

## Appendix B

### Proposed Emissions Testing and Mechanical Improvements at GSE

# GSE MECHANICAL IMPROVEMENTS

ID	Task Name	Start	Finish
1	Information acquisition	Thu 9/26/02	Thu 10/31/02
2	Compile existing ventilation & emissions data	Thu 9/26/02	Tue 10/1/02
3	Determine known & suspected emissions components	Tue 10/1/02	Tue 10/8/02
4	Determine water usages & collection streams	Mon 10/7/02	Fri 10/11/02
5	Determine additional data needed	Wed 10/9/02	Thu 10/31/02
6	Develop plan to obtain additional data (if needed)	Mon 10/28/02	Thu 10/31/02
7			
8	<b>Centrifuge scrubber system</b>	Tue 10/1/02	Fri 4/11/03
9	Verify adequacy of existing design	Tue 10/1/02	Fri 11/15/02
10	Design upgrades (if needed)	Fri 10/18/02	Mon 12/30/02
11	Prepare report for RKA	Mon 12/16/02	Mon 12/30/02
12	Pre-installation chemical and odor characterization testing	Mon 2/10/03	Fri 2/28/03
13	Complete design	Mon 1/13/03	Fri 2/14/03
14	Installation	Mon 3/10/03	Fri 3/28/03
15	Measure emissions & scrubber efficiency	Mon 3/31/03	Fri 4/11/03
16			
17	<b>Green scrubber system</b>	Mon 1/13/03	Thu 6/19/03
18	Verify adequacy of existing design	Mon 1/13/03	Fri 2/7/03
19	Pre-installation chemical and odor characterization testing	Mon 2/10/03	Fri 2/28/03
20	Design upgrades (if needed)	Mon 3/3/03	Fri 4/4/03
21	Prepare report for RKA	Mon 4/7/03	Mon 4/7/03
22	Complete modifications	Tue 4/8/03	Mon 5/26/03
23	Measure emissions & scrubber efficiency	Tue 5/27/03	Thu 6/19/03
24			
25	<b>Fermentation scrubber/pre-scrubber</b>	Mon 12/16/02	Thu 3/20/03
26	Design post-scrubber	Mon 12/16/02	Fri 1/10/03
27	Design water recovery system	Mon 1/13/03	Fri 1/17/03
28	Prepare report for RKA	Wed 1/15/03	Wed 1/22/03
29	Install new pressure relief valve	Mon 2/3/03	Thu 2/20/03
30	Complete installation	Mon 2/3/03	Thu 2/20/03
31	Measure emissions & scrubber efficiency	Mon 3/3/03	Thu 3/20/03
32	Odor characterization testing	Mon 3/3/03	Thu 3/20/03
33			
34	<b>DDGS Cooling and DDGS Storage</b>	Tue 11/8/02	Fri 9/26/03
35	Install sample ports into cooling cyclone fan exhaust	Tue 12/17/02	Wed 12/18/02
36	Determine volume that can be accommodated by the dryer	Tue 11/5/02	Fri 11/15/02
37	Install baghouse for DDGS Storage Room	Mon 2/17/03	Fri 3/28/03
38	Post-baghouse installation chemical and odor characterization testing	Tue 4/1/03	Wed 4/30/03
39	Perform control feasibility study	Mon 4/28/03	Fri 9/26/03
40			
41	<b>DDGS/TO dryer system</b>	Mon 11/18/02	Fri 3/7/03
42	receive TO sections	Wed 11/20/02	Tue 11/26/02
43	receive boiler section	Mon 11/18/02	Wed 11/27/02
44	Installation	Mon 11/25/02	Wed 1/8/03
45	startup	Mon 12/23/02	Fri 1/10/03
46	Engineering testing (7E,25A, 10 or eq.)	Fri 2/7/03	Fri 3/7/03
47			
48	<b>Ethanol load out</b>	Fri 2/14/03	Mon 4/14/03
49	Determine flow and concentrations	Mon 3/10/03	Fri 3/28/03
50	Determine control method	Thu 3/13/03	Mon 4/14/03
51	designate milestones for installation	Fri 2/14/03	Fri 3/7/03
52			
53	<b>Distillation Scrubber</b>	Mon 10/7/02	Tue 10/15/02
54	Change horizontal discharge to vertical	Mon 10/7/02	Tue 10/15/02
55			
56	<b>General Review</b>	Mon 10/21/02	Mon 9/22/03
57	Projects status review	Mon 12/23/02	Mon 9/22/03
98	Review process changes that may impact emissions	Mon 10/21/02	Fri 3/21/03
105	Review new information acquired	Mon 10/21/02	Fri 3/21/03
112	Review actions completed to date	Mon 10/21/02	Fri 3/21/03
119	Review pending actions	Mon 10/21/02	Fri 3/21/03
126	Review potential impacts on process systems	Mon 10/21/02	Fri 3/21/03
133	Review potential impacts on ventilation	Mon 10/21/02	Fri 3/21/03
140	Review potential impacts on ventilation	Mon 10/21/02	Fri 3/21/03
147	Review potential impacts on water/utilities	Mon 10/21/02	Fri 3/21/03
154	Review potential impacts on sewer discharges	Mon 10/21/02	Fri 3/21/03



