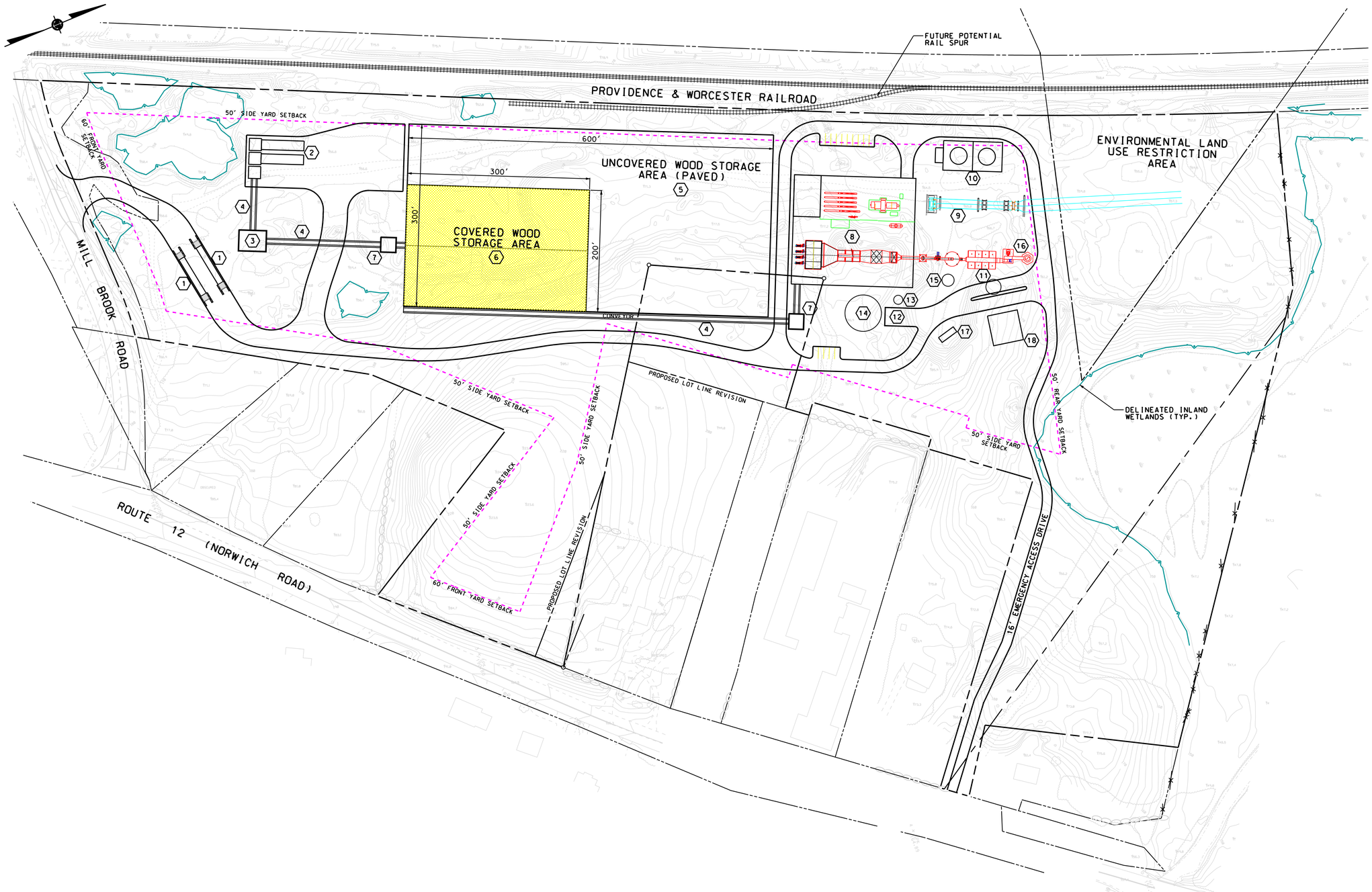
Appendix A

Site Plan, General Arrangement Plans and Conceptual Renderings



SITE LAYOUT LEGEND

1	TRUCK WEIGH STATION
2	TRUCK UNLOADING
3	HOG AND SCREEN BUILDING
4	HOGGED WOOD TRANSFER CONVEYOR
5	HOGGED FUEL STORAGE PILE
6	COVERED HOGGED STORAGE
7	TRANSFER HOUSE
8	POWER HOUSE
9	MAIN STEPUP TRANSFORMER
10	COOLING TOWER
11	ASH SILO
12	LEASED DI WATER SYSTEM
13	DEMINERALIZED WATER STORAGE TANK
14	FILTERED WATER STORAGE TANK
15	LIME STORAGE TANK
16	STACK
17	PROPANE TANK
18	CLARIFIER

SURVEY LEGEND

PROPERTY LINE	
EASEMENT LINE	
CENTERLINE OF TRACK	
STONE WALL	
WIRE FENCE	
WETLANDS	
MONITORING WELL	MW

80 0 80 160 240 320

SCALE: 1"= 80'

Anchor Engineering Services, Inc.
75 Nutmeg Lane Glastonbury, CT 06033
TEL (860) 633-8770 FAX (860) 633-5971

PROJ. ENGINEER	BJH
PROJ. MANAGER	DSA
OFFICE REVIEW	MMZ

REVISIONS

SCALE: 1" = 80'

SITE DEVELOPMENT PLAN

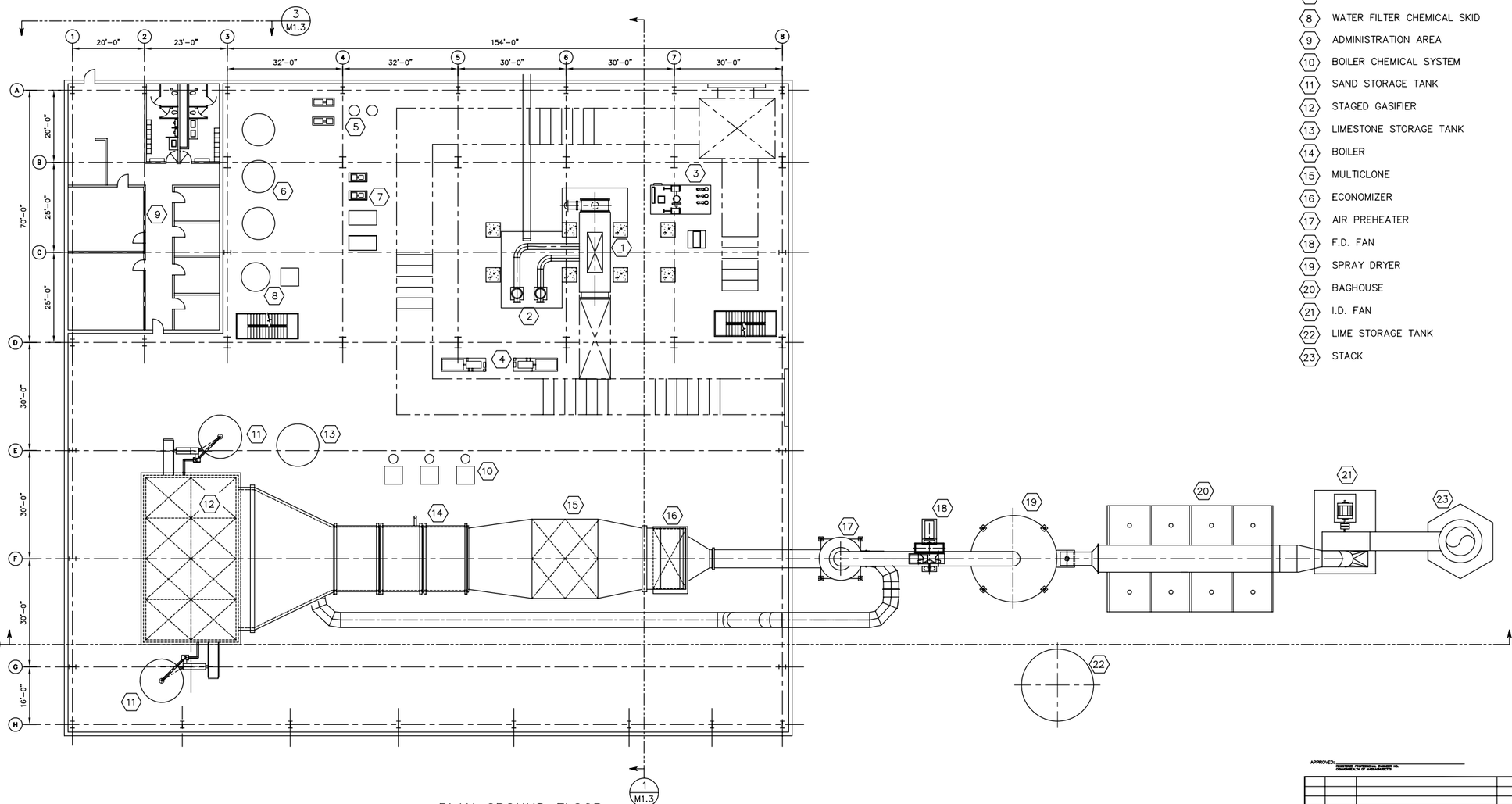
PREPARED FOR
PLAINFIELD RENEWABLE ENERGY, LLC

SITE LAYOUT PLAN

NORWICH RD./MILL BROOK RD. PLAINFIELD, CT

PROJECT	DATE	SHEET NO.
952-01	8/4/06	2 OF 10

J:\PROJECT\Survey\DESIGN\Site Layout.dgn



PLAN GROUND FLOOR

LEGEND:

1. CONDENSER
2. CONDENSATE PUMPS
3. LUBE OIL EQUIPMENT
4. BOILER FEED PUMPS
5. PLANT AIR SYSTEM
6. RIVER WATER FILTERS
7. COMPONENT COOLING SYSTEM
8. WATER FILTER CHEMICAL SKID
9. ADMINISTRATION AREA
10. BOILER CHEMICAL SYSTEM
11. SAND STORAGE TANK
12. STAGED GASIFIER
13. LIMESTONE STORAGE TANK
14. BOILER
15. MULTICLONE
16. ECONOMIZER
17. AIR PREHEATER
18. F.D. FAN
19. SPRAY DRYER
20. BAGHOUSE
21. I.D. FAN
22. LIME STORAGE TANK
23. STACK

SCALE 3/32" = 1' - 0"

APPROVED: REGISTERED PROFESSIONAL ENGINEER NO. COMMONWEALTH OF MASSACHUSETTS

ISSUE	DATE	DESCRIPTION	BY	CHK'D

R·W·BECK

PB Power
A Parsons Brinckerhoff Company
75 ARLINGTON STREET, BOSTON, MASS. 02116

PLAINFIELD RENEWABLE ENERGY, LLC

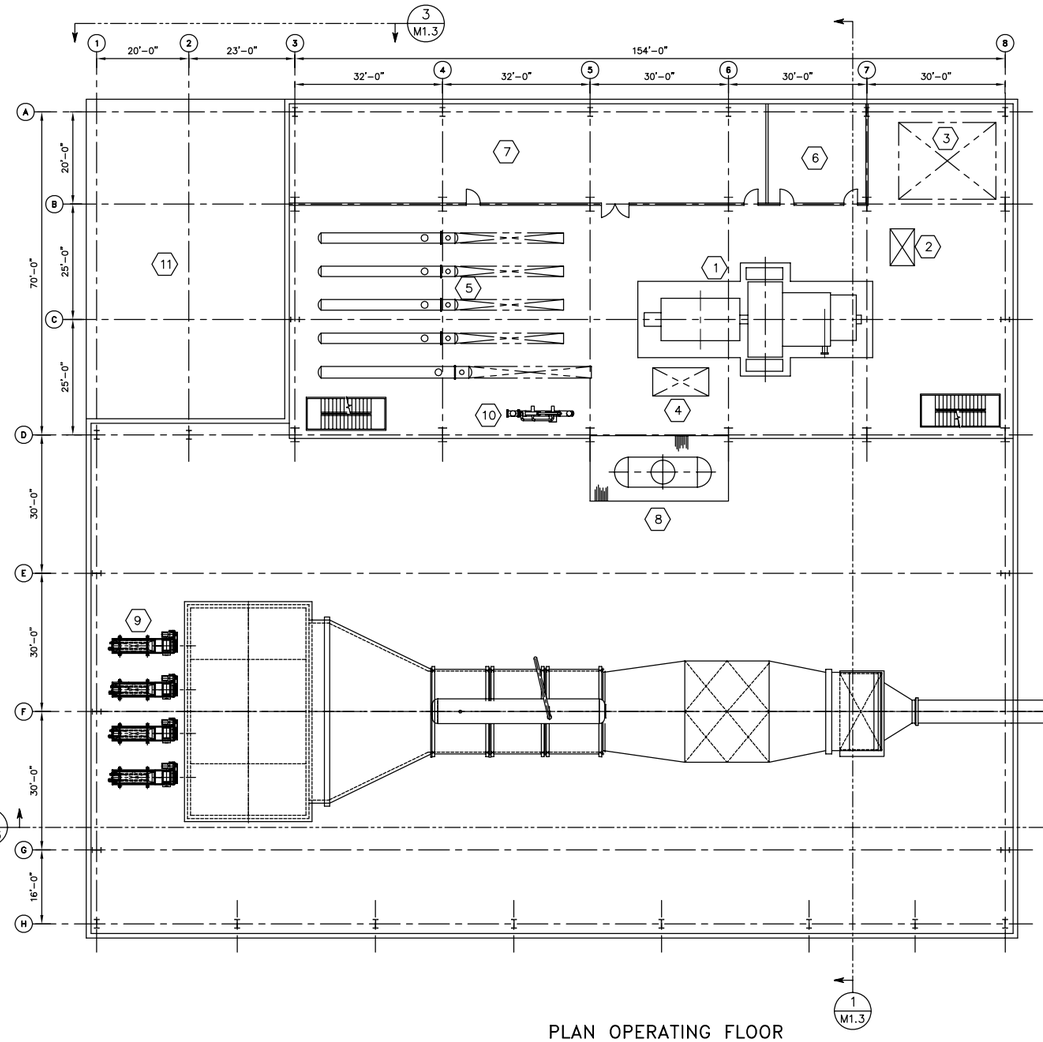
GENERAL ARRANGEMENT
POWER BLOCK
PLAN GROUND FLOOR

DR. JCM		JOB NO.	
DES.	APPROVED	DATE	DRAWING NO. M1.1	ISSUE A
CHK.				

