

State of California  
AIR RESOURCES BOARD

Resolution 79-28

April 25, 1979

WHEREAS, the League of Women Voters of California has petitioned the Board pursuant to Health and Safety Code Section 40451 to review the decision of the South Coast Air Quality Management District (SCAQMD) to issue a Permit to Construct to Shell Oil Company for the Shell Beta Project, on the grounds that this decision is inconsistent with the purposes of Division 26 of the Health and Safety Code (relating to the control of air pollution);

WHEREAS, the Board finds that the League of Women Voters is an aggrieved party with standing to petition the Board pursuant to Health and Safety Code Section 40451;

WHEREAS, the Board is authorized pursuant to Health and Safety Code Sections 40451 and 40452, to review the SCAQMD's permit decision to determine whether it is consistent with the purposes of Division 26 of the Health and Safety Code;

WHEREAS, the Board has held a public hearing pursuant to Sections 40451(c) and 40452 of the Health and Safety Code, and has considered the available record before the SCAQMD pertaining to the Shell Beta Project, together with the evidence and testimony received from the Board's staff, Shell, and other interested persons regarding SCAQMD's permit decision;

WHEREAS, the Board finds that the predominant wind flow will transport emissions from sources within California Coastal Waters adjacent to the South Coast District, including the Shell Beta project, to the South Coast Air Basin, and thus such sources will contribute to violations of state and federal ambient air quality standards;

WHEREAS, the Board finds that the SCAQMD has not made efforts to control the substantial amounts of emissions from platforms associated with the Shell Beta project and located within California Coastal Waters;

WHEREAS, the Board finds that emissions from the platforms will prevent or interfere with the attainment and maintenance of state and federal air quality standards;

WHEREAS, the Board finds that the District's permit decision is inconsistent with the policies applied by the District to other permit applications involving substantially similar issues; and

WHEREAS, the Board finds that the SCAQMD's permit decision and other actions regarding the Shell Beta project is inconsistent with the purposes of Division 26 of the Health and Safety Code;

NOW, THEREFORE BE IT RESOLVED, that the Board, pursuant to Health and Safety Code Sections 40451 and 40452, makes additions to the Permit to Construct issued by the District (Number C-21648) to include the offset package and permit conditions described in Exhibit A consistent with the District's rules and regulations. The ARB shall publish pursuant to Rule 213 the tradeoff package approved by the Board today and delegates to the Executive Officer the authority to issue the permit additions after the 30-day comment period has run. The additions to the permit shall contain an appropriate savings and severability clause to ensure that in the event of any successful judicial challenge to the ARB additions to the permit, the original underlying permit issued by the SCAQMD shall be unaffected.

This is to certify that this is a true and correct copy of Resolution 79-28 as passed by the Air Resourced Board.

  
Joan Gilpin, Board Secretary

## EXHIBIT A

### Additional Permit Conditions for Shell Beta Project

4. Shell shall limit Beta project emissions (from the sources listed in Table 1) to a maximum of 363 tons/year of NO<sub>x</sub>, 84 tons/year HC, 37 tons/year of SO<sub>x</sub> and 18 tons/year of PM. These emission limits are based on the maximum projected emission levels for Beta project through the thirteenth year of the project's operational phase. Prior to the beginning of the thirteenth year of the project's operational phase, Shell shall provide the Executive Officer of the SCAQMD with one of the following:
  - (a) An analysis demonstrating to the reasonable satisfaction of the Executive Officer of the SCAQMD that the above emission levels will continue to be the maximum projected emission levels for Beta project after the thirteenth year of the project's operational phase; or
  - (b) A revised analysis of emissions from Beta project for years after the thirteenth year of the project's operational phase, and proposed mitigation measures for any net increases in emissions above the maximum projected emissions levels allowed pursuant to this permit, to the extent such mitigation is required by applicable new source review rules.
5. If other companies, by means of other platforms, develop tracts 254, 255 and 268 of the Beta Unit, the crude oil produced from such platforms shall not be moved through the onshore facility for which this permit is issued, unless this permit or the operating permit then in effect for said facility is amended to authorize such use.
6. Shell shall limit the oxides of nitrogen emissions from gas fired turbines and from diesel fuel fired turbines on Platform E1ly to 0.413 and 0.49 pounds per million BTU, respectively.
7. The sulfur content of diesel fuel used in the turbines and drilling rigs shall not exceed 0.20% by weight through the thirteenth year of the project's operational phase and shall not exceed 0.1% by weight after the thirteenth year of the project's operational phase.
8. Natural gas H<sub>2</sub>S content shall not exceed 2,000 grans per million standard cubic feet.
9. Shell shall limit total fuel consumption by the 10 turbines installed on Platform E1ly to 124 barrels of diesel fuel per day plus 122 million BTU heat input per hour of natural gas. Notwithstanding the foregoing, if no diesel fuel is burned in the turbines on a given day, natural gas consumption by the turbines shall not exceed 170 million BTU heat input per hour for that day.

