

MINUTE ITEM  
This Calendar Item No. 34  
was approved as Minute Item  
No. 34 by the State Lands  
Commission by a vote of 3  
to 0 at its 3-2-88  
meeting.

CALENDAR ITEM

A 58

34

03/02/88  
PRC 425  
Smith  
Gonzalez

S 37

APPROVAL OF PROPOSAL TO MODIFY PLATFORM EMMY, AND ITS  
SATELLITE PLATFORM, STATE OIL AND GAS LEASE PRC 425

LESSEE: Shell Western E&P Inc. (SWEPI)  
Attn.: D. L. Oreolt  
P. O. Box 11164  
Bakersfield, California 93389

AREA, TYPE LAND AND LOCATION:

State Oil and Gas Lease PRC 425, issued on  
February 10, 1950, contains approximately  
835 acres of tide and submerged lands west of  
Huntington Beach, Orange County. Oil drilling  
and production Platform Emmy stands in 46 feet  
of water approximately 7000 feet from shore and  
was completed in 1963. A satellite platform  
was set adjacent to Platform Emmy in 1981.

BACKGROUND:

Platform Emmy is a 25-year-old drilling and  
production platform. It is an eight-legged  
structure with three primary decks, the lower,  
the production and the top or drilling deck.  
The largest deck measures 100 feet by 146 feet.

Platform Emmy stands in 46 feet of water with  
the lower deck 43 feet above mean low-low water  
level and the drill deck 82 feet above MLLW.  
The 1200-square-foot office and crew change  
room is cantilevered out over the water from  
the northern end of the drill deck. The roof  
of the change room also serves as the  
helideck. The platform rig is capable of well  
drilling or workover activities. There is one  
platform crane, located on the eastern side of  
the drill deck toward the northern end.

CALENDAR ITEM NO. 34 (CONT'D)

In 1981, a small four-legged satellite platform was set adjacent and south of Platform Emmy. The existing deck of this platform measures 50 feet by 70 feet, and is 45 feet above MLLW. It was used to house a steam generator and well testing facilities. The steam generator has recently been removed, leaving much of the deck space available for other uses.

Shell Western E&P, Inc. (SWEPI) proposes to make modifications to the existing Platform Emmy and its satellite platform to improve their safe and efficient operation. Specifically, changes are sought to:

- o modernize the electrical system and process control using State-of-the-art equipment;
- o optimize well testing operations;
- o enhance personnel safety on the platform; and
- o install a safer means for handling drilling pipe, well casing, and tubing.

PROPOSED PLATFORM MODIFICATIONS:

General Description:

Two additional decks will be added to the satellite platform. This modification will allow the relocation of the office and crews quarters, helicopter deck and electric motor control center from Platform Emmy. The installation of a second platform crane to the Platform Emmy will improve safety of handling tubulars on the drill deck. The platform electrical system will also be improved by installing of additional transformers, a new standby diesel generator and upgraded lighting. Modernization of the communication system, deck drainage, sanitary waste handling system and platform safety systems will also be accomplished during this modification project.

CALENDAR ITEM NO. 34 (CONT'D)

AB 884: 12/23/88.

OTHER PERTINENT INFORMATION:

1. Pursuant to the Commission's delegation of authority and the State CEQA Guidelines (14 Cal. Adm. Code 15025), the staff has prepared a Negative Declaration EIR ND 433, State Clearinghouse #88012705. Such Negative Declaration was prepared and circulated for public review pursuant to the provision of the CEQA. A copy of this environmental document is attached as Exhibit "B".

Based upon the initial study, the Negative Declaration, and the comments received in response thereto, there is no substantial evidence that the project will have a significant effect on the environment (14 Cal. Adm. Code 15074(b)).

2. This activity involves lands identified as possessing significant environmental values pursuant to P.R.C. 6370 et. seq. Based upon the staff's consultation CEQA through the review process, it is the staff's opinion that the project, as proposed, is consistent with the use classification.

EXHIBITS:

- A. Platform Location Map.
- B. Negative Declaration.

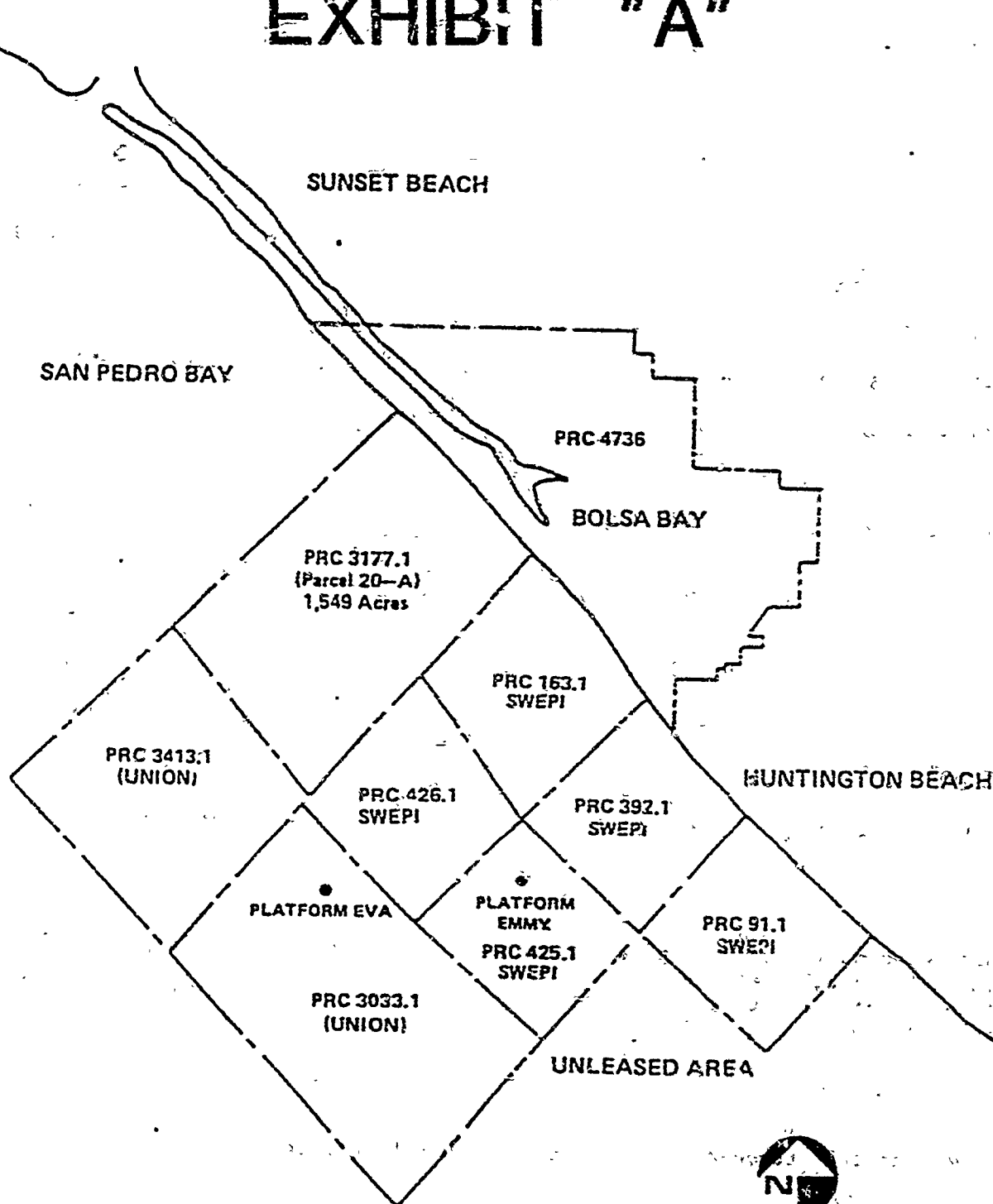
IT IS RECOMMENDED THAT THE COMMISSION:

1. CERTIFY THAT A NEGATIVE DECLARATION EIR ND 433, STATE CLEARINGHOUSE #88012705, WAS PREPARED FOR THIS PROJECT PURSUANT TO THE PROVISIONS OF THE CEQA AND THAT THE COMMISSION HAS REVIEWED AND CONSIDERED THE INFORMATION CONTAINED THEREIN.
2. DETERMINE THAT THE PROJECT, AS PROPOSED, WILL NOT HAVE A SIGNIFICANT EFFECT ON THE ENVIRONMENT.

CALENDAR ITEM NO. 34 (CONT'D)

3. FIND THAT THIS ACTIVITY IS CONSISTENT WITH THE USE CLASSIFICATION DESIGNATED FOR THE LAND PURSUANT TO P.R.C. 6383 ET. SEQ.
4. APPROVE THE MODIFICATIONS TO PLATFORM EMMY AND ITS SATELLITE PLATFORM AS PROPOSED BY SHELL WESTERN E&P INC. SUBJECT TO ENGINEERING REVIEW AND FINAL APPROVAL BY THE STAFF OF THE STATE LANDS COMMISSION.

# EXHIBIT "A"



Platform Emmy Location

FIGURE

CALENDAR PAGE

19.4

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STATE OF CALIFORNIA STATE LANDS COMMISSION  
STATE LANDS COMMISSION  
1807 13TH STREET  
SACRAMENTO, CALIFORNIA 95814

EXHIBIT "B"

GLOBAL ULUKMEJIAN, Governor



PROPOSED NEGATIVE DECLARATION

EIR NO 433

File Ref.: W 40031.1

SC# 88012705

Project Title: Modification of Platform Emmy  
Project Proponent: Shell Western Exploration and Production, Inc. (SWEPI)  
Project Location: State Oil and Gas Lease PRC 425, Offshore Huntington Beach, Orange County, California

Project Description: SWEPI proposes to modify Platform Emmy and the satellite to modernize the facility allowing for a safer and more efficient condition on the platform. Modifications proposed are the addition of two decks to the satellite platform, movement of the crew quarters, electrical switching equipment, platform control systems, and helideck to the satellite platform. In addition, a new crane will be added to the main platform. Other modernizations are proposed to the electrical, communication, and the fire suppression systems.

Contact Person: Randall L. Moory

Telephone: (916) 322-7828

This document is prepared pursuant to the requirements of the California Environmental Quality Act (Section 21000 et seq., Public Resources Code), the State CEQA Guidelines (Section 15000 et seq., Title 14, California Administrative Code), and the State Lands Commission regulation (Section 2901 et seq., Title 2, California Administrative Code).

Based upon the attached Initial Study, it has been found that:

☒ the project will not have a significant effect on the environment.

☐ mitigation measures included in the project will avoid potentially significant effects.

|               |       |
|---------------|-------|
| CALENDAR PAGE | 169.5 |
| MINUTE PAGE   | 695   |

INITIAL STUDY  
PROPOSED PLATFORM MODIFICATION  
TO SHELL PLATFORM EMMY  
DESCRIPTION OF PROPOSED MODIFICATION

OVERVIEW

Shell Western Exploration and Production, Inc. (SWEPI) proposes to make modifications to existing Platform Emmy which is located on State Lease 425 offshore Huntington Beach. The goals of the modifications are to improve safe and efficient operation of the platform. Specifically, these goals include:

- o modernization of the electrical system and process control;
- o optimization of well testing;
- o enhancement of personnel safety on the platform; and
- o installation of a safer means for handling drilling pipe, well casing, and tubing.

The proposed modifications are designed to modernize the equipment and process controls on the 25-year old platform. These modifications will not increase platform well slots, production capacity or substantially affect overall platform operations. SWEPI intends to take advantage of technological advances by installing state-of-the-art equipment to replace the existing antiquated equipment. The new equipment is considerably more reliable and efficient and its installation will improve safety and ease of operations.

1.1 PROPOSED PLATFORM MODIFICATIONS

1.1.1 General Description

The SWEPI proposal would result in a significant modification to the satellite platform. The satellite platform would be expanded from one deck to three. This modification will allow the relocation of the office and crews quarters, helicopter deck and electrical motor control center and the installation of a second platform crane. These modifications are more fully described in the following paragraphs.

1.1.2 Relocation of Quarters, Helideck, and Motor Control Center

SWEPI proposes to move the quarters/office building, helideck, and motor control center from the main platform to the satellite platform. SWEPI's proposal

has several advantages over the present configuration: 1) there is greater safety in isolating personnel quarters and electrical equipment from hydrocarbon production equipment; 2) the relocation will enhance the seismic stability of the main platform by optimizing weight distribution; 3) the relocation provides an opportunity to isolate the helideck from the quarters by the construction of an air gap between the two. This air gap will not only reduce noise and vibration in the quarters building but will also reduce air turbulence on the heliport, thereby reducing the engine torque necessary for takeoff; and 4) the relocation of these facilities to the satellite platform reduces equipment congestion on the main platform. Modular replacement of the electrical control room is planned to minimize the duration and cost of construction activities.

