	(c) State	(d) Other Sources	(e) **Totals**
8. DE - GOA - 0000096			Exemption 4		
9.					
10.					
11.					
12. **Total** (sum of lines 8 - 11)		$0			

Section D - Forecasted Cash Needs					
	Total for 1st Year	1st Quarter	2nd Quarter	3rd Quarter	4th quarter
13. Federal	$484,400	$154,398	$117,802	$117,802	$94,398
14. Non-Federal	Exemption 4				
15. **Total** (sum of lines 13 and 14)					

Section E - Budget Estimates of Federal Funds Needed for Balance of the Project				
	Future Funding Periods (Years)			
(a) Grant Program	(b) First	(c) Second	(d) Third	(e) Fourth
16.				
17.				
18.				
19.				
20. **Total** (sum of lines 16-19)	$0	$0	$0	$0

Section F - Other Budget Information	
21. Direct Charges	22. Indirect Charges
23. Remarks	

Georgia Tech

The Strategic Energy Institute

May 21, 2009

Algenol Biofuels Inc.
Craig R. Smith, M.D.
Executive Vice President, Chief Operating Officer
28100 Bonita Grande Drive, Suite 200
Bonita Springs FL 34135

Subject: "Pilot-Scale Integrated Biorefinery Operations for Producing Ethanol From Algae"

Dear Dr. Smith,

The purpose of this letter is to confirm our support for and participation in the project **"Pilot-Scale Integrated Biorefinery Operations for Producing Ethanol From Algae."** which will be submitted as a proposal to the US Department of Energy under Funding Opportunity DE-PS36-09GO99038.

As you know, the Georgia Institute of Technology (GT) has significant experience and expertise in renewable energy research, particularly within in our Strategic Energy Institute and our School of Chemical & Biomolecular Engineering. We believe our background in CO_2 capture, membrane separations, and energy systems analysis will help the Algenol-led team to successfully complete the project.

Georgia Tech will be a significant collaborator in the R&D component of the project. Specifically, Georgia Tech researchers will:

Exemption 4

The Strategic Energy Institute
Atlanta, Georgia 30332-0363 U.S.A.
web site: http://www.energy.gatech.edu

Phone: 404.385.0834
Fax: 404.894.7559

Exemption 4

We here at Georgia Tech look forward to working with you and the distinguished team that Algenol has assembled to successfully complete the goals of this project and prepare the technology for commercialization.

Sincerely,

Roger P. Webb, PhD.
Director, Strategic Energy Institute

The Strategic Energy Institute
Atlanta, Georgia 30332-0362 U.S.A.
Phone: 404-385-0384
Fax: 404-894-7896
web site: http://www.energy.gatech.edu

Applicant Name: **Membrane Technology and Research, Inc.** Award Number: _____ **YEAR ONE**

Budget Information - Non Construction Programs

OMB Approval No. 0348-0044

Section A - Budget Summary

Grant Program Function or Activity (a)	Catalog of Federal Domestic Assistance Number (b)	Estimated Unobligated Funds		New or Revised Budget		
		Federal (c)	Non-Federal (d)	Federal (e)	Non-Federal (f)	Total (g)
1. DE - FOA - 0000096	81.087			$148,854	Exemption 4	
2.						
3.						
4.						
5. Totals		$0	$0	$148,854		

Section B - Budget Categories

6. Object Class Categories	Grant Program, Function or Activity				Total (5)
	(1) 81.087	(2)	(3)	(4)	
a. Personnel	Exemption 4				
b. Fringe Benefits					
c. Travel					
d. Equipment					
e. Supplies					
f. Contractual					
g. Construction					
h. Other					
i. Total Direct Charges (sum of 6a-6h)					
j. Indirect Charges					
k. **Totals** (sum of 6i-6j)					
7. Program Income	$0				$0

Section C - Non-Federal Resources

(a) Grant Program	(b) Applicant	(c) State	(d) Other Sources	(e) **Totals**
8. DE - FOA - 0000096	$37,214	Exemption 4		
9.				
10.				
11.				
12. **Total** (sum of lines 8 - 11)	$37,214			

Section D - Forecasted Cash Needs

	Total for 1st Year	1st Quarter	2nd Quarter	3rd Quarter	4th quarter
13. Federal	$148,854	$37,214	$37,213	$37,214	$37,213
14. Non-Federal	Exemption 4				
15. **Total** (sum of lines 13 and 14)					

Section E - Budget Estimates of Federal Funds Needed for Balance of the Project

	Future Funding Periods (Years)			
(a) Grant Program	(b) First	(c) Second	(d) Third	(e) Fourth
16. DE - FOA - 0000096	$615,304	$114,382	$113,508	$0
17.				
18.				
19.				
20. **Total** (sum of lines 16-19)	$615,304	$114,382	$113,508	$0

Section F - Other Budget Information

21. Direct Charges

22. Indirect Charges
Provisional rate, Exemption 4 includes all allowable indirect costs.

23. Remarks

Applicant Name: **Membrane Technology and Research, Inc.** Award Number: **YEAR TWO**

Budget Information - Non Construction Programs

OMB Approval No. 0348-0044

Section A - Budget Summary

Grant Program Function or Activity (a)	Catalog of Federal Domestic Assistance Number (b)	Estimated Unobligated Funds		New or Revised Budget		
		Federal (c)	Non-Federal (d)	Federal (e)	Non-Federal (f)	Total (g)
1. DE - FOA - 0000096	81.087			$615,304	Exemption 4	
2.						
3.						
4.						
5. Totals		$0	$0	$615,304		

