CALIFORNIA COASTAL COMMISSION

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TO: Coastal Commissioners and Interested Parties

- FROM: Jaime Kooser, Deputy Director, Energy, Ocean Resources and Water Quality Division Alison Dettmer, Manager, Energy & Ocean Resources Unit Moira McEnespy, Analyst, Energy & Ocean Resources Unit
- SUBJECT: Status Report on the Proposed National Pollutant Discharge Elimination System ("NPDES") General Permit for Offshore Oil and Gas Exploration, Development and Production Operations off Southern California

NOTE - This is an informational item only; no formal action is needed. It is recommended that interested public be afforded an opportunity to comment.

1.0 Introduction and Background

1.1 Overview of the NPDES Permit Program

Discharges into navigable waters of the United States are regulated under the federal Clean Water Act ("CWA"). CWA Sections 402 and 301(a) authorize the EPA to administer the NPDES permit program which prohibits discharges of pollutants to surface waters except in compliance with the terms and conditions of an NPDES permit. NPDES permits issued by the EPA under CWA Section 402 are subject to the consistency provisions of the federal Coastal Zone Management Act ("CZMA") which state:

[A]ny applicant for a required federal license or permit to conduct an activity, in or outside the coastal zone, affecting any land or water use or natural resource of the coastal zone of that state shall provide...a certification that the proposed activity complies with the enforceable polices of the state's approved program and that such activity will be conducted in a manner consistent with the program. $(CZMA \ 307(c)(3)(A))$

1.2 Summary of Proposed Permit

The U.S. Environmental Protection Agency, Region 9, ("EPA"¹) is proposing to issue in early 2000 a new general NPDES permit (No. CAG280000) for discharges from oil and gas

¹ Unless otherwise specified, the term "EPA" refers to Region 9.

exploration, development and production operations in federal waters offshore California. When issued, the proposed general permit will establish effluent limitations, prohibitions, and other conditions on discharges from facilities in the general permit area.

A total of 23 oil and gas platforms on the Outer Continental Shelf ("OCS") offshore California are currently active.² Discharges from 14 of the 23 platforms are regulated by a general NPDES permit (No. CA0110516) that the EPA issued in 1982; the remaining nine platforms are covered by eight individual NPDES permits³ (see Table 1, "NPDES Permits: California OCS Oil & Gas Platforms").⁴ The proposed new general permit will regulate discharges from all 23 existing platforms plus discharges from exploration vessels.

1.3 More Stringent Standards

In 1993, the EPA promulgated more stringent discharge standards: *Effluent Limitations Guidelines for the Oil and Gas Extraction Point Source Category, Offshore Subcategory* [58 *Federal Register 12454, March 4, 1993*]. Most notably, the 1993 guidelines limit allowable discharges of oil and grease⁵ from 72 mg/l daily maximum and 48 mg/l monthly average (72/48 mg/l) to 42/29 mg/l. Furthermore, the technology used to reduce oil and grease to these new levels captures and reduces discharges of other pollutants as well.

The discharges from only five of the 23 oil and gas platforms are subject to these more stringent guidelines. The new general permit will, most importantly, make the 18 other existing facilities subject to the more stringent 1993 effluent limitations guidelines. Hence, issuance of the new general permit will lead to significantly improved water quality.

1.4 Compliance Monitoring

A major issue associated with the development of the new general permit is whether or not the permit should provide for independent compliance monitoring (also called "third-party monitoring") of pollutant discharges from offshore platforms, and, if so, which entities or agencies should be responsible for funding and conducting said monitoring. The Commission staff is working to address this issue.

² Platforms A, B, C, Edith, Ellen and Elly (two separate platforms connected by a bridge), Eureka, Gail, Gilda, Gina, Grace, Habitat, Harmony, Harvest, Henry, Heritage, Hermosa, Hillhouse, Hidalgo, Hogan, Hondo, Houchin, and Irene. Although there are 23 platforms, there are only 22 permitted facilities because discharges from Ellen and Elly are authorized under one individual NPDES permit.

