DEPARTMENT OF ENVIRONMENTAL QUALITY
DIVISION OF AIR QUALITY

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Reply to: State of Utah
Division of Air Quality
P.O. Box 144820
Salt Lake City, Utah 84114-4820

August 20, 1993

DAQE-0719-93

James R. Van Orman
Hill Air Force Base
OO-ALC/EM
7276 Wardleigh Road
Hill Air Force Base, Utah 84056-5127

Re: Approval Order for Air Permit for Emergency Power Generators
Davis County CDS A2 NA Title V

Dear Mr. Orman:

The above-referenced project has been evaluated and found to be consistent with the requirements of the Utah Air Conservation Rules (UACR) and the Utah Air Conservation Act. A 30-day public comment period was held and all comments received were evaluated. The conditions of this Approval Order (AO) reflect any changes to the proposed conditions which resulted from the evaluation of the comments received. This air quality AO authorizes the project with the following conditions and failure to comply with any of the conditions may constitute a violation of this order.

General Conditions:

1. This AO applies to the following organization:

   Headquarters, Ogden Air Logistics Center OO-ALC/EM (AFMC)
   7276 Wardleigh Road
   Hill Air Force Base, Utah 84056-5127

   The emergency power generating equipment listed in Attachment 1 of this AO shall be operated at the specified locations listed in the attachment.

   Universal Transverse Mercator (UTM) Coordinate System: 4,552,000 meters Northing, 418,000 meters Easting (Modeling will require more accurate UTM coordinates)

2. Definitions of terms, abbreviations, and references used in this AO conform to those used in the UACR, Utah Administrative Codes (UAC), and Series 40 of the Code of Federal Regulations (40 CFR). These definitions take precedence unless specifically defined otherwise herein.

3. Hill Air Force Base (HAFB) shall install and operate the 81 emergency generators, as listed in Attachment 1 of this AO, according to the information submitted in the Notice

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of Intent dated April 1, 1993, and the Notices of Intent associated with the generator engines operating under current AOs.

4. A copy of this AO shall be posted on site. The AO shall be available to the employees who operate the air emission producing equipment. These employees shall receive instruction as to their responsibilities in operating the equipment according to all of the relevant conditions listed below.

5. The approved installations shall consist of the 81 emergency generators as listed in Attachment 1 to this AO.

6. This AO shall replace all conditions regarding generators that are listed in Attachment 1 that have a valid AO. These AOs are dated January 4, 1993 (DAQE-1171-92), May 22, 1992 (DAQE-492-92), November 22, 1988 (BAQE-585-88), June 15, 1988 (BAQE-260-88), June 15, 1988 (BAQE-257-88), March 10, 1983, and March 20, 1980.

Limitations and Tests Procedures

7. Visible emissions from any emergency generator emission source associated with this AO shall not exceed 20% opacity after warm-up. Opacity observations of emissions from stationary sources shall be conducted in accordance with 40 CFR 60, Appendix A, Method 9.

8. All emergency generators listed in Attachment 1 shall be limited to 100 operating hours per 12-month period for each generator engine. This limit shall not be exceeded without prior approval in accordance with R307-1-3.1, UAC.

   Compliance with the annual limitations shall be determined on a rolling 12-month total. Based on the first day of each month, a new 12-month total shall be calculated using data from the previous 12 months. Records of operating hours shall be kept for all periods when the generators are in operation. Records of operating hours shall be made available to the Executive Secretary or his representative upon request and shall include a period of two years ending, with the date of the request. Operating hours shall be determined by engine operating hour meters. The records shall be kept on a monthly basis. Hours of operation shall be determined by supervisor monitoring and maintaining of an operations log.

9. Any or all of the diesel emergency power generator engines listed in Attachment 1 shall be stack tested for NO_x emissions if directed by the Executive Secretary. The emission rate/concentration shall not exceed 14 grams of NO_x per horsepower-hour. The test method used shall be 40 CFR 60, Appendix A, Method 7 (all Method 7 tests are acceptable test methods). A pretest conference shall be held if directed by the Executive Secretary. It shall be held at least 30 days prior to the test between the owner/operator, the tester, and the Executive Secretary. The exhaust stack need not be designed to accommodate testing. However, if the Executive Secretary determines a stack test is necessary, whatever modifications needed to meet the requirements of 40 CFR 60, Appendix A, Method 1, and to provide Occupational Safety and Health Administration (OSHA) approvable access to the test location shall be retrofitted to the emission point.

The horsepower output during all compliance testing shall be no less than 90% of rated horsepower (KW) rating per engine.

Fuels

10. The sulfur content of any diesel fuel oil used in the emergency generator engines shall not exceed 0.50 percent by weight (0.05% when available). Sulfur content shall be decided by ASTM Method D-4294-89, or approved equivalent. The sulfur content shall be tested if directed by the Executive Secretary.

Construction Limitations

11. Eighteen months from the date of this AO, the Executive Secretary shall be notified in writing of the status of this project. If installation of all generators are complete and operation has commenced a notice is not required.

12. All records referenced in this AO, which are required to be kept by the owner/operator, shall be made available to the Executive Secretary or his representative upon request.

13. All installations and facilities authorized by this AO shall be adequately and properly maintained. All pollution control vendor recommended equipment shall be installed, maintained, and operated. Instructions from the vendor or established maintenance practices that maximize pollution control shall be used. All necessary equipment control and operating devices, such as pressure gauges, amp meters, volt meters, flow rate indicators, temperature gauges, continuous emission monitors (CEMs), etc., shall be installed and operated properly and easily accessible to compliance inspectors.

14. The owner/operator shall comply with R307-1-3.5, UAC. This rule addresses emission inventory reporting requirements.

15. The owner/operator shall comply with R307-1-4.7, UAC. This rule addresses unavoidable breakdown reporting requirements. The owner/operator shall calculate/estimate the excess emissions whenever a breakdown occurs. The total of excess emissions shall be reported to the Executive Secretary as directed for each calendar year.

16. The owner/operator has submitted to the Executive Secretary an emergency plan dated October 5, 1990. This plan should identify what control/production measures the owner/operator shall implement when an emergency episode is declared by the Executive Director of the Department of Environmental Quality.

Any future modifications to the equipment approved by this order must also be approved in accordance with R307-1-3.1.1, UAC.

This AO in no way releases the owner or operator from any liability for compliance with all other applicable federal, state, and local regulations including the UACR.

Annual emissions for this source (all emergency generators located on the contiguous confines of Hill AFB) are currently calculated at the following values:

	Pollutant	Tons/yr
A.	Particulate	2.86
B.	PM_{10}	2.86
C.	SO_2	2.66
D.	NO_x	40.07
E.	CO	8.67
F.	VOC	3.21
G.	Aldehydes	0.60

These calculations are for the purposes of determining the applicability of the prevention of significant deterioration and nonattainment area major source requirements of the UACR.

In accordance with the requirements of Title V of the 1990 Clean Air Act, the following pollutants may be subject to an operating permit fee. Both the fees rate and the class of pollutants are subject to change by the state, the federal agencies, or both.