Section B - Budget Categories

6. Object Class Categories	Grant Program, Function or Activity				Total (5)
	(1) 81.087	(2)	(3)	(4)	
a. Personnel	Exemption 4				
b. Fringe Benefits					
c. Travel					
d. Equipment					
e. Supplies					
f. Contractual					
g. Construction					
h. Other					
i. Total Direct Charges (sum of 6a-6h)					
j. Indirect Charges					
k. **Totals** (sum of 6i-6j)					
7. Program Income	$0				$0

Section C - Non-Federal Resources

(a) Grant Program	(b) Applicant	(c) State	(d) Other Sources	(e) **Totals**
8. DE - FOA - 0000096	$153,826	Exemption 4		
9.				
10.				
11.				
12. **Total** (sum of lines 8 - 11)	$153,826			

Section D - Forecasted Cash Needs

	Total for 1st Year	1st Quarter	2nd Quarter	3rd Quarter	4th quarter
13. Federal	$148,854	$37,214	$37,213	$37,214	$37,213
14. Non-Federal	Exemption 4				
15. **Total** (sum of lines 13 and 14)					

Section E - Budget Estimates of Federal Funds Needed for Balance of the Project

	Future Funding Periods (Years)			
(a) Grant Program	(b) First	(c) Second	(d) Third	(e) Fourth
16. DE - FOA - 0000096	$615,304	$114,382	$113,508	$0
17.				
18.				
19.				
20. **Total** (sum of lines 16-19)	$615,304	$114,382	$113,508	$0

Section F - Other Budget Information

21. Direct Charges

22. Indirect Charges
Provisional rate, Exemption 4 , includes all allowable indirect costs.

23. Remarks

Applicant Name: **Membrane Technology and Research, Inc.** Award Number: _____ **YEAR THREE**

Budget Information - Non Construction Programs

OMB Approval No. 0348-0044

Section A - Budget Summary

Grant Program Function or Activity (a)	Catalog of Federal Domestic Assistance Number (b)	Estimated Unobligated Funds		New or Revised Budget		
		Federal (c)	Non-Federal (d)	Federal (e)	Non-Federal (f)	Total (g)
1. DE - FOA - 0000096	81.087			$114,382	Exemption 4	
2.						
3.						
4.						
5. Totals		$0	$0	$114,382		

Section B - Budget Categories

6. Object Class Categories	Grant Program, Function or Activity (1) 81.087	(2)	(3)	(4)	Total (5)
a. Personnel	Exemption 4				
b. Fringe Benefits					
c. Travel					
d. Equipment					
e. Supplies					
f. Contractual					
g. Construction					
h. Other					
i. Total Direct Charges (sum of 6a-6h)					
j. Indirect Charges					
k. **Totals** (sum of 6i-6j)					
7. Program Income	$0				$0

Section C - Non-Federal Resources

(a) Grant Program	(b) Applicant	(c) State	(d) Other Sources	(e) **Totals**
8. DE - FOA - 0000096	$28,596	Exemption 4		
9.				
10.				
11.				
12. **Total** (sum of lines 8 - 11)	$28,596			

Section D - Forecasted Cash Needs

	Total for 1st Year	1st Quarter	2nd Quarter	3rd Quarter	4th quarter
13. Federal	$148,854	$37,214	$37,213	$37,214	$37,213
14. Non-Federal		Exemption 4			
15. **Total** (sum of lines 13 and 14)					

Section E - Budget Estimates of Federal Funds Needed for Balance of the Project

	Future Funding Periods (Years)			
(a) Grant Program	(b) First	(c) Second	(d) Third	(e) Fourth
16. DE - FOA - 0000096	$615,304	$114,382	$113,508	$0
17.				
18.				
19.				
20. **Total** (sum of lines 16-19)	$615,304	$114,382	$113,508	$0

Section F - Other Budget Information

21. Direct Charges

22. Indirect Charges
Provisional rate, Exemption 4 , includes all allowable indirect costs.

23. Remarks

Applicant Name: **Membrane Technology and Research, Inc.** Award Number: _____ **YEAR FOUR**

Budget Information - Non Construction Programs

OMB Approval No. 0348-0044

Section A - Budget Summary

Grant Program Function or Activity (a)	Catalog of Federal Domestic Assistance Number (b)	Estimated Unobligated Funds		New or Revised Budget		
		Federal (c)	Non-Federal (d)	Federal (e)	Non-Federal (f)	Total (g)
1. DE - FOA -0000096	81.087			$113,508	Exemption 4	
2.						
3.						
4.						
5. Totals		$0	$0	$113,508		

Section B - Budget Categories

6. Object Class Categories	Grant Program, Function or Activity				Total (5)
	(1) 81.087	(2)	(3)	(4)	
a. Personnel	Exemption 4				
b. Fringe Benefits					
c. Travel					
d. Equipment					
e. Supplies					
f. Contractual					
g. Construction					
h. Other					
i. Total Direct Charges (sum of 6a-6h)					
j. Indirect Charges					
k. **Totals** (sum of 6i-6j)					
7. Program Income	$0				$0

Section C - Non-Federal Resources

(a) Grant Program	(b) Applicant	(c) State	(d) Other Sources	(e) **Totals**
8. DE - FOA -0000096	$28,377	Exemption 4		
9.				
10.				
11.				
12. **Total** (sum of lines 8 - 11)	$28,377			