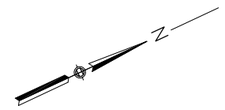
External references: NONE

4-21-06

PRE-M1A.DWG

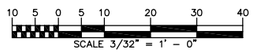


PLAN OPERATING FLOOR



LEGEND:

1. STEAM TURBINE GENERATOR
2. LUBE OIL PUMP REMOVAL AREA
3. EQUIPMENT REMOVAL AREA
4. CONDENSATE PUMP REMOVAL AREA
5. FEEDWATER HEATERS
6. CONTROL ROOM
7. ELECTRICAL EQUIPMENT ROOM
8. DEARATOR
9. FUEL METERING BINS
10. GLAND STEAM CONDENSER
11. ADMINISTRATION BUILDING ROOF



APPROVED: REGISTERED PROFESSIONAL ENGINEER MA. COMMONWEALTH OF MASSACHUSETTS

ISSUE	DATE	DESCRIPTION	BY	CHK'D

R·W·BECK

PB Power
A Parsons Brinckerhoff Company
70 ARLINGTON STREET, BOSTON, MASS. 02116

PLAINFIELD RENEWABLE ENERGY, LLC

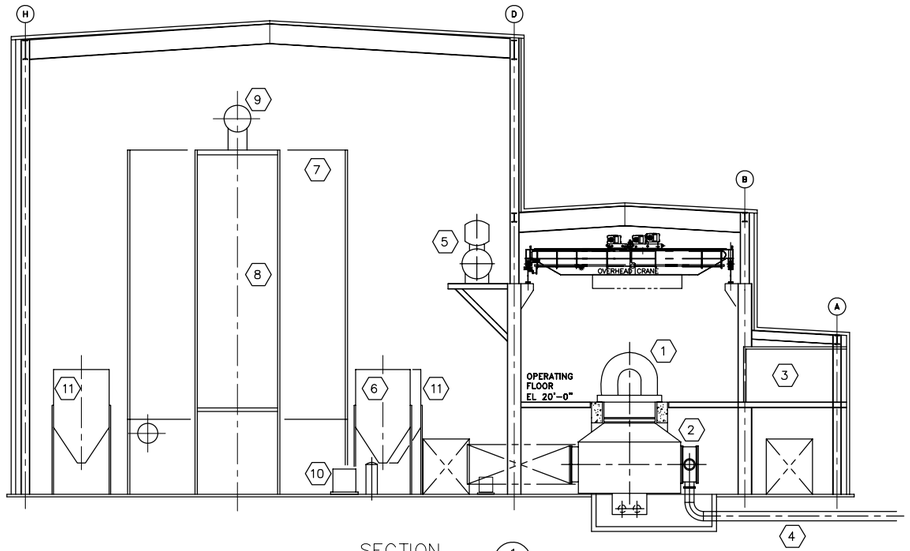
GENERAL ARRANGEMENT
POWER BLOCK
PLAN OPERATING FLOOR

DR. JCM		JOB NO.	
DES.			
CHK.	APPROVED / DATE	DRAWING NO. M1.2	ISSUE A

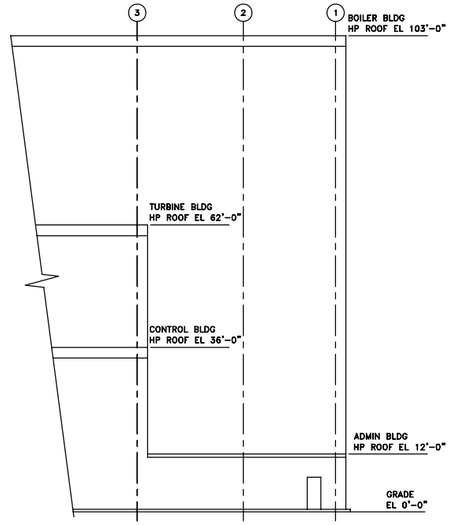
External references: NONE

PRE-MYLONG

4-21-06



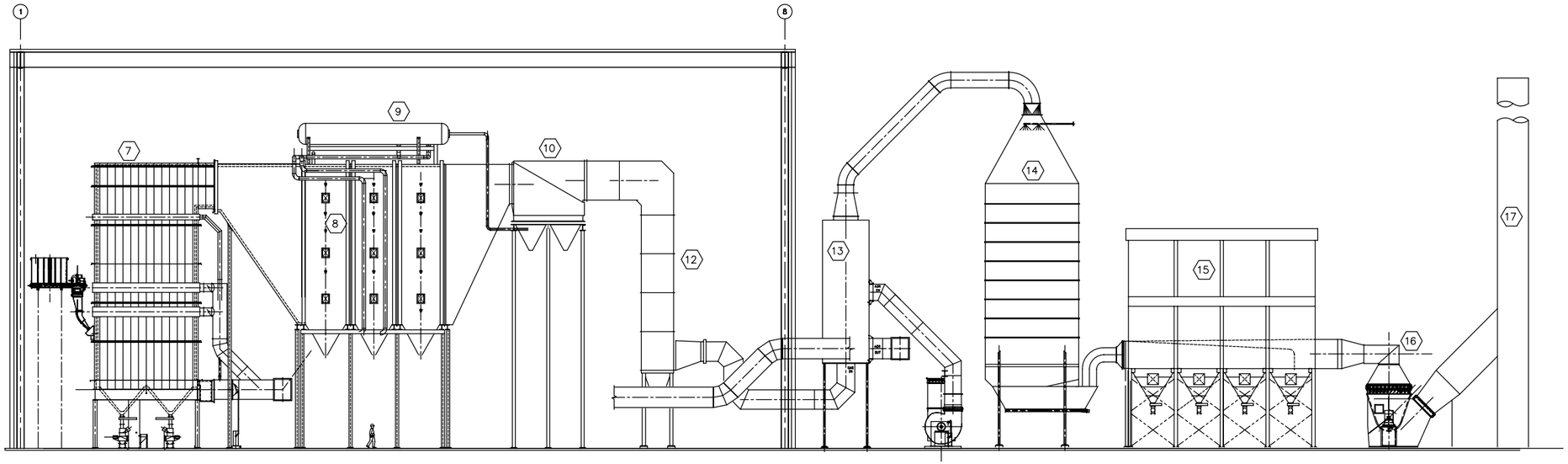
SECTION
SCALE: 3/32" = 1'-0" (1 / M1.1)



SECTION
SCALE: 3/32" = 1'-0" (3 / M1.1)

LEGEND:

1. STEAM TURBINE GENERATOR
2. CONDENSER
3. CONTROL ROOM
4. CURCULATING WATER PIPES
5. DEAERATOR
6. LIMESTONE STORAGE TANK
7. STAGED GASIFIER
8. BOILER
9. STEAM DRUM
10. MULTICLONE
11. SAND STORAGE TANK
12. ECONOMIZER
13. AIR PREHEATER
14. SPRAY DRYER
15. BAGHOUSE
16. I.D. FAN
17. STACK



SECTION
SCALE: 3/32" = 1'-0" (2 / M1.1)

10 5 0 5 10 20 30 40
SCALE 3/32" = 1' - 0"

4-21-06

APPROVED: REGISTERED PROFESSIONAL ENGINEER, COMMONWEALTH OF MASSACHUSETTS

ISSUE	DATE	DESCRIPTION	BY	CHK'D

R·W·BECK

PB Power
A Parsons Brinckerhoff Company
75 ARLINGTON STREET, BOSTON, MASS. 02116

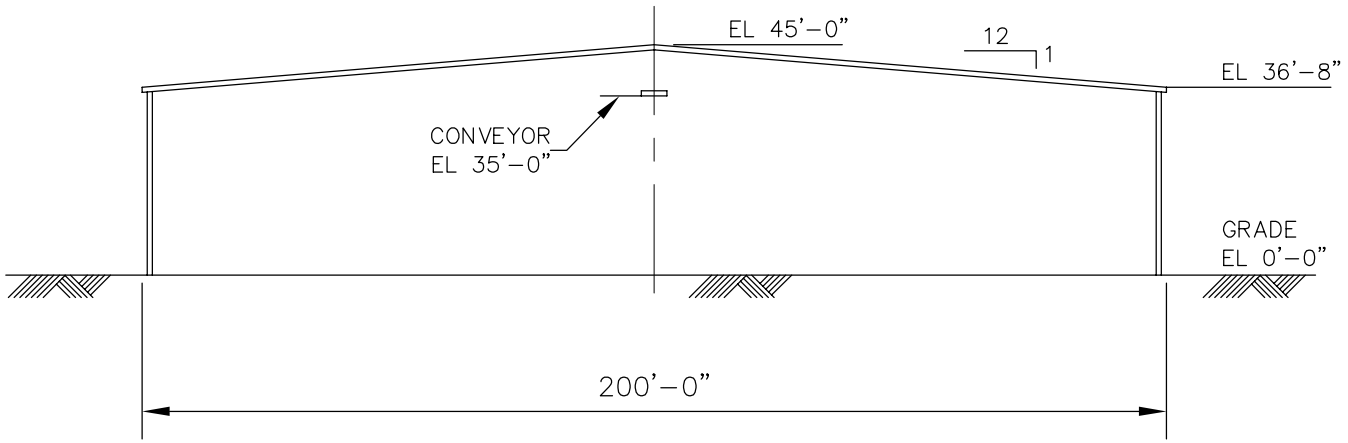
PLAINFIELD RENEWABLE ENERGY, LLC

GENERAL ARRANGEMENT
POWER BLOCK
CROSS SECTIONS

DR. JCM		JOB NO.	
DES.			
CHK.	APPROVED / DATE	DRAWING NO. M1.3	ISSUE A

External references: NONE

PRE-MH-LDNG



CROSS SECTION
300'–0" X 200'–0"
COVERED HOGGED STORAGE BUILDING

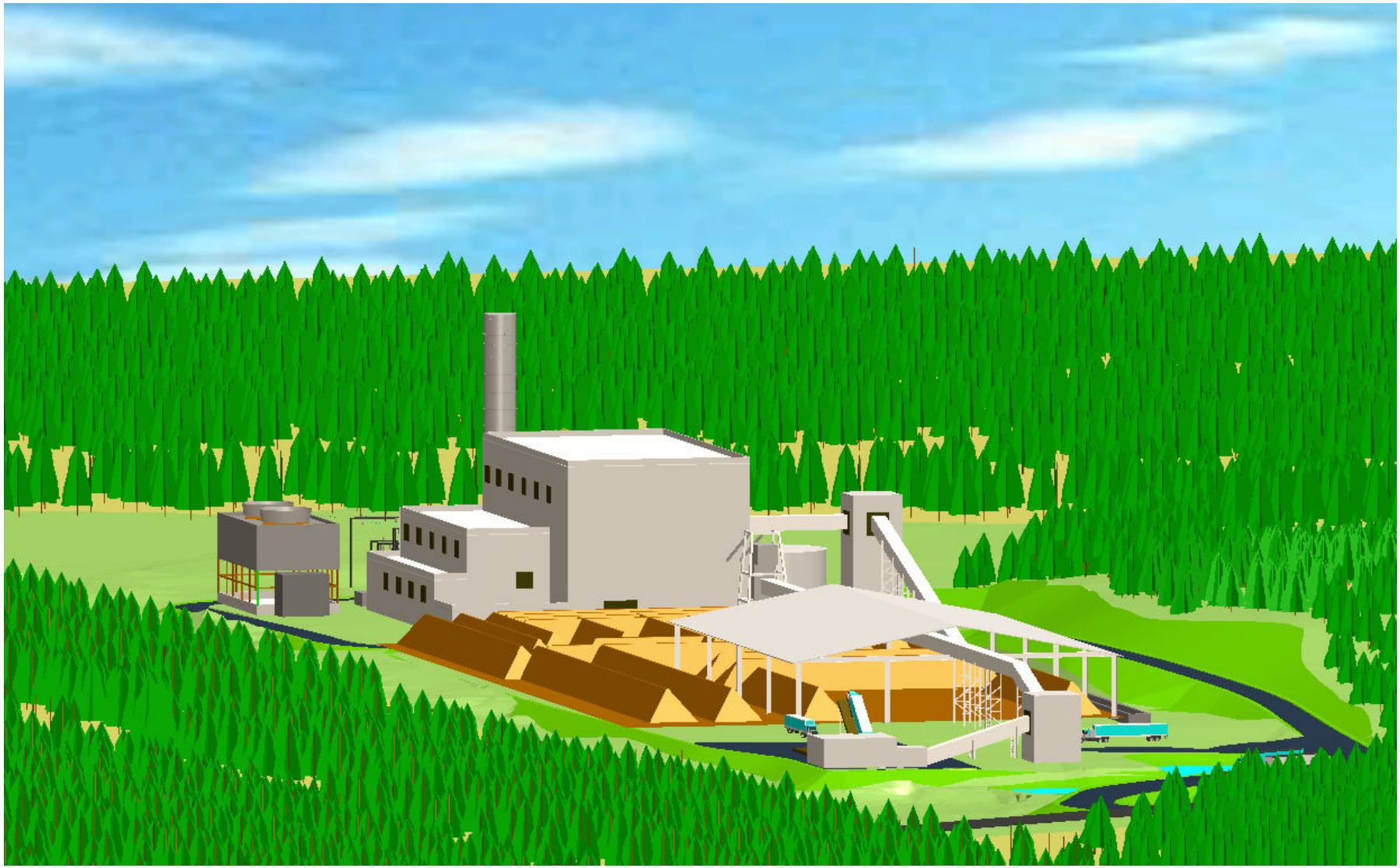
PB Power
A Parsons Brinckerhoff Company
75 ARLINGTON STREET, BOSTON, MASS. 02116