	Pollutant	Tons/yr
A.	TSP	2.86 ton/yr
B.	SO_x	2.66 ton/yr
C.	NO_x	40.07 tons/yr

Sincerely,

Russell A. Roberts, Executive Secretary
Utah Air Quality Board

RAR:HGN:sbq

cc: Davis County Health Department

Hill Air Force Base Emergency Generators

Item No.	Building Number	Manufacturer	Model	Serial #	Year	KW	Fuel	Annual op hours 1992	Maximum allowable op hours	NOX 14.00 gm/hp-hr lbs/year	CO 3.03 gm/hp-hr lbs/year	SOX 0.93 gm/hp-hr lbs/year	PM 1.00 gm/hp-hr lbs/year	VOC 1.12 gm/hp-hr lbs/year	ALD 0.21 gm/hp-hr lbs/year	Current Approval Order number or date
1	7	John Deere	70239T2241	42391P0011	90	50	D	12.00	100.00	206.95	44.79	13.76	14.78	16.56	3.10	
2	9	Cummins	68T-5-91	44139583	86	100	D	13.50	100.00	413.90	89.58	27.52	29.56	33.11	6.21	
3	10	Cat	3116	2SG00483	88	125	D	12.00	100.00	517.37	111.97	34.41	36.96	41.39	7.76	
4	11	Cat	3416	75Z00456	91	300	D	4.00	100.00	1,241.69	268.74	82.57	88.69	99.34	18.63	
5	14	Cat (not installed	3412DTI			500	D	12.00	100.00	2,069.49	447.90	137.62	147.82	165.56	31.04	DAQE-1171-92
6	14	Cat (not installed)				350	D	12.00	100.00	1,448.64	313.53	96.33	103.47	115.89	21.73	DAQE-1171-92
7	20	Cummins	NT855G4	11469041	88	200	D	27.90	100.00	827.80	179.16	55.05	59.13	66.22	12.42	
8	25	Cat	3114	6AF00428	88	50	D	16.00	100.00	206.95	44.79	13.76	14.78	16.56	3.10	
9	36	Detroit	4A0234430	10437000	65	66	D	30.00	100.00	269.03	58.23	17.89	19.22	21.52	4.04	
10	133	John Deere	6359TP0021	706359	89	80	D	15.90	100.00	331.12	71.66	22.02	23.65	26.49	4.97	
11	200	Detroit	1064731	GA422903	83	175	D	112.00	100.00	310.42	67.18	20.64	22.17	24.83	4.66	
12	200	Detroit	1064731	GA422749	83	175	D	112.00	100.00	310.42	67.18	20.64	22.17	24.83	4.66	
13	200	Detroit	1064731	GA423076	83	175	D	112.00	100.00	310.42	67.18	20.64	22.17	24.83	4.66	
14	200	Detroit	1064731	GA422898	83	175	D	112.00	100.00	310.42	67.18	20.64	22.17	24.83	4.66	
15	200	Detroit	1064731	6A423230	83	175	D		100.00	310.42	67.18	20.64	22.17	24.83	4.66	
16	221	Cummins	NTA855	30125017	86	350	D	26.70	100.00	1,448.64	313.53	96.33	103.47	115.89	21.73	
17	260	Cummins	KTA38GS11	33111066	85	750	D	15.70	100.00	3,104.24	671.85	206.43	221.73	248.34	46.56	
18	400	Onan	L423D11	H833702711	83	20	D	47.50	100.00	82.78	17.92	5.50	5.91	6.62	1.24	
19	505	Cummins	VTA28GS2	37112182	86	600	D	6.80	100.00	2,483.39	537.48	165.15	177.38	198.67	37.25	
20	507	Onan	45.0DYJ-15R	17803585531	79	45	D	48.00	100.00	186.25	40.31	12.39	13.30	14.90	2.79	
21	511	Onan	30.0EK-15R	18709248931	88	30	D	100.00	100.00	124.17	26.87	8.26	8.87	9.93	1.86	
22	566	Cat	3306B011	2AJ00536	90	225	D	9.00	100.00	931.27	201.55	61.93	66.52	74.50	13.97	DAQE-1171-92
23	570	Cummins	NRTO8G1	500924	63	100	D	35.80	100.00	413.90	89.58	27.52	29.56	33.11	6.21	
24	575	Cat	3412 DITA	81Z12595	91	600	D	17.00	100.00	2,483.39	537.48	165.15	177.38	198.67	37.25	DAQE-1171-92
25	590	Onan	15DRDJ1	J904609171	79	15	D	15.00	100.00	62.08	13.44	4.13	4.43	4.97	0.93	
26	598	White	D198ERI	34336269	79	45	D	16.00	100.00	186.25	40.31	12.39	13.30	14.90	2.79	
27	727	Cummins	483.9	44249904	89	30	D	112.00	100.00	124.17	26.87	8.26	8.87	9.93	1.86	
28	727	Cat	3412DT	38S13871	88	175	D	112.00	100.00	310.42	67.18	20.64	22.17	24.83	4.66	
29	758	Cummins	NT495GS1	56712	83	100	D	15.00	100.00	413.90	89.58	27.52	29.56	33.11	6.21	
30	759	Onan	H76P1	1624871	76	15	D	3.00	100.00	62.08	13.44	4.13	4.43	4.97	0.93	
31	769	Onan	6AT34-91	531128832	91	40	D	17.00	100.00	165.56	35.83	11.01	11.83	13.24	2.48	
32	774	Cummins	68T-5-91	44140217	86	80	D	8.00	100.00	331.12	71.66	22.02	23.65	26.49	4.97	
33	776	White	N/A	3435678	79	45	D	23.10	100.00	186.25	40.31	12.39	13.30	14.90	2.79	
34	780	Cummins	KTA1150G1	C790405269	79	350	D	12.90	100.00	1,448.64	313.53	96.33	103.47	115.89	21.73	
35	782	John Deere	6414TF1	516236CD	82	175	D	112.00	100.00	310.42	67.18	20.64	22.17	24.83	4.66	
36	782	Cat	3208	03207476	87	175	D	112.00	100.00	310.42	67.18	20.64	22.17	24.83	4.66	
37	783	Cat	3306B	6420687	87	175	D	112.00	100.00	310.42	67.18	20.64	22.17	24.83	4.66	
38	799	Cummins	4B39	69011134	69	30	D	18.00	100.00	124.17	26.87	8.26	8.87	9.93	1.86	
39	825	Cat	3406B	41B17541	58	300	D	18.00	100.00	1,241.69	268.74	82.57	88.69	99.34	18.63	
40	830	Hercules	D298ERI	52-30-561	65	30	D	14.20	100.00	124.17	26.87	8.26	8.87	9.93	1.86	
41	839	Cummins	N1855C2	30106793	80	150	D	7.80	100.00	620.85	134.37	41.29	44.35	49.67	9.31	20-Mar-80
42	851	Cummins	NT855F3	11245213	84	175	D	112.00	100.00	310.42	67.18	20.64	22.17	24.83	4.66	
43	851	Cummins	NT855F3	11232676	84	175	D	112.00	100.00	310.42	67.18	20.64	22.17	24.83	4.66	
44	877	Cummins	6CTA83G1	443506	88	150	D	7.80	100.00	620.85	134.37	41.29	44.35	49.67	9.31	BAQE-257-88
45	900	White	M-13	UK3436721	79	60	D	13.40	100.00	248.34	53.75	16.51	17.74	19.87	3.73	
46	915	Cummins	4B39	4A205501	87	20	D	12.10	100.00	82.78	17.92	5.50	5.91	6.62	1.24	
47	925	Cummins	NTA495	52633	86	155	D	14.40	100.00	641.54	138.85	42.66	45.82	51.32	9.62	
48	1102	Cummins	KTA19GS1	25145921	86	155	D	14.30	100.00	641.54	138.85	42.66	45.82	51.32	9.62	
48	1151	Perkins	ED22433	089435	68	15	D	14.80	100.00	62.08	13.44	4.13	4.43	4.97	0.93	DAQE-1171-92
49	1152	Perkins	ED22433	89435	68	15	D	14.80	100.00	62.08	13.44	4.13	4.43	4.97	0.93	
50	1204	Allis Chalm	7000	7-21581	68	70	D	29.00	100.00	289.73	62.71	19.27	20.69	23.18	4.35	
51	1212	(Not installed)				200	D	112.00	100.00	827.80	179.16	55.05	59.13	66.22	12.42	DAQE-492-92
52	1213	(Not installed)				125	D	112.00	100.00	517.37	111.97	34.41	36.96	41.39	7.76	DAQE-492-92
53	1214	Cummins	NTA855G2	54371	90	300	D	23.00	100.00	1,241.69	268.74	82.57	88.69	99.34	18.63	
54	1219	Cat	3304B	83Z05403	89	125	D	11.00	100.00	517.37	111.97	34.41	36.96	41.39	7.76	
55	1230	Cummins	NT855GS3	30122838	86	260	D	112.00	100.00	1,076.13	232.91	71.56	76.87	86.09	16.14	
56	1250	Onan	067LTI	52145	85	125	D	13.10	100.00	517.37	111.97	34.41	36.96	41.39	7.76	
57	1286	Cat	3208	SVF00855	89	150	D	18.00	100.00	620.85	134.37	41.29	44.35	49.67	9.31	
58	1311	Onan	60DJB	CR181003AC	85	6	D	15.00	100.00	24.83	5.37	1.65	1.77	1.99	0.37	
59	1538	Cat	D333	87Z22665	70	110	D	48.00	100.00	455.29	98.54	30.28	32.52	36.42	6.83	
60	1570	Cummins	483.9	44249878	86	30	D	0.00	100.00	124.17	26.87	8.26	8.87	9.93	1.86	
61	1570	Cat	3406D	6TB04619	88	175	D	112.00	100.00	310.42	67.18	20.64	22.17	24.83	4.66	
62	1590	Onan	6CTA83G1	447007901	92	175	D	75.00	100.00	724.32	156.76	48.17	51.74	57.95	10.86	
63	1803	Cat	3208	90N67185	85	100	D	112.00	100.00	413.90	89.58	27.52	29.56	33.11	6.21	
64	11531	MWM	TD226-6	2266750471	88	80	D	15.70	100.00	331.12	71.66	22.02	23.65	26.49	4.97	
65	11537	Allis Chalm	7000	4338820	68	75	D	126.00	100.00	310.42	67.18	20.64	22.17	24.83	4.66	
66	11538	Cat	D330	85B18812	70	100	D	48.00	100.00	413.90	89.58	27.52	29.56	33.11	6.21	
67	1275-N	Onan	KTA19G2	25166568	89	600	D	112.00	100.00	2,483.39	537.48	165.15	177.38	198.67	37.25	
68	1275-S	Onan	VTA28G2	31132286	84	400	D	112.00	100.00	1,655.59	358.32	110.10	118.26	132.45	24.83	
69	1-A	Detroit	4A02311	6F-458621	79	65	D	112.00	100.00	269.03	58.23	17.89	19.22	21.52	4.04	
70	519-1	Cat	3508	2ZZ02999	89	900	D	32.00	100.00	3,725.08	806.21	247.72	266.08	298.01	55.88	
71	519-2	Cat	3508	81Z08195	89	475	D	31.00	100.00	1,966.02	425.50	130.74	140.43	157.28	29.49	
72	800-A	Onan	D6491	30424.7	87	50	D	10.30	100.00	206.95	44.79	13.76	14.78	16.56	3.10	BAQE-260-88
73	800-A	Onan	D6491	30424.71	86	50	D		100.00	206.95	44.79	13.76	14.78	16.56	3.10	
74	800-B	Generac	4DL1	642381	89	50	D	11.50	100.00	206.95	44.79	13.76	14.78	16.56	3.10	
75	837-1	Cat	D3491	61P01547	84	600	D	3.60	100.00	2,483.39	537.48	165.15	177.38	198.67	37.25	10-Mar-83
76	837-2	Cat	D3491	61P01551	84	600	D	3.50	100.00	2,483.39	537.48	165.15	177.38	198.67	37.25	10-Mar-83
77	837-3	Cat	D3491	61P15491	84	600	D	2.70	100.00	2,483.39	537.48	165.15	177.38	198.67	37.25	10-Mar-83
78	837-4	Cat	D3491	61P15501	84	600	D	3.40	100.00	2,483.39	537.48	165.15	177.38	198.67	37.25	10-Mar-83
79	891-1	Cat	3516STD	4XF00236	88	1700	D	20.80	100.00	7,036.27	1,522.85	467.91	502.59	562.90	105.54	BAQE-585-88

4.2.4-563

80	891-2	Cat	3516STD	4XF00231	88	1700	D	36.40	100.00	7,036.27	1,522.85	467.91	522.59	562.90	105.54	BAQE-585-88
81	891-3	Cat	3516STD	4XF00237	88	1700	D	39.40	100.00	7,036.27	1,522.85	467.91	522.59	562.90	105.54	BAQE-585-88
							Avg.	19.35							
								Lbs/yr		80,134.79	17,343.46	5,328.96	5,723.91	6,410.78	1,202.02
								Tons/yr		40.07	8.67	2.66	2.86	3.21	0.60
Generators in buildings 14, 1212, and 1213 have not been installed.															
Model numbers and serial numbers shall be provided on installation.															
		6/8/93	3:31 PM												