Section D - Forecasted Cash Needs

	Total for 1st Year	1st Quarter	2nd Quarter	3rd Quarter	4th quarter
13. Federal	$148,854	$37,214	$37,213	$37,214	$37,213
14. Non-Federal	Exemption 4				
15. **Total** (sum of lines 13 and 14)					

Section E - Budget Estimates of Federal Funds Needed for Balance of the Project

	Future Funding Periods (Years)			
(a) Grant Program	(b) First	(c) Second	(d) Third	(e) Fourth
16. DE - FOA -0000096	$615,304	$114,382	$113,508	$0
17.				
18.				
19.				
20. **Total** (sum of lines 16-19)	$615,304	$114,382	$113,508	$0

Section F - Other Budget Information

21. Direct Charges

22. Indirect Charges
Provisional rate, Exemption 4 , includes all allowable indirect costs.

23. Remarks

Applicant Name: **Membrane Technology and Research, Inc.** Award Number: _____ **CUMULATIVE**

Budget Information - Non Construction Programs

OMB Approval No. 0348-0044

Section A - Budget Summary

Grant Program Function or Activity (a)	Catalog of Federal Domestic Assistance Number (b)	Estimated Unobligated Funds		New or Revised Budget		
		Federal (c)	Non-Federal (d)	Federal (e)	Non-Federal (f)	Total (g)
1. DE - FOA -0000096	81.087			$992,048	Exemption 4	
2.						
3.						
4.						
5. Totals		$0	$0	$992,048		

Section B - Budget Categories

6. Object Class Categories	Grant Program, Function or Activity (1) 81.087	(2)	(3)	(4)	Total (5)
a. Personnel	Exemption 4				
b. Fringe Benefits					
c. Travel					
d. Equipment					
e. Supplies					
f. Contractual					
g. Construction					
h. Other					
i. Total Direct Charges (sum of 6a-6h)					
j. Indirect Charges					
k. **Totals** (sum of 6i-6j)					
7. Program Income	$0				$0

Section C - Non-Federal Resources

(a) Grant Program	(b) Applicant	(c) State	(d) Other Sources	(e) **Totals**
8. DE - FOA -0000096	$248,013	Exemption 4		
9.				
10.				
11.				
12. **Total** (sum of lines 8 - 11)	$248,013			

Section D - Forecasted Cash Needs

	Total for 1st Year	1st Quarter	2nd Quarter	3rd Quarter	4th quarter
13. Federal	$148,854	$37,214	$37,213	$37,214	$37,213
14. Non-Federal	Exemption 4				
15. **Total** (sum of lines 13 and 14)					

Section E - Budget Estimates of Federal Funds Needed for Balance of the Project

	Future Funding Periods (Years)			
(a) Grant Program	(b) First	(c) Second	(d) Third	(e) Fourth
16. DE - FOA -0000096	$615,304	$114,382	$113,508	$0
17.				
18.				
19.				
20. **Total** (sum of lines 16-19)	$615,304	$114,382	$113,508	$0

Section F - Other Budget Information

21. Direct Charges

22. Indirect Charges
Provisional rate, Exemption 4 includes all allowable indirect costs.

23. Remarks

Applicant Name: The Dow Chemical Company Award Number:

Budget Information - Non Construction Programs

OMB Approval No. 0348-0044

Section A - Budget Summary

Grant Program Function or Activity (a)	Catalog of Federal Domestic Assistance Number (b)	Estimated Unobligated Funds		New or Revised Budget		
		Federal (c)	Non-Federal (d)	Federal (e)	Non-Federal (f)	Total (g)
1. DE-FOA-0000096	81.087			$4,625,118	Exemption 4	
2.						
3.						
4.						
5. Totals		$0	$0	$4,625,118		

Section B - Budget Categories

6. Object Class Categories	Grant Program, Function or Activity (1)	(2)	(3)	(4)	Total (5)
a. Personnel	Exemption 4				
b. Fringe Benefits					
c. Travel					
d. Equipment					
e. Supplies					
f. Contractual					
g. Construction					
h. Other					
i. Total Direct Charges (sum of 6a-6h)					
j. Indirect Charges					
k. **Totals** (sum of 6i-6j)					
7. Program Income					$0

Section C - Non-Federal Resources

(a) Grant Program	(b) Applicant	(c) State	(d) Other Sources	(e) **Totals**
8. DE-FOA-0000096	$1,996,280	Exemption 4		
9.				
10.				
11.				
12. **Total** (sum of lines 8 - 11)	$1,996,280			

Section D - Forecasted Cash Needs

	Total for 1st Year	1st Quarter	2nd Quarter	3rd Quarter	4th quarter
13. Federal	$2,150,008	$1,156,280	$1,156,280	$1,156,280	$1,156,280
14. Non-Federal	Exemption 4				
15. **Total** (sum of lines 13 and 14)					

Section E - Budget Estimates of Federal Funds Needed for Balance of the Project

	Future Funding Periods (Years)			
(a) Grant Program	(b) First	(c) Second	(d) Third	(e) Fourth
16. DE-FOA-0000096	$1,454,642	$428,295	$292,522	$299,651
17.				
18.				
19.				
20. **Total** (sum of lines 16-19)	$1,454,642	$428,295	$292,522	$299,651