#### 1.1.3 Installation of Second Platform Crane

Installation of a second platform crane on the main platform is the other part of the SWEPI proposal. This will provide crane lifting capability for the entire drill deck and will eliminate the current need to hand roll drill pipe, casing and tubing on certain drill deck areas not covered by the existing crane. The practice of hand-rolling drill pipe and other tubular goods considered an unnecessary personnel injury risk.

#### 1.1.4 Modification of Electrical Systems

SWEPI also plans to modernize the platform electrical system. The installation of additional transformers is proposed to step down the voltage for use on the platform. All platform utilities, such as lighting, Heating, ventilation and air conditions (HVAC), communications, pumps, air compressors, and certain instrumentation will remain electrical.

Standby power will be provided by a new 150-kilowatt (kW) diesel generator. This would replace the current standby system which powers only essential loads, including emergency lighting, instrument air compressors, aircraft warning lights, and some miscellaneous electrically powered shutdown equipment.

SWEPI also proposes to upgrade platform lighting to meet or exceed API Recommended Practice 14-F levels of illumination. These modifications will include connecting sufficient lighting circuits to the standby power system.



#### 1.1.5 Modification of Communication System

Presently, platform communications are carried over eight hardwire telephone lines integrated into both of the power cables and over FCC-approved FM band two-way radios allow communication with shore, boats, helicopters, and other platforms. SWEPI proposes to upgrade the system to provide both area-to-area phone-type party lines and general intercom service. Several new speaker stations will also be installed to enhance the communications system.

SWEPI is considering the addition of a microwave communications dish on the platform. A microwave system may be desired to provide communications capacity not only for Platform Emmy's needs, but also for SWEPI's Beta Project, including Platform Elly, Platform Ellen, and Platform Eureka. The Beta Project is currently channeled through microwave equipment located in the Domínguez Hills.

#### 1.1.6 Modification of Deck Drainage

All drain water from the upper decks, including spillage, rainwater, vessel drains, etc., is to be gathered by gravity into drain lines which will flow into a single sump tank located in the lower deck. Drainage from the lower deck and the satellite deck will remain unchanged. Lower deck drainage will continue to be gathered to the 350-gallon closed drain vessel suspended below the lower deck. From this vessel, it will be pumped to the sump tank on the lower deck. The fluids will then be pumped into the bulk fluids line and taken to shore. No changes will be necessary or made to onshore facilities as a result of the proposed modernization of Platform Emmy.

#### 1.1.7 Modification of Sanitary Waste System

Relocation of the crew quarters/office building to the satellite platform necessitates modifications to the existing sanitary waste system. In order to use space more efficiently and to minimize sewage handling on the platform, SWEPI proposes to install a new state-of-the-art, packaged, electrocatalytic sewage treatment unit on the satellite platform. This unit will be adequate to handle the permanent crew capacity on a continuous basis, as well as peak capacities during construction.

Discharge of effluent to the ocean which meets water quality regulations will be achieved through a disposal caisson. SWEPI intends to apply for a modification to the existing platform NPDES discharge permit for these changes.

#### 1.1.8 Oil Spill Contingency Plan

SWEPI, in a process separate from the proposed project, is in the process of revising its Spill Prevention, Control and Countermeasure/Oil Spill Contingency Plan for its Huntington Beach leases. SWEPI will begin operating under the new plan as soon as the appropriate approvals are obtained. Changes on the platform will not alter SWEPI's plans other than to necessitate minor updates to referenced vessel capacities, etc..

#### 1.1.9 Modification of Platform Safety Systems

With the exception of minor repiping and relocation of certain pieces of safety equipment due to new system layouts, modifications to the safety systems will be limited to the emergency shutdown system. The new emergency shutdown system incorporates a new pneumatic fusible plug loop and emergency shut down (ESD) panel. Controls within the fusible plug loop are to be provided to open proper deluge valves, initiate the proper platform shutdown, and to interface with the existing combustible gas detection system. The new system is designed to consolidate and improve platform emergency shutdown capabilities and procedures.

New emergency shutdown stations will be added to the platform and a complete fusible plug loop system will be run throughout the platform as required. The fusible plug loop system is a fire suppression system which is constantly under pressure. The system operates when the fusible plug (a metal plug which melts at a certain temperature) fails and deluges the fire. The heat detectors within the drain tank area are also slated for removal and replacement with fusible plug loops.

All flowline high/low pressure sensors and well shutdown solenoids are to be relocated centrally to a new solenoid valve panel.

It is proposed that the existing annunciator and relay panel be relocated to the satellite platform. It must therefore be rewired to interface with the panels described above as well as to interface with any new

equipment. Also, the annunciator and relay panel must be rewired to provide first-out shutdown logic as outlined by the Safety Analysis Function Evaluation (SAFE) charts as outlined in API Recommended Practice 14-C.

## 2.1

### CONSTRUCTION

Construction activities for the Platform Emmy upgrade are divided into four phases:

- o Preconstruction activities
- o Transportation and installation
- o Facilities hookup
- o Checkout

Offshore preconstruction activities are required to prepare the facility for the impending modifications. Prior to arrival of the new equipment modules, existing systems must be modified to complement the new installations and to minimize total shut-in time for the existing facility. Production will be shut-in just prior to the arrival of the equipment transportation and derrick barges.

Preconstruction activities include onshore fabrication of new modules (including quarters, helideck, and electrical control room) and individual equipment items (pump skids, tanks, etc.). These modules are to be transported to the offshore site and installed on the facility by derrick barges.

Transportation and installation activities include movement of all equipment and modules from the shore to Platform Emmy for installation. When all new equipment and modules have been installed, they will be hooked up to the existing facility.

Once hookup is completed, pre-startup checkouts will be performed on all process and utility systems including piping, electrical, and instrumentation subsystems. These checks are conducted to ensure that the facility is complete and operationally ready for restart. The facility will then be slowly brought up to its present production capacity by sequentially restarting individual producing wells.

## 2.2 SCHEDULE

A simplified construction schedule for both onshore and offshore phases of the Platform Emmy upgrade project is presented in Figure 2-1. The complete schedule shows onshore equipment and structural fabrication will be performed during a 10-month period. Peak offshore construction activity is scheduled for May through August 1988, with completion scheduled for September 1988.

## 2.3 MANPOWER

The anticipated offshore work force is presented in Table 2-1.

## 2.4 EQUIPMENT

Pre-installation preparatory work and final module hookup requires welding machines, utility air compressors, platform cranes, supply boats, and helicopters.