4.2.4-564

Sorted by Serial Number

Attachment 2

Hill Air Force Base Emergency Generators

Item No.	Building Number	Manufacturer	Model	Serial #	Year	KW	Fuel	Annual op hours 1992	Maximum allowable op hours	NOX 14.00 gm/hp-hr lbs/year	CO 3.03 gm/hp-hr lbs/year	SOX 0.93 gm/hp-hr lbs/year	PM 1.00 gm/hp-hr lbs/year	VOC 1.12 gm/hp-hr lbs/year	ALD 0.21 gm/hp-hr lbs/year	Current Approval Order number or date
1	1214	Cummins	NTA855G2	64371	90	300	D	23.00	100.00	1,241.69	268.74	82.57	88.69	99.34	18.63	
2	1250	Onan	067LTI	52145	85	125	D	13.10	100.00	517.37	111.97	34.41	36.96	41.39	7.76	
3	925	Cummins	NTA495	52633	86	155	D	14.40	100.00	641.54	138.85	42.66	45.82	51.32	9.62	
4	758	Cummins	NT495GS	56712	83	100	D	15.00	100.00	413.90	89.58	27.52	29.56	33.11	6.21	
5	800-B	Generac	40L	64238	89	50	D	11.50	100.00	206.95	44.79	13.76	14.78	16.56	3.10	
6	1152	Perkins	ED22433	89435	68	15	D	14.80	100.00	62.08	13.44	4.13	4.43	4.97	0.93	
7	759	Onan	H76PI	624871	76	15	D	3.00	100.00	62.08	13.44	4.13	4.43	4.97	0.93	
8	877	Cummins	6CTA83G1	443506	88	150	D	7.80	100.00	620.85	134.37	41.29	44.35	49.67	9.31	BAQE-257-88
9	570	Cummins	NRTO8IG1	500924	63	100	D	35.80	100.00	413.90	89.58	27.52	29.56	33.11	6.21	
10	20	Cummins	NT855G4	11469041	88	200	D	27.90	100.00	827.80	179.16	55.05	59.13	66.22	12.42	
11	776	White	N/A	34356781	79	45	D	23.10	100.00	186.25	40.31	12.39	13.30	14.90	2.79	
12	11537	Allis Chalm	7000	43388201	68	75	D	126.00	100.00	310.42	67.18	20.64	22.17	24.83	4.66	
13	799	Cummins	4B39	69011341	69	30	D	18.00	100.00	124.17	26.87	8.26	8.87	9.93	1.86	
14	36	Detroit	4A0234430	104370001	65	65	D	30.00	100.00	269.03	58.23	17.89	19.22	21.52	4.04	
15	851	Cummins	NT855F3	112326761	84	175	D	112.00	100.00	310.42	67.18	20.64	22.17	24.83	4.66	
16	851	Cummins	NT855F3	112452131	84	175	D	112.00	100.00	310.42	67.18	20.64	22.17	24.83	4.66	
17	1102	Cummins	NTA195GS	251459211	86	155	D	14.30	100.00	641.54	138.85	42.66	45.82	51.32	9.62	
18	1275-N	Onan	KTA19G2	251666558	89	600	D	112.00	100.00	2,483.39	537.48	165.15	177.38	198.67	37.25	
19	839	Cummins	N1855C2	301067931	80	150	D	7.80	100.00	620.85	134.37	41.29	44.35	49.67	9.31	20-Mar-80
20	1230	Cummins	NT855GS3	301228381	86	260	D	112.00	100.00	1,076.13	232.91	71.56	76.87	86.09	16.14	
21	2211	Cummins	NTA855	301250171	86	350	D	26.70	100.00	1,448.64	313.53	96.33	103.47	115.89	21.73	
22	1275-S	Onan	VTA28G2	311322861	84	400	D	112.00	100.00	1,655.59	358.32	110.10	118.26	132.45	24.83	
23	260	Cummins	KTA38GS1	331110651	85	750	D	15.70	100.00	3,104.24	671.85	206.43	221.73	248.34	46.56	
24	598	White	D198ER	343362691	79	45	D	16.00	100.00	186.25	40.31	12.39	13.30	14.90	2.79	
25	505	Cummins	VTA28GS2	371121821	86	600	D	6.80	100.00	2,483.39	537.48	165.15	177.38	198.67	37.25	
26	91	Cummins	6BT-5-91	441395831	86	100	D	13.50	100.00	413.90	89.58	27.52	29.56	33.11	6.21	
27	724	Cummins	6BT-5-91	441402171	86	80	D	8.00	100.00	331.12	71.66	22.02	23.65	26.49	4.97	
28	1570	Cummins	483.91	442498781	86	30	D	0.00	100.00	124.17	26.87	8.26	8.87	9.93	1.86	
29	727	Cummins	483.91	442499041	89	30	D	112.00	100.00	124.17	26.87	8.26	8.87	9.93	1.86	
30	1590	Onan	6CTA83G1	447007901	92	175	D	75.00	100.00	724.32	156.76	48.17	51.74	57.95	10.86	
31	11531	M&M	TD226-6	226675047	88	80	D	15.70	100.00	331.12	71.66	22.02	23.65	26.49	4.97	
32	769	Onan	6AT34-91	531128832	91	40	D	17.00	100.00	165.56	35.83	11.01	11.83	13.24	2.48	
33	507	Onan	45.0DYJ-15R	178035885	79	45	D	48.00	100.00	186.25	40.31	12.39	13.30	14.90	2.79	
34	511	Onan	30.0EK-15R	187092489	88	30	D	100.00	100.00	124.17	26.87	8.26	8.87	9.93	1.86	
35	782	Cat	3208	03207476	87	175	D	112.00	100.00	310.42	67.18	20.64	22.17	24.83	4.66	
36	519-1	Cat	3508	23202909	89	900	D	32.00	100.00	3,725.08	806.21	247.72	266.08	298.01	55.88	
37	565	Cat	3306B011	2AJ00536	90	225	D	9.00	100.00	931.27	201.55	61.93	66.52	74.50	13.97	DAQE-1171-92
38	10	Cat	3116	2SG00483	88	125	D	12.00	100.00	517.37	111.97	34.41	36.96	41.39	7.76	
39	800-A	Onan	O6491	30424 91	87	50	D	10.30	100.00	206.95	44.79	13.76	14.78	16.56	3.10	BAQE-260-88
40	800-A	Onan	O6491	30424 91	86	50	D		100.00	206.95	44.79	13.76	14.78	16.56	3.10	
41	727	Cat	3412DT	38S13871	88	175	D	112.00	100.00	310.42	67.18	20.64	22.17	24.83	4.66	
42	825	Cat	3406B	41B17541	58	300	D	18.00	100.00	1,241.69	268.74	82.57	88.69	99.34	18.63	
43	7	John Deere	10239T224	4239TP001	90	50	D	12.00	100.00	206.95	44.79	13.76	14.78	16.56	3.10	
44	915	Cummins	4B39	4A2065011	87	20	D	12.10	100.00	82.78	17.92	5.50	5.91	6.62	1.24	
45	891-2	Cat	3516STD	4XP00231	88	1700	D	36.40	100.00	7,036.27	1,522.85	467.91	502.59	562.90	105.54	BAQE-585-88
46	891-1	Cat	3516STD	4XP00236	88	1700	D	22.80	100.00	7,036.27	1,522.85	467.91	502.59	562.90	105.54	BAQE-585-88
47	891-3	Cat	3516STD	4XP00237	88	1700	D	39.40	100.00	7,036.27	1,522.85	467.91	502.59	562.90	105.54	BAQE-585-88
48	782	John Deere	6414TF	516236CD	82	175	D	112.00	100.00	310.42	67.18	20.64	22.17	24.83	4.66	
49	830	Hercules	D298ER	52-30-561	66	30	D	14.20	100.00	124.17	26.87	8.26	8.87	9.93	1.86	
50	1286	Cat	3208	5YP00855	89	150	D	18.00	100.00	620.85	134.37	41.29	44.35	49.67	9.31	
51	837-1	Cat	D349	61P01547	84	600	D	3.60	100.00	2,483.39	537.48	165.15	177.38	198.67	37.25	10-Mar-83
52	837-2	Cat	D349	61P01561	84	600	D	3.50	100.00	2,483.39	537.48	165.15	177.38	198.67	37.25	10-Mar-83
53	837-3	Cat	D349	61P15491	84	600	D	2.70	100.00	2,483.39	537.48	165.15	177.38	198.67	37.25	10-Mar-83
54	837-4	Cat	D349	61P15501	84	600	D	3.40	100.00	2,483.39	537.48	165.15	177.38	198.67	37.25	10-Mar-83
55	783	Cat	3306B	6A206871	87	175	D	112.00	100.00	310.42	67.18	20.64	22.17	24.83	4.66	
56	200	Detroit	10647311	6A423230	83	175	D		100.00	310.42	67.18	20.64	22.17	24.83	4.66	
57	28	Cat	3114	6AF00428	88	50	D	16.00	100.00	206.95	44.79	13.76	14.78	16.56	3.10	
58	1570	Cat	3406D	6TB04619	88	175	D	112.00	100.00	310.42	67.18	20.64	22.17	24.83	4.66	
59	1204	Allis Chalm	7000	7-215811	68	70	D	29.00	100.00	289.73	62.71	19.27	20.69	23.18	4.35	
60	111	Cat	3416	75D04561	91	300	D	4.00	100.00	1,241.69	268.74	82.57	88.69	99.34	18.63	
61	519-2	Cat	3508	81D08195	89	475	D	31.00	100.00	1,966.02	425.50	130.74	140.43	157.28	29.49	
62	575	Cat	3412 DITA	81Z12595	91	600	D	17.00	100.00	2,483.39	537.48	165.15	177.38	198.67	37.25	DAQE-1171-92
63	1219	Cat	3304B	83D06403	89	125	D	11.00	100.00	517.37	111.97	34.41	36.96	41.39	7.76	
63	11538	Cat	D330	85818121	70	100	D	48.00	100.00	413.90	89.58	27.52	29.56	33.11	6.21	
64	1538	Cat	D333	87D22651	70	110	D	48.00	100.00	455.29	98.54	30.28	32.52	36.42	6.83	
65	1803	Cat	3208	90N67185	85	1100	D	112.00	100.00	413.90	89.58	27.52	29.56	33.11	6.21	
66	780	Cummins	KTA1150G1	C790405269	79	350	D	12.90	100.00	1,448.64	313.53	96.33	103.47	115.89	21.73	
67	1311	Onan	60DJB1	CR18100AC1	85	6	D	15.00	100.00	24.83	5.37	1.65	1.77	1.99	0.37	
68	200	Detroit	10647311	GA422749	83	175	D	112.00	100.00	310.42	67.18	20.64	22.17	24.83	4.66	
69	200	Detroit	10647311	GA422898	83	175	D	112.00	100.00	310.42	67.18	20.64	22.17	24.83	4.66	
70	200	Detroit	10647311	GA422903	83	175	D	112.00	100.00	310.42	67.18	20.64	22.17	24.83	4.66	
71	200	Detroit	10647311	GA423076	83	175	D	112.00	100.00	310.42	67.18	20.64	22.17	24.83	4.66	
72	400	Onan	L423D11	HB337027	83	20	D	47.50	100.00	82.78	17.92	5.50	5.91	6.62	1.24	
73	590	Onan	15DRDJ1	590469017	79	15	D	15.00	100.00	62.08	13.44	4.13	4.43	4.97	0.93	
74	1-A	Detroit	4A0231	JF-45862	79	65	D	112.00	100.00	269.03	58.23	17.89	19.22	21.52	4.04	
75	1151	Perkins	ED22433	089435	68	15	D	14.80	100.00	62.08	13.44	4.13	4.43	4.97	0.93	DAQE-1171-92
76	133	John Deere	6359TP002	706359	89	80	D	15.90	100.00	331.12	71.66	22.02	23.65	26.49	4.97	
77	900	White	M-131	UK343672	79	60	D	13.40	100.00	248.34	53.75	16.51	17.74	19.87	3.73	
78	14	Cat not inst.	3412DT			500	D	112.00	100.00	2,069.49	447.90	137.62	147.82	165.56	31.04	DAQE-1171-92
79	14	Cat not inst.				350	D	112.00	100.00	1,448.64	313.53	96.33	103.47	115.89	21.73	DAQE-1171-92

4.2.4-565

Attachment 2

80	1212	Not installed		200	D	112.00	100.00	827.80	179.16	55.05	59.13	66.22	12.42	DAQE-492-92
81	1213	Not installed		125	D	112.00	100.00	517.37	111.97	34.41	36.96	41.39	7.76	DAQE-492-92
					Avg.	19.69								
						Lbs/yr		80,134.79	17,343.46	5,328.96	5,723.91	6,410.78	1,202.02	
						Tons/yr		40.07	8.67	2.66	2.86	3.21	0.60	

Generators in buildings 14, 1212, and 1213 have not been installed.

Model numbers and serial numbers shall be provided on installation.