10. Shell shall record the daily fuel consumption rate for turbines and diesel engines and provide such record to the SCAQMD and ARB annually. Shell shall maintain these records for a period of two years.
11. Shell shall reduce emissions from existing stationary sources adequately to demonstrate a net air quality benefit within the South Coast Air Basin. Compliance with conditions (12) and (13) below will satisfy this requirement.
12. Shell shall reduce emissions by 251 tons HC/year and 1221 tons NOx/year from Shell's Ventura Oil field. The following conditions are required and sufficient to achieve these reductions:
  - (a) Shell shall surrender its Permit to Operate (Number 00221) a natural gas plant in Ventura to the Ventura County Air Pollution Control District (VCAPCD).
  - (b) Shell shall curtail fuel usage for waterflood plant engines and gas lift compressors in the Ventura Oil field. A list of waterflood plant engines and gas lift compressors included in the natural gas curtailment program is tabulated in Table 2. Shell shall not consume more than a total of 700 million cubic feet of natural gas during any year in the units listed in Table 2. No fuel other than natural gas shall be burned in the units listed in Table 2.
  - (c) Shell shall meter the fuel consumption rate for those units listed in Table 2 and provide such records to the ARB, VCAPCD, and SCAQMD annually.
  - (d) Shell shall provide the Executive Officer of the SCAQMD with a letter from the VCAPCD verifying that Shell has surrendered the permit to Operate (Number 00221) to natural gas plant and submitted a list of equipment included in the natural gas curtailment program.
13. Shell shall provide emission reductions of 60 tons SOx/year and 140.6 tons NOx/year from Aminoil's Huntington Beach oil field. The following steps shall be sufficient to satisfy this requirement: Prior to Shell's receipt of a Permit to Operate the onshore facilities covered by this permit, (a) Aminoil obtains a Permit to Operate for the Stretford unit, and (b) gives up the right to reactivate its water injection plant #1 in the Huntington Beach oil field without going through the SCAQMD's New Source Review Procedures.
14. As an alternate to satisfying condition 11, Shell may provide other offset sources upon written approval from the Executive Officer of the SCAQMD.

TABLE 2

GAS LIFT COMPRESSORS AND WATERFLOOD ENGINESINCLUDED IN THE NATURAL GAS CURTAILMENT PROGRAM

<u>AREA I</u>	<u>Shell Unit No.</u>	<u>Engine Make/Model</u>	<u>Total Plant HP</u>
Compressor Plant			
Taylor 18	7,8,9,10,11,12	Clark, HMA6, 265 HP	2250
	27	IR, SVG 12, 660 HP	
Taylor 9	33,39	IR, SVG 12, 660 HP	1320
Taylor 17	30,35,38	IR, SVG 12, 660 HP	2980
	41	Worthington, SLHC 1,000 HP	
Sub-Total	13 units		6,550 HP
<u>AREA II</u>			
Compressor Plant			
Taylor 22	44,45	CB, GMVH-12, 2400 HP	4800
Sub-Total	2 units		4800
<u>AREA III</u>			
Compressor Plant			
Taylor 14	24	Clark, HMA 10, 440 HP	2760
	28,31	IR, SVG 12, 660 HP	
	42	Worthington, SLHC 1,000 HP	
Taylor 19	32,37	IR, SVG 12, 660 HP	2320
	43	Worthington SLHC 1,000 HP	
Taylor 23	29,34	IR, SVG 12, 660 HP	2320
	40	Worthington, SLHC 1,000 HP	
Sub-Total	10 units		7400
<u>AREA IV</u>			
Compressor Plant			
Taylor 12	6	Clark, HMA 6, 265 HP	925
	36	IR, SVG 12, 660 HP	
Taylor 21	13,17	Clark, HMA 6, 265 HP	1310
	21	Clark, HMA 8, 340 HP	
	23	Clark, HMA 10, 440 HP	
Injection Plant			
Taylor 1	1,2	White, G-825-8, 625 HP	1250
Centrifugal Sys.		Bingham Pumps	
Taylor 2	1,2,3,4,5	White, G-825-8, 625 HP	4375
Positive Disp. Sys., 4500 psi	6,7	Ajax Pumps	
Taylor 3	1,2	White, GT 825-12, 1500 HP	4875
Centrifugal Sys. 3000 psi	3,4,5	Bingham Pumps White G-825-8, 625 HP	
Sub-Total	20 units		12,735
Grand Total	45 units	Total HP	31,485