SWEPI plans to use standard offshore construction equipment during installation of the modules. The equipment is planned for use 7 days per week for the duration of the construction efforts which is estimated to last 14 to 16 weeks. Installation equipment is to operate continuously (24 hours per day, 7 days per week) while equipment setting and tie-down are in progress. Equipment setting and tie-down are scheduled for a maximum of one week, but could be completed as quickly as two days, weather permitting.

Since the platform has existing electrical power supply from shore, it is anticipated that all construction power requirements can be drawn from the onshore power supply. If utilizing the platform power supply proves impractical, electrical generators can be brought onto the platform to supply construction power needs.

## 2.5 WASTE MATERIALS

General solid and liquid waste materials are to be stored in appropriate containers and transported to shore for disposal at approved sites.

Approximately 15 barrels of waste hydrotest water is estimated to remain after the hydrotest activities. The water will be tested to ensure compliance with toxicity limitations and shipped to shore for processing. If the test shows noncompliance, the waste will be collected in a tank and transported to shore for disposal at an approved site.

Consumable material used in the installation phase is expected to include diesel fuel, welding rods, oxygen, acetylene, fresh water, food, and miscellaneous personal items. This material is to be purchased locally and transported by supply boats to Platform Emmy from the most convenient port.

## 2.6

### TRANSPORTATION







Equipment deck and derrick barges will be used to transport the new packages to Platform Emmy, and to haul off existing equipment for salvage. The supply boat is scheduled to run to port every other day. It is estimated that the supply boat and helicopter will operate approximately 4 hours per day.

Transportation will also be required for personnel/crew change outs, and with delivery of materials and supplies to support the hookup effort. During final hookup, it is anticipated that the crews will either be temporarily quartered on the platform, or that crew changes will be arranged during daylight hours via helicopter. Due to the platforms proximity to shore, the use of a crew boat is not anticipated at this time.

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**Table 2-1**  
**ANTICIPATED CONSTRUCTION WORK FORCE**

| <u>Phase<br/>of Construction</u>   | <u>Duration of<br/>Phase (weeks)</u> | <u>Crew<br/>Size</u> | <u>Shift Length<br/>(hours)</u> | <u>Shifts<br/>Per Day</u> |
|------------------------------------|--------------------------------------|----------------------|---------------------------------|---------------------------|
| Preconstruction<br>activities      | 6                                    | 12                   | 12                              | 1                         |
| Transportation and<br>installation | 1                                    | 3                    | 12                              | 2                         |
| Facilities hook up                 | 8                                    | 16                   | 12                              | 2                         |
| Checkout                           | 1.5                                  | 10                   | 12                              | 1                         |

| JOB DESCRIPTION                      | 1988                                                                                  |     |     |     |     |     |     |     |      |     |     |     |
|--------------------------------------|---------------------------------------------------------------------------------------|-----|-----|-----|-----|-----|-----|-----|------|-----|-----|-----|
|                                      | JAN                                                                                   | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEPT | OCT | NOV | DEC |
| ONSHORE MAJOR FABRICATION            |     |     |     |     |     |     |     |     |      |     |     |     |
| MOBILIZE OFFSHORE CONSTRUCTION CREWS |    |     |     |     |     |     |     |     |      |     |     |     |
| PRE-INSTALLATION DEMOLITION          |    |     |     |     |     |     |     |     |      |     |     |     |
| TRANSPORT & INSTALL NEW PACKAGES     |    |     |     |     |     |     |     |     |      |     |     |     |
| OFFSHORE FABRICATION & HOOKUP        |   |     |     |     |     |     |     |     |      |     |     |     |
| CHECKOUT, TESTING & START-UP         |  |     |     |     |     |     |     |     |      |     |     |     |

NOTE: CONSTRUCTION TIMING IS CONTINGENT ON THE RECEIPT OF ALL NECESSARY PERMITS BY APRIL 15, 1988.

Platform Emmy Construction Schedule

**FIGURE**  
**2-1**

ALL IN PAGE  
PAGE 1  
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## ENVIRONMENTAL IMPACT ASSESSMENT CHECKLIST - PART II

Form 13.20 (7/82)

File Ref.: W 40031

## I. BACKGROUND INFORMATION

- A. Applicant: Shell Western Exploration & Production Inc.  
P.O. Box 11164  
Bakersfield, CA 93389
- B. Checklist Date: 01 / 15 / 88
- C. Contact Person: Randall Moory  
 Telephone: (916) 322-7828
- D. Purpose: Modification of Platform Emmy
- E. Location: State oil and gas Lease 425.1; Offshore Huntington Beach  
Orange County,
- F. Description:
- G. Persons Contacted:

## II. ENVIRONMENTAL IMPACTS. (Explain all "yes" and "maybe" answers)

## A. Earth. Will the proposed result in:

Yes Maybe No

- |                                                                                                                                                                                                                    |                          |                          |                                     |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------|--------------------------|-------------------------------------|
| 1. Unstable earth conditions or changes in geologic substructures? . . . . .                                                                                                                                       | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| 2. Disruptions, displacements, compaction, or overcompacting of the soil? . . . . .                                                                                                                                | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| 3. Change in topography or ground surface relief features? . . . . .                                                                                                                                               | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| 4. The destruction, covering, or modification of any unique geologic or physical features? . . . . .                                                                                                               | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| 5. Any increase in wind or water erosion of soils, either on or off the site? . . . . .                                                                                                                            | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| 6. Changes in deposition or erosion of beach sands, or changes in siltation, deposition or erosion which may modify the channel of a river or stream or the bed of the ocean or any bay, inlet, or lake? . . . . . | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| 7. Exposure of all people or property to geologic hazards such as earthquakes, landslides, mudslides, ground failure, or similar hazards? . . . . .                                                                | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |

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 7/84  
 M U G E



|                                                                                                                                                                          | Yes                      | Maybe                               | No                                  |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------|-------------------------------------|-------------------------------------|
| <b>B. Air.</b> Will the proposal result in:                                                                                                                              |                          |                                     |                                     |
| 1. Substantial air emissions or deterioration of ambient air quality?                                                                                                    | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/>            |
| 2. The creation of objectionable odors?                                                                                                                                  | <input type="checkbox"/> | <input type="checkbox"/>            | <input checked="" type="checkbox"/> |
| 3. Alteration of air movement, moisture or temperature, or any change in climate, either locally or regionally?                                                          | <input type="checkbox"/> | <input type="checkbox"/>            | <input checked="" type="checkbox"/> |
| <b>C. Water.</b> Will the proposal result in:                                                                                                                            |                          |                                     |                                     |
| 1. Changes in the currents, or the course or direction of water movements, in either marine or fresh waters?                                                             | <input type="checkbox"/> | <input type="checkbox"/>            | <input checked="" type="checkbox"/> |
| 2. Changes in absorption rates, drainage patterns, or the rate and amount of surface water runoff?                                                                       | <input type="checkbox"/> | <input type="checkbox"/>            | <input checked="" type="checkbox"/> |
| 3. Alterations to the course or flow of flood waters?                                                                                                                    | <input type="checkbox"/> | <input type="checkbox"/>            | <input checked="" type="checkbox"/> |
| 4. Change in the amount of surface water in any water body?                                                                                                              | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/>            |
| 5. Discharge into surface waters, or in any alteration of surface water quality, including but not limited to temperature, dissolved oxygen or turbidity?                | <input type="checkbox"/> | <input type="checkbox"/>            | <input checked="" type="checkbox"/> |
| 6. Alteration of the direction or rate of flow of ground waters?                                                                                                         | <input type="checkbox"/> | <input type="checkbox"/>            | <input checked="" type="checkbox"/> |
| 7. Change in the quantity of ground waters, either through direct additions or withdrawals, or through interception of an aquifer by cuts or excavations?                | <input type="checkbox"/> | <input type="checkbox"/>            | <input checked="" type="checkbox"/> |
| 8. Substantial reduction in the amount of water otherwise available for public water supplies?                                                                           | <input type="checkbox"/> | <input type="checkbox"/>            | <input checked="" type="checkbox"/> |
| 9. Exposure of people or property to water-related hazards such as flooding or tidal waves?                                                                              | <input type="checkbox"/> | <input type="checkbox"/>            | <input checked="" type="checkbox"/> |
| 10. Significant changes in the temperature, flow or chemical content of surface thermal springs?                                                                         | <input type="checkbox"/> | <input type="checkbox"/>            | <input checked="" type="checkbox"/> |
| <b>D. Plant Life.</b> Will the proposal result in:                                                                                                                       |                          |                                     |                                     |
| 1. Change in the diversity of species, or number of any species of plants (including trees, shrubs, grass, crops, and aquatic plants)?                                   | <input type="checkbox"/> | <input type="checkbox"/>            | <input checked="" type="checkbox"/> |
| 2. Reduction of the numbers of any unique, rare or endangered species of plants?                                                                                         | <input type="checkbox"/> | <input type="checkbox"/>            | <input checked="" type="checkbox"/> |
| 3. Introduction of new species of plants into an area, or in a barrier to the normal replenishment of existing species?                                                  | <input type="checkbox"/> | <input type="checkbox"/>            | <input checked="" type="checkbox"/> |
| 4. Reduction in acreage of any agricultural crop?                                                                                                                        | <input type="checkbox"/> | <input type="checkbox"/>            | <input checked="" type="checkbox"/> |
| <b>E. Animal Life.</b> Will the proposal result in:                                                                                                                      |                          |                                     |                                     |
| 1. Change in the diversity of species, or numbers of any species of animals (birds, land animals including reptiles, fish and shellfish, benthic organisms, or insects)? | <input type="checkbox"/> | <input type="checkbox"/>            | <input checked="" type="checkbox"/> |
| 2. Reduction of the numbers of any unique, rare or endangered species of animals?                                                                                        | <input type="checkbox"/> | <input type="checkbox"/>            | <input checked="" type="checkbox"/> |
| 3. Introduction of new species of animals into an area, or result in a barrier to the migration or movement of animals?                                                  | <input type="checkbox"/> | <input type="checkbox"/>            | <input checked="" type="checkbox"/> |
| 4. Deterioration to existing fish or wildlife habitat?                                                                                                                   | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/>            |
| <b>F. Noise.</b> Will the proposal result in:                                                                                                                            |                          |                                     |                                     |
| 1. Increase in existing noise levels?                                                                                                                                    | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/>            |
| 2. Exposure of people to severe noise levels?                                                                                                                            | <input type="checkbox"/> | <input type="checkbox"/>            | <input checked="" type="checkbox"/> |
| <b>G. Light and Glare.</b> Will the proposal result in:                                                                                                                  |                          |                                     |                                     |
| 1. The production of new light or glare?                                                                                                                                 | <input type="checkbox"/> | <input type="checkbox"/>            | <input checked="" type="checkbox"/> |
| <b>H. Land Use.</b> Will the proposal result in:                                                                                                                         |                          |                                     |                                     |
| 1. A substantial alteration of the present or planned land use of an area?                                                                                               | <input type="checkbox"/> | <input type="checkbox"/>            | <input checked="" type="checkbox"/> |
| <b>I. Natural Resources.</b> Will the proposal result in:                                                                                                                |                          |                                     |                                     |
| 1. Increase in the rate of use of any natural resources?                                                                                                                 | <input type="checkbox"/> | <input type="checkbox"/>            | <input checked="" type="checkbox"/> |
| 2. Substantial depletion of any nonrenewable resources?                                                                                                                  | <input type="checkbox"/> | <input type="checkbox"/>            | <input checked="" type="checkbox"/> |

J. *Risk of Upset.* Does the proposal result in:

Yes Maybe No

1. A risk of an explosion or the release of hazardous substances (including, but not limited to, oil, pesticides, chemicals, or radiation) in the event of an accident or upset conditions? ☐ ☒ ☐
2. Possible interference with emergency response plan or an emergency evacuation plan? ☐ ☐ ☒

K. *Population.* Will the proposal result in:

1. The alteration, distribution, density, or growth rate of the human population of the area? ☐ ☐ ☒

L. *Housing.* Will the proposal result in:

1. Affecting existing housing, or create a demand for additional housing? ☐ ☐ ☒

M. *Transportation/Circulation.* Will the proposal result in:

1. Generation of substantial additional vehicular movement? ☐ ☐ ☒
2. Affecting existing parking facilities, or create a demand for new parking? ☐ ☐ ☒
3. Substantial impact upon existing transportation systems? ☐ ☐ ☒
4. Alterations to present patterns of circulation or movement of people and/or goods? ☐ ☐ ☒
5. Alterations to waterborne, rail, or air traffic? ☐ ☒ ☐
6. Increase in traffic hazards to motor vehicles, bicyclists, or pedestrians? ☐ ☐ ☒

N. *Public Services.* Will the proposal have an effect upon, or result in a need for new or altered governmental services in any of the following areas:

1. Fire protection? ☐ ☐ ☒
2. Police protection? ☐ ☐ ☒
3. Schools? ☐ ☐ ☒
4. Parks and other recreational facilities? ☐ ☐ ☒
5. Maintenance of public facilities, including roads? ☐ ☐ ☒
6. Other governmental services? ☐ ☐ ☒

O. *Energy.* Will the proposal result in:

1. Use of substantial amounts of fuel or energy? ☐ ☐ ☒
2. Substantial increase in demand upon existing sources of energy, or require the development of new sources? ☐ ☐ ☒

P. *Utilities.* Will the proposal result in a need for new systems, or substantial alterations to the following utilities:

1. Power or natural gas? ☐ ☐ ☒
2. Communication systems? ☐ ☐ ☒
3. Water? ☐ ☐ ☒
4. Sewer or septic tanks? ☐ ☐ ☒
5. Storm water drainage? ☐ ☐ ☒
6. Solid waste and disposal? ☐ ☐ ☒

Q. *Human Health.* Will the proposal result in:

1. Creation of any health hazard or potential health hazard (excluding mental health)? ☐ ☐ ☒
2. Exposure of people to potential health hazards? ☐ ☐ ☒

R. *Aesthetics.* Will the proposal result in:

1. The obstruction of any scenic vista or view open to the public, or will the proposal result in the creation of an aesthetically offensive site open to public view? ☐ ☒ ☐

S. *Recreation.* Will the proposal result in:

1. An impact upon the quality or quantity of existing recreational opportunities? ☐ ☐ ☐

|               |        |
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**I. Cultural Resources.**

Yes Maybe No

1. Will the proposal result in the alteration of or the destruction of a prehistoric or historic archeological site? ☐ ☐ ☒
2. Will the proposal result in adverse physical or aesthetic effects to a prehistoric or historic building, structure, or object? ☐ ☐ ☒
3. Does the proposal have the potential to cause a physical change which would affect unique ethnic cultural values? ☐ ☐ ☒
4. Will the proposal restrict existing religious or sacred uses within the potential impact area? ☐ ☐ ☒

**U. Mandator: Findings of Significance.**

1. Does the project have the potential to degrade the quality of the environment, reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory? ☐ ☐ ☒
2. Does the project have the potential to achieve short-term, to the disadvantage of long-term, environmental goals? ☐ ☐ ☒
3. Does the project have impacts which are individually limited, but cumulatively considerable? ☐ ☐ ☒
4. Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly? ☐ ☐ ☒

**III. DISCUSSION OF ENVIRONMENTAL EVALUATION (See Comments Attached)**

**IV. PRELIMINARY DETERMINATION**

On the basis of this initial evaluation:

- ☐ I find the proposed project COULD NOT have a significant effect on the environment, and a **NEGATIVE DECLARATION** will be prepared.
- ☐ I find that although the proposed project could have a significant effect on the environment, there will not be a significant effect in this case because the mitigation measures described on an attached sheet have been added to the project. A **NEGATIVE DECLARATION** will be prepared.
- ☐ I find the proposed project MAY have a significant effect on the environment, and an **ENVIRONMENTAL IMPACT REPORT** is required.

Date: / - /

For the State Lands Commission

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II.A.7

The installation of additional decks to the existing satellite platform may change how the satellite platform jacket responds to seismic shaking. At this time it is unknown how the new platform configuration will respond.

The new design will have to be evaluated and approved by a structural engineer registered by the State of California. This evaluation will assess the response of the structure to seismic shaking. In the event it is determined that the satellite platform would sustain disabling damage, a new design will be required. If such new design is substantially changed from the existing proposal, additional environmental analysis will be necessary.

II.B.1

Air emissions associated with the proposed Platform Emmy modifications are discussed in this section. During the construction phase, minor emissions will be generated by barge transport of equipment modules and increased deliveries of supplies and personnel via supply boat and helicopter. The existing diesel platform crane will also be used to unload the vessels and to move equipment and supplies about the platform. Most of the same equipment is used to service the existing operational platform, such that only small incremental increases in emissions will occur intermittently during the 14 to 16 week period while the platform is shut in for construction. All other tools and equipment utilized on the platform to complete the proposed modifications will operate on electric power.

It is likely that future operational emissions associated with the platform following the proposed upgrades are expected to decrease slightly relative to present-day facility operations due to the removal of a 700 hp diesel powered mud pump.

All equipment on the platform will operate in accordance with SCAQMD requirements.

Construction Phase Emissions: The major phases for the proposed platform modification will consist of:

- (1) preconstruction activities;
- (2) transportation and installation of new equipment;
- (3) facilities hookup; and

(4) checkout of new systems.

Only the second category of construction activity, transportation, and installation of new equipment will generate appreciable air emissions. These emissions and the corresponding construction equipment are summarized in Tables 3.2-1 and 3.2-2. These tables also indicate their usage. On the basis of this information, the air quality effects associated with the proposed modifications are insignificant.

Operational Emissions: Operations on Platform Emmy following completion of the proposed modifications will be nearly identical, in terms of pollutant emissions, to those of the present platform. The only equipment changes will be:

- (1) retirement of an existing 700-hp diesel-fired mud pump;
- (2) the addition of a second 200-hp diesel platform crane; and
- (3) replacement of the 50kw stand by generator with a 150kw generator.

Air quality factors for the proposed crane emissions, the stack parameters and emission rates are as follows:

|                       |                  |
|-----------------------|------------------|
| Stack height:         | 98'2" above MLLW |
| Stack diameter:       | 4"               |
| Exhaust temperature   | 16200            |
| Exhaust exit velocity | 142.7 ft/sec     |

Assuming a load factor of 40% for the crane operations, the emission rates are as follows:

|                                                                                         |                  |
|-----------------------------------------------------------------------------------------|------------------|
| NOx: 2.46 lb/hr;                                                                        | CO: 0.53 lb/hr;  |
| THC: 0.20 lb/hr;                                                                        | ROC: 0.18 lb/hr; |
| SO <sub>2</sub> 0.17 lb/hr;                                                             | TSP: 0.17 lb/hr. |
| SOURCE: EPA Document AP-42, Table-3.3-1,<br>"Gasoline and Diesel Industrial Equipment." |                  |

Under existing SCAQMD Rule 219, the 200 hp diesel platform crane is exempt from regulation, but could become regulated in mid-1988. All other existing equipment will continue to operate in accordance with existing SCAQMD requirements.