6/8/93 3:26 PM

4.2.4-566

UTAH DIVISION OF AIR QUALITY
NEW/MODIFIED SOURCE PLAN REVIEW

James R. Van Orman
Director of Environmental Management
OO-ALC/EM
7276 Wardleigh Road
Hill AFB, Utah 84056-5127

RE:	Emergency Power Generators Davis County, CDS A2; NA
ENGINEER:	Herman G. Nellestein
DATE:	May 24, 1993
NOTICE OF INTENT DATED:	April 1, 1993
PLANT CONTACT:	Jay Gupta
PHONE NUMBER:	(801) 777-0359
FAX NUMBER	(801) 777-4306/1866
PLANT LOCATION:	Hill Air Force Base, Utah
UTM COORDINATES:	4,552,000 m Northing 418,000 m Easting

FEES:

Filing Fee	$1,500.00
Review Engineer - XXXX hours at $50.00/hour	$000.00
Modeler - XXXX hours at $50.00/hour	$000.00
Computer Usage Fee	$000.00
Travel - 00 miles at $0.23/mile	$000.00
Total	$1,500.00

APPROVALS:

Review Engineer J. Jim Bloomfield 6/5/93

Engineering Unit Manager _____

Applicant Contact Made yes - Jay Gupta - 6/8/93

F:\AQ\ENGINEER\DUTCH.N\WP\RVW\HILLGEN.RVW

TYPE OF IMPACT AREA

Attainment Area . . . . . No

Nonattainment Area

PM_{10} . . . . . Yes
SO_2 . . . . . Yes
NO_X . . . . . Yes
CO . . . . . No
Ozone . . . . . Yes

NSPS . . . . . No

Subparts A and _____

NESHAP . . . . . No

Subparts A and _____

Toxic Pollutants . . . . . No

_____

Toxic Major Source . . . . . No

[> 10 tpy of any one Hazardous Air Pollutant (HAP) or > 25 tpy of any combination of HAPs]

New Major Source . . . . . No

Major Modification . . . . . No

PSD Permit . . . . . No

PSD Increment . . . . . No
(modeling)

Send to EPA . . . . . No

Operating Permit program . . . . . Yes

FOR MODIFIED SOURCES

The Notice of Intent is for a modification to an existing source. The following standards apply in this review:

NSPS applies to modification? . . . . . NO

PSD review of entire source required? . . . . . NO

NESHAPS applies to modification? . . . . . NO

TOXICS involved in modification? . . . . . NO

TITLE V required for entire source? . . . . . YES

TOXIC MAJOR for modification? . . . . . NO

NONATT MAJOR for entire source? . . . . . Yes

Abstract

Hill Air Force Base (AFB) has requested all emergency generators on base be consolidated under one Approval Order. Some generators were installed prior to 1970. Some were approved previously, and some generators installed since 1970 were never approved. This Approval Order will consolidate all emergency generators as reported by Hill AFB. Please see Attachment 1 for a complete listing.

I. DESCRIPTION OF PROPOSAL

Attachment 1 contains a complete listing of all emergency generators installed at Hill AFB. This listing of 81 generators provides the make, model, serial number, KW rating, and emission calculations. Emission factors were taken from EPA's *Compilation of Air Pollutant Emission Factors* (AP-42) manual, Table 3.3-1 (Emission factors for uncontrolled gasoline and diesel industrial engines), dated September 1985, Supplement E, dated October 1992. Several generators were approved in the past with 100 hours/year maximum operation hour restrictions. This Approval Order (AO) will consolidate all emergency generators into one AO. The maximum allowable operating time will be restricted to 100 hours/year for all generators. Additional restrictions will be the use of low sulfur diesel fuel and proper maintenance.

II. EMISSION SUMMARY

The emission reduction from this source (all emergency generators) will be as follows:

Pollutant	Current Emissions	Emission Increases	Total Emissions
Particulate	2.86	0	2.86
PM_{10}	2.86	0	2.86
SO_2	2.66	0	2.66
NO_X	40.07	0	40.07
CO	8.67	0	8.67
VOC	3.21	0	3.21
Aldehydes	0.60	0	0.60

III. BEST AVAILABLE CONTROL TECHNOLOGY (BACT) ANALYSIS

Most of the generators listed in Attachment 1 have been install between 1963 and the present. Some have yet to be installed. Several generators were previously approved (see last column on Attachment 1). All of the engines were installed prior to the Lean Burn/Clean Burn technology becoming available. No requirement to retrofit these generator engines with catalytic converters is recommended because these are intended for emergency purposes only and all engines have been previously installed and operated. Most operating hours will be for periodic maintenance and servicing. They all burn Diesel fuel. Low sulfur diesel fuel will be required.

IV. APPLICABILITY OF FEDERAL REGULATIONS AND UTAH ADMINISTRATIVE CODES

(UAC)

This Notice of Intent is for the addition of several minor point sources to and existing major source. It is not a new major source or a major modification. The following federal regulations and state rules have been examined to determine their applicability to this Notice of Intent:

1. R307-1-3.1, UAC - Notice of Intent required for a new source, modified source, or new piece of control equipment. This rule does not apply.

2. R307-1-3.1.7 (A), UAC - A Notice of Intent is not required for natural gas fuel burning equipment with a rated capacity of less than 5 x 10^6 BTU per hour. This rule does not apply.

3. R307-1-3.1.8 (A), UAC - Application of best available control technology (BACT) required at all emission points. This rule applies.

4. R307-1-3.1.8 (C), UAC - Approval of the Utah Air Quality Board (UAQB) is required before the Executive Secretary can approve a source under Section 3.6.5 that consumes more than 50% of a PSD increment. This rule does not apply to this NOI because a PSD permit is not being issued.

5. R307-1-3.1.8 (D), UAC - Enforceable offset of 1.2:1 required for new sources or modifications that would produce an emission increase greater than or equal to 50.00 tons per year of any combination of PM_{10}, SO_2, and NO_x. This is required in Salt Lake, Davis, and Utah Counties and in any area that affects these three counties as defined in the rule. The effective date is November 15, 1990. This rule does not apply.

6. R307-1-3.1.8 (D), UAC - Enforceable offset of 1:1 required for new sources or modifications that would produce an emission increase greater than or equal to 25.00 tons per year of any combination of PM_{10}, SO_2, and NO_x. This is required in Salt Lake, Davis, and Utah Counties and in any area that affects these three counties as defined in the rule. The effective date is November 15, 1990. This rule does not apply.

7. R307-1-3.1.9, UAC - Rules for relocation of temporary sources. This source is a permanent source. Therefore, this rule does not apply.

8. R307-1-3.1.12, UAC - Requirement for installation of low-NO_x burners on all existing sources whenever existing fuel combustion burners are replaced, unless the replacement is not physically practical or cost effective. The effective date is November 15, 1990. This rule does not apply.

9. R307-1-3.2.1, UAC - Particulate emission limitations for existing sources that are located in a nonattainment area. This rule has been superseded by the PM_{10} SIP, except for Weber County. The effective date is November 15, 1990. This source is not listed in the SIP. Therefore, this rule does not apply.

10. R307-1-3.3.2, UAC - Review requirements for new major sources or major modifications that are located in a nonattainment area or which impact a nonattainment area. This Notice of Intent does not represent a new major source or a major modification. Therefore, this rule will not apply.

11. R307-1-3.5, UAC - Emission inventory reporting requirements. This rule requires any source that emits 25 tons or more per year of any pollutant to submit an emission inventory to the Division of Air Quality at least every third year or as determined necessary by the Executive Secretary. This source must comply with this rule.

12. R307-1-3.6.3, UAC - PSD Increment Consumption - This rule lists the allowable PSD increment consumption. Under the PSD rules, the entire state has been triggered for TSP, SO_2, and NO_x. The allowable increments are as follows:

TSP			
	Three Hour	24 Hour	Annual
Class I Area		**10 $\mu g/m^3$**	**5 $\mu g/m^3$**
Class II Area		**37 $\mu g/m^3$**	**19 $\mu g/m^3$**
SO_2			
Class I Area	**25 $\mu g/m^3$**	**5 $\mu g/m^3$**	**25 $\mu g/m^3$**
Class II Area	**512 $\mu g/m^3$**	**91 $\mu g/m^3$**	**20 $\mu g/m^3$**
NO_X			
Class I Area			**2.5 $\mu g/m^3$**
Class II Area			**25 $\mu g/m^3$**

There are also Class III increments, which do not apply in Utah. The above increments apply at all locations, unless the area is already nonattainment. The entire increment may not be available at all locations due to previously permitted sources consuming increment. Modeling analysis is not routinely performed for air pollution sources with emissions below the following levels:

Criteria for Screen Modeling (Tons per Year)		
	Nonattainment Areas	Attainment Areas
TSP	10	10
PM_{10}	5	5
SO_2	10	20
NO_X	20	20
CO	25	50
VOC	10	20
O_3	5	5

13. R307-1-3.6.5 (b), UAC - Prevention of significant deterioration (PSD) review requirements for new major sources or major modifications. This Notice of Intent does not represent a new major source or a major modification under PSD rules. Therefore, this rule does not apply.

14. R307-1-3.6.6, UAC - Increment violations. This rule requires the UAQB to promulgate a plan and implement rules to eliminate any PSD increment violations that occur in the state. No known violations have yet occurred.

15. R307-1-3.8, UAC - Stack height rule. This rule limits the creditable height of stacks to that height determined to be good engineering practice. The formulas used to determine good engineering practice are found in 40 CFR 51.100. A deminimus height of 65 meters (213.2 feet) is allowed. Hill AFB has no stacks that exceed 65 meters in height. It is in compliance with this rule.

16. R307-1-3.11, UAC - Visibility screening analysis requirements. This rule requires all new major sources or major modifications to undergo a visibility screening analysis to determine visibility impact on any mandatory Class I area. This Notice of Intent does not represent a new major source or a major modification under UACR rules. Therefore, this rule does not apply.

17. R307-1-4.1.2, UAC - 20% opacity limitation at all emission points. Unless a more stringent limitation is required by New Source Performance Standards (NSPS) or BACT or National Emission Standards for Hazardous Air Pollutants (NESHAPS). In this case, the 20% opacity limitation applies.

18. R307-1-4.1.9, UAC - EPA Method 9 shall be used for visible emission observations. This rule applies.

19. R307-1-4.2.1, UAC - Sulfur content limitations in oil and coal used for combustion. This source, emission point, burns Diesel fuel. The limitation in the rule is 0.5 percent sulfur by weight.

20. R307-1-4.6, UAC - Continuous Emission Monitoring Systems Program - Reporting and technical requirements for continuous emission monitoring systems. It covers breakdowns and quarterly reports for continuous monitoring systems. Section 4.6.5 states that this regulation applies to the following:

    A. Sources required to install CEMS as required by the following documents:

        1) NSPS
        2) State Implementation Plan
        3) Approval Order
        4) Consent Decree
        5) Administrative Orders and Agreements

    B. Any source that constructs after the promulgation of this rule two or more emission points, which may interfere with VEO's, shall install an opacity monitor on each stack.

21. R307-1-4.7, UAC - Unavoidable breakdown reporting requirements. This rule applies. Section 4.7.1 discusses reporting requirements. A breakdown for any period longer than two hours must be reported to the Executive Secretary within three hours of the beginning of the breakdown, if reasonable, but in no case longer than 18 hours after the beginning of the breakdown. A written report is required within seven calendar days. The report shall include the estimated quantity of pollutants (total and excess). Section 4.7.2 discusses penalties.