³ Note that discharges from Platforms Ellen and Elly, two separate platforms connected by a bridge, are authorized under one individual NPDES permit.

⁴ All of these existing permits have expired. However, pursuant to 40 CFR § 122.6 and 5 USC § 558(c), the EPA has on an annual basis administratively extended each such expired permit.

⁵ "Oil and grease" is both a conventional pollutant subject to "best conventional pollution control technology" ("BCT") and an indicator of toxic pollutants, subject to "best available pollution control technology economically achievable" ("BAT").

2.0 California Coastal Commission Consistency Review Authority

The Coastal Commission received its federal consistency review authority on August 31, 1978. Chapter 11 of the California Coastal Management Program ("CCMP") lists NPDES permits issued by the EPA as an activity requiring a consistency concurrence from the State [see also 14 CCR § 13660.1(a)]. The EPA will submit a consistency certification for the proposed general permit to the Coastal Commission for review. The proposed new general NPDES permit will become effective if and when the Coastal Commission concurs with the EPA's consistency certification. The concurrence, if granted, will be a "general" concurrence as that term is defined and used in Section 930.53(c) of the Coastal Zone Management Act ("CZMA") regulations [15 CFR § 930.53].

To concur with NPDES consistency certifications, the Commission must find the proposed activities consistent with the enforceable policies of the CCMP; in particular, consistent with the following standards:

- The Chapter 3 policies (sections 30200 30265.5) of the California Coastal Act ("CCA") (*California Public Resources Code* ("*PRC*"), *Division 20*), incorporated into and made a part of the CCMP by CCA Section 30008;
- The enforceable policies of the State Water Resources Control Board's "California Ocean Plan" (also known as the "Water Quality Control Plan for Ocean Waters of California" or "Ocean Plan"), incorporated into and made a part of the CCMP by section 307(f) of the CZMA (16 USC § 1456(f)); and
- Section 13142.5 of the California Water Code, which provides additional water quality policies relating to the coastal marine environment,⁶ incorporated into the CCMP by CCA Section 30412(a)).

3.0 Coastal Commission Consistency Review of Past NPDES Permits

The Coastal Commission did not review individual NPDES permits for Platforms Hogan and Houchin because they were installed in 1967 and 1968, respectively, before the Commission had federal consistency review authority. The Commission also did not review the 1982 general permit.

In January, 1984, the Coastal Commission did, however, concur with a consistency certification to extend the 1982 general permit's expiration date for an additional six months, through June, 1984 (CC-26-83).

In February, 1986, the Coastal Commission objected to consistency certifications for proposed new general NPDES permits nos. CAG280622 (development/production operations) and CAG280605 (exploratory operations) (CC-38-85/CC-39-85). The Commission based its objection on findings that the permits:

⁶ Specifically, Section 13142.5 addresses, among other things, treatment of wastewater discharges to protect and restore beneficial uses of receiving waters, and conducting baseline studies of the marine system.

- provided insufficient protection of site-specific, sensitive marine resources;
- did not comply with all state water quality standards or fully explain reasons for excluding feasible standards;
- provided inadequate monitoring procedures to control discharges and ineffective testing methods to detect levels of discharge toxicity;
- provided inadequate enforcement measures to ensure permit compliance; and
- did not mitigate potential adverse impacts to coastal zone resources to the maximum extent feasible.

The 1986 general permits were thus never issued, and the EPA did not propose a revised or new version of a general permit until now. Consequently, the existing individual permits and the 1982 general permit were never superceded,⁷ and new sources were handled via new individual permits.