As such, the proposed modifications will produce no adverse air quality impacts during the operational phase; in fact, a net air quality impact may result because of the removal of the 200 hp mud pump.

- II.C.5 Potential discharge of diesel fuel into the marine environment from an accidental spill from a construction vessel could result in impacts to marine water quality. The probability of a significant diesel spill from a construction vessel is, however, unlikely. Further, the oil spill contingency plan and existing on site material would provide for rapid containment and clean up if such a spill occurred.
- II.E.4 Deterioration of fish habitat is possible in the event of an diesel oil spill from a construction vessel. As stated before, this impact is of low probability and its significance substantially reduced because any spill could be contained and cleaned up rapidly.
- II.F.1 Increased noise would occur on the platform and onshore fabrication areas due to construction activities. These increased noises would not be significant, however, since they could not be heard above those sounds produced by existing operations on the platform and fabrication areas.
- II.J.1 The construction activity poses the increased risk of a diesel oil spill because of fuel on the construction vessels. As previously stated, the probability of a spill from a construction vessel is considered unlikely. Further, any spill would be addressed immediately because of the oil spill containment capabilities already associated with platform operations. In addition, the proposed project will be addressed in SWEPI's updated oil spill contingency plan.
- II.M.5 Marine traffic support activities associated with the construction phase of the proposed platform modifications will include:
- Construction phase - (14 to 16 weeks)
- Derrick barge and tugs - Two round trips total
- Supply boat - An additional 2 to 3 round trips per week over current operations

Helicopter

- An increase of 5 round trips per day over current operations

After construction, marine traffic will revert to current operational levels. As such, there will be no permanent, long-term effects attributable to the platform modifications.

These increased operations should have no significant impact on existing vessel traffic in the area.

II.R.1

The proposed modifications of Emmy will add two new decks to the satellite platform and a second platform crane. A photo simulation analysis of the modifications as proposed was done to compare the existing view of the platform with the modified platform. Four vantage points were used to evaluate the aesthetic impact. One view was from Bolsa Chica Beach State Park due North from the platform, the second view was the closest onshore location from the platform, the third was on the beach due east of the platform, and the fourth was from the Huntington Beach pier. The four view locations are shown on the attached figure.

The proposed modifications to the platform were readily visible only from the location due East of the platform and from Huntington Beach Pier. From each of these locations one could observe that the satellite platform had increased in size. However, this increase is not considered significant due to the presence of the existing main platform directly adjacent to the satellite and to other platforms visible from these two vantage points.

II.S.1

An impact to the quality of recreation is possible in the event that diesel oil from a construction vessel reaches the beach. Such an oil spill is considered unlikely and the probability of it reaching shore is even more remote because of the presence of existing oil spill containment capabilities on the platform.

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Table 3.2-1

# PROJECTED CONSTRUCTION PHASE INCREMENTAL EQUIPMENT USAGE

| <u>Equipment</u>           | <u>Power<br/>Rating<br/>(hp)</u> | <u>Fuel<br/>Type</u> | <u>Present Usage<br/>for Normal<br/>Platform Operations</u> | <u>Anticipated<br/>Usage During<br/>Construction</u> | <u>Incremental<br/>Usage During<br/>Construction</u> |
|----------------------------|----------------------------------|----------------------|-------------------------------------------------------------|------------------------------------------------------|------------------------------------------------------|
| Derrick Barge              | 8,000                            | Diesel               | not used                                                    | 2 trips total<br>8 hrs/trip                          | 2 trips<br>8 hrs/trip                                |
| Tug                        | 900                              | Diesel               | not used                                                    | 2 trips total<br>8 hrs/trip                          | 2 trips<br>8 hrs/trip                                |
| Tug                        | 2,000                            | Diesel               | not used                                                    | 2 trips total<br>8 hrs/trip                          | 2 trips<br>8 hrs/trip                                |
| Supply Boat                | 2,250                            | Diesel               | 4-5 trips/week<br>2 hrs/trip                                | 1 trip/day<br>2 hrs/trip                             | 2-3 trips/day<br>for 105 days*                       |
| Helicopter                 | 2-engine<br>Bell 212             | Diesel               | 10 trips/day                                                | 15 trips/day                                         | 5 trips/day<br>for 105 days*                         |
| Existing<br>Platform Crane | 187                              | Diesel               | 1.5 hrs/day                                                 | 2 hrs/day                                            | 0.5 hrs/day<br>for 105 days*                         |

\*Total construction equipment usage based on 7-day work week over 15-week period.



Table 3.2-2

**PROJECTED TOTAL AND INCREMENTAL POLLUTANT EMISSIONS FOR  
PLATFORM EMMY MODIFICATIONS  
CONSTRUCTION PHASE**

| Equipment                  | Maximum Hourly Emissions<br>(lb/hr) |                 |       |       |        | Total Construction Period Emissions<br>(lb) |                 |                |                |                 | Increase in Emissions Due to<br>Construction (lb) |                 |              |                |                 | Emission<br>Factor<br>Reference |
|----------------------------|-------------------------------------|-----------------|-------|-------|--------|---------------------------------------------|-----------------|----------------|----------------|-----------------|---------------------------------------------------|-----------------|--------------|----------------|-----------------|---------------------------------|
|                            | SO <sub>2</sub>                     | NO <sub>x</sub> | PM    | VOC   | CO     | SO <sub>2</sub>                             | NO <sub>x</sub> | PM             | VOC            | CO              | SO <sub>2</sub>                                   | NO <sub>x</sub> | PM           | VOC            | CO              |                                 |
| Derrick Barge              | 7.5                                 | 62.4            | 6.2   | 1.6   | 16.2   | 120.0                                       | 998.4           | 99.2           | 25.6           | 259.2           | 120.0                                             | 998.4           | 99.2         | 25.6           | 259.2           | a                               |
| 900 Hp Tug                 | 0.9                                 | 3.7             | 0.7   | 0.3   | 1.4    | 14.4                                        | 59.2            | 11.2           | 4.8            | 22.4            | 14.4                                              | 59.2            | 11.2         | 4.8            | 22.4            | b                               |
| 2000 Hp Tug                | 2.1                                 | 15.9            | 1.6   | 0.9   | 6.2    | 33.6                                        | 254.4           | 25.6           | 14.4           | 99.2            | 33.6                                              | 254.4           | 25.6         | 14.4           | 99.2            | b                               |
| Supply Boat                | 2.1                                 | 17.4            | 1.6   | 1.6   | 3.0    | 441.0                                       | 3,654.0         | 336.0          | 336.0          | 630.0           | 189.0                                             | 1,566.0         | 144.0        | 144.0          | 270.0           | c                               |
| Helicopter<br>(Bell 212)   | 0.4**                               | 1.1**           | 0.5** | 0.9** | 11.4** | 1,260.0                                     | 3,465.0         | 1,575.0        | 2,835.0        | 35,910.0        | 420.0                                             | 1,155.0         | 525.0        | 945.0          | 11,970.0        | d                               |
| Existing<br>Platform Crane | 0.2                                 | 2.9             | 0.2   | 0.2   | 0.6    | 42.0                                        | 609.0           | 42.0           | 42.0           | 126.0           | 10.5                                              | 152.3           | 10.5         | 10.5           | 31.5            | e                               |
| <b>Total***</b>            |                                     |                 |       |       |        | <b>1,911.0</b>                              | <b>9,040.0</b>  | <b>2,089.0</b> | <b>3,257.8</b> | <b>37,046.8</b> | <b>787.5</b>                                      | <b>4,185.3</b>  | <b>815.5</b> | <b>1,144.3</b> | <b>12,652.3</b> |                                 |