22. R307-1-4.9, UAC - Review requirements for volatile organic compound (VOC) sources located in a nonattainment area for ozone constructed in 1980 or earlier. This rule covers the following processes:

A. Section 4.9.1 - Petroleum liquid storage

B. Section 4.9.2 - Gasoline transfer/storage

C. Section 4.9.3 - Control of hydrocarbon emissions in refineries

1) Vacuum producing systems
2) Wastewater separators
3) Process unit turnaround
4) Catalytic cracking units
5) Safety pressure relief valves
6) Leaks from petroleum refinery equipment

D. Section 4.9.4 - Degreasing and solvent cleaning operations

1) Cold cleaning facilities
2) Open top vapor degreasers
3) Conveyorized degreasers

E. Section 4.9.5 - Cutback asphalt

F. Section 4.9.6 - VOC used for various processes

1) Section 4.9.6(A) - General Provisions

2) Section 4.9.6(B) - Paper Coating

3) Section 4.9.6(C) - Fabric and Vinyl Coating

4) Section 4.9.6(D) - Metal Furniture Coating VOC Emissions

5) Section 4.9.6(E) - Large Appliance Surface Coating VOC Emissions

6) Section 4.9.6(F) - Magnet Wire Coating VOC Emissions

7) Section 4.9.6(G) - Flat Wood Coating

8) Section 4.9.6(H) - Miscellaneous Metal Parts and Products VOC Emissions

9) Section 4.9.6(I) - Graphic Arts

10) Section 4.9.6(J) - Exemptions

11) Section 4.9.6(K) - Capture Systems

12) Section 4.9.6(L) - Testing and Monitoring

G. Section 4.9.7 - Perchloroethylene Dry Cleaning Plants

H. Section 4.9.8 - Compliance Schedule

This process is not covered in this rule.

23. R307-1-5, UAC - Emergency episode requirements. This rule applies.

24. New Source Performance Standards (NSPS) - There is no NSPS for this industrial process.

25. National Emission Standards for Hazardous Air Pollutants (NESHAPS) - There is no NESHAPS for this industrial process.

26. National Ambient Air Quality Standards (NAAQS) - This source is located in Davis County, which is a nonattainment area for PM_{10} and ozone.

The Division of Air Quality guidelines do not call for this source to be modeled for any pollutant. The Division has found through experience that a source or emission point of this small size is very unlikely to cause a new violation of the NAAQS. This is because of the small quantity of emissions involved and the conservative predictions made by modeling.

For VOC emissions, there is no model that can predict an ozone impact directly from VOC emissions. However, since VOC are precursors to ozone formation, this new source will contribute to the existing exceedances of the ozone standard in Davis County. The amount of that contribution has not been decided. The ozone nonattainment area of Davis and Salt Lake Counties must show reasonable further progress toward attainment of the standard. This source, along with all other VOC sources having emissions above 10 tons per year, may have to apply more controls to lower the VOC emissions. This would be a SIP change action.

27. 40 CFR 60.14, Definition of Modification - Any physical or operational change to an existing facility that results in an increase in the emission rate to the atmosphere of any pollutant to which an NSPS standard applies. The following are not by themselves considered modifications:

1) Maintenance, repair, and replacement

2) An increase in production rate of an existing facility, if that increase can be accomplished without a capital expenditure on that facility

3) An increase in the hours of operation

4) Use of an alternate fuel or raw material if, before the date any standard under this

part becomes applicable to that source type, as provided by 60.1, the existing facility was designed to accommodate that alternative use

5) The addition or use of any system or device whose primary function is the reduction of air pollutants

6) Relocation or change in ownership

Also see Section 1.92, which is the State's definition. It is a planned increase in emissions. This Notice of Intent is a modification.

28. 40 CFR 60.15, Definition of Reconstruction - the replacement of components of an existing facility to such an extent that:

1) The fixed capital cost of the new components exceeds 50% of the fixed capital cost that would be required to construct a comparable entirely new facility and

2) It is technologically and economically feasible to meet the applicable standards set forth in this part

This Notice of Intent is not a reconstruction.

29. R307-1-1.89, Definition of Major Modification - It means any physical change in or changes in the method of operation of a major source that would result in a significant net emission increase of any pollutant. A net emissions increase that is significant for VOC shall be considered significant for ozone. A physical change or change in the method of operation shall not include:

A. Routine maintenance, repair, or replacement

B. Use of an alternative fuel or raw material by reason of an order under Section 2a and b of the ESECA of 1974 or by reason of a natural gas curtailment plan pursuant to the Federal Power Act

C. Use of an alternative fuel by reason of an order under Section 125 of the CAA

D. Use of an alternative fuel at a steam generating unit to the extent that the fuel is generated from municipal solid waste

E. Use of an alternative fuel or raw material by a source:

1) which the source was capable of accommodating before January 6, 1975, unless such change would be prohibited under any enforceable permit condition

2) which the source is otherwise approved to use

F. An increase in the hours of operation or the production rate unless such change would be prohibited under any enforceable permit condition

G. Any change in ownership at a source

This Notice of Intent is not a major modification.

30. 40 CFR 80.29, Controls and Prohibitions on Diesel Fuel Quality - The effective date of the regulation is September 20, 1990. This rule implements a new national program of diesel fuel quality control. The rule requires that refiners reduce the sulfur content of on-highway diesel fuel from current average levels of approximately 0.25% to levels not exceeding 0.05%. This rule also requires that on-highway diesel fuel have a minimum cetane index specification of 40 (or meet a maximum aromatics level of 35%).

Both requirements will take effect at all points throughout the distribution system on October 1, 1993. Special provisions providing for a phasing-in of these requirements for small domestic refineries are also included.

Certification diesel fuel will also be changed beginning with both the 1991 and 1994 model years to reflect the above mentioned changes in commercial diesel fuel quality. Vehicles sold in model years 1991 through 1993 will be certified using 0.10% fuel, reflecting the average fuel sulfur level expected to be used over these vehicles' useful lives. Beginning with the 1994 model year, the certification fuel sulfur level would be that of commercial diesel fuel (not to exceed 0.05% by weight) and a minimum cetane index value of 40 will be established.

V. RECOMMENDED APPROVAL ORDER CONDITIONS

General conditions:

1. This Approval Order (AO) applies to the following organization:

   Headquarters, Ogden Air Logistics Center OO-ALC/EM (AFMC)
   7276 Wardleigh Road
   Hill Air Force Base, Utah 84056-5127

   The emergency power generating equipment listed in Attachment 1 of this AO shall be operated at the specified locations listed in the attachment.

   Universal Transverse Mercator (UTM) Coordinate System: 4,552,000 meters Northing, 418,000 meters Easting (Modeling will require more accurate UTM coordinates)

2. Definitions of terms, abbreviations, and references used in this AO conform to those used in the Utah Air Conservation Rules (UACR), Utah Administrative Codes (UAC), and Series 40 of the Code of Federal Regulations (40 CFR). These definitions take precedence unless specifically defined otherwise herein.

3. Hill Air Force Base (HAFB) shall install and operate the 81 emergency generators, as listed in Attachment 1 of this Approval Order, according to the information submitted in the Notice of Intent (NOI) dated April 1, 1993 and NOIs associated with generator engines operating under current AOs.

4. A copy of this AO shall be posted on site. The AO shall be available to the employees who operate the air emission producing equipment. These employees shall receive instruction as to their responsibilities in operating the equipment according to all of the relevant conditions listed below.

5. The approved installations shall consist of the 81 emergency generators as listed in Attachment 1 to this Approval Order.

6. This Approval Order shall replace all conditions regarding generators that are listed in Attachment 1 that have a valid AO. These AOs are dated January 4, 1993 (DAQE-1171-92), May 22, 1992 (DAQE-492-92), November 22, 1988 (BAQE-585-88), June 15, 1988 (BAQE-260-88), June 15, 1988 (BAQE-257-88), March 10, 1983, and March 20, 1980.

Limitations and tests procedures

7. Visible emissions from any emergency generator emission source associated with this Approval Order shall not exceed 20% opacity after warm-up. Opacity observations of emissions from stationary sources shall be conducted in accordance with 40 CFR 60, Appendix A, Method 9.

8. All emergency generators listed in Attachment 1 shall be limited to 100 operating hours per 12 month period for each generator engine. This limit shall not be exceeded without prior approval in accordance with R307-1-3.1, UAC.

   Compliance with the annual limitations shall be determined on a rolling 12-month total. Based

on the first day of each month a new 12-month total shall be calculated using data from the previous 12 months. Records of operating hours shall be kept for all periods when the generators are in operation. Records of operating hours shall be made available to the Executive Secretary or his representative upon request and shall include a period of two years ending with the date of the request. Operating hours shall be determined by engine operating hour meters. The records shall be kept on a monthly basis. Hours of operation shall be determined by supervisor monitoring and maintaining of an operations log.

9. Any or all of the diesel emergency power generator engines listed in Attachment 1 shall be stack tested for NO_x emissions if directed by the Executive Secretary. The emission rate/concentration shall not exceed 14 grams of NO_x per horsepower-hour. The test method used shall be 40 CFR 60, Appendix A, Method 7 (all Method 7 tests are acceptable test methods). A pretest conference shall be held if directed by the Executive Secretary. It shall be held at least 30 days prior to the test between the owner/operator, the tester, and the Executive Secretary. The exhaust stack need not be designed to accommodate testing. However, if the Executive Secretary determines a stack test is necessary, whatever modifications needed to meet the requirements of 40 CFR 60, Appendix A, Method 1, and to provide Occupational Safety and Health Administration (OSHA) approvable access to the test location shall be retrofitted to the emission point. The horsepower output during all compliance testing shall be no less than 90% of rated horsepower (KW) rating per engine.

Fuels

10. The sulfur content of any Diesel fuel oil used in the emergency generator engines shall not exceed 0.50 percent by weight (0.05% when available). Sulfur content shall be decided by ASTM Method D-4294-89, or approved equivalent. The sulfur content shall be tested if directed by the Executive Secretary.

Construction limitations

11. Eighteen months from the date of this Approval Order the Executive Secretary shall be notified in writing of the status of this project. If installation of all generators are complete and operation has commenced a notice is not required.

12. All records referenced in this Approval Order which are required to be kept by the owner/operator, shall be made available to the Executive Secretary or his representative upon request.

13. All installations and facilities authorized by this Approval Order shall be adequately and properly maintained. All pollution control vendor recommended equipment shall be installed, maintained, and operated. Instructions from the vendor or established maintenance practices that maximize pollution control shall be used. All necessary equipment control and operating devices, such as; pressure gauges, amp meters, volt meters, flow rate indicators, temperature gauges, CEMs, etc., shall be installed and operated properly and easily accessible to compliance inspectors.

14. The owner/operator shall comply with R307-1-3.5, UAC. This rule addresses emission inventory reporting requirements.

15. The owner/ operator shall comply with R307-1-4.7, UAC. This rule addresses unavoidable breakdown reporting requirements. The owner/operator shall calculate/estimate the excess emissions whenever a breakdown occurs. The total of excess emissions shall be reported to the Executive Secretary as directed for each calendar year.

16. The owner/operator has submitted to the Executive Secretary an emergency plan dated October 5, 1990. This plan should identify what control/production measures the owner/operator shall implement when an emergency episode is declared by the Executive Director of the Department of Environmental Quality.

Any future modifications to the equipment approved by this order must also be approved in accordance with R307-1-3.1.1, UAC.

This Approval Order in no way releases the owner or operator from any liability for compliance with all other applicable federal, state, and local regulations including the Utah Air Conservation Rules.

Annual emissions for this source (all emergency generators located on the contiguous confines of Hill AFB) are currently calculated at the following values:

	Pollutant	tons/yr
A.	Particulate	2.86
B.	PM_{10}	2.86
C.	SO_2	2.66
D.	NO_x	40.07
E.	CO	8.67
F.	VOC	3.21
G.	Aldehydes	0.60

These calculations are for the purposes of determining the applicability of PSD and nonattainment area major source requirements of the UACR.