PLAINFIELD RENEWABLE ENERGY, LLC

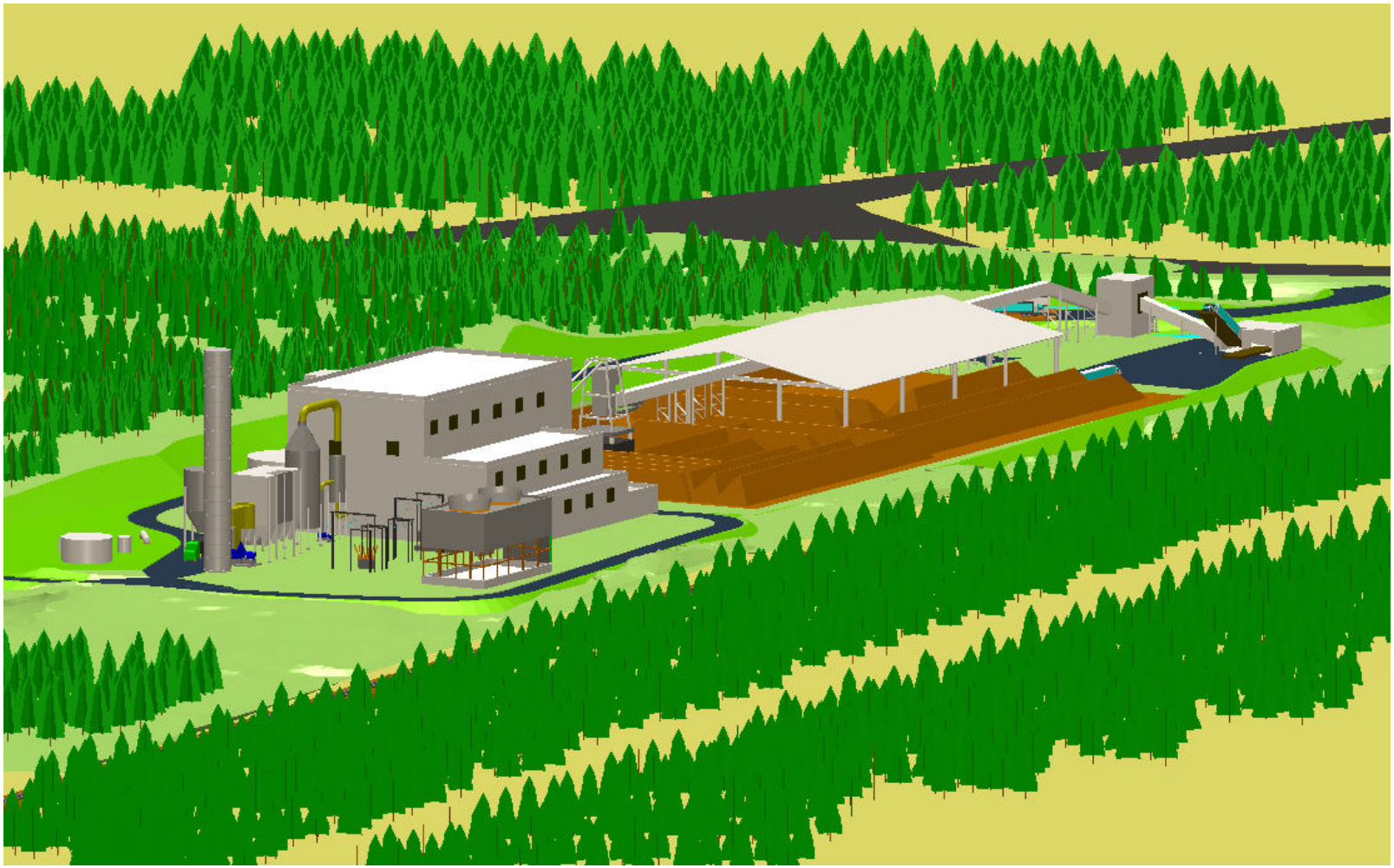
COVERED HOGGED STORAGE BUILDING

DR. JCM	APPROVED DATE	DRAWING NO. SK–1	REV A
DES.			
CHK.	PRINCIPAL IN CHARGE DATE	SHEET OF	

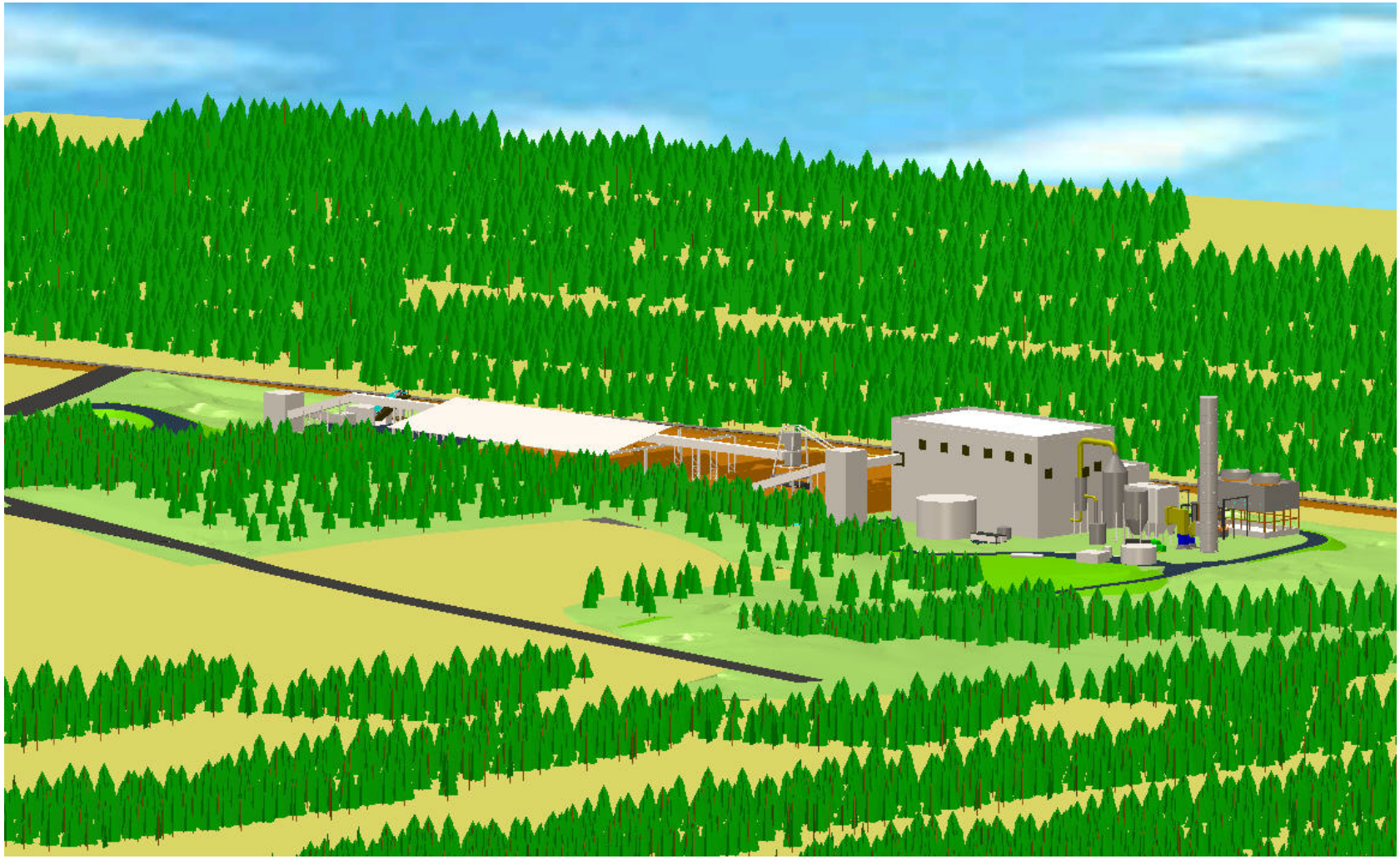
External references: NONE



Conceptual Rendering - View Looking Northeast



Conceptual Rendering - View Looking South



Conceptual Rendering - View Looking Southwest

Appendix B

BPIP with Prime Algorithm Model Output

C:\MIHA Files\MIHA\Projects\(085)Decker Energy\(001)Plainfield Renew

BPIP (Dated: 04274)
DATE : 11/27/2006
TIME : 15: 8:35
C:\MIHA Files\MIHA\Projects\(085)Decker Energy\(001)Plainfield Renew

==========
BPIP PROCESSING INFORMATION:
==========

The P flag has been set for preparing downwash related data for a model run utilizing the PRIME algorithm.

Inputs entered in METERS will be converted to meters using a conversion factor of 1.0000. Output will be in meters.

The UTMP variable is set to UTMY. The input is assumed to be in UTM coordinates. BPIP will move the UTM origin to the first pair of UTM coordinates read. The UTM coordinates of the new origin will be subtracted from all the other UTM coordinates entered to form this new local coordinate system.

Plant north is set to 0.00 degrees with respect to True North.

C:\MIHA Files\MIHA\Projects\(085)Decker Energy\(001)Plainfield Renew

PRELIMINARY* GEP STACK HEIGHT RESULTS TABLE
(Output Units: meters)

Stack Name	Stack Height	Stack-Building Base Elevation Differences	GEP** EQN1	Preliminary* GEP Stack Height Value
STCK1	47.24	-2.48	80.96	80.96
STCK2	3.05	-2.53	81.01	81.01
STCK3	13.06	-3.53	82.01	82.01

* Results are based on Determinants 1 & 2 on pages 1 & 2 of the GEP Technical Support Document. Determinant 3 may be investigated for additional stack height credit. Final values result after Determinant 3 has been taken into consideration.

** Results were derived from Equation 1 on page 6 of GEP Technical Support Document. Values have been adjusted for any stack-building base elevation differences.

Note: Criteria for determining stack heights for modeling emission limitations for a source can be found in Table 3.1 of the GEP Technical Support Document.

BPIP (Dated: 04274)

DATE : 11/27/2006
TIME : 15: 8:35

C:\MIHA Files\MIHA\Projects\(085)Decker Energy\(001)Plainfield Renew

BPIP output is in meters

SO	BUILDHGT	STCK1	31.39	31.39	31.39	31.39	31.39	18.90
SO	BUILDHGT	STCK1	13.06	13.06	13.06	13.06	0.00	0.00
SO	BUILDHGT	STCK1	17.68	17.68	17.68	17.68	17.68	31.39
SO	BUILDHGT	STCK1	31.39	31.39	31.39	31.39	31.39	18.90
SO	BUILDHGT	STCK1	0.00	0.00	0.00	5.18	5.18	5.18
SO	BUILDHGT	STCK1	17.68	17.68	17.68	17.68	17.68	31.39
SO	BUILDWID	STCK1	48.07	38.56	38.83	48.26	56.23	75.11
SO	BUILDWID	STCK1	30.21	31.71	32.24	31.80	0.00	0.00
SO	BUILDWID	STCK1	21.15	23.27	24.79	25.68	25.90	56.13
SO	BUILDWID	STCK1	48.07	38.56	38.83	48.26	56.23	75.11
SO	BUILDWID	STCK1	0.00	0.00	0.00	10.97	10.96	10.95
SO	BUILDWID	STCK1	21.15	23.27	24.79	25.68	25.90	56.13
SO	BUILDLEN	STCK1	67.52	63.58	63.98	67.84	69.65	69.34
SO	BUILDLEN	STCK1	29.86	27.32	23.95	19.85	0.00	0.00
SO	BUILDLEN	STCK1	21.28	20.30	18.83	16.90	16.46	69.40
SO	BUILDLEN	STCK1	67.52	63.58	63.98	67.84	69.65	69.34
SO	BUILDLEN	STCK1	0.00	0.00	0.00	10.97	10.96	10.95
SO	BUILDLEN	STCK1	21.28	20.30	18.83	16.90	16.46	69.40
SO	XBADJ	STCK1	-118.46	-118.99	-119.24	-118.46	-114.08	-106.24
SO	XBADJ	STCK1	-71.51	-72.09	-70.48	-66.73	0.00	0.00
SO	XBADJ	STCK1	1.29	4.07	6.73	9.19	11.36	44.93
SO	XBADJ	STCK1	50.94	55.41	55.27	50.62	44.43	36.90
SO	XBADJ	STCK1	0.00	0.00	0.00	-35.90	-36.36	-35.87
SO	XBADJ	STCK1	-22.57	-24.38	-25.56	-26.08	-27.83	-114.33
SO	YBADJ	STCK1	22.33	7.28	-8.49	-23.48	-37.75	-44.56
SO	YBADJ	STCK1	15.59	5.53	-4.70	-14.79	0.00	0.00
SO	YBADJ	STCK1	-18.81	-16.43	-13.48	-10.07	-6.29	-36.70
SO	YBADJ	STCK1	-22.33	-7.28	8.49	23.48	37.75	44.56
SO	YBADJ	STCK1	0.00	0.00	0.00	5.32	-0.04	-5.40
SO	YBADJ	STCK1	18.81	16.43	13.48	10.07	6.29	36.70

SO	BUILDHGT	STCK2	31.39	18.90	18.90	18.90	18.90	18.90
SO	BUILDHGT	STCK2	18.90	26.21	31.39	31.39	31.39	31.39
SO	BUILDHGT	STCK2	31.39	31.39	31.39	31.39	31.39	31.39
SO	BUILDHGT	STCK2	31.39	18.90	18.90	18.90	18.90	18.90
SO	BUILDHGT	STCK2	18.90	26.21	31.39	31.39	31.39	31.39
SO	BUILDHGT	STCK2	31.39	31.39	31.39	31.39	31.39	31.39
SO	BUILDWID	STCK2	48.07	52.22	54.46	63.34	70.29	75.11
SO	BUILDWID	STCK2	77.65	78.35	69.40	67.52	63.58	63.98
SO	BUILDWID	STCK2	67.84	69.65	69.34	66.93	62.48	56.13
SO	BUILDWID	STCK2	48.07	52.22	54.46	63.34	70.29	75.11
SO	BUILDWID	STCK2	77.65	78.35	69.40	67.52	63.58	63.98
SO	BUILDWID	STCK2	67.84	69.65	69.34	66.93	62.48	56.13
SO	BUILDLEN	STCK2	67.52	64.51	63.98	67.84	69.65	69.34
SO	BUILDLEN	STCK2	68.04	64.74	56.13	48.07	38.56	38.83

```
SO BUILDLEN STCK2      48.26   56.23   62.48   66.84   69.17   69.40
SO BUILDLEN STCK2      67.52   64.51   63.98   67.84   69.65   69.34
SO BUILDLEN STCK2      68.04   64.74   56.13   48.07   38.56   38.83
SO BUILDLEN STCK2      48.26   56.23   62.48   66.84   69.17   69.40
SO XBADJ    STCK2     -78.68  -71.11  -64.73  -58.96  -51.41  -42.29
SO XBADJ    STCK2     -33.01  -20.52   -8.53    3.73   15.87   22.54
SO XBADJ    STCK2      22.84   22.44   21.36   19.63   17.30   14.45
SO XBADJ    STCK2      11.16    6.61    0.75   -8.88  -18.24  -27.05
SO XBADJ    STCK2     -35.03  -44.22  -47.60  -51.80  -54.43  -61.37
SO XBADJ    STCK2     -71.10  -78.66  -83.84  -86.47  -86.47  -83.85
SO YBADJ    STCK2     -27.76  -28.32  -34.14  -39.43  -43.52  -46.29
SO YBADJ    STCK2     -47.65  -47.30  -49.15  -44.92  -39.32  -32.74
SO YBADJ    STCK2     -25.04  -16.58   -7.62    1.57   10.72   19.54
SO YBADJ    STCK2      27.76   28.32   34.14   39.43   43.52   46.29
SO YBADJ    STCK2      47.65   47.30   49.15   44.92   39.32   32.74
SO YBADJ    STCK2      25.04   16.58    7.62   -1.57  -10.72  -19.54


SO BUILDHGT STCK3      31.39   13.06   13.06   13.06   13.06   13.06
SO BUILDHGT STCK3      13.06   13.06   17.68   17.68   26.21   26.21
SO BUILDHGT STCK3      31.39   31.39   31.39   31.39   31.39   31.39
SO BUILDHGT STCK3      31.39   13.06   13.06   13.06   13.06   13.06
SO BUILDHGT STCK3      13.06   13.06   17.68   17.68   26.21   26.21
SO BUILDHGT STCK3      31.39   31.39   31.39   31.39   31.39   31.39
SO BUILDWID STCK3      48.07   15.15   15.90   20.53   24.54   27.80
SO BUILDWID STCK3      30.21   31.71  101.14  103.84   84.84   85.42
SO BUILDWID STCK3      67.84   69.65   69.34   66.93   62.48   56.13
SO BUILDWID STCK3      48.07   15.15   15.90   20.53   24.54   27.80
SO BUILDWID STCK3      30.21   31.71  101.14  103.84   84.84   85.42
SO BUILDWID STCK3      67.84   69.65   69.34   66.93   62.48   56.13
SO BUILDLEN STCK3      67.52   30.39   30.59   31.86   32.17   31.49
SO BUILDLEN STCK3      29.86   27.32   71.47   59.08   38.56   38.83
SO BUILDLEN STCK3      48.26   56.23   62.48   66.84   69.17   69.40
SO BUILDLEN STCK3      67.52   30.39   30.59   31.86   32.17   31.49
SO BUILDLEN STCK3      29.86   27.32   71.47   59.08   38.56   38.83
SO BUILDLEN STCK3      48.26   56.23   62.48   66.84   69.17   69.40
SO XBADJ    STCK3    -102.78  -14.21  -14.25  -14.86  -15.02  -14.72
SO XBADJ    STCK3     -13.97  -12.80  -13.39    0.09   27.24   37.64
SO XBADJ    STCK3      41.20   43.52   44.51   44.15   42.44   39.45
SO XBADJ    STCK3      35.26  -16.18  -16.34  -17.00  -17.15  -16.77
SO XBADJ    STCK3     -15.89  -14.52  -58.08  -59.17  -65.80  -76.47
SO XBADJ    STCK3     -89.46  -99.74 -106.99 -110.99 -111.62 -108.85
SO YBADJ    STCK3     -35.06   -0.42   -0.25   -0.06    0.13    0.31
SO YBADJ    STCK3       0.48    0.64  -58.28  -50.86  -51.16  -42.17
SO YBADJ    STCK3     -42.27  -30.36  -17.52   -4.16    9.33   22.54
SO YBADJ    STCK3      35.06    0.42    0.25    0.06   -0.13   -0.31
SO YBADJ    STCK3      -0.48   -0.64   58.28   50.86   51.16   42.17
SO YBADJ    STCK3      42.27   30.36   17.52    4.16   -9.33  -22.54
```