Section F - Other Budget Information

21. Direct Charges	22. Indirect Charges

23. Remarks

Applicant Name: The Dow Chemical Company Award Number: _____

Budget Information - Non Construction Programs

OMB Approval No. 0348-0044

Section A - Budget Summary

Grant Program Function or Activity (a)	Catalog of Federal Domestic Assistance Number (b)	Estimated Unobligated Funds		New or Revised Budget		
		Federal (c)	Non-Federal (d)	Federal (e)	Non-Federal (f)	Total (g)
1. DE-FOA-0000096	81.087			$2,150,008	Exemption 4	
2.						
3.						
4.						
5. Totals		$0	$0	$2,150,008		

Section B - Budget Categories

6. Object Class Categories	Grant Program, Function or Activity (1)	(2)	(3)	(4)	Total (5)
a. Personnel	Exemption 4				
b. Fringe Benefits					
c. Travel					
d. Equipment					
e. Supplies					
f. Contractual					
g. Construction					
h. Other					
i. Total Direct Charges (sum of 6a-6h)					
j. Indirect Charges					
k. **Totals** (sum of 6i-6j)					
7. Program Income					$0

Section C - Non-Federal Resources				
(a) Grant Program	(b) Applicant	(c) State	(d) Other Sources	(e) **Totals**
8. DE-FOA-0000096	$537,502	Exemption 4		
9.				
10.				
11.				
12. **Total** (sum of lines 8 - 11)	$537,502			

Section D - Forecasted Cash Needs					
	Total for 1st Year	1st Quarter	2nd Quarter	3rd Quarter	4th quarter
13. Federal	$0				
14. Non-Federal	$0				
15. **Total** (sum of lines 13 and 14)	$0	$0	$0	$0	$0

Section E - Budget Estimates of Federal Funds Needed for Balance of the Project				
	Future Funding Periods (Years)			
(a) Grant Program	(b) First	(c) Second	(d) Third	(e) Fourth
16.				
17.				
18.				
19.				
20. **Total** (sum of lines 16-19)	$0	$0	$0	$0

Section F - Other Budget Information	
21. Direct Charges	22. Indirect Charges

23. Remarks

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Applicant Name: The Dow Chemical Company Award Number: _____

Budget Information - Non Construction Programs

OMB Approval No. 0348-0044

Section A - Budget Summary

Grant Program Function or Activity (a)	Catalog of Federal Domestic Assistance Number (b)	Estimated Unobligated Funds		New or Revised Budget		
		Federal (c)	Non-Federal (d)	Federal (e)	Non-Federal (f)	Total (g)
1. DE-FOA-0000096	81.087			$1,454,642	Exemption 4	
2.						
3.						
4.						
5. Totals		$0	$0	$1,454,642		

Section B - Budget Categories

6. Object Class Categories	Grant Program, Function or Activity (1)	(2)	(3)	(4)	Total (5)
a. Personnel	Exemption 4				
b. Fringe Benefits					
c. Travel					
d. Equipment					
e. Supplies					
f. Contractual					
g. Construction					
h. Other					
i. Total Direct Charges (sum of 6a-6h)					
j. Indirect Charges					
k. **Totals** (sum of 6i-6j)					
7. Program Income					$0

Section C - Non-Federal Resources

(a) Grant Program	(b) Applicant	(c) State	(d) Other Sources	(e) **Totals**
8. DE-FOA-0000096	$573,661	Exemption 4		
9.				
10.				
11.				
12. **Total** (sum of lines 8 - 11)	$573,661			

Section D - Forecasted Cash Needs

	Total for 1st Year	1st Quarter	2nd Quarter	3rd Quarter	4th quarter
13. Federal	$0				
14. Non-Federal	$0				
15. **Total** (sum of lines 13 and 14)	$0	$0	$0	$0	$0

Section E - Budget Estimates of Federal Funds Needed for Balance of the Project

	Future Funding Periods (Years)			
(a) Grant Program	(b) First	(c) Second	(d) Third	(e) Fourth
16.				
17.				
18.				
19.				
20. **Total** (sum of lines 16-19)	$0	$0	$0	$0

Section F - Other Budget Information

21. Direct Charges	22. Indirect Charges

23. Remarks

Applicant Name: The Dow Chemical Company Award Number:

Budget Information - Non Construction Programs

OMB Approval No. 0348-0044

Section A - Budget Summary

Grant Program Function or Activity (a)	Catalog of Federal Domestic Assistance Number (b)	Estimated Unobligated Funds		New or Revised Budget		
		Federal (c)	Non-Federal (d)	Federal (e)	Non-Federal (f)	Total (g)
1. DE-FOA-0000096	81.087			$428,295	Exemption 4	
2.						
3.						
4.						
5. Totals		$0	$0	$428,295		

Section B - Budget Categories

6. Object Class Categories	Grant Program, Function or Activity (1)	(2)	(3)	(4)	Total (5)
a. Personnel	Exemption 4				
b. Fringe Benefits					
c. Travel					
d. Equipment					
e. Supplies					
f. Contractual					
g. Construction					
h. Other					
i. Total Direct Charges (sum of 6a-6h)					
j. Indirect Charges					
k. **Totals** (sum of 6i-6j)					
7. Program Income					$0

Section C - Non-Federal Resources

(a) Grant Program	(b) Applicant	(c) State	(d) Other Sources	(e) **Totals**
8. DE-FOA-0000096	$317,074	Exemption 4		
9.				
10.				
11.				
12. **Total** (sum of lines 8 - 11)	$317,074			

Section D - Forecasted Cash Needs

	Total for 1st Year	1st Quarter	2nd Quarter	3rd Quarter	4th quarter
13. Federal	$0				
14. Non-Federal	$0				
15. **Total** (sum of lines 13 and 14)	$0	$0	$0	$0	$0