In accordance with the requirements of Title V of the 1990 Clean Air Act, the following pollutants may be subject to an operating permit fee. Both the fees rate and the class of pollutants are subject to change by State, the federal agencies, or both.

	Pollutant	tons/yr
A.	TSP	2.86 ton/yr
B.	SO_x	2.66 ton/yr
C.	NO_x	40.07 tons/yr

Hill Air Force Base Emergency Generators

Item No.	Building Number	Manufacturer	Model	Serial #	Year	KW	Fuel	Annual op hours 1992	Maximum allowable op hours	NOX 14.00 gm/hp-hr lbs/year	CO 3.03 gm/hp-hr lbs/year	SOX 0.93 gm/hp-hr lbs/year	PM 1.00 gm/hp-hr lbs/year	VOC 1.12 gm/hp-hr lbs/year	ALD 0.21 gm/hp-hr lbs/year	Current Approval Order number or date
1	7	John Deere	T0239T224	4239TF001	90	50	D	12.00	100.00	206.95	44.79	13.76	14.78	16.56	3.10	
2	9	Cummins	6BT-5-9	44139583	86	100	D	13.50	100.00	413.90	89.58	27.52	29.56	33.11	6.21	
3	10	Cat	3116	2SG00483	88	125	D	12.00	100.00	517.37	111.97	34.41	36.96	41.39	7.76	
4	11	Cat	3416	7ZD00456	91	300	D	4.00	100.00	1,241.69	268.74	82.57	88.69	99.34	18.63	
5	14	Cat (not installed	3412DIT			500	D	12.00	100.00	2,069.49	447.90	137.62	147.82	165.56	31.04	DAQE-1171-92
6	14	Cat (not installed)				350	D	12.00	100.00	1,448.64	313.53	96.33	103.47	115.89	21.73	DAQE-1171-92
7	20	Cummins	NT855G4	1146904	88	200	D	27.90	100.00	827.80	179.16	55.05	59.13	66.22	12.42	
8	28	Cat	3114	6AF00428	88	50	D	16.00	100.00	206.95	44.79	13.76	14.78	16.56	3.10	
9	36	Detroit	4A0234430	10437000	65	66	D	30.00	100.00	269.03	58.23	17.89	19.22	21.52	4.04	
10	133	John Deere	6359TF002	T06359	89	80	D	15.90	100.00	331.12	71.66	22.02	23.65	26.49	4.97	
11	200	Detroit	1064731	GA422903	83	75	D	12.00	100.00	310.42	67.18	20.64	22.17	24.83	4.66	
12	200	Detroit	1064731	GA422749	83	75	D	12.00	100.00	310.42	67.18	20.64	22.17	24.83	4.66	
13	200	Detroit	1064731	GA423076	83	75	D	12.00	100.00	310.42	67.18	20.64	22.17	24.83	4.66	
14	200	Detroit	1064731	GA422898	83	75	D	12.00	100.00	310.42	67.18	20.64	22.17	24.83	4.66	
15	200	Detroit	1064731	6A423230	83	75	D		100.00	310.42	67.18	20.64	22.17	24.83	4.66	
16	221	Cummins	NTA855	30125017	86	350	D	26.70	100.00	1,448.64	313.53	96.33	103.47	115.89	21.73	
17	260	Cummins	KTA38GS1	33111065	85	750	D	15.70	100.00	3,104.24	671.85	206.43	221.73	248.34	46.56	
18	400	Onan	L423D11	HB33702711	83	20	D	47.50	100.00	82.78	17.92	5.50	5.91	6.62	1.24	
19	505	Cummins	VTA28GS2	37112182	86	600	D	6.80	100.00	2,483.39	537.48	165.15	177.38	198.67	37.25	
20	507	Onan	45.0DYJ-15R	1780358853	79	45	D	48.00	100.00	186.25	40.31	12.39	13.30	14.90	2.79	
21	511	Onan	30.0EK-15R	1870924893	88	30	D	100.00	100.00	124.17	26.87	8.26	8.87	9.93	1.86	
22	565	Cat	3306B01	2AJ00636	90	225	D	9.00	100.00	931.27	201.55	61.93	66.52	74.50	13.97	DAQE-1171-92
23	570	Cummins	NRTO8IG	500924	63	100	D	35.80	100.00	413.90	89.58	27.52	29.56	33.11	6.21	
24	575	Cat	3412 DITA	81Z12595	91	600	D	17.00	100.00	2,483.39	537.48	165.15	177.38	198.67	37.25	DAQE-1171-92
25	590	Onan	15DRDJ	J90460917	79	15	D	15.00	100.00	62.08	13.44	4.13	4.43	4.97	0.93	
26	598	White	D198ER	34336269	79	45	D	16.00	100.00	186.25	40.31	12.39	13.30	14.90	2.79	
27	727	Cummins	4B3.9	44249904	89	30	D	12.00	100.00	124.17	26.87	8.26	8.87	9.93	1.86	
28	727	Cat	3412DT	38S13871	88	75	D	12.00	100.00	310.42	67.18	20.64	22.17	24.83	4.66	
29	758	Cummins	NT495GS	56712	83	100	D	15.00	100.00	413.90	89.58	27.52	29.56	33.11	6.21	
30	759	Onan	H76P	162487	76	15	D	3.00	100.00	62.08	13.44	4.13	4.43	4.97	0.93	
31	769	Onan	6AT34-91	531128832	91	40	D	17.00	100.00	165.56	35.83	11.01	11.83	13.24	2.48	
32	774	Cummins	6BT-5-9	44140217	86	80	D	8.00	100.00	331.12	71.66	22.02	23.65	26.49	4.97	
33	776	White	N/A	3435678	79	45	D	23.10	100.00	186.25	40.31	12.39	13.30	14.90	2.79	
34	780	Cummins	KTA1150G	C790405269	79	350	D	12.90	100.00	1,448.64	313.53	96.33	103.47	115.89	21.73	
35	782	John Deere	6414TF	516236CD	82	75	D	12.00	100.00	310.42	67.18	20.64	22.17	24.83	4.66	
36	782	Cat	3208	03Z07476	87	75	D	12.00	100.00	310.42	67.18	20.64	22.17	24.83	4.66	
37	783	Cat	3306B	64Z06687	87	75	D	12.00	100.00	310.42	67.18	20.64	22.17	24.83	4.66	
38	799	Cummins	4B39	69011134	69	30	D	18.00	100.00	124.17	26.87	8.26	8.87	9.93	1.86	
39	825	Cat	3406B	41B1754	58	300	D	18.00	100.00	1,241.69	268.74	82.57	88.69	99.34	18.63	
40	830	Hercules	D298ER	52-30-561	65	30	D	14.20	100.00	124.17	26.87	8.26	8.87	9.93	1.86	
41	839	Cummins	N1855C2	30106793	80	150	D	7.80	100.00	620.85	134.37	41.29	44.35	49.67	9.31	20-Mar-80
42	851	Cummins	NT855F3	11245213	84	75	D	12.00	100.00	310.42	67.18	20.64	22.17	24.83	4.66	
43	851	Cummins	NT855F3	11232676	84	75	D	12.00	100.00	310.42	67.18	20.64	22.17	24.83	4.66	
44	877	Cummins	6CTA83G	443506	88	150	D	7.80	100.00	620.85	134.37	41.29	44.35	49.67	9.31	BAQE-257-88
45	900	White	M-13	UK3436721	79	60	D	13.40	100.00	248.34	53.75	16.51	17.74	19.87	3.73	
46	915	Cummins	4B39	4A205501	87	20	D	12.10	100.00	82.78	17.92	5.50	5.91	6.62	1.24	
47	925	Cummins	NTA495	52633	86	155	D	14.40	100.00	641.54	138.85	42.66	45.82	51.32	9.62	
48	1102	Cummins	NTA195GS	25145921	86	155	D	14.30	100.00	641.54	138.85	42.66	45.82	51.32	9.62	
48	1151	Perkins	ED22433	O89435	68	15	D	14.80	100.00	62.08	13.44	4.13	4.43	4.97	0.93	DAQE-1171-92
49	1152	Perkins	ED22433	89435	68	15	D	14.80	100.00	62.08	13.44	4.13	4.43	4.97	0.93	
50	1204	Allis Chalm	7000	7-21581	68	70	D	29.00	100.00	289.73	62.71	19.27	20.69	23.18	4.35	
51	1212	(Not installed)				200	D	12.00	100.00	827.80	179.16	55.05	59.13	66.22	12.42	DAQE-492-92
52	1213	(Not installed)				125	D	12.00	100.00	517.37	111.97	34.41	36.96	41.39	7.76	DAQE-492-92
53	1214	Cummins	NTA855G2	6437	90	300	D	23.00	100.00	1,241.69	268.74	82.57	88.69	99.34	18.63	
54	1219	Cat	3304B	83Z06403	89	125	D	11.00	100.00	517.37	111.97	34.41	36.96	41.39	7.76	
55	1230	Cummins	NT855GS3	30122838	86	260	D	12.00	100.00	1,076.13	232.91	71.56	76.87	86.09	16.14	
56	1250	Onan	067LT	52145	85	125	D	13.10	100.00	517.37	111.97	34.41	36.96	41.39	7.76	
57	1286	Cat	3208	5YF00855	89	150	D	18.00	100.00	620.85	134.37	41.29	44.35	49.67	9.31	
58	1311	Onan	60DJB	CR18100AC	85	6	D	15.00	100.00	24.83	5.37	1.65	1.77	1.99	0.37	
59	1538	Cat	D333	87Z2265	70	110	D	48.00	100.00	455.29	98.54	30.28	32.52	36.42	6.83	
60	1570	Cummins	4B3.9	44249878	86	30	D	0.00	100.00	124.17	26.87	8.26	8.87	9.93	1.86	
61	1570	Cat	3406D	6TB04619	88	75	D	12.00	100.00	310.42	67.18	20.64	22.17	24.83	4.66	
62	1590	Onan	6CTA83G	44700790	92	175	D	75.00	100.00	724.32	156.76	48.17	51.74	57.95	10.86	
63	1803	Cat	3208	90N67185	85	100	D	12.00	100.00	413.90	89.58	27.52	29.56	33.11	6.21	
64	11531	MMM	TD226-6	226675047	88	80	D	15.70	100.00	331.12	71.66	22.02	23.65	26.49	4.97	
65	11537	Allis Chalm	7000	4338820	68	75	D	126.00	100.00	310.42	67.18	20.64	22.17	24.83	4.66	
66	11538	Cat	D330	8581812	70	100	D	48.00	100.00	413.90	89.58	27.52	29.56	33.11	6.21	
67	1275-N	Onan	KTA19G2	25166558	89	600	D	12.00	100.00	2,483.39	537.48	165.15	177.38	198.67	37.25	
68	1275-S	Onan	VTA28G2	31132286	84	400	D	12.00	100.00	1,655.59	358.32	110.10	118.26	132.45	24.83	
69	1-A	Detroit	4A0231	JF-45862	79	65	D	12.00	100.00	269.03	58.23	17.89	19.22	21.52	4.04	
70	519-1	Cat	3508	23Z02909	89	900	D	32.00	100.00	3,725.08	806.21	247.72	266.08	298.01	55.88	
71	519-2	Cat	3508	81Z08195	89	475	D	31.00	100.00	1,966.02	425.50	130.74	140.43	157.28	29.49	
72	800-A	Onan	O649	30424 ?1	87	50	D	0.30	100.00	206.95	44.79	13.76	14.78	16.56	3.10	BAQE-260-88
73	800-A	Onan	O649	30424 ?1	86	50	D		100.00	206.95	44.79	13.76	14.78	16.56	3.10	
74	800-B	Generac	40L	64238	89	50	D	11.50	100.00	206.95	44.79	13.76	14.78	16.56	3.10	
75	837-1	Cat	D349	61P01547	84	600	D	3.60	100.00	2,483.39	537.48	165.15	177.38	198.67	37.25	10-Mar-83
76	837-2	Cat	D349	61P01551	84	600	D	3.50	100.00	2,483.39	537.48	165.15	177.38	198.67	37.25	10-Mar-83
77	837-3	Cat	D349	61P1549	84	600	D	2.70	100.00	2,483.39	537.48	165.15	177.38	198.67	37.25	10-Mar-83
78	837-4	Cat	D349	61P1550	84	600	D	3.40	100.00	2,483.39	537.48	165.15	177.38	198.67	37.25	10-Mar-83
79	891-1	Cat	3516STD	4XF00236	88	1700	D	22.80	100.00	7,036.27	1,522.85	467.91	502.59	562.90	105.54	BAQE-585-88