Appendix C

CTDEP Inventory Radius Search Data Files

Table 1

Plainfield Renewable Energy LLC

DEP Inventory of NO2 Emissions Units Sorted by Ambient Impact Analysis Guideline Criteria for Multi-Source Analyses (Edited As Noted)

Year of Data	COMPANY NAME	DATE OF SOURCE STARTUP	DATE PERMIT ISSUED	TWN ID	PREM ID	F	REG ID	STK ID	DESCRIPTION	UTMX (KM)	UTMX (KM)	BASE ELEV (FT)	STK HGT ABOVE GRADE (FT)	STK DIA (FT)	STK TEMP (deg. F)	STK FLOW (ACFM)	ALLOWABLE NOX EMISSIONS (TPY)	POTENTIAL NOX EMISSIONS (TPY)	Actual NOX (TPY)	Notes
All sources within significant impact radius (10.4 km)																				
2005	EXETER ENERGY L.P.	7/27/1991	10/23/1991	176	5	P	2	1	STANDARD KESSL INC/BLR #2	265.2	4621.4	565	196	8	180	80370	85.8	85.8	60.287	
2005	EXETER ENERGY L.P.	7/27/1991	10/23/1991	176	5	P	1	1	STANDARD KESSL INC/BLR #1	265.2	4621.4	565	196	8	180	80390	85.8	85.8	52.461	
5555	GRISWOLD RUBBER CO	.	6/19/1997	145	1	P	26	1	KOHLER 70R2 PROPANE EMER GEN	260.4	4622.0	250	39	0.3	360	1400	4.4	4.4	30.528	1,3
2004	AMERICAN INDUSTRIES, INC	4/17/2002	4/17/2002	69	20	P	17	2	4T CMI ASPHALT BATCH PLANT	252.4	4612.3	100	32	2	300	68000	11.2	11.2	11.276	
1997	KAMAN AEROSPACE CORP	7/15/1970	.	145	22	R	170	3	BLR CB 668-400 #3	259.2	4626.3	220	55	2	550	5280	23.1	23.1	7.688	
1996	QUINEBAUG TROUT HATCHERY	.	3/6/1996	145	53	P	23	1	CAT 600KW DIESEL	256.2	4623.7	150	15	0.8	963	4990	3.7	3.7	6.78	4
1996	GRISWOLD RUBBER CO	1/1/1961	.	145	1	R	1	1	BLR FARRAR & TREFTS #1	260.9	4621.9	230	115	5	425	4600	11	14.4	4.963	
5555	JEWETT CITY DPUC	4/18/2005	4/18/2005	69	15	P	20	1	DETROIT DIESEL GENERATOR	251.3	4609.9	150	25	0.8	880	6510	3.4	3.4	3.497	1
1994	WASTE MANAGEMENT OF CT INC	.	5/13/1993	32	1	P	1	1	ENCLOSED LANDFILL FLARE	253.7	4616.9	110	30	6	1400	43800	5.6	5.6	2.423	
5555	NEW ENGLAND FURNITURE	.	3/15/1988	69	10	P	3	1	BOILER, 3WB-350 HP	251.7	4610.1	137	80	4	375	1134	2.8	2.8	2.35	1
1997	TILCON CONNECTICUT INC	1/1/1961	.	145	5	R	14	2	3T BITUM CONC BATCH PLT	259.6	4624.9	210	45	3.6	250	42000	11.1	11.1	2.023	
1997	KAMAN AEROSPACE CORP	1/1/1957	.	145	22	R	168	1	BLR O&S 3-H #2	259.2	4626.3	220	55	1.7	375	4800	16.7	16.7	1.166	
1994	QUIKRETE OF CONN	.	5/5/1989	145	34	P	17	1	CONCRETE MIX DRYER	260.5	4625.8	300	98	3	200	14124	3.6	3.6	0.981	
1999	C & M CORP	12/1/1955	.	145	13	R	167	1	BLR CB 621-150 #3	257.9	4626.3	150	75	4.7	375	6000	5.5	4.7	0.881	
1993	GRISWOLD HIGH SCHOOL	.	5/13/1993	69	23	P	4	1	BLR PVI #12WBHE225ATPO #1	251.6	4609.2	135	53	2.3	405	300	0.8	0.8	0.75	
1993	GRISWOLD HIGH SCHOOL	.	5/13/1993	69	23	P	5	1	BLR PVI #12WBHE225ATPO #2	251.6	4609.2	135	53	2.3	405	300	0.8	0.8	0.75	
2002	LISBON TEXTILE PRINTS INC	2/1/1978	12/1/1981	93	4	P	5	10	6 PROPANE FIRED BURNERS	250.5	4608.6	125	6	1.7	350	22500	4.4	4.4	0.734	
1997	KAMAN AEROSPACE CORP	1/1/1957	.	145	22	R	169	2	BLR O&S 3-H #1	259.2	4626.3	220	60	1.7	375	4800	16.7	16.7	0.557	
1996	GRISWOLD RUBBER CO	1/1/1961	.	145	1	R	2	1	BLR TITUSVILLE A341001 #2	260.9	4621.9	230	125	5	425	720	11	14.4	0.548	
1999	C & M CORP	12/1/1955	.	145	13	R	166	1	BLR CB 621-150 #2	257.9	4626.3	150	75	4.7	375	6000	5.5	4.7	0.514	
1990	MCCANN MFG CO	2/22/1971	.	176	1	R	1	1	BLR RAY 300HP #1	265.4	4620.7	340	60	2.1	350	4800	14.2	16.5	0.47	
2005	EXETER ENERGY L.P.	6/1/1991	11/12/1992	176	5	P	4	3	CUMMINS 1100KTA52DS DIESEL #2	265.2	4621.4	565	16	0.7	670	8850	7.7	7.7	0.468	
1987	PLAINFIELD HIGH SCHOOL	8/1/1963	.	145	37	R	230	1	BLR KEWANEE C #1	258.2	4623.5	220	70	4.2	600	1386	2.6	1.8	0.41	
1987	PLAINFIELD HIGH SCHOOL	8/1/1963	.	145	37	R	231	1	BLR KEWANEE C #2	258.2	4623.5	220	70	4.2	600	1386	2.6	1.8	0.4	
2005	FABRIC TRENDS INT'L	6/1/1972	.	145	6	R	146	31	FLOCK COATING LINE #49	257.6	4613.9	260	28	2.7	150	4400	0.4	0.4	0.27	
1987	GRISWOLD ELEM SCHOOL	1/10/1963	.	69	22	R	22	1	BLR HB SMITH 640-14 #1	251.7	4609.2	135	50	2	350	4800	5.3	3.7	0.25	
1987	GRISWOLD ELEM SCHOOL	1/10/1963	.	69	22	R	23	1	BLR HB SMITH 640-14 #2	251.7	4609.2	135	50	2	350	4800	5.3	3.7	0.24	
2005	FABRIC TRENDS INT'L	1/1/1970	.	145	6	E	8	58	HEATERS	257.6	4613.9	260	0	0	86	0	0	43.8	0.215	
1987	GRISWOLD HIGH SCHOOL	12/13/1962	.	69	21	R	20	1	BLR Y-S 560-SPL-150-5 #1	251.6	4609.2	135	50	2	350	4800	6.8	3.8	0.2	
1987	GRISWOLD HIGH SCHOOL	12/13/1962	.	69	21	R	21	1	BLR Y-S 560-SPL-150-5 #2	251.6	4609.2	135	50	2	350	4800	6.8	3.8	0.2	
2002	LISBON TEXTILE PRINTS INC	2/14/1977	9/21/1982	93	4	P	3	3	BLR COLUMBIA 100HP #2	250.5	4608.6	125	45	1.9	300	1550	6.2	6.2	0.169	
2002	LISBON TEXTILE PRINTS INC	1/1/1994	6/23/1998	93	4	P	11	12	REGGIANI #2 PRINT MACHINE	250.5	4608.6	125	32	2	275	5000	0.5	0.5	0.134	
2002	LISBON TEXTILE PRINTS INC	7/1/1998	6/30/1998	93	4	P	18	13	REGGIANI #3 PRINT MACHINE	250.5	4608.6	125	32	1.5	275	5000	0.5	0.5	0.134	
1995	EARTHGRO, INC/THE SCOTT'S CO	.	5/12/1995	188	4	P	2	1	MUSHROOM SUBS. COMPOSTING OP	265.3	4612.9	470	5	0.7	86	286	2	2	0.063	5
2005	FABRIC TRENDS INT'L	1/1/1988	.	145	6	E	4	54	EMBOSSER	257.6	4613.9	260	0	0	86	0	0.7	0.7	0.015	
5555	CONNECTICUT WATER COMPANY, TH	.	8/27/2001	181	44	P	13	1	KOHLER 50RZ	260.8	4620.3	350	6	0.3	1100	550	6.7	0.4	0.014	1
2005	FABRIC TRENDS INT'L	6/15/1980	11/2/1981	145	6	P	12	47	FLOCK COATING LINE #52	257.6	4613.9	260	30	2	300	12500	0	0	0.005	
2005	FABRIC TRENDS INT'L	1/1/1988	.	145	6	E	3	53	FLOCK CUTTING LINE	257.6	4613.9	260	0	0	86	0	0	0	0	
2005	FABRIC TRENDS INT'L	1/1/1987	.	145	6	E	5	55	FABRIC SPOT CLEANING	257.6	4613.9	260	0	0	86	0	0	0	0	
2005	FABRIC TRENDS INT'L	1/1/1962	.	145	6	E	6	56	POWERMASTER BOILER	257.6	4613.9	260	0	0	86	0	0	4.4	0	
2005	FABRIC TRENDS INT'L	1/1/1970	.	145	6	E	10	59	300 GALLON DIESEL TANK	257.6	4613.9	260	0	3.7	86	0	0	0	0	
1997	KAMAN AEROSPACE CORP	7/23/1990	10/10/1990	145	22	E	1	11	BAYCO BURNOUT OVEN # BB-56	260.0	4621.4	200	33	0.7	700	560	0.2	0.2	0	
1990	WYRE WYND INC	3/1/1977	3/1/1980	69	9	P	1	2	ELECT MN SOL STOR TANK	252.0	4610.6	100	23	1.7	86	8000	0	0	0	
2002	LISBON TEXTILE PRINTS INC	2/1/1978	12/1/1981	93	4	P	4	9	FINISHING FRAME #4	250.5	4608.6	125	6	1.7	350	22500	0	0	0	
2002	LISBON TEXTILE PRINTS INC	2/1/1978	12/1/1981	93	4	P	6	11	PRE-DRIER	250.5	4608.6	125	6	1.7	350	22500	0	0	0	
5555	TILCON CONNECTICUT INC	.	12/7/2000	145	5	P	38	5	PORTABLE AGGREGATE PROC SYSTEM	259.0	4626.0	250	0	0	86	0	0	0	0	1
2005	FABRIC TRENDS INT'L	10/1/1976	3/1/1980	145	6	P	7	42	FLOCK COATING LINE #51	257.6	4613.9	260	30	2.7	290	19000	0	0	0	
2005	EXETER ENERGY L.P.	6/1/1991	11/12/1992	176	5	P	3	2	CUMMINS 1100KTA52DGS DIESEL #1	265.2	4621.4	565	16	0.7	670	8850	7.7	7.7	0	
1995	UNITED RETEK CORP	.	11/1/1995	176	7	P	5	1	EXTEC CRUSH/SCREEN 6000	264.2	4621.3	300	11	0.2	1010	245	2.2	2.2	0	
1990	TILCON CONNECTICUT INC	.	.	29	5	R	6	1	CONCRETE BATCHER	258.6	4625.2	230	14	0.8	500	5000	0	0	0	
2004	AMERICAN INDUSTRIES, INC	11/1/1971	.	69	20	R	10	1	TRANSIT CONCRETE PLT	253.1	4612.4	160	30	0	86	1000	0	0	0	
2004	AMERICAN INDUSTRIES, INC	11/1/1971	.	69	20	R	12	3	CRUSHING PLANT	253.1	4612.4	160	0	0	86	0	0	0	0	
1996	GRISWOLD RUBBER CO	1/1/1961	.	145	1	R	193	3	BANBURY INT MIXER #3	260.9	4621.9	230	12	1	86	1000	0	0	0	
1996	GRISWOLD RUBBER CO	1/1/1961	.	145	1	R	194	3	BANBURY INT MIXER #4	260.9	4621.9	230	12	1	86	1000	0	0	0	
1996	GRISWOLD RUBBER CO	1/1/1955	.	145	1	R	232	5	PRESS LINE #1	260.9	4621.9	230	5	1	86	0	0	0	0	