Section E - Budget Estimates of Federal Funds Needed for Balance of the Project

(a) Grant Program	**Future Funding Periods (Years)** (b) First	(c) Second	(d) Third	(e) Fourth
16.				
17.				
18.				
19.				
20. **Total** (sum of lines 16-19)	$0	$0	$0	$0

Section F - Other Budget Information

21. Direct Charges	22. Indirect Charges

23. Remarks

Applicant Name: The Dow Chemical Company Award Number:

Budget Information - Non Construction Programs

OMB Approval No. 0348-0044

Section A - Budget Summary

Grant Program Function or Activity (a)	Catalog of Federal Domestic Assistance Number (b)	Estimated Unobligated Funds		New or Revised Budget		
		Federal (c)	Non-Federal (d)	Federal (e)	Non-Federal (f)	Total (g)
1. DE-FOA-0000096	81.087			$292,522	Exemption 4	
2.						
3.						
4.						
5. Totals		$0	$0	$292,522		

Section B - Budget Categories

6. Object Class Categories	Grant Program, Function or Activity (1)	(2)	(3)	(4)	Total (5)
a. Personnel	Exemption 4				
b. Fringe Benefits					
c. Travel					
d. Equipment					
e. Supplies					
f. Contractual					
g. Construction					
h. Other					
i. Total Direct Charges (sum of 6a-6h)					
j. Indirect Charges					
k. **Totals** (sum of 6i-6j)					
7. Program Income					$0

Section C - Non-Federal Resources

(a) Grant Program	(b) Applicant	(c) State	(d) Other Sources	(e) **Totals**
8. DE-FOA-0000096	$283,131	Exemption 4		
9.				
10.				
11.				
12. **Total** (sum of lines 8 - 11)	$283,131			

Section D - Forecasted Cash Needs

	Total for 1st Year	1st Quarter	2nd Quarter	3rd Quarter	4th quarter
13. Federal	$0				
14. Non-Federal	$0				
15. **Total** (sum of lines 13 and 14)	$0	$0	$0	$0	$0

Section E - Budget Estimates of Federal Funds Needed for Balance of the Project

(a) Grant Program	**Future Funding Periods (Years)** (b) First	(c) Second	(d) Third	(e) Fourth
16.				
17.				
18.				
19.				
20. **Total** (sum of lines 16-19)	$0	$0	$0	$0

Section F - Other Budget Information

21. Direct Charges	22. Indirect Charges

23. Remarks

Applicant Name: The Dow Chemical Company Award Number:

Budget Information - Non Construction Programs

OMB Approval No. 0348-0044

Section A - Budget Summary

Grant Program Function or Activity (a)	Catalog of Federal Domestic Assistance Number (b)	Estimated Unobligated Funds		New or Revised Budget		
		Federal (c)	Non-Federal (d)	Federal (e)	Non-Federal (f)	Total (g)
1. DE-FOA-0000096	81.087			$299,651	Exemption 4	
2.						
3.						
4.						
5. Totals		$0	$0	$299,651		

Section B - Budget Categories

6. Object Class Categories	Grant Program, Function or Activity (1)	(2)	(3)	(4)	Total (5)
a. Personnel	Exemption 4				
b. Fringe Benefits					
c. Travel					
d. Equipment					
e. Supplies					
f. Contractual					
g. Construction					
h. Other					
i. Total Direct Charges (sum of 6a-6h)					
j. Indirect Charges					
k. **Totals** (sum of 6i-6j)					
7. Program Income					$0

Section C - Non-Federal Resources

(a) Grant Program	(b) Applicant	(c) State	(d) Other Sources	(e) **Totals**
8. DE-FOA-0000096	$284,912	Exemption 4		
9.				
10.				
11.				
12. **Total** (sum of lines 8 - 11)	$284,912			

Section D - Forecasted Cash Needs

	Total for 1st Year	1st Quarter	2nd Quarter	3rd Quarter	4th quarter
13. Federal	$0				
14. Non-Federal	$0				
15. **Total** (sum of lines 13 and 14)	$0	$0	$0	$0	$0

Section E - Budget Estimates of Federal Funds Needed for Balance of the Project

	Future Funding Periods (Years)			
(a) Grant Program	(b) First	(c) Second	(d) Third	(e) Fourth
16.				
17.				
18.				
19.				
20. **Total** (sum of lines 16-19)	$0	$0	$0	$0

Section F - Other Budget Information

21. Direct Charges	22. Indirect Charges

23. Remarks

Applicant Name: NREL Cumulative Award Number: _____

Budget Information - Non Construction Programs

OMB Approval No. 0348-0044

Section A - Budget Summary

Grant Program Function or Activity (a)	Catalog of Federal Domestic Assistance Number (b)	Estimated Unobligated Funds		New or Revised Budget		
		Federal (c)	Non-Federal (d)	Federal (e)	Non-Federal (f)	Total (g)
1. DE - FOA - 0000096	81.087				Exemption 4	
2.						
3.						
4.						
5. Totals		$0	$0	$0		

Section B - Budget Categories

6. Object Class Categories	Grant Program, Function or Activity (1)	(2)	(3)	(4)	Total (5)
a. Personnel	Exemption 4				
b. Fringe Benefits					
c. Travel					
d. Equipment					
e. Supplies					
f. Contractual					
g. Construction					
h. Other					
i. Total Direct Charges (sum of 6a-6h)					
j. Indirect Charges					
k. **Totals** (sum of 6i-6j)					
7. Program Income					$0