4.2.4-581

80	891-2	Cat	3516STD	40F00231	88	1700	D	36.40	100.00	7,036.27	1,522.85	467.91	502.59	562.90	105.54	BAQE-585-88
81	891-3	Cat	3516STD	40F00237	88	1700	D	39.40	100.00	7,036.27	1,522.85	467.91	502.59	562.90	105.54	BAQE-585-88
							Avg	19.35								
								Lbs/yr		80,134.79	17,343.46	5,328.96	5,723.91	6,410.78	1,202.02	
								Tons/yr		40.07	8.67	2.66	2.86	3.21	0.60	

Generators in buildings 14, 1212, and 1213 have not been installed.

Model numbers and serial numbers shall be provided on installation.

6/8/93 3:31 PM

4.2.4-582

Sorted by Serial Number

Attachment 2

Hill Air Force Base Emergency Generators

em No.	Building Number	Manufacturer	Model	Serial #	Year	KW	Fuel	Annual op hours 1992	Maximum allowable op hours	NOX 14.00 gm/hp-hr lbs/year	CO 3.03 gm/hp-hr lbs/year	SOX 0.93 gm/hp-hr lbs/year	PM 1.00 gm/hp-hr lbs/year	VOC 1.12 gm/hp-hr lbs/year	ALD 0.21 gm/hp-hr lbs/year	Current Approval Order number or date
1	1214	Cummins	NTA855G2	6437	90	300	D	23.00	100.00	1,241.69	268.74	82.57	88.69	99.34	18.63	
2	1250	Onen	067LT	52145	85	125	D	13.10	100.00	517.37	111.97	34.41	36.96	41.39	7.76	
3	925	Cummins	NTA495	52633	86	155	D	14.40	100.00	641.54	138.85	42.66	45.82	51.32	9.62	
4	758	Cummins	NT495GS	56712	83	100	D	15.00	100.00	413.90	89.58	27.52	29.56	33.11	6.21	
5	800-B	Generoc	40L	64238	89	50	D	11.50	100.00	206.95	44.79	13.76	14.78	16.56	3.10	
6	1152	Perkins	ED22433	89435	68	15	D	14.80	100.00	62.08	13.44	4.13	4.43	4.97	0.93	
7	759	Onen	H76P	162487	76	15	D	3.00	100.00	62.08	13.44	4.13	4.43	4.97	0.93	
8	877	Cummins	6CTA83G	443506	88	150	D	7.80	100.00	620.85	134.37	41.29	44.35	49.67	9.31	BAQE-257-88
9	570	Cummins	NRTOBIG	500924	63	100	D	35.80	100.00	413.90	89.58	27.52	29.56	33.11	6.21	
10	20	Cummins	NT855G4	1146904	88	200	D	27.90	100.00	827.80	179.16	55.05	59.13	66.22	12.42	
11	776	White	N/A	3435678	79	45	D	23.10	100.00	186.25	40.31	12.39	13.30	14.90	2.79	
12	11537	Allis Chalm	7000	4338820	68	75	D	126.00	100.00	310.42	67.18	20.64	22.17	24.83	4.66	
13	799	Cummins	4839	6901134	69	30	D	18.00	100.00	124.17	26.87	8.26	8.87	9.93	1.86	
14	36	Detroit	4A0234430	10437000	65	65	D	30.00	100.00	269.03	58.23	17.89	19.22	21.52	4.04	
15	851	Cummins	NT855F3	11232676	84	175	D	12.00	100.00	310.42	67.18	20.64	22.17	24.83	4.66	
16	851	Cummins	NT855F3	11245213	84	175	D	12.00	100.00	310.42	67.18	20.64	22.17	24.83	4.66	
17	1102	Cummins	NTA195GS	25145921	86	155	D	14.30	100.00	641.54	138.85	42.66	45.82	51.32	9.62	
18	1275-N	Onan	KTA19G2	25166558	89	600	D	12.00	100.00	2,483.39	537.48	165.15	177.38	198.67	37.25	
19	839	Cummins	N1855C2	30106793	80	150	D	7.80	100.00	620.85	134.37	41.29	44.35	49.67	9.31	20-Mar-80
20	1230	Cummins	NT855GS3	30122838	86	260	D	12.00	100.00	1,076.13	232.91	71.56	76.87	86.09	16.14	
21	221	Cummins	NTA855	30125017	86	350	D	26.70	100.00	1,448.64	313.53	96.33	103.47	115.89	21.73	
22	1275-S	Onan	VTA28G2	31132286	84	400	D	12.00	100.00	1,655.59	358.32	110.10	118.26	132.45	24.83	
23	260	Cummins	KTA38GS1	33111065	85	750	D	15.70	100.00	3,104.24	671.85	206.43	221.73	248.34	46.56	
24	598	White	D198ER	34336269	79	45	D	16.00	100.00	186.25	40.31	12.39	13.30	14.90	2.79	
25	505	Cummins	VTA28GS2	37112182	86	600	D	6.80	100.00	2,483.39	537.48	165.15	177.38	198.67	37.25	
26	9	Cummins	6BT-5-91	44139583	86	100	D	13.50	100.00	413.90	89.58	27.52	29.56	33.11	6.21	
27	774	Cummins	6BT-5-91	44140217	86	80	D	8.00	100.00	331.12	71.66	22.02	23.65	26.49	4.97	
28	1570	Cummins	4B3.9	44249878	86	30	D	0.00	100.00	124.17	26.87	8.26	8.87	9.93	1.86	
29	727	Cummins	4B3.9	44249904	89	30	D	12.00	100.00	124.17	26.87	8.26	8.87	9.93	1.86	
30	1590	Onen	6CTA83G	44700790	92	175	D	75.00	100.00	724.32	156.76	48.17	51.74	57.95	10.86	
31	11531	MMM	TD226-6	2266750471	88	80	D	15.70	100.00	331.12	71.66	22.02	23.65	26.49	4.97	
32	769	Onan	6AT34-91	531128832	91	40	D	17.00	100.00	165.56	35.83	11.01	11.83	13.24	2.48	
33	507	Onan	45.0DY-J-15R	1780358853	79	45	D	48.00	100.00	186.25	40.31	12.39	13.30	14.90	2.79	
34	511	Onan	30.0EK-15R	1870924893	88	30	D	100.00	100.00	124.17	26.87	8.26	8.87	9.93	1.86	
35	782	Cat	3208	03207476	87	75	D	12.00	100.00	310.42	67.18	20.64	22.17	24.83	4.66	
36	519-1	Cat	3508	23Z02909	89	900	D	32.00	100.00	3,725.08	806.21	247.72	266.08	298.01	55.88	
37	565	Cat	3306B01	2AJ00536	90	225	D	9.00	100.00	931.27	201.55	61.93	66.52	74.50	13.97	DAQE-1171-92
38	10	Cat	3116	2SG00483	88	125	D	12.00	100.00	517.37	111.97	34.41	36.96	41.39	7.76	
39	800-A	Onan	O649	30424 ?	87	50	D	10.30	100.00	206.95	44.79	13.76	14.78	16.56	3.10	BAQE-260-88
40	800-A	Onan	O649	30424 ?	86	50	D		100.00	206.95	44.79	13.76	14.78	16.56	3.10	
41	727	Cat	3412DT	38S13871	88	175	D	12.00	100.00	310.42	67.18	20.64	22.17	24.83	4.66	
42	825	Cat	3406B	4181754	58	300	D	18.00	100.00	1,241.69	268.74	82.57	88.69	99.34	18.63	
43	7	John Deere	T02397224	4239TP001	90	50	D	12.00	100.00	206.95	44.79	13.76	14.78	16.56	3.10	
44	915	Cummins	4B39	4A205501	87	20	D	12.10	100.00	82.78	17.92	5.50	5.91	6.62	1.24	
45	891-2	Cat	3516STD	4XF00231	88	1700	D	36.40	100.00	7,036.27	1,522.85	467.91	502.59	562.90	105.54	BAQE-585-88
46	891-1	Cat	3516STD	4XF00236	88	1700	D	22.80	100.00	7,036.27	1,522.85	467.91	502.59	562.90	105.54	BAQE-585-88
47	891-3	Cat	3516STD	4XF00237	88	1700	D	39.40	100.00	7,036.27	1,522.85	467.91	502.59	562.90	105.54	BAQE-585-88
48	782	John Deere	6414TF	516236CD	82	75	D	12.00	100.00	310.42	67.18	20.64	22.17	24.83	4.66	
48	830	Hercules	D298ER	52-30-561	65	30	D	14.20	100.00	124.17	26.87	8.26	8.87	9.93	1.86	
49	1286	Cat	3208	5YF00855	89	150	D	18.00	100.00	620.85	134.37	41.29	44.35	49.67	9.31	
50	837-1	Cat	D349	61P01547	84	600	D	3.60	100.00	2,483.39	537.48	165.15	177.38	198.67	37.25	10-Mar-83
51	837-2	Cat	D349	61P01551	84	600	D	3.50	100.00	2,483.39	537.48	165.15	177.38	198.67	37.25	10-Mar-83
52	837-3	Cat	D349	61P1549	84	600	D	2.70	100.00	2,483.39	537.48	165.15	177.38	198.67	37.25	10-Mar-83
53	837-4	Cat	D349	61P1550	84	600	D	3.40	100.00	2,483.39	537.48	165.15	177.38	198.67	37.25	10-Mar-83
54	783	Cat	3306B	6420687	87	75	D	12.00	100.00	310.42	67.18	20.64	22.17	24.83	4.66	
55	200	Detroit	1064731	6A423230	83	75	D		100.00	310.42	67.18	20.64	22.17	24.83	4.66	
56	28	Cat	3114	6AF00428	88	50	D	16.00	100.00	206.95	44.79	13.76	14.78	16.56	3.10	
57	1570	Cat	3406D	6TB04619	88	175	D	12.00	100.00	310.42	67.18	20.64	22.17	24.83	4.66	
58	1204	Allis Chalm	7000	7-21581	68	70	D	29.00	100.00	289.73	62.71	19.27	20.69	23.18	4.35	
59	11	Cat	3416	75Z00456	91	300	D	4.00	100.00	1,241.69	268.74	82.57	88.69	99.34	18.63	
60	519-2	Cat	3508	81Z08195	89	475	D	31.00	100.00	1,966.02	425.50	130.74	140.43	157.28	29.49	
61	575	Cat	3412 DITA	81Z12595	91	600	D	17.00	100.00	2,483.39	537.48	165.15	177.38	198.67	37.25	DAQE-1171-92
62	1219	Cat	3304B	83Z05403	89	125	D	11.00	100.00	517.37	111.97	34.41	36.96	41.39	7.76	
63	11538	Cat	D330	8581812	70	100	D	48.00	100.00	413.90	89.58	27.52	29.56	33.11	6.21	
64	1538	Cat	D333	8722265	70	110	D	48.00	100.00	455.29	98.54	30.28	32.52	36.42	6.83	
65	1803	Cat	3208	90N67185	85	100	D	12.00	100.00	413.90	89.58	27.52	29.56	33.11	6.21	
66	780	Cummins	KTA1150G	C790405269	79	350	D	12.90	100.00	1,448.64	313.53	96.33	103.47	115.89	21.73	
67	1311	Onan	60DJB	CR18100AC	85	6	D	15.00	100.00	24.83	5.37	1.65	1.77	1.99	0.37	
68	200	Detroit	1064731	GA422749	83	75	D	12.00	100.00	310.42	67.18	20.64	22.17	24.83	4.66	
69	200	Detroit	1064731	GA422898	83	75	D	12.00	100.00	310.42	67.18	20.64	22.17	24.83	4.66	
70	200	Detroit	1064731	GA422903	83	75	D	12.00	100.00	310.42	67.18	20.64	22.17	24.83	4.66	
71	200	Detroit	1064731	GA423076	83	75	D	12.00	100.00	310.42	67.18	20.64	22.17	24.83	4.66	
72	400	Onan	L423D11	HB33702711	83	20	D	47.50	100.00	82.78	17.92	5.50	5.91	6.62	1.24	
73	590	Onen	15DRDJ	J90460917	79	15	D	15.00	100.00	62.08	13.44	4.13	4.43	4.97	0.93	
74	1-A	Detroit	4A0231	JF-45862	79	65	D	12.00	100.00	269.03	58.23	17.89	19.22	21.52	4.04	
75	1151	Perkins	ED22433	O89435	68	15	D	14.80	100.00	62.08	13.44	4.13	4.43	4.97	0.93	DAQE-1171-92
76	133	John Deere	6359TF002	T06359	89	80	D	15.90	100.00	331.12	71.66	22.02	23.65	26.49	4.97	
77	900	White	M-13	UK3436721	79	60	D	13.40	100.00	248.34	53.75	16.51	17.74	19.87	3.73	
78	14	Cat not inst.	3412DIT			500	D	12.00	100.00	2,069.49	447.90	137.62	147.82	165.56	31.04	DAQE-1171-92
79	14	Cat not inst.				350	D	12.00	100.00	1,448.64	313.53	96.33	103.47	115.89	21.73	DAQE-1171-92