Year of Data	COMPANY NAME	DATE OF SOURCE STARTUP	DATE PERMIT ISSUED	TWN ID	PREM ID	F	REG ID	STK ID	DESCRIPTION	UTMX (KM)	UTMX (KM)	BASE ELEV (FT)	STK HGT ABOVE GRADE (FT)	STK DIA (FT)	STK TEMP (deg. F)	STK FLOW (ACFM)	ALLOWABLE NOX EMISSIONS (TPY)	POTENTIAL NOX EMISSIONS (TPY)	Actual NOX (TPY)	Notes
1996	GRISWOLD RUBBER CO	1/1/1955	.	145	1	R	233	6	PRESS LINE #2	260.9	4621.9	230	36	12	86	0	0	0	0	
1997	TILCON CONNECTICUT INC	1/1/1945	.	145	5	R	12	1	STONE CRUSHING III	257.0	4617.9	210	0	0	86	0	0	0	0	
2005	FABRIC TRENDS INT'L	3/1/1971	.	145	6	R	145	30	FLOCK COATING LINE #48	257.6	4613.9	260	30	2.2	175	2200	0	0	0	
1999	C & M CORP	12/1/1955	.	145	13	R	165	1	BLR CB 621-150 #1	257.9	4626.3	150	75	4.7	375	6000	5.5	4.7	0	
1999	C & M CORP	1/1/1968	.	145	13	R	200	2	LACQUER TOWER & POT #2	258.5	4625.2	150	0	0.1	86	0	0	0	0	
1997	KAMAN AEROSPACE CORP	1/1/1963	.	145	22	R	217	7	PRE-ZYGLO ETCH TANK 14M1 #4	259.2	4626.3	220	20	3	86	1000	0	0	0	
All sources between 10.4 and 20 km w/ actual emissions greater than 50 TPY																				
2005	WHEELABRATOR LISBON INC (WM)	10/23/1995		93	14	P	8	1	MSW & DEMO. WOOD INCIN	246.5	4607.8	110	266	5.7	270	53389	146.1	146.1	132.8	
2005	WHEELABRATOR LISBON INC (WM)	10/19/1995		93	14	P	9	1	MSW & DEMO. WOOD INCIN	246.5	4607.8	110	266	5.7	270	53389	146	146	133	
2005	CASCADES BOXBOARD GROUP-CT LL(	10/1/1962		170	2	R	3	1	BLR B&W PFI-22-0 #1	246.4	4611.8	120	120	10	370	120000	377.3	377.3	341.5	
2005	EXETER ENERGY L.P.	7/27/1991		176	5	P	1	1	STANDARD KESSL INC/BLR	265.2	4621.4	565	196	8	180	80390	85.8	85.8	52.5	
2005	EXETER ENERGY L.P.	7/27/1991		176	5	P	2	1	STANDARD KESSL INC/BLR	265.2	4621.4	565	196	8	180	80370	85.8	85.8	60.3	
All sources within 20 to 50 km w/ actual emissions > 500 TPY																				
	No stacks met the criteria of >500 TPY of NOx emissions within 50 km of the proposed PRE stack.																			

Notes:

1. If year of data equals 5555, then actual data has not been verified.
2. Sources located within UTM Zone 18 have been converted to Zone 19 UTM coordinates.
3. From review of Kohler website and model numbers, this appears to be a 70 kw propane fired emergency genertor. Listed actual emissions exceed allowable/potential emissions and do not make sense for a small propane fired generator. Therefore, allowable/potential emissions were used for further evaluation of inclusion of this unit in the multiple source modeling inventory. Since allowable/potential emissions are less than 15 TPY, this source was not included in the NAAQS multi-source modeling. For PSD Increment analysis, stack diameter estimated from Kohler specification sheets obtained from www.kohlerpowersystems.com.
4. No stack flow rate was listed in DEP inventory. Stack flow rate obtained from www.cat.com for Caterpillar Inc. 600 kW standby diesel generator.
5. Estimate of stack diameter provided by Jude Catalano, DEP, 11/1/06.

Table 2

Plainfield Renewable Energy LLC

DEP Inventory of SO2 Emissions Units Sorted by Ambient Impact Analysis Guideline Criteria for Multi-Source Analyses (Edited As Noted)

Year of Data	COMPANY NAME	DATE OF SOURCE STARTUP	DATE PERMIT ISSUED	TWN ID	PREM ID	F	REG ID	STK ID	DESCRIPTION	UTMX (KM)	UTMX (KM)	BASE ELEV (FT)	STK HGT ABOVE GRADE (FT)	STK DIA (FT)	STK TEMP (deg. F)	STK FLOW (ACFM)	ALLOWABLE SOX EMISSIONS (TPY)	POTENTIAL SOX EMISSIONS (TPY)	Actual SOX (TPY)	Notes
All sources within significant impact radius (10.4 km)																				
2005	EXETER ENERGY L.P.	7/27/1991	10/23/1991	176	5	P	2	1	STANDARD KESSL INC/BLR #2	265.2	4621.4	565	196	8	180	80370	76.8	76.8	50.116	
2005	EXETER ENERGY L.P.	7/27/1991	10/23/1991	176	5	P	1	1	STANDARD KESSL INC/BLR #1	265.2	4621.4	565	196	8	180	80390	76.8	76.8	46.622	
1997	KAMAN AEROSPACE CORP	7/15/1970	.	145	22	R	170	3	BLR CB 668-400 #3	259.2	4626.3	220	55	2	550	5280	81.9	79.8	26.553	
1996	GRISWOLD RUBBER CO	1/1/1961	.	145	1	R	1	1	BLR FARRAR & TREFTS #1	260.9	4621.9	230	115	5	425	4600	48.2	35.8	12.331	
2004	AMERICAN INDUSTRIES, INC	4/17/2002	4/17/2002	69	20	P	17	2	4T CMI ASPHALT BATCH PLANT	252.4	4612.3	100	32	2	300	68000	9	9	8.269	
1997	KAMAN AEROSPACE CORP	1/1/1957	.	145	22	R	168	1	BLR O&S 3-H #2	259.2	4626.3	220	55	1.7	375	4800	58.5	57.7	4.035	
5555	NEW ENGLAND FURNITURE	.	3/15/1988	69	10	P	3	1	BOILER, 3WB-350 HP	251.7	4610.1	137	80	4	375	1134	3.9	3.9	3.893	1
1994	QUIKRETE OF CONN	.	5/5/1989	145	34	P	17	1	CONCRETE MIX DRYER	260.5	4625.8	300	98	3	200	14124	7.8	7.8	2.119	
1997	KAMAN AEROSPACE CORP	1/1/1957	.	145	22	R	169	2	BLR O&S 3-H #1	259.2	4626.3	220	60	1.7	375	4800	58.5	57.7	1.928	
1999	C & M CORP	12/1/1955	.	145	13	R	167	1	BLR CB 621-150 #3	257.9	4626.3	150	75	4.7	375	6000	9.1	8.7	1.626	
1990	MCCANN MFG CO	2/22/1971	.	176	1	R	1	1	BLR RAY 300HP #1	265.4	4620.7	340	60	2.1	350	4800	62.6	54.6	1.557	
1997	TILCON CONNECTICUT INC	1/1/1961	.	145	5	R	14	2	3T BITUM CONC BATCH PLT	259.6	4624.9	210	45	3.6	250	42000	8.1	8.1	1.484	
1996	GRISWOLD RUBBER CO	1/1/1961	.	145	1	R	2	1	BLR TITUSVILLE A341001 #2	260.9	4621.9	230	125	5	425	720	48.2	35.8	1.36	
1993	GRISWOLD HIGH SCHOOL	.	5/13/1993	69	23	P	4	1	BLR PVI #12WBHE225ATPO #1	251.6	4609.2	135	53	2.3	405	300	1.2	1.2	1.219	
1993	GRISWOLD HIGH SCHOOL	.	5/13/1993	69	23	P	5	1	BLR PVI #12WBHE225ATPO #2	251.6	4609.2	135	53	2.3	405	300	1.2	1.2	1.219	
1987	GRISWOLD HIGH SCHOOL	12/13/1962	.	69	21	R	20	1	BLR Y-S 560-SPL-150-5 #1	251.6	4609.2	135	50	2	350	4800	30	21.5	1.14	
1987	GRISWOLD HIGH SCHOOL	12/13/1962	.	69	21	R	21	1	BLR Y-S 560-SPL-150-5 #2	251.6	4609.2	135	50	2	350	4800	30	21.5	1.14	
1999	C & M CORP	12/1/1955	.	145	13	R	166	1	BLR CB 621-150 #2	257.9	4626.3	150	75	4.7	375	6000	9.1	8.7	0.948	
1987	PLAINFIELD HIGH SCHOOL	8/1/1963	.	145	37	R	230	1	BLR KEWANEE C #1	258.2	4623.5	220	70	4.2	600	1386	4.2	4.1	0.908	
1987	PLAINFIELD HIGH SCHOOL	8/1/1963	.	145	37	R	231	1	BLR KEWANEE C #2	258.2	4623.5	220	70	4.2	600	1386	4.2	4.1	0.886	
1987	GRISWOLD ELEM SCHOOL	1/10/1963	.	69	22	R	22	1	BLR HB SMITH 640-14 #1	251.7	4609.2	135	50	2	350	4800	8.7	8.2	0.554	
1987	GRISWOLD ELEM SCHOOL	1/10/1963	.	69	22	R	23	1	BLR HB SMITH 640-14 #2	251.7	4609.2	135	50	2	350	4800	8.7	8.2	0.532	
1996	QUINEBAUG TROUT HATCHERY	.	3/6/1996	145	53	P	23	1	CAT 600KW DIESEL	256.2	4623.7	150	15	0.8	963	4990	0.3	0.3	0.446	4
2002	LISBON TEXTILE PRINTS INC	2/14/1977	9/21/1982	93	4	P	3	3	BLR COLUMBIA 100HP #2	250.5	4608.6	125	45	1.9	300	1550	15.3	15.3	0.42	
5555	GRISWOLD RUBBER CO	.	6/19/1997	145	1	P	26	1	KOHLER 70R2 PROPANE EMER GEN	260.4	4622	250	39	0.3	360	1400	9.5	9.5	0.077	1,3
1995	EARTHGRO, INC/THE SCOTT'S CO	.	5/12/1995	188	4	P	2	1	MUSHROOM SUBS. COMPOSTING OP	265.3	4612.9	470	5	0.7	86	286	0.1	0.1	0.068	5
2005	EXETER ENERGY L.P.	6/1/1991	11/12/1992	176	5	P	4	3	CUMMINS 1100KTA52DS DIESEL #2	265.2	4621.4	565	16	0.7	670	8850	0.5	0.5	0.031	
1994	WASTE MANAGEMENT OF CT INC	.	5/13/1993	32	1	P	1	1	ENCLOSED LANDFILL FLARE	253.7	4616.9	110	30	6	1400	43800	0.1	0.1	0.015	
5555	JEWETT CITY DPUC	4/18/2005	4/18/2005	69	15	P	20	1	DETROIT DIESEL GENERATOR	251.3	4609.9	150	25	0.8	880	6510	0.1	0.1	0.003	1
2005	FABRIC TRENDS INT'L	6/1/1972	.	145	6	R	146	31	FLOCK COATING LINE #49	257.6	4613.9	260	28	2.7	150	4400	0	0	0.002	
2005	FABRIC TRENDS INT'L	1/1/1970	.	145	6	E	8	58	HEATERS	257.6	4613.9	260	0	0	86	0	0	0	0.001	
2005	FABRIC TRENDS INT'L	1/1/1988	.	145	6	E	4	54	EMBOSSER	257.6	4613.9	260	0	0	86	0	0	0	0	
1997	KAMAN AEROSPACE CORP	7/23/1990	10/10/1990	145	22	E	1	11	BAYCO BURNOUT OVEN # BB-56	260	4621.4	200	33	0.7	700	560	0	0	0	
All sources between 10.4 and 20 km w/ actual emissions greater than 50 TPY																				
2005	CASCADES BOXBOARD GROUP-CT	10/1/1962		170	2	R	3	1	BLR B&W PFI-22-0 #1	246.4	4611.8	120	120	10	370	120000	1324.7	653.1	438.4	
2005	EXETER ENERGY L.P.	7/27/1991		176	5	P	2	1	STANDARD KESSL INC/BLR #2	265.2	4621.4	565	196	8	180	80370	76.8	76.8	50.1	
All sources within 20 to 50 km w/ actual emissions > 500 TPY																				
2004	A E S THAMES, LLC	8/9/1989		107	44	P	10	5	BLR CE FLUID BED #1	241.2	4591.1	10	383	14.3	280	262300	1293	1293	1135.6	
2004	A E S THAMES, LLC	8/9/1989		107	44	P	11	5	BLR CE FLUID BED #2	241.2	4591.1	10	383	14.3	280	262300	1293	1293	1076.2	

Notes:

1. If year of data equals 5555, then actual data has not been verified.
2. Sources located within UTM Zone 18 have been converted to Zone 19 UTM coordinates.
3. No stack diameter was listed in DEP inventory. Stack diameter estimated from Kohler specification sheets obtained from www.kohlerpowersystems.com.
4. No stack flow rate was listed in DEP inventory. Stack flow rate obtained from www.cat.com for Caterpillar Inc. 600 kW standby diesel generator.
5. Estimate of stack diameter provided by Jude Catalano, DEP, 11/1/06.

Table 3
Plainfield Renewable Energy LLC
DEP Inventory of PM10 Emissions Units Sorted by Ambient Impact Analysis Guideline Criteria for Multi-Source Analyses (Edited As Noted) *