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Section C - Non-Federal Resources

(a) Grant Program	(b) Applicant	(c) State	(d) Other Sources	(e) **Totals**
8. DE - FOA - 0000096		Exemption 4		
9.				
10.				
11.				
12. **Total** (sum of lines 8 - 11)	$0			

Section D - Forecasted Cash Needs

	Total for 1st Year	1st Quarter	2nd Quarter	3rd Quarter	4th quarter
13. Federal					
14. Non-Federal	Exemption 4				
15. **Total** (sum of lines 13 and 14)					

Section E - Budget Estimates of Federal Funds Needed for Balance of the Project

	Future Funding Periods (Years)			
(a) Grant Program	(b) First	(c) Second	(d) Third	(e) Fourth
16. DE - FOA - 0000096				
17.				
18.				
19.				
20. **Total** (sum of lines 16-19)	$0	$0	$0	$0

Section F - Other Budget Information

21. Direct Charges	22. Indirect Charges

23. Remarks

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

May 26, 2009

Mr. Hank Eggink
Contracting Officer
U.S. Department of Energy
Golden Field Office
Mail Stop 1501
1617 Cole Boulevard
Golden, Colorado 80401
Phone: 303-275-4825
Fax: 303-275-4858

Re: DOE Funding Opportunity Announcement, Recovery Act – Demonstration of Integrated Biorefinery Operations, No. DE-FOA-0000096

Dear Mr. Eggink:

Authorization is granted for the National Bioenergy Center of the National Renewable Energy Laboratory to assist Algenol Biofuels, Inc., with a simulated laboratory analysis of natural gas power plant flue gas and its impacts on Algenol cyanobacteria samples, as well as development of an Aspen Plus technoeconomic model for the Algenol algae-to-ethanol production process for the above-cited solicitation. The proposed work is consistent with, or complementary to, the missions of the laboratory and will not adversely impact execution of the laboratory's DOE-assigned programs.

Sincerely yours,

Jean M. Siekerka
Contracting Officer

Cc:
Phil Pienkos, NREL

Federal Recycling Program Printed on Recycled Paper

PMC 121 1
(07/2008)

U.S. DEPARTMENT OF ENERGY
PROJECT MANAGEMENT CENTER

PRE-AWARD INFORMATION SHEET

Awardee Name:	Algenol Biofuels Inc.
Award Number:	
Awardee Business Officer:	Katie McFadden
Awardee Project Director:	Craig R. Smith, M.D.

Employer/Taxpayer Identification Number (EIN/TIN):	REDACTED EXEMPTION 4
Data Universal Numbering System (DUNS):	800399904

For assistance in obtaining a DUNS Number, call Dunn & Bradstreet at 1-800-333-0505.
The Applicant should be prepared to provide the following information to Dunn & Bradstreet:
(1) Company name
(2) Company address
(3) Company telephone number
(4) Line of business
(5) Chief executive officer/key manager
(6) Date the company was started
(7) Number of people employed by the company
(8) Company affiliation

A. TYPE OF BUSINESS - the Awardee is a:

- ☒ For-Profit Organization (Other than Small Business)
  - ☒ Corporation
  - ☐ Partnership
  - ☐ Sole Proprietorship
- ☐ Government
  - ☐ Local Government
  - ☐ State Government
  - ☐ Indian Tribal Government
- ☐ Individual
- ☐ Institution of Higher Education
- ☐ Other NonProfit Organization
- ☐ Small Business
- ☐ Other (specify):

If NonProfit, select one below:

☐ A university or other institution of higher education or an organization of the type described in Section 501(c)(3) of the Internal Revenue Code of 1954 (26 USC 501(c)) and exempt from taxation under Section 501(a) of the Internal Revenue Code (26 USC 501(a)); or

☐ An organization of the type described in Section 501(c)(4) of the Internal Revenue Code of 1954 (26 USC 501(c)) and exempt from taxation under Section 501(a) of the Internal Revenue Code (26 USC 501(a)); or

☐ An organization of the type described in Section 501(c)(6) of the Internal Revenue Code of 1954 (26 USC 501(c)) and exempt from taxation under Section 501(a) of the Internal Revenue Code (26 USC 501(a)); or

☐ A nonprofit scientific or educational organization qualified under a State nonprofit organization statute. (Please identify the statute.); or

☐ Other (specify type):

Is the Applicant a member of the Federal Demonstration Partnership (FDP)? ☐ Yes ☐ No
A listing of FDP members is available at http://www.thefdp.org/FDP_Members.html.

B. INTELLECTUAL PROPERTY

1. WAIVER OF DOE PATENT RIGHTS

This section applies only to large businesses and nonprofits other than 501(c)(3) organizations. All others should leave this subsection blank and proceed to the "Rights in Application Data" subsection that follows. Large businesses and nonprofits other than 501(c)(3) organizations have the right to request, in advance or within 30 days after execution of an award, in accordance with applicable statutes and DOE Patent Waiver Regulation (10 CFR 784), a waiver of all or any part of the rights of the United States in Subject Inventions. Accordingly, please check all that apply:

☐ I intend to request an advance waiver in accordance with 10 CFR 784.
☒ I intend to request an advance waiver on behalf of one or more subrecipients/subcontractors.
☐ I have at least one subrecipient/subcontractor that will request a waiver on its own behalf.
☐ I do not intend to request an advance waiver.