Since 1986, the Commission has concurred with consistency certifications for individual NPDES permits for the following five platforms:

- Exxon Platforms Harmony and Heritage (CC-68-92, 8/12/92, for "Phase I" discharges; and CC-85-92, 4/14/93, for "Phase II" discharges);⁸
- Chevron Platform Gail (CC-68-93, 2/17/94);
- Chevron Platform Grace (CC-65-94, 11/15/94); and
- Torch Platform Irene (*CC-45-94*, *11/15/94*).

These individual NPDES permits include the new, more stringent discharge standards promulgated in the EPA's 1993 *Effluent Limitations Guidelines*.

Finally, the Commission has not concurred in the EPA's 1993 renewal of the individual permit for Platforms Ellen and Elly⁹ because neither the operator nor the EPA to date has submitted to the Commission a consistency certification. Hence, the NPDES permit renewal is not effective. At the present time, the operator is not discharging.

The Commission's Consistency Review actions are summarized in Table 2, "Consistency Review Comparisons."

⁷ Although these existing permits have expired, pursuant to 40 CFR § 122.6 and 5 USC § 558(c), the EPA has on an annual basis administratively extended each such expired permit.

⁸ Discharges from Platforms Harmony and Heritage are permitted under two individual NPDES permits. The Coastal Commission conducted its consistency review, however, for both platforms together, but considered the discharges from both platforms in two phases.

⁹ Discharges from Platforms Ellen (drilling platform) and Elly (processing platform), two separate platforms connected by a bridge, are authorized by one individual NPDES permit.

4.0 Compliance (Third-Party) Monitoring

4.1 Existing Scheme

The NPDES program is based on self-monitoring and unannounced spot checks by agency personnel. In November, 1989, the EPA and the Minerals Management Service ("MMS") signed a Memorandum of Understanding ("MOU") to improve coordination in, among other things, ensuring NPDES permit compliance. The MOU provides for the EPA and the MMS to develop an annual compliance monitoring workplan that contains the specifics on inspections and sampling for the year. Thus sampling frequency is dependent on the EPA's ability to allocate resources for it each year (e.g., for personnel time, travel costs, laboratory analyses, etc).

4.2 Difference of Opinion Over the Need for Additional Compliance Monitoring

Several parties support agency or independent compliance monitoring, including the Coastal Commission ("CCC"); the Regional Water Quality Control Board, Central Coast ("RWQCB"); Santa Barbara County, Energy Division; and the Environmental Defense Center ("EDC"). The CCC, the County, and the EDC maintain that the EPA (1) has the authority to establish and implement a compliance monitoring program through the new proposed general permit, and (2) should include in the permit language provisions for said monitoring. Specifically, the EDC has requested that the permit require operators to either independently fund or contract with an independent company to provide sampling services, or fund the EPA and/or the MMS to provide sampling services.

The EPA has chosen, however, not to include compliance monitoring provisions in the draft permit. The EPA maintains that the NPDES program is based on self-monitoring, unannounced spot checks by EPA personnel, and penalties if a violation is found. The EPA bases its decision also on a review of operators' past performance, on which it concludes that operators are adequately sampling and reporting data, and that no additional oversight monitoring is necessary.

4.3 Additional Monitoring Built Into Consistency Certifications

Although none of the EPA, Region 9, NPDES permits to date, including the 1982 general permit, provide for independent compliance monitoring, the Coastal Commission based its concurrences in four consistency certifications for five individual NPDES permits¹⁰ in part on agreements between the MMS, the EPA, and the operators that the operators conduct and/or provide for quarterly sampling with MMS oversight.¹¹ These agreements consisted of (1) specification in the annual EPA-MMS compliance monitoring workplans that MMS inspectors would conduct a minimum of four annual random (unannounced) sampling inspections in addition to two joint EPA-MMS annual sampling inspections, (2) letters from the operators stating their willingness to

¹⁰ Consistency certifications for individual NPDES permits for Platforms Harmony and Heritage (CC-68-92, 8/12/92, for Phase I discharges; and CC-85-92, 4/14/93, for Phase II discharges), Gail (CC-68-93, 2/17/94), Irene (CC-45-94, 11/15/94), and Grace (CC-65-94, 11/15/94).