Year of Data	COMPANY NAME	DATE OF SOURCE STARTUP	DATE PERMIT ISSUED	TWN ID	PREM ID	F	REG ID	STK ID	DESCRIPTION	UTMX (KM)	UTMX (KM)	BASE ELEV (FT)	STK HGT ABOVE GRADE (FT)	STK DIA (FT)	STK TEMP (deg. F)	STK FLOW (ACFM)	ALLOWABLE PM10 EMISSIONS (TPY)	POTENTIAL PM10 EMISSIONS (TPY)	Actual PM10 (TPY)	Notes
All sources within significant impact radius (10.4 km)																				
2004	AMERICAN INDUSTRIES, INC	4/17/2002	4/17/2002	69	20	P	17	2	4T CMI ASPHALT BATCH PLANT	252.4	4612.3	100	32	2	300	68000	4	4	8.457	
5555	TILCON CONNECTICUT INC	.	12/7/2000	145	5	P	38	5	PORTABLE AGGREGATE PROC SYSTE	259	4626	250	0	0	86	0	4.7	4.7	4.708	1
1997	KAMAN AEROSPACE CORP	7/15/1970	.	145	22	R	170	3	BLR CB 668-400 #3	259.2	4626.3	220	55	2	550	5280	5.2	5.2	1.745	
5555	GRISWOLD RUBBER CO	.	6/19/1997	145	1	P	26	1	KOHLER 70R2 PROPANE EMER GEN	260.4	4622	250	39	0.3	360	1400	0.2	0.2	1.054	1,3
1996	GRISWOLD RUBBER CO	1/1/1955	.	145	1	R	233	6	PRESS LINE #2	260.9	4621.9	230	36	12	86	0	1.1	1.1	0.905	
1996	GRISWOLD RUBBER CO	1/1/1961	.	145	1	R	1	1	BLR FARRAR & TREFTS #1	260.9	4621.9	230	115	5	425	4600	1.8	1.8	0.636	
1996	QUINEBAUG TROUT HATCHERY	.	3/6/1996	145	53	P	23	1	CAT 600KW DIESEL	256.2	4623.7	150	15	0.8	963	4990	0	0.3	0.477	4
1996	GRISWOLD RUBBER CO	1/1/1955	.	145	1	R	232	5	PRESS LINE #1	260.9	4621.9	230	5	1	86	0	0.5	0.5	0.435	
1994	QUIKRETE OF CONN	.	5/5/1989	145	34	P	17	1	CONCRETE MIX DRYER	260.5	4625.8	300	98	3	200	14124	0	1.6	0.398	
2005	EXETER ENERGY L.P.	7/27/1991	10/23/1991	176	5	P	2	1	STANDARD KESSL INC/BLR #2	265.2	4621.4	565	196	8	180	80370	0	5.8	0.313	
5555	NEW ENGLAND FURNITURE	.	3/15/1988	69	10	P	3	1	BOILER, 3WB-350 HP	251.7	4610.1	137	80	4	375	1134	0	0.3	0.301	1
2005	EXETER ENERGY L.P.	7/27/1991	10/23/1991	176	5	P	1	1	STANDARD KESSL INC/BLR #1	265.2	4621.4	565	196	8	180	80390	0	5.8	0.292	
1997	KAMAN AEROSPACE CORP	1/1/1957	.	145	22	R	168	1	BLR O&S 3-H #2	259.2	4626.3	220	55	1.7	375	4800	3.8	3.8	0.265	
1994	WASTE MANAGEMENT OF CT INC	.	5/13/1993	32	1	P	1	1	ENCLOSED LANDFILL FLARE	253.7	4616.9	110	30	6	1400	43800	0	0.9	0.184	
1997	KAMAN AEROSPACE CORP	1/1/1957	.	145	22	R	169	2	BLR O&S 3-H #1	259.2	4626.3	220	60	1.7	375	4800	3.8	3.8	0.127	
2004	AMERICAN INDUSTRIES, INC	11/1/1971	.	69	20	R	12	3	CRUSHING PLANT	253.1	4612.4	160	0	0	86	0	0.9	0.9	0.124	
1997	TILCON CONNECTICUT INC	1/1/1961	.	145	5	R	14	2	3T BITUM CONC BATCH PLT	259.6	4624.9	210	45	3.6	250	42000	0.4	0.4	0.076	
1996	GRISWOLD RUBBER CO	1/1/1961	.	145	1	R	2	1	BLR TITUSVILLE A341001 #2	260.9	4621.9	230	125	5	425	720	1.8	1.8	0.07	
1990	MCCANN MFG CO	2/22/1971	.	176	1	R	1	1	BLR RAY 300HP #1	265.4	4620.7	340	60	2.1	350	4800	2.1	2.1	0.06	
5555	JEWETT CITY DPUC	4/18/2005	4/18/2005	69	15	P	20	1	DETROIT DIESEL GENERATOR	251.3	4609.9	150	25	0.8	880	6510	0.1	0.1	0.06	1
1997	TILCON CONNECTICUT INC	1/1/1945	.	145	5	R	12	1	STONE CRUSHING III	257	4617.9	210	0	0	86	0	0.2	0.2	0.052	
1987	GRISWOLD HIGH SCHOOL	12/13/1962	.	69	21	R	20	1	BLR Y-S 560-SPL-150-5 #1	251.6	4609.2	135	50	2	350	4800	0.8	0.8	0.043	
1987	GRISWOLD HIGH SCHOOL	12/13/1962	.	69	21	R	21	1	BLR Y-S 560-SPL-150-5 #2	251.6	4609.2	135	50	2	350	4800	0.8	0.8	0.043	
1995	UNITED RETEK CORP	.	11/1/1995	176	7	P	5	1	EXTEC CRUSH/SCREEN 6000	264.2	4621.3	300	11	0.2	1010	245	0.2	0.2	0.042	
1993	GRISWOLD HIGH SCHOOL	.	5/13/1993	69	23	P	4	1	BLR PVI #12WBHE225ATPO #1	251.6	4609.2	135	53	2.3	405	300	0.04	0.041	0.041	5
1993	GRISWOLD HIGH SCHOOL	.	5/13/1993	69	23	P	5	1	BLR PVI #12WBHE225ATPO #2	251.6	4609.2	135	53	2.3	405	300	0.04	0.041	0.041	5
1999	C & M CORP	12/1/1955	.	145	13	R	167	1	BLR CB 621-150 #3	257.9	4626.3	150	75	4.7	375	6000	0.2	0.2	0.037	
2005	EXETER ENERGY L.P.	6/1/1991	11/12/1992	176	5	P	4	3	CUMMINS 1100KTA52DS DIESEL #2	265.2	4621.4	565	16	0.7	670	8850	0	0.6	0.033	
1987	PLAINFIELD HIGH SCHOOL	8/1/1963	.	145	37	R	230	1	BLR KEWANEE C #1	258.2	4623.5	220	70	4.2	600	1386	0.1	0.1	0.022	
1987	PLAINFIELD HIGH SCHOOL	8/1/1963	.	145	37	R	231	1	BLR KEWANEE C #2	258.2	4623.5	220	70	4.2	600	1386	0.1	0.1	0.022	
2002	LISBON TEXTILE PRINTS INC	2/14/1977	9/21/1982	93	4	P	3	3	BLR COLUMBIA 100HP #2	250.5	4608.6	125	45	1.9	300	1550	0.8	0.8	0.022	
2005	FABRIC TRENDS INT'L	6/1/1972	.	145	6	R	146	31	FLOCK COATING LINE #49	257.6	4613.9	260	28	2.7	150	4400	0	0	0.021	
1999	C & M CORP	12/1/1955	.	145	13	R	166	1	BLR CB 621-150 #2	257.9	4626.3	150	75	4.7	375	6000	0.2	0.2	0.021	
2002	LISBON TEXTILE PRINTS INC	2/1/1978	12/1/1981	93	4	P	5	10	6 PROPANE FIRED BURNERS	250.5	4608.6	125	6	1.7	350	22500	0.1	0.1	0.021	
1987	GRISWOLD ELEM SCHOOL	1/10/1963	.	69	22	R	22	1	BLR HB SMITH 640-14 #1	251.7	4609.2	135	50	2	350	4800	0.2	0.2	0.014	
1987	GRISWOLD ELEM SCHOOL	1/10/1963	.	69	22	R	23	1	BLR HB SMITH 640-14 #2	251.7	4609.2	135	50	2	350	4800	0.2	0.2	0.013	
2005	FABRIC TRENDS INT'L	1/1/1970	.	145	6	E	8	58	HEATERS	257.6	4613.9	260	0	0	86	0	1.3	1.3	0.007	
2004	AMERICAN INDUSTRIES, INC	11/1/1971	.	69	20	R	10	1	TRANSIT CONCRETE PLT	253.1	4612.4	160	30	0	86	1000	0.1	0.1	0.005	
2002	LISBON TEXTILE PRINTS INC	7/1/1998	6/30/1998	93	4	P	18	13	REGGIANI #3 PRINT MACHINE	250.5	4608.6	125	32	1.5	275	5000	0	0	0.004	
2002	LISBON TEXTILE PRINTS INC	1/1/1994	6/23/1998	93	4	P	11	12	REGGIANI #2 PRINT MACHINE	250.5	4608.6	125	32	2	275	5000	0	0	0.004	
1995	EARTHGRO, INC/THE SCOTT'S CO	.	5/12/1995	188	4	P	2	1	MUSHROOM SUBS. COMPOSTING OP	265.3	4612.9	470	5	0	86	286	0.2	0.2	0.003	
2005	FABRIC TRENDS INT'L	1/1/1988	.	145	6	E	4	54	EMBOSSER	257.6	4613.9	260	0	0	86	0	0.1	0.1	0.001	
5555	CONNECTICUT WATER COMPANY, THI	.	8/27/2001	181	44	P	13	1	KOHLER 50RZ	260.8	4620.3	350	6	0.3	1100	550	0.2	0	0.001	1
2005	FABRIC TRENDS INT'L	6/15/1980	11/2/1981	145	6	P	12	47	FLOCK COATING LINE #52	257.6	4613.9	260	30	2	300	12500	0	0	0	

Year of Data	COMPANY NAME	DATE OF SOURCE STARTUP	DATE PERMIT ISSUED	TWN ID	PREM ID	F	REG ID	STK ID	DESCRIPTION	UTMX (KM)	UTMX (KM)	BASE ELEV (FT)	STK HGT ABOVE GRADE (FT)	STK DIA (FT)	STK TEMP (deg. F)	STK FLOW (ACFM)	ALLOWABLE PM10 EMISSIONS (TPY)	POTENTIAL PM10 EMISSIONS (TPY)	Actual PM10 (TPY)	Notes
All sources between 10.4 and 20 km w/ actual emissions greater than 50 TPY																				
	No stacks met the criteria of > 50 TPY of actual PM10 emissions within 20 km of the proposed PRE stack.																			
All sources within 20 to 50 km w/ actual emissions > 500 TPY																				
	No stacks met the criteria of >500 TPY of PM10 emissions within 50 km of the proposed PRE stack.																			

Notes:

* PM2.5 emissions are not included in the CTDEP Point Source Inventory. Therefore, PM10 emissions were used to conservatively represent PM2.5 emissions.

1. If year of data equals 5555, then actual data has not been verified.
2. Sources located within UTM Zone 18 have been converted to Zone 19 UTM coordinates.
3. From review of Kohler website and model numbers, this appears to be a 70 kw propane fired emergency genertor. Listed actual emissions exceed allowable/potential emissions and do not make sense for a small propane fired generator. Therefore, allowable/potential emissions were used for further evaluation of inclusion of this unit in the multiple source modeling inventory. Since allowable/potential emissions are less than 15 TPY, this source was not included in the NAAQS multi-source modeling. For PSD Increment analysis, stack diameter estimated from Kohler specification sheets obtained from www.kohlerpowersystems.com.
4. No stack flow rate was listed in DEP inventory. Stack flow rate obtained from www.cat.com for Caterpillar Inc. 600 kW standby diesel generator.
5. No allowable/potential emissions listed in DEP inventory. Consistent wtih inventory for SO2 emissions from this source, allowable/potential emissions were assumed equal to actual emissions.

Appendix D

PTMTPA and ISCST Multiple-Source Modeling Results Summaries

Table 10: ISCST and PTMTPA Multi-Source Refined Impacts Summary
Plainfield Renewable Energy LLC

	NO2 AAQS Analysis										
	PTMTPA Multi-Source Impacts at Complex Terrain Receptors ($\mu g/m^3$) [1,2]							UTM Coordinates		Distance from Stack (m)	Azimuth, degrees from N.
	Recept. 1 - 30	Recept. 31-60	Recept. 61-90	Recept. 91-120	Recept. 121-150	Recept. 1 51	Max.	East (m)	North (m)		
1-hour average	81.1	113.3	100.0	53.3	61.1	8.9	113.3	758,261.3	4,615,647.5	2500	120
3-hour average	73.0	102.0	90.0	48.0	55.0	8.0	102.0	758,261.3	4,615,647.5	2500	120
8-hour average	56.8	79.3	70.0	37.3	42.8	6.2	79.3	758,261.3	4,615,647.5	2500	120
24-hour average	14.0	17.0	17.0	10.0	11.0	1.0	17.0	758,261.3	4,615,647.5	2500	120
Annual average	3.5	4.3	4.3	2.5	2.8	0.3	4.3	758,261.3	4,615,647.5	2500	120
Alternate receptor locations of maximum 24-hour and annual PTMTPA impacts, if applic.:								758,971.0	4,618,558.0	3320	60

	NO2 PSD Increment Analysis										
	PTMTPA Multi-Source Impacts at Complex Terrain Receptors ($\mu g/m^3$) [1,2]							UTM Coordinates		Distance from Stack (m)	Azimuth, degrees from N.
	Recept. 1 - 30	Recept. 31-60	Recept. 61-90	Recept. 91-120	Recept. 121-150	Recept. 1 51	Max.	East (m)	North (m)		
1-hour average	81.1	113.3	92.2	54.4	35.6	8.9	113.3	758,261.3	4,615,647.5	2500	120
3-hour average	73.0	102.0	83.0	49.0	32.0	8.0	102.0	758,261.3	4,615,647.5	2500	120
8-hour average	56.8	79.3	64.6	38.1	24.9	6.2	79.3	758,261.3	4,615,647.5	2500	120
24-hour average	14.0	17.0	14.0	10.0	8.0	1.0	17.0	758,261.3	4,615,647.5	2500	120
Annual average	3.5	4.3	3.5	2.5	2.0	0.3	4.3	758,261.3	4,615,647.5	2500	120
Alternate receptor locations of maximum 24-hour and annual PTMTPA impacts, if applic.:											

	SO2 AAQS Analysis										
	PTMTPA Multi-Source Impacts at Complex Terrain Receptors ($\mu g/m^3$) [1,2]							UTM Coordinates		Distance from Stack (m)	Azimuth, degrees from N.
	Recept. 1 - 30	Recept. 31-60	Recept. 61-90	Recept. 91-120	Recept. 121-150	Recept. 1 51	Max.	East (m)	North (m)		
1-hour average	48.9	83.3	146.7	86.7	104.4	3.3	146.7	758,261.3	4,615,647.5	2500	120
3-hour average	44.0	75.0	132.0	78.0	94.0	3.0	132.0	758,261.3	4,615,647.5	2500	120
8-hour average	34.2	58.3	102.7	60.7	73.1	2.3	102.7	758,261.3	4,615,647.5	2500	120
24-hour average	10.0	16.0	29.0	16.0	20.0	1.0	29.0	757,756.0	4,619,772.0	3319	30
Annual average	2.5	4.0	7.3	4.0	5.0	0.3	7.3	757,756.0	4,619,772.0	3319	30
Alternate receptor locations of maximum 24-hour and annual PTMTPA impacts, if applic.:											

	SO2 PSD Increment Analysis										
	PTMTPA Multi-Source Impacts at Complex Terrain Receptors (µg/m³) [1,2]							UTM Coordinates		Distance from Stack (m)	Azimuth, degrees from N.
	Recept. 1 - 30	Recept. 31-60	Recept. 61-90	Recept. 91-120	Recept. 121-150	Recept. 1 51	Max.	East (m)	North (m)		
1-hour average	36.7	51.1	41.1	23.3	13.3	3.3	51.1	758,261.3	4,615,647.5	2500	120
3-hour average	33.0	46.0	37.0	21.0	12.0	3.0	46.0	758,261.3	4,615,647.5	2500	120
8-hour average	25.7	35.8	28.8	16.3	9.3	2.3	35.8	758,261.3	4,615,647.5	2500	120
24-hour average	6.0	8.0	9.0	7.0	5.0	1.0	9.0	758,261.3	4,615,647.5	2500	120
Annual average	1.5	2.0	2.3	1.8	1.3	0.3	2.3	758,261.3	4,615,647.5	2500	120

Alternate receptor locations of maximum 24-hour and annual PTMTPA impacts, if applic.:				