2. RIGHTS IN APPLICATION DATA

For an award based on an application/proposal, the Government will obtain unlimited rights in the technical data contained in the application/proposal, unless the Awardee marks those portions of the technical information which it asserts as "proprietary data" or specifies those portions of such technical data which are not directly related to or will not be utilized in the work to be funded under this award.

Accordingly, please indicate:

☐ No restrictions on Government rights in technical data contained in the application/proposal; or

☒ The application/proposal contains the following identified technical data that is proprietary, or is not directly related to, or will not be utilized in the work to be funded under this award.

Please list specific page numbers, table numbers, etc., and the dated version of the application/proposal to which you refer:

The data contained on pages 6-10 of the Project Narrative; pages 3-6 and 12-13 of Environmental Questionnaire; pages 1-10, 16-18 and 20 of the Business and Commercialization Plan; and pages 2-4 of the IP Statement and all information contained the files named Lifecycle Energy and Greenhouse Gas Emissions, SF424A, Budget, Subaward Budget Files, Process Flow Diagram, Project Management Plant and Project Executive Plan have been submitted in confidence and contain trade secrets or proprietary information, and such data shall be used or disclosed only for evaluation purposes, provided that if this applicant receives an award as a result of or in

connection with the submission of this application, DOE shall have the right to use or disclose the data herein to the extent provided in the award.

All existing data on our process, procedures and know-how embody trade secrets, commercial and financial data that are confidential and privileged.

Paragraphs in this application's respective files that are preceded by an asterisk (*) contain proprietary information that Algenol Biofuels requests not be released to persons outside the Government, except for the purposes of review and evaluation.

3. IDENTIFICATION OF LIMITED RIGHTS DATA AND RESTRICTED COMPUTER SOFTWARE

Below, please identify any Limited Rights Data or Restricted Computer Software you plan to use to carry out your work under the award. Limited Rights Data means data (other than computer software) developed at private expense that embody trade secrets or are commercial or financial, and confidential or privileged. Restricted Computer Software means computer software developed at private expense and that is a trade secret, is commercial or financial, and confidential or privileged, or is published, copyrighted computer software, to include modifications of the computer software.

Please note that these data do not include data that you will produce under this award. Data that is first produced under this award is treated separately under the data rights clause of this award. This section covers only those data that you bring into this award that were privately funded.

If you plan to use Limited Rights Data or Restricted Computer Software under the award, please describe it in a few sentences or bullets, with sufficient detail that the DOE Project Officer can determine whether DOE will need to have any of it delivered, for example, to validate your results or the data produced under the award. You are not required to list issued patents or published patent applications. You do need to list unpublished patent applications (by title and brief description) and trade secret processes (by non-proprietary title with brief, non-proprietary description). If you have questions regarding the completion of this section, please contact the Contract Specialist handling your award.

Based on the above, please review the requirements in the technical scope of work for this award and indicate, to the best of your knowledge:

☐ No Limited Rights Data will be utilized in the performance of this award.

☒ Limited Rights Data as follows will be utilized in the performance of this award.

Use this block to provide additional information or provide an attachment:

All existing data on our process, procedures and know-how embody trade secrets, commercial and financial data that are confidential and privileged.

Based on the above, please review the requirements in the technical scope of work for this award and indicate, to the best of your knowledge:

☐ Awardee Restricted Computer Software will NOT be utilized in the performance of this award.

☒ Awardee Restricted Computer Software as follows will be utilized in the performance of this award.

Use this block to provide additional information or provide an attachment:
Attached please find the Process Flow Diagram that was included the application. The Supervisory Control and Data Acquisition system is described on pages 28-35. As well, the Vapor Compression Steam Stripper control system is described on pages 14-23. These systems are privileged and confidential restricted computer software.

C. PROJECT PERFORMANCE SITE and CONGRESSIONAL DISTRICT

List the address and congressional district for the primary site where the work will be performed:

Street Address:	2301 N Brazosport Blvd. APB 2436
City:	Freeport
State:	TX
Zip:	77541
Congressional District:	TX-14th

If a portion of the work will be performed at any other site(s), identify those site(s) below, and indicate what portion of the effort will be performed at this/these site(s):

Street Address:	16121 Lee Road
City:	Ft. Myers
State:	FL
Zip:	33912
Congressional District:	FL-14th

Briefly describe portion of effort for this Site:	Algenol is in the process of consolidating already established research and development activities at this location. Research and development activities detailed in our application will be located at this facility.

Street Address:	2805 B Road
City:	Loxahatchee
State:	Florida
Zip:	33470
Congressional District:	FL-16th

Briefly describe portion of effort for this Site:	The process development unit detailed in the application will be located at this site.

Street Address:	1700 Union AVE, Suite A
City:	Baltimore
State:	Maryland
Zip:	21211
Congressional District:	MD-3rd

Briefly describe portion of effort for this Site:	On-going research and development activities detailed in the application will continue to be conducted at this site.

D. INVOICING AND PAYMENTS

1. Has the Awardee received any prior DOE awards administered by the Golden Field Office (GO)?

   ☐ Yes

   If yes, please list the most recent award number: _____

   ☒ No

2. Is the Awardee currently enrolled with the U.S. Department of Treasury / ASAP system (Automated Standard Application for Payment System) under the DOE / Golden Field Office (GO) Agency Locator Code (ALC) and Region Code (#8900-0001-04)?