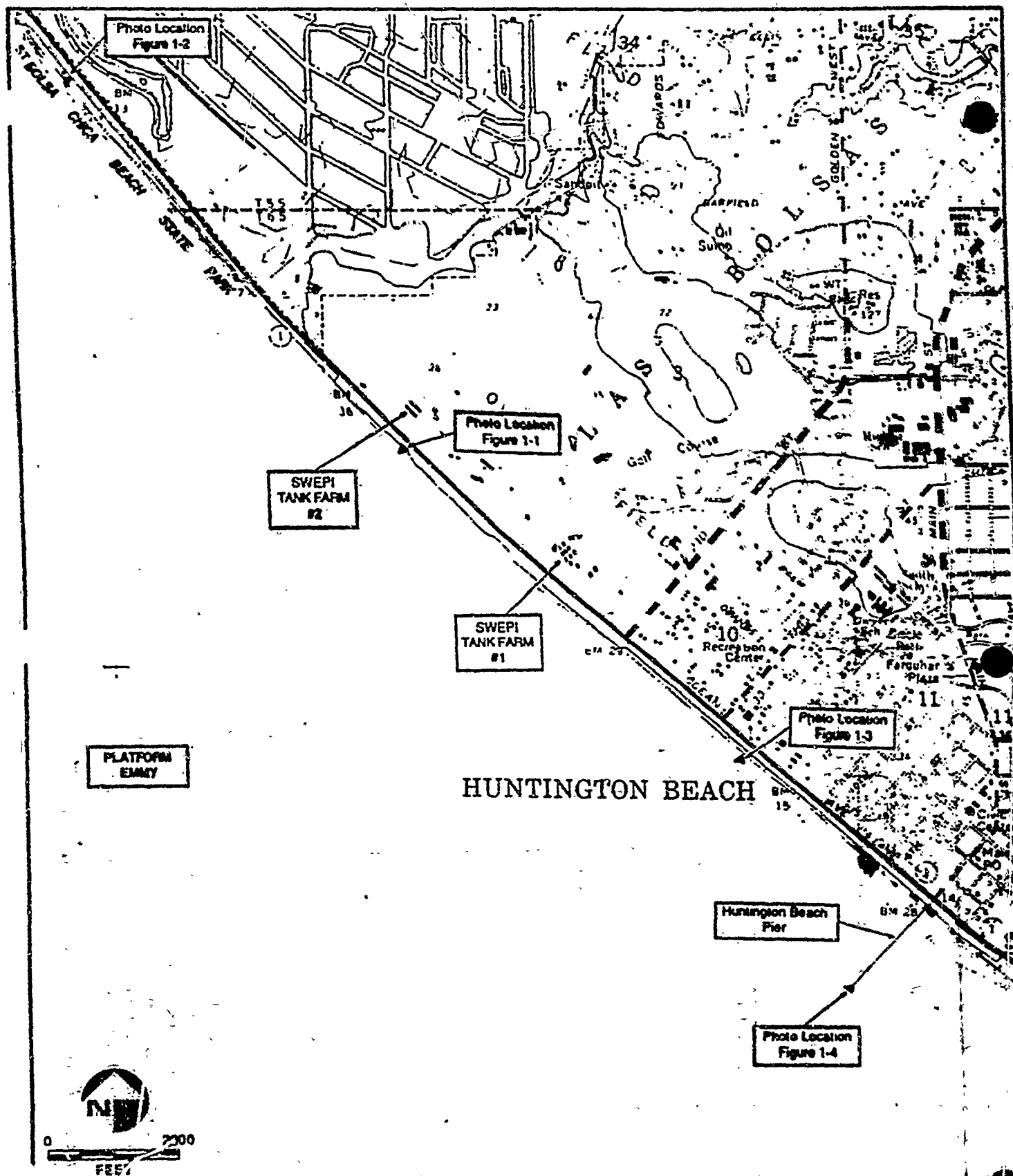
\* Emission increases are calculated as the difference between construction phase emissions and the emissions that would occur due to operation of the existing platform over a 15-week period.

\*\* Emissions for helicopter are expressed in terms of lb per landing-takeoff cycle, rather than lb/hr.

\*\*\* Maximum hourly emissions will not occur at the same time for all equipment. Therefore, maximum hourly emissions are not totaled.

- Derrick barge emission factors taken from U.S. EPA Document AP-42, Compilation of Air Pollutant Emission Factors, Fourth Edition, Table 3.4-1, "Emission Factors for Stationing Large-Bore Diesel and Dual Fired Engines." A full power fuel consumption rate of 208 gal/hr and 8,000 hp full power rating were assumed.
- Tug boat emission factors for 2,000 hp and 900 hp tugs were taken from AP-42, Table II-3.3, "Diesel Vessel Emission Factors by Operating Mode." Factors corresponding to 2/3 power setting (maneuvering) were used.
- Supply boat emission factors were taken from AP-42, Table II-3.3, "Diesel Vessel Emission Factors for Operating Mode." Factors for 2500 hp with a 2/3 power setting (maneuvering) were used.
- Helicopter emission factors were taken from AP-42, Table 3.2.1-3, "Emission Factors per Aircraft Landing-Takeoff Cycle." Factors for 2-engine helicopters were used.
- Platform crane emission factors were taken from AP-42, Table 3.3-1, "Emission Factors for Gasoline and Diesel Powered Industrial Equipment."

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Photographic Vantage Points

FIGURE

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