	PM2.5 AAQS Analysis										
	PTMTPA Multi-Source Impacts at Complex Terrain Receptors (µg/m³) [1,2]							UTM Coordinates		Distance from Stack (m)	Azimuth, degrees from N.
	Recept. 1 - 30	Recept. 31-60	Recept. 61-90	Recept. 91-120	Recept. 121-150	Recept. 1 51	Max.	East (m)	North (m)		
1-hour average	25.6	34.4	28.9	18.9	14.4	3.3	34.4	758,261.3	4,615,647.5	2500	120
3-hour average	23.0	31.0	26.0	17.0	13.0	3.0	31.0	758,261.3	4,615,647.5	2500	120
8-hour average	17.9	24.1	20.2	13.2	10.1	2.3	24.1	758,261.3	4,615,647.5	2500	120
24-hour average	4.0	5.0	4.0	3.0	2.0	0.0	5.0	758,261.3	4,615,647.5	2500	120
Annual average	1.0	1.3	1.0	0.8	0.5	0.0	1.3	758,261.3	4,615,647.5	2500	120

Alternate receptor locations of maximum 24-hour and annual PTMTPA impacts, if applic.:				

	ISCST NO2 Impacts, Annual Average (µg/m³)							UTM Coordinates			
	1970	1971	1972	1973	1974	Max.	Max. Year	East (m)	North (m)	Distance from Stack (m)	Azimuth, degrees from N.
PRE FBG Stack	1.04	**1.07**	0.94	1.00	0.87	1.07	1971	758,261.3	4,615,647.5	2500	120
PRE Emergency Generator	2.24	**2.28**	2.11	2.14	2.17	2.28	1971	756,121.1	4,616,770.5	129	169
Total PRE Sources	2.24	**2.28**	2.11	2.14	2.17	2.28	1971	756,121.1	4,616,770.5	129	169
Total Combined AAQS Sources	**3.32**	3.24	3.24	3.11	3.17	3.32	1970	746,361.0	4,613,354.0	10360	250
Total Combined PSD Sources	2.36	**2.42**	2.23	2.27	2.28	2.42	1971	756,121.1	4,616,770.5	129	169

	ISCST SO2 Impacts, Annual Average (µg/m³)							UTM Coordinates			
	1970	1971	1972	1973	1974	Max.	Max. Year	East (m)	North (m)	Distance from Stack (m)	Azimuth, degrees from N.
PRE FBG Stack	0.49	**0.51**	0.44	0.47	0.41	0.51	1971	758,261.1	4,615,647.5	2500	120
PRE Emergency Generator	0.001	**0.001**	0.001	0.001	0.001	0.001	1971	756,121.1	4,616,770.5	129	169
Total PRE Sources	0.49	**0.51**	0.44	0.47	0.41	0.51	1971	758,261.3	4,615,647.5	2500	120
Total Combined AAQS Sources	**9.27**	9.04	9.10	8.73	9.20	9.27	1970	746,361.0	4,613,354.0	10360	250
Total Combined PSD Sources	**1.48**	1.39	1.32	1.31	1.28	1.48	1970	740,221.9	4,607,732.5	18330	240

	ISCST SO2 Impacts, 24-hr Average (µg/m³)							UTM Coordinates			
	1970	1971	1972	1973	1974	Max.	Max. Year	East (m)	North (m)	Distance from Stack (m)	Azimuth, degrees from N.
PRE FBG Stack	2.91	2.62	**3.19**	3.04	2.36	3.19	1972	758,261.3	4,615,647.5	2500	120
PRE Emergency Generator	0.16	0.14	0.15	0.16	**0.18**	0.18	1974	756,015.1	4,616,892.0	81	266
Total PRE Sources	2.92	2.62	**3.19**	3.05	2.36	3.19	1972	758,261.3	4,615,647.5	2500	120
Total Combined AAQS Sources	53.18	59.00	**70.60**	56.84	49.06	70.60	1972	746,361.0	4,613,354.0	10360	250
Total Combined PSD Sources	7.50	**8.63**	8.11	8.20	7.94	8.63	1971	740,221.9	4,607,732.5	18330	240

	ISCST SO2 Impacts, 3-hr Average (µg/m³)							UTM Coordinates			
	1970	1971	1972	1973	1974	Max.	Max. Year	East (m)	North (m)	Distance from Stack (m)	Azimuth, degrees from N.
PRE FBG Stack	9.77	9.96	9.68	9.48	**10.02**	10.02	1974	759,365.8	4,617,474.0	3320	80
PRE Emergency Generator	0.30	0.32	0.32	**0.34**	0.33	0.34	1973	755,996.1	4,616,849.5	111	244
Total PRE Sources	9.79	9.98	9.70	9.50	**10.03**	10.03	1974	759,365.8	4,617,474.0	3320	80
Total Combined AAQS Sources	165.40	157.52	152.29	**173.97**	167.01	173.97	1973	746,361.0	4,613,354.0	10360	250
Total Combined PSD Sources	35.73	34.00	34.53	35.59	**36.09**	36.09	1974	738,044.7	4,613,714.5	18330	260

	ISCST PM2.5 Impacts, Annual Average (µg/m³)							UTM Coordinates			
	1970	1971	1972	1973	1974	Max.	Max. Year	East (m)	North (m)	Distance from Stack (m)	Azimuth, degrees from N.
PRE FBG Stack	0.28	**0.29**	0.25	0.27	0.23	0.29	1971	758,261.3	4,615,647.5	2500	120
PRE Emergency Generator	0.06	**0.07**	0.06	0.06	0.06	0.07	1971	756,121.1	4,616,770.5	129	169
PRE Cooling Tower	0.03	**0.03**	0.03	0.03	0.03	0.03	1971	756,121.1	4,616,770.5	129	169
Total PRE Sources	0.28	**0.29**	0.26	0.27	0.24	0.29	1971	758,261.3	4,615,647.5	2500	120
Total Combined AAQS Sources	0.28	**0.29**	0.26	0.27	0.24	0.29	1971	758,261.3	4,615,647.5	2500	120
Total Combined PSD Sources	0.28	**0.29**	0.26	0.27	0.24	0.29	1971	758,261.3	4,615,647.5	2500	120

	ISCST PM2.5 Impacts, 24-hr Average (µg/m³)							UTM Coordinates			
	1970	1971	1972	1973	1974	Max.	Max. Year	East (m)	North (m)	Distance from Stack (m)	Azimuth, degrees from N.
PRE FBG Stack	1.71	1.72	2.06	**2.07**	2.06	2.07	1973	758,261.3	4,615,647.5	2500	120
PRE Emergency Generator	**9.56**	8.86	7.27	9.00	9.27	9.56	1970	756,015.1	4,616,892.0	81	266
PRE Cooling Tower	**0.32**	0.24	0.29	0.26	0.23	0.32	1970	756,121.1	4,616,770.5	129	169
Total PRE Sources	**9.56**	8.88	7.30	9.03	9.29	9.56	1970	756,015.1	4,616,892.0	81	266
Total Combined AAQS Sources	**9.56**	8.88	7.30	9.03	9.29	9.56	1970	756,015.1	4,616,892.0	81	266
Total Combined PSD Sources	**9.56**	8.88	7.30	9.03	9.29	9.56	1970	756,015.1	4,616,892.0	81	266

Table 11: ISCST and PTMTPA Refined Multi-Source Modeling Results
Plainfield Renewable Energy LLC

ISCST Modeled Impacts

Pollutant	Averaging Period	Max. Impact AAQS Sources ($\mu g/m^3$)[1]	Max. Impact PSD Increment Consuming Sources ($\mu g/m^3$)[1]	Class II Allowable PSD Increments. ($\mu g/m^3$)	Background Conc. ($\mu g/m^3$)[3]	Total Conc. ($\mu g/m^3$)	Ambient Standard ($\mu g/m^3$)	Receptor Location of Maximum Impact				Year
								UTM East (m)	UTM North (m)	Distance from Stack (m)	Azimuth, degrees from N.	
PM2.5	24-hour average	9.6	N/A	N/A	33.2	42.7	65	756,015	4,616,892	81	266	1970
	Annual average	0.29	N/A	N/A	9.8	10.1	15	758,261	4,615,648	2,500	120	1971
NO_2 *	Annual average	3.3	2.4	25	32.7	36.0	100	746,361	4,613,354	10,360	250	1970
SO_2 **	3-hour average	174.0	35.7	512	92.0	266.0	1300	746,361	4,613,354	10,360	250	1973
	24-hour average	70.6	8.6	91	55.0	125.6	260	746,361	4,613,354	10,360	250	1972
	Annual average	9.3	1.5	20	11.0	20.3	60	746,361	4,613,354	10,360	250	1970

* Receptor location and year of maximum impact listed for cumulative AAQS sources. For PSD increment consuming sources, maximum modeled impact receptor was (X, Y, Dist., Azimuth, Year):

756,121	4,616,771	129.4	168.9	1971

** Receptor locations and years of maximum impact listed for cumulative AAQS sources. For PSD increment consuming sources, maximum modeled impact receptors were (X, Y, Dist., Azimuth, Year):

3-hour:	738,045	4,613,715	18,330	260	1974
24-hour:	740,222	4,607,733	18,330	240	1971
annual:	740,222	4,607,733	18,330	240	1970

PTMTPA-CONN Modeled Impacts

Pollutant	Averaging Period	Max. Impact AAQS Sources ($\mu g/m^3$)[1, 2]	Max. Impact PSD Increment Consuming Sources ($\mu g/m^3$)[1, 2]	Class II Allowable PSD Increments. ($\mu g/m^3$)	Background Conc. ($\mu g/m^3$)[3]	Total Conc. ($\mu g/m^3$)	Ambient Standard ($\mu g/m^3$)	Receptor Location of Maximum Impact			
								UTM East (m)	UTM North (m)	Distance from Stack (m)	Azimuth, degrees from N.
PM2.5	24-hour average	5.0	N/A	N/A	33.2	38.2	65	758,261	4,615,648	2500	120
	Annual average	1.3	N/A	N/A	9.8	11.1	15	758,261	4,615,648	2500	120
NO_2	Annual average	4.3	4.3	25	32.7	36.9	100	758,261	4,615,648	2500	120
SO_2	3-hour average	132.0	31	512	92.0	224.0	1300	758,261	4,615,648	2500	120
	24-hour average	29.0	9.0	91	55.0	84.0	260	758,261	4,615,648	2500	120
	Annual average	7.3	2.3	20	11.0	18.3	60	758,261	4,615,648	2500	120

1. For ISCST model results, highest second high modeled concentrations were used to evaluate all short-term impacts (1-hour to 24-hour), with the exception of PM2.5. For PM2.5, highest modeled concentrations were conservatively used. Highest modeled concentrations were used to evaluate annual impacts.
2. PTMTPA-CONN provides maximum 3-hour and 24-hour concentrations for each receptor modeled. 1-hour and 8-hour concentrations were calculated by dividing the 3-hour value by 0.9 to calculate a 1-hour average, and then multiplying the 1-hour value by 0.7 to calculate an 8-hour average. Annual average concentrations were estimated by multiplying the maximum 24-hour concentration by 0.25 (the maximum ratio of the annual to 24-hr second high concentration modeled with ISCST was 0.2 at the maximum PTPTPA impact receptor). Maximum modeled results from all receptors were used to evaluate impacts for each averaging period.
3. With exceptions noted as follows, background concentrations were obtained from the 2003-2005 average values from the 3 CT monitoring sites nearest to the project site (data provided by CTDEP). For PM2.5, background concentrations were obtained from the average of 2003-2005 data from the Norwich, CT and East Greenwich, RI monitoring sites. For PM10, the 24-hour background concentration was obtained from the average of the 2003-2005 values from East Hartford, CT and E. Greenwich, RI. The PM10 annual background concentration was obtained from the average of the 2003-2005 values from Waterbury,CT and E. Greenwich, RI.

Maximum of ISCST-PRIME and PTMTPA Impacts

Pollutant	Averaging Period	Max. Impact AAQS Sources ($\mu g/m^3$)[1]	Max. Impact PSD Increment Consuming Sources ($\mu g/m^3$)[1,4]	Class II Allowable PSD Increments. ($\mu g/m^3$)	Background Conc. ($\mu g/m^3$)[6]	Total Conc. ($\mu g/m^3$)	Ambient Standard ($\mu g/m^3$)
PM2.5	24-hour average	9.6	N/A	N/A	33.2	42.7	65
	Annual average	1.3	N/A	N/A	9.8	11.1	15
NO_2	Annual average	4.3	4.3	25	32.7	36.9	100
SO_2	3-hour average	174.0	35.7	512	92.0	266.0	1300
	24-hour average	70.6	9.0	91	55.0	125.6	260
	Annual average	9.3	2.3	20	11.0	20.3	60

Appendix E

List of ISCST, PTMTPA and BPIP Model Input and Output Files

[The input and output files will be emailed to CTDEP for review and approval]

Listing of Screening and Single-Source Modeling Input and Output Files
Plainfield Renewable Energy LLC