   ☐ Yes

   Enter Awardee Seven-digit ASAP ID Number: _____

   ☒ No

3. Please provide the following contact information for ASAP and/or Payments:

   IMPORTANT: If not currently enrolled in the ASAP system under GO's ALC and Region Code, the person identified below will be contacted by the U.S. Department of Treasury with further instruction on completing the ASAP enrollment process.

   ASAP / Payments Contact Person: Katie McFadden

   Phone No.: (239) 498-2000 Extension: _____ E-mail: Katie.mcfadden@algenolbiofuels.com

4. Indicate preferred payment method below: (NOTE: this section is reserved for universities, hospitals, other non-profit organizations and state and local governments that are authorized Advance Payment Procedures, unless a specific need is supported. All other entities desiring advance payment should discuss with the DOE Award Administrator.)

   ☐ Payment by Advance is preferred. (SF 272 reporting will be required.)
   ☒ Payment by Reimbursement is preferred. (SF 272 reporting will not be required.)

5. Indicate the name, phone number, and email address of the Designated Responsible Employee for complying with national policies prohibiting discrimination (see 10 CFR 1040.5 and the Certifications and Assurances found at http://management.energy.gov/documents/CERTSASSUR.doc).

Craig R. Smith, M.D.	(239) 498-2000
Name	Telephone Number
Chief Operating Officer	**Craig.smith@algenolbiofuels.com**
Title	Email Address

REPRESENTATION/CERTIFICATION

I represent by my signature below that all the information provided by this form is accurate.

Name: Craig R. Smith, M.D.

Title: Chief Operating Officer

Signature of Authorized Company Official: Craig R. Smith, MD.

Date: 1/4/10

PMC 460.2
(09/06)

U.S. DEPARTMENT OF ENERGY – RISK ASSESSMENT

SECTION I – To be completed by the Specialist and forwarded to D&B Coordinator

Name of Requestor:	Molly Hames	**Date of Request:**	12/16/2009
Awardee Name:	Algenol Biofuels, Inc.	**Award No.**	DE-EE0002867
Street Address:	28100 Bonita Grande Drive Suite 200	**Project Title**	Integrated Pilot-Scale Biorefinery for Producing Ethanol from Hybrid Algae
City/State/ZIP:	Bonita Springs, FL, 34135-6220	**DUNS Number:**	80-039-9904
Business Contact:	Craig Smith	**Phone Number:**	239-498-2000

☒ The Recipient has been selected for Award. Please pull a Dun & Bradstreet (D&B) Business Information Report (BIR). This report should be requested on all For Profit and Non-Profit Recipients with awards > $100K (DOE) (excluding Educational Institutions, Tribal Nations, or State and Local Governments). *This form should be used for new awards, renewals and continuations.*

☐ The Recipient is a Small Business entity and a D&B BIR report was pulled which identified a 4 rating. Please pull D&B Small Business Risk Account Scoring Report. The PMC460.3 "Authorization For Consumer Report Information" is properly signed and attached.

☐ The Recipient has requested reassessment due to changed situation. Date of initial report was: _____. A new PMC460.3 "Authorization For Consumer Report Information" is properly signed and attached. *(Note: A reassessment may be requested no sooner than 6 months after initial D&B report date)*

SECTION II -To be completed by D&B Coordinator

Type of D&B Report Pulled

☒ Business Information Report (BIR)

☐ Small Business Scoring Report (SBRASR) (PMC460.3 required)

Proper Authorization Verified Initial:_____

Report Pulled By:

Name: **Carlo DiFranco**

Date: **12/16/2009**

Electronic File Name: **PMC Shared Docs/Risk Assess/DB Reports/ALGENOL BIOFUELS INC_121619.doc**

Comments: Please view the report.

D&B SCORE: DS

SECTION III - To Be Completed by FOA/Congressional Directed Project Specialist

The Specialist will make a risk assessment recommendation based on the following criteria.

All Recipients: Recipient is **not At Risk** if the last digit of the BIR Score is a 1, 2, or 3,

Other than Small Business: Recipient is **At Risk** if the last digit of the BIR Score is a 4, or there is no score and instead is a letter code or --

Small Business: If last digit of the BIR Score is 4, request a SBRASR report. If the SBRASR score is between 0 and 15, Recipient is **At Risk**.
If the SBRASR score is between 16 and 30, Recipient is **At Risk**, but may not require as high of a level of monitoring.
If the SBRASR score is greater than 30, Recipient is **not At Risk**.
If there is an unexpected event or material item discovered which will impact the assessment, further analysis may be required. (i.e. information received in conversation with the recipient)

Awardee Risk Determination

☒ At Risk (Include the **"At Risk"** provision in the Terms and Conditions of the Award. Follow-up is required if any Action Items are checked below)

☐ Not At Risk (No Further Action Required)

Action Items/Recommendations:

☐ Awardee requires on-going monitoring: Activate D&B Customer Watch Alert Monitoring Service and forward the results to the Specialist.
☐ CP Analysis required on additional information received (i.e. Financial Statements, SBRASR Reports)*
☐ Other:_____

Comments: The Recipient will be put on ACH payment terms.

Assessment Completed by: Molly Hames, Grants and Agreements Specialist Date: 12/16/2009
[Enter Name, Title]

Specialists: Forward this form, or the results (including Recipient Name, DUNS, Award No., and Y/N At-Risk Determination), to the D&B Coordinator, who will update the Tracking Log and activate the D&B Customer Watch, if applicable. Place this form in the Award File, along with the first page of the D&B Report containing the score. *The Specialist shall initiate a PMC 420.3 form if CP analysis is required (GO only).