4.2.4-583

Attachment 2

80	1212	Not installed			200	D	12.00	100.00	827.80	179.16	55.05	59.13	66.22	12.42	DAQE-492-92
81	1213	Not installed			125	D	12.00	100.00	517.37	111.97	34.41	36.96	41.39	7.76	DAQE-492-92
						Avg.	19.69								
							Lbs/yr		80,134.79	17,343.46	5,328.96	5,723.91	6,410.78	1,202.02	
							Tons/yr		40.07	8.67	2.66	2.86	3.21	0.60	

Generators in buildings 14, 1212, and 1213 have not been installed.

Model numbers and serial numbers shall be provided on installation.

6/8/93 3:26 PM

4.2.4-584

State of Utah
DEPARTMENT OF ENVIRONMENTAL QUALITY
DIVISION OF AIR QUALITY

Michael O. Leavitt
Governor
Dianne R. Nielson, Ph.D.
Executive Director
F. Burnell Cordner
Director

150 North 1950 West
Salt Lake City, Utah 84114
(801) 536-4000
(801) 536-4099 Fax
(801) 538-6621 T.D.D.

Reply to: State of Utah
Division of Air Quality
P.O. Box 144820
Salt Lake City, Utah 84114-4820

DAQE-0542-93

June 11, 1993

Newspaper Agency
Legal Advertising Department
157 Regent Street
Salt Lake City, UT 84111

This letter will confirm the authorization to publish the attached NOTICE in the Salt Lake Tribune on June 18, 1993.

Please mail the invoice and affidavit of publication to the Utah State Department of Environmental Quality, Division of Air Quality, P.O. Box 144820, Salt Lake City, Utah 84114-4820.

Sincerely,

Diane Nielson

Diane Nielson
Office Technician
Division of Air Quality

LRM:dn

Enclosure

4.2.4-585

Printed on recycled paper

NOTICE

The following notice of intent to construct, submitted in accordance with Section 3.1, Utah Air Conservation Rules, has been received for consideration by the Executive Secretary, Utah Air Quality Board:

1. James R. Van Orman

   Department of the Air Force

   Hill Air Force Base, Utah

   Air Permit for Emergency Power Generators

   Davis County - CDS A2 NA Title V

Emission Summary

Pollutant	Current Emission	Emissions Increases
Particulate	2.86	0
PM_{10}	2.86	0
SO_2	2.66	0
NO_x	40.07	0
CO	8.67	0
VOC	3.21	0
Aldehydes	0.06	0

2. Russel Larsen

   Lakeview Rock Products, Inc.

   North Salt Lake

P.O. Box 870256

West Bountiful, Utah

Increased Production and Processing Limitations

Davis County - CDS B NA NSPS Title V

Emissions Summary

TSP	9.29 tons/yr
PM_{10}	3.21 tons/yr
SO_2	0.47 tons/yr
NO_x	5.52 tons/yr
CO	2.30 tons/yr
VOC	0.50 tons/yr
Aldehydes	0.11 tons/yr

3. Stephen L. Aardema

Thatcher Company

Thatcher Company

1905 West Fortune Road

Salt Lake City, Utah

Impinjet, Sulfur Dioxide, Chlorine, and Ferric Chloride Scrubbers

Salt Lake County - CDS B NA Toxics

Emissions Summary

The emissions from this source (all four scrubbers will be a follows:

Pollutant	Current Emissions	Emission Increase
SO_2	0.405	0
NO_x	0.034	0
Cl_2	0.033	0

4. Dave Peck

Waste Management of Utah, Inc.

8652 South 4000 West

West Jordan, Utah

Paint Booth

Salt Lake County - CDS B NA Toxics

Emissions Summary

TSP	0.10 tons/yr
PM_{10}	0.03 tons/yr
SO_2	0.00 tons/yr
NO_x	0.32 tons/yr
CO	0.07 tons/yr
VOC	4.02 tons/yr
Methane	0.01 tons/yr

The engineering evaluation and air quality impact analysis have been completed and no adverse air quality impacts are expected. It is the intent of the Executive Secretary to approve the construction project.

The construction proposal and estimates of the effect on local air quality are available for public inspection and comment at the Division of Air Quality, Utah State Department of Environmental Quality, 150 North 1950 West, Salt Lake City, Utah 84114-4820. Written comments received by the Division, at the same address on or before July 18, 1993 will be considered in making the final decision on the approval/disapproval of the proposed construction.

If anyone so requests to the Executive Secretary in writing, within 15 days of publication of the Notice, a hearing will be held to explain the project and technical rationale for proposed action. A hearing will be scheduled as close as practicable to the proposed project location. Comments obtained during a hearing will be evaluated and considered by the Executive Secretary before making a final decision on the approval/disapproval of the project.

Date of Notice: June 18, 1993

State of Utah
DEPARTMENT OF ENVIRONMENTAL QUALITY
DIVISION OF AIR QUALITY

Norman H. Bangerter
Governor
Kenneth L. Alkema
Executive Director
F. Burnell Cordner
Director

1950 West North Temple
Salt Lake City, Utah
(801) 536-4000
(801) 536-4099 Fax

Reply to: State of Utah
Division of Air Quality
Department of Environmental Quality
Salt Lake City, Utah 84114-4820

DAQE-0787-92

August 17, 1992

Newspaper Agency
Legal Advertising Department
157 Regent Street
Salt Lake City, UT 84111

This letter will confirm the authorization to publish the attached NOTICE in the Deseret News and the Salt Lake Tribune on August 25, 1992.

Please mail the invoice and affidavit of publication to the Utah State Department of Environmental Quality, Division of Air Quality, P.O. Box 16690, Salt Lake City, Utah 84114-4820.

Sincerely,

Cheery Love

Cheery Love
Office Technician
Division of Air Quality

MK:cl

Enclosure

Printed on recycled paper

NOTICE

The following Notices of Intent to construct, submitted in accordance with Section 3.1, Utah Air Conservation Rules, have been received for consideration by the Executive Secretary, Utah Air Quality Board:

1. Department of the Air Force
   Headquarters Ogden AFLC
   Hill Air Force Base, UT 84056-5990

Emergency Generators and Media Blast Booth

Davis County - CDS NA

Existing Emissions (from existing emergency generator in Building 575)

Particulate	0.04 ton/yr
PM_{10}	0.02
SO_2	0.04
NO_x	0.62
CO	0.13
VOC	0.05
Aldehydes	0.01

Proposed Emissions (from new generator)

Particulate	0.09 ton/yr
PM_{10}	0.05
SO_2	0.08
NO_x	1.24
CO	0.26
VOC	0.10
Aldehydes	0.02

Net Increase in Emissions

Particulate	0.05 ton/yr
PM_{10}	0.03

SO_2	0.04
NO_x	0.62
CO	0.13
VOC	0.05
Aldehydes	0.01

2. Southwest Soil Remediation, Inc.
   6262 N. Swan, Suite 200A
   Tucson, AZ 85718

Mobile - Soil Decontaminator

Mobile County - CDS B NA

Emissions were calculated using a maximum concentration of 5000 milligrams of VOC per kilogram contaminated soil and maximum contaminated soil throughput of 12.5 tons/hr.

Proposed Emissions

Particulate	4.08	tons/year
PM_{10}	2.94	
SO_x	1.38	
NO_x	24.50	
CO	6.02	
VOC	7.38	

The engineering evaluation and air quality impact analysis have been completed and no adverse air quality impacts are expected. It is the intent of the Executive Secretary to approve the construction projects.

The construction proposal and estimates of the effect on local air quality are available for public inspection and comment at the Division of Air Quality, Utah State Department of Environmental Quality, 1950 West North Temple, Salt Lake City, Utah 84114-4820. Written comments received by the Division, at the

same address on or before September 24, 1992 will be considered in making the final decision on the approval/disapproval of the proposed construction.

If anyone so requests to the Executive Secretary in writing, within 15 days of publication of the Notice, a hearing will be held to explain the project and technical rationale for proposed action. A hearing will be scheduled as close as practicable to the proposed project location. Comments obtained during a hearing will be evaluated and considered by the Executive Secretary before making a final decision on the approval/disapproval of the project.

Date of Notice: August 25, 1992