Input Files:	Output Files:	Description
ISCST Worst-Case Operating Scenario Screening Files:		
PRESCR1.INP	PRESCR1.OUT	Screening Meteorology, Flat Terrain, Unit Emission Rates, 4 Load Cases Run As Separate Source Groups.
PRESCR2.INP	PRESCR2.OUT	Screening Meteorology, Max. Terrain, Unit Emission Rates, 4 Load Cases Run As Separate Source Groups.
PRESCR2P.INP	PRESCR2P.OUT	ISCST3 w/ PRIME. Screening Meteorology, Max. Terrain, Unit Emission Rates, 4 Load Cases Run As Separate Source Groups.
ISCST Prime Refined Modeling Files:		
PRE3P70.PIN	PRE3P70.POU	Refined, Simple + Complex Terrain, Unit Emission Rate, Case 2 (PM, NO2, SO2, Pb), 1970
PRE3P71.PIN	PRE3P71.POU	Refined, Simple + Complex Terrain, Unit Emission Rate, Case 2 (PM, NO2, SO2, Pb), 1971
PRE3P72.PIN	PRE3P72.POU	Refined, Simple + Complex Terrain, Unit Emission Rate, Case 2 (PM, NO2, SO2, Pb), 1972
PRE3P73.PIN	PRE3P73.POU	Refined, Simple + Complex Terrain, Unit Emission Rate, Case 2 (PM, NO2, SO2, Pb), 1973
PRE3P74.PIN	PRE3P74.POU	Refined, Simple + Complex Terrain, Unit Emission Rate, Case 2 (PM, NO2, SO2, Pb), 1974
PRE4P70.PIN	PRE4P70.POU	Refined, Simple + Complex Terrain, Unit Emission Rate, Case 1 (CO), 1970
PRE4P71.PIN	PRE4P71.POU	Refined, Simple + Complex Terrain, Unit Emission Rate, Case 1 (CO), 1971
PRE4P72.PIN	PRE4P72.POU	Refined, Simple + Complex Terrain, Unit Emission Rate, Case 1 (CO), 1972
PRE4P73.PIN	PRE4P73.POU	Refined, Simple + Complex Terrain, Unit Emission Rate, Case 1 (CO), 1973
PRE4P74.PIN	PRE4P74.POU	Refined, Simple + Complex Terrain, Unit Emission Rate, Case 1 (CO), 1974
PTMTPA Complex Terrain Screening Modeling Files:		
PRE1_IN.TXT	PRE1_OUT.TXT	Complex Terrain Screening Modeling, Case 2 (PM, NO2, SO2, Pb), Receptors 1-30
PRE2_IN.TXT	PRE2_OUT.TXT	Complex Terrain Screening Modeling, Case 2 (PM, NO2, SO2, Pb), Receptors 31-60
PRE3_IN.TXT	PRE3_OUT.TXT	Complex Terrain Screening Modeling, Case 2 (PM, NO2, SO2, Pb), Receptors 61-90
PRE4_IN.TXT	PRE4_OUT.TXT	Complex Terrain Screening Modeling, Case 2 (PM, NO2, SO2, Pb), Receptors 91-120
PRE5_IN.TXT	PRE5_OUT.TXT	Complex Terrain Screening Modeling, Case 2 (PM, NO2, SO2, Pb), Receptors 121-150
PRE6_IN.TXT	PRE6_OUT.TXT	Complex Terrain Screening Modeling, Case 2 (PM, NO2, SO2, Pb), Receptor 151
PRE7_IN.TXT	PRE7_OUT.TXT	Complex Terrain Screening Modeling, Case 1 (CO), Receptors 1-30
PRE8_IN.TXT	PRE8_OUT.TXT	Complex Terrain Screening Modeling, Case 1 (CO), Receptors 31-60
PRE9_IN.TXT	PRE93_OUT.TXT	Complex Terrain Screening Modeling, Case 1 (CO), Receptors 61-90
PRE10_IN.TXT	PRE10_OU.TXT	Complex Terrain Screening Modeling, Case 1 (CO), Receptors 91-120
PRE11_IN.TXT	PRE11_OU.TXT	Complex Terrain Screening Modeling, Case 1 (CO), Receptors 121-150
PRE12_IN.TXT	PRE12_OU.TXT	Complex Terrain Screening Modeling, Case 1 (CO), Receptor 151
BPIP Prime Files:		
PRESCR1.BPI	PRESCR1.PRO	BPIP Input and Output Files For ISCST Screening Runs
PRE1.BPI	PRE1.PRO	BPIP Input and Output Files For ISCST Prime Refined Runs

Listing of Multi-Source Modeling Input and Output Files
Plainfield Renewable Energy LLC

Input Files:	Output Files:	Description
ISCST Prime Refined Multi-Source AAQS and PSD Increment Modeling Files:		
PRENOM70.PIN	PRENOM70.POU	Refined, Simple + Complex Terrain, NO2 AAQS + PSD Increment Multi-Source Anal. 1970
PRENOM71.PIN	PRENOM71.POU	Refined, Simple + Complex Terrain, NO2 AAQS + PSD Increment Multi-Source Anal. 1971
PRENOM72.PIN	PRENOM72.POU	Refined, Simple + Complex Terrain, NO2 AAQS + PSD Increment Multi-Source Anal. 1972
PRENOM73.PIN	PRENOM73.POU	Refined, Simple + Complex Terrain, NO2 AAQS + PSD Increment Multi-Source Anal. 1973
PRENOM74.PIN	PRENOM74.POU	Refined, Simple + Complex Terrain, NO2 AAQS + PSD Increment Multi-Source Anal. 1974
PRESOM70.PIN	PRESOM70.POU	Refined, Simple + Complex Terrain, SO2, Short-Term AAQS + PSD Increment Multi-Source Anal. 1970
PRESOM71.PIN	PRESOM71.POU	Refined, Simple + Complex Terrain, SO2, Short-Term AAQS + PSD Increment Multi-Source Anal. 1971
PRESOM72.PIN	PRESOM72.POU	Refined, Simple + Complex Terrain, SO2, Short-Term AAQS + PSD Increment Multi-Source Anal. 1972
PRESOM73.PIN	PRESOM73.POU	Refined, Simple + Complex Terrain, SO2, Short-Term AAQS + PSD Increment Multi-Source Anal. 1973
PRESOM74.PIN	PRESOM74.POU	Refined, Simple + Complex Terrain, SO2, Short-Term AAQS + PSD Increment Multi-Source Anal. 1974
PRESAM70.PIN	PRESAM70.POU	Refined, Simple + Complex Terrain, SO2, Annual AAQS + PSD Increment Multi-Source Anal. 1970
PRESAM71.PIN	PRESAM71.POU	Refined, Simple + Complex Terrain, SO2, Annual AAQS + PSD Increment Multi-Source Anal. 1971
PRESAM72.PIN	PRESAM72.POU	Refined, Simple + Complex Terrain, SO2, Annual AAQS + PSD Increment Multi-Source Anal. 1972
PRESAM73.PIN	PRESAM73.POU	Refined, Simple + Complex Terrain, SO2, Annual AAQS + PSD Increment Multi-Source Anal. 1973
PRESAM74.PIN	PRESAM74.POU	Refined, Simple + Complex Terrain, SO2, Annual AAQS + PSD Increment Multi-Source Anal. 1974
PREPMM70.PIN	PREPMM70.POU	Refined, Simple + Complex Terrain, PM, Short-Term AAQS + PSD Increment Multi-Source Anal. 1970
PREPMM71.PIN	PREPMM71.POU	Refined, Simple + Complex Terrain, PM, Short-Term AAQS + PSD Increment Multi-Source Anal. 1971
PREPMM72.PIN	PREPMM72.POU	Refined, Simple + Complex Terrain, PM, Short-Term AAQS + PSD Increment Multi-Source Anal. 1972
PREPMM73.PIN	PREPMM73.POU	Refined, Simple + Complex Terrain, PM, Short-Term AAQS + PSD Increment Multi-Source Anal. 1973
PREPMM74.PIN	PREPMM74.POU	Refined, Simple + Complex Terrain, PM, Short-Term AAQS + PSD Increment Multi-Source Anal. 1974
PREPAM70.PIN	PREPMM70.POU	Refined, Simple + Complex Terrain, PM, Annual AAQS + PSD Increment Multi-Source Anal. 1970
PREPAM71.PIN	PREPMM71.POU	Refined, Simple + Complex Terrain, PM, Annual AAQS + PSD Increment Multi-Source Anal. 1971
PREPAM72.PIN	PREPMM72.POU	Refined, Simple + Complex Terrain, PM, Annual AAQS + PSD Increment Multi-Source Anal. 1972
PREPAM73.PIN	PREPMM73.POU	Refined, Simple + Complex Terrain, PM, Annual AAQS + PSD Increment Multi-Source Anal. 1973
PREPAM74.PIN	PREPMM74.POU	Refined, Simple + Complex Terrain, PM, Annual AAQS + PSD Increment Multi-Source Anal. 1974
PTMTPA Complex Terrain Screening Modeling Files:		
PRE13_IN.TXT	PRE13_OU.TXT	Complex Terrain Screening Modeling, NO2 AAQS, Receptors 1-30
PRE14_IN.TXT	PRE14_OU.TXT	Complex Terrain Screening Modeling, NO2 AAQS, Receptors 31-60
PRE15_IN.TXT	PRE15_OU.TXT	Complex Terrain Screening Modeling, NO2 AAQS, Receptors 61-90
PRE16_IN.TXT	PRE16_OU.TXT	Complex Terrain Screening Modeling, NO2 AAQS, Receptors 91-120
PRE17_IN.TXT	PRE17_OU.TXT	Complex Terrain Screening Modeling, NO2 AAQS, Receptors 121-150
PRE18_IN.TXT	PRE18_OU.TXT	Complex Terrain Screening Modeling, NO2 AAQS, Receptor 151
PRE19_IN.TXT	PRE19_OU.TXT	Complex Terrain Screening Modeling, NO2 PSD Increment, Receptors 1-30
PRE20_IN.TXT	PRE20_OU.TXT	Complex Terrain Screening Modeling, NO2 PSD Increment, Receptors 31-60
PRE21_IN.TXT	PRE21_OU.TXT	Complex Terrain Screening Modeling, NO2 PSD Increment, Receptors 61-90
PRE22_IN.TXT	PRE22_OU.TXT	Complex Terrain Screening Modeling, NO2 PSD Increment, Receptors 91-120
PRE23_IN.TXT	PRE23_OU.TXT	Complex Terrain Screening Modeling, NO2 PSD Increment, Receptors 121-150
PRE24_IN.TXT	PRE24_OU.TXT	Complex Terrain Screening Modeling, NO2 PSD Increment, Receptor 151
PRE25_IN.TXT	PRE25_OU.TXT	Complex Terrain Screening Modeling, SO2 AAQS, Receptors 1-30
PRE26_IN.TXT	PRE26_OU.TXT	Complex Terrain Screening Modeling, SO2 AAQS, Receptors 31-60
PRE27_IN.TXT	PRE27_OU.TXT	Complex Terrain Screening Modeling, SO2 AAQS, Receptors 61-90
PRE28_IN.TXT	PRE28_OU.TXT	Complex Terrain Screening Modeling, SO2 AAQS, Receptors 91-120
PRE29_IN.TXT	PRE29_OU.TXT	Complex Terrain Screening Modeling, SO2 AAQS, Receptors 121-150
PRE30_IN.TXT	PRE30_OU.TXT	Complex Terrain Screening Modeling, SO2 AAQS, Receptor 151
PRE31_IN.TXT	PRE31_OU.TXT	Complex Terrain Screening Modeling, SO2 PSD Increment, Receptors 1-30
PRE32_IN.TXT	PRE32_OU.TXT	Complex Terrain Screening Modeling, SO2 PSD Increment, Receptors 31-60
PRE33_IN.TXT	PRE33_OU.TXT	Complex Terrain Screening Modeling, SO2 PSD Increment, Receptors 61-90
PRE34_IN.TXT	PRE34_OU.TXT	Complex Terrain Screening Modeling, SO2 PSD Increment, Receptors 91-120
PRE35_IN.TXT	PRE35_OU.TXT	Complex Terrain Screening Modeling, SO2 PSD Increment, Receptors 121-150
PRE36_IN.TXT	PRE36_OU.TXT	Complex Terrain Screening Modeling, SO2 PSD Increment, Receptor 151
PRE37_IN.TXT	PRE37_OU.TXT	Complex Terrain Screening Modeling, PM2.5 AAQS, Receptors 1-30
PRE38_IN.TXT	PRE38_OU.TXT	Complex Terrain Screening Modeling, PM2.5 AAQS, Receptors 31-60
PRE39_IN.TXT	PRE39_OU.TXT	Complex Terrain Screening Modeling, PM2.5 AAQS, Receptors 61-90
PRE40_IN.TXT	PRE40_OU.TXT	Complex Terrain Screening Modeling, PM2.5 AAQS, Receptors 91-120
PRE41_IN.TXT	PRE41_OU.TXT	Complex Terrain Screening Modeling, PM2.5 AAQS, Receptors 121-150
PRE42_IN.TXT	PRE42_OU.TXT	Complex Terrain Screening Modeling, PM2.5 AAQS, Receptor 151
BPIP Prime Files:		
PREPMM70.BP	PREPMM70.PRO	BPIP Input and Output Files For ISCST Prime Refined Runs

Appendix F

VISCREEN Model Output Files

Visual Effects Screening Analysis for
Source: PRE FBG stack
Class I Area: Lye Brook Wilderness

*** Level-1 Screening ***

Input Emissions for

Particulates	1.32	G	/S
NOx (as NO2)	4.94	G	/S
Primary NO2	.49	G	/S
Soot	.00	G	/S
Primary SO4	.12	G	/S

**** Default Particle Characteristics Assumed

Transport Scenario Specifications:

Background Ozone:	.04 ppm
Background Visual Range:	40.00 km
Source-Observer Distance:	185.00 km
Min. Source-Class I Distance:	185.00 km
Max. Source-Class I Distance:	200.00 km
Plume-Source-Observer Angle:	11.25 degrees
Stability:	6
Wind Speed:	1.00 m/s

R E S U L T S

Asterisks (*) indicate plume impacts that exceed screening criteria

Maximum Visual Impacts INSIDE Class I Area
Screening Criteria ARE NOT Exceeded

					Delta E		Contrast	
Backgrnd	Theta	Azi	Distance	Alpha	Crit	Plume	Crit	Plume
SKY	10.	84.	185.0	84.	2.00	.003	.05	.000
SKY	140.	84.	185.0	84.	2.00	.001	.05	.000
TERRAIN	10.	85.	185.4	84.	2.00	.000	.05	.000
TERRAIN	140.	85.	185.4	84.	2.00	.000	.05	.000

Maximum Visual Impacts OUTSIDE Class I Area
Screening Criteria ARE NOT Exceeded

					Delta E		Contrast	
Backgrnd	Theta	Azi	Distance	Alpha	Crit	Plume	Crit	Plume
SKY	10.	75.	179.1	94.	2.00	.003	.05	.000
SKY	140.	75.	179.1	94.	2.00	.001	.05	.000
TERRAIN	10.	60.	169.2	109.	2.00	.000	.05	.000
TERRAIN	140.	60.	169.2	109.	2.00	.000	.05	.000

Visual Effects Screening Analysis for
Source: PRE FBG
Class I Area: Edwin B. Forsythe NWR (B

*** Level-1 Screening ***

Input Emissions for

Particulates	1.32	G	/S
NOx (as NO2)	4.94	G	/S
Primary NO2	.49	G	/S
Soot	.00	G	/S
Primary SO4	.12	G	/S

**** Default Particle Characteristics Assumed

Transport Scenario Specifications:

Background Ozone:	.04 ppm
Background Visual Range:	40.00 km
Source-Observer Distance:	320.00 km
Min. Source-Class I Distance:	320.00 km
Max. Source-Class I Distance:	335.00 km
Plume-Source-Observer Angle:	11.25 degrees
Stability:	6
Wind Speed:	1.00 m/s

R E S U L T S

Asterisks (*) indicate plume impacts that exceed screening criteria

Maximum Visual Impacts INSIDE Class I Area
Screening Criteria ARE NOT Exceeded

					Delta E		Contrast	
Backgrnd	Theta	Azi	Distance	Alpha	Crit	Plume	Crit	Plume
SKY	10.	84.	320.0	84.	2.00	.000	.05	.000
SKY	140.	84.	320.0	84.	2.00	.000	.05	.000
TERRAIN	10.	90.	326.3	79.	2.00	.000	.05	.000
TERRAIN	140.	90.	326.3	79.	2.00	.000	.05	.000

Maximum Visual Impacts OUTSIDE Class I Area
Screening Criteria ARE NOT Exceeded

					Delta E		Contrast	
Backgrnd	Theta	Azi	Distance	Alpha	Crit	Plume	Crit	Plume
SKY	10.	80.	315.2	89.	2.00	.000	.05	.000
SKY	140.	80.	315.2	89.	2.00	.000	.05	.000
TERRAIN	10.	100.	338.1	69.	2.00	.000	.05	.000
TERRAIN	140.	100.	338.1	69.	2.00	.000	.05	.000