¹¹ Exxon, Chevron, and Torch agreed to MMS compliance monitoring at least quarterly; Chevron also contracted with Lawry Technical Services to conduct the monitoring.

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comply with the modified inspection programs stipulated in said workplans, and, in some cases, (3) commitments from the operators to pay for laboratory analysis of the samples.

These agreements are part of the consistency certifications accompanying each individual permit. Because each individual permit will be superceded by the provisions of the new general permit, the agreements regarding additional compliance monitoring will be superceded as well.

In exploring possible alternatives to address the compliance monitoring issue, staff from the EPA, the MMS, the RWQCB, and the CCC have agreed informally that the annual workplans between the EPA and the MMS can provide for RWQCB and CCC staff to serve as a backup to EPA staff in conducting sampling visits. Said arrangement may be formalized in an MOA or MOU. Nevertheless, the difference of opinion about the need to incorporate compliance monitoring provisions into the language of the general permit still exists.

4.4 Summary of EPA-MMS inspections

In its fact sheet accompanying the proposed new general permit, the EPA highlighted the following observations about monitoring:

- During the last nine fiscal years, the EPA and the MMS visited the discharging platforms 92 times;
- All discharging platforms were sampled in five of the nine years;
- During the last nine fiscal years, there was only one year that sampling was not accomplished (in FY96 when federal employees were furloughed due to lack of funding);
- There were three additional years when a workplan was not negotiated but samples nevertheless taken;
- At no time during the last nine fiscal years did the EPA and the MMS make commitments and then fail to follow them. In most years, more sampling was accomplished than what had been negotiated under the workplans.
- The number of exceedances of permit limits for oil and grease in the EPA/MMS and selfreported results in the last nine years were 2 and 5 out of 104 platforms, respectively.

Please refer to Table 3, "Preliminary Summary of Past Sampling Events," for more detail.

5.0 Proposed Timeline

A summary of the status and timelines for the issuance of a new general permit is as follows:

- In early October, 1999, the EPA expects to publish the draft general permit in the *Federal Register*.
- In early November, 1999, the EPA will hold a public hearing in Santa Barbara.
- At the close of the 45-day public comment period, the EPA will respond to comments within 60 days.



- The EPA will submit to the Coastal Commission a certification that activities permitted under the proposed new general NPDES permit are consistent with the CCMP.
- Tentatively in January, 2000, the Coastal Commission will hear said request for consistency. The general NPDES permit will become effective if and when the Coastal Commission concurs with the EPA's consistency certification. The EPA will then publish the final permit.

23 total in OCS ¹	NPDES Permit No.	OCS Platform (& Install Date/County)			Platform Operator [& previous permittee(s)]	Date of Permit Issue/Renewal		Date of Permit Expiration		CC Submittal by Operator or EPA? (if yes, CC#/date)
(1) CA0110516		A	(1968)	(S.B.)	Nuevo [Torch/Unocal]	12	/8/83	6/30/84 ²		CC-26-83
(2)	(General	В	(1968)	(S.B.)	Nuevo [Torch/Unocal]					In 1/84, the CCC concurred in EPA's consistency certification
(3)	Permit)	Hillhouse	(1969)	(S.B.)	Nuevo [Torch/Unocal]					that reissuance of the General
(4)		Hondo	(1976)	(S.B.)	Exxon					NPDES Permit through 6/84
(5)		С	(1977)	(S.B.)	Nuevo [Torch/Unocal]					was consistent with the CCMP. (EPA originally issued the
(6)		Henry	(1979)	(S.B.)	Nuevo [Torch/Unocal]					General Permit in 2/82 with an
(7)		Gina	(1980)	(Ventura)	Nuevo [Torch/Unocal]					expiration date of 1/84.)
(8)		Gilda	(1981)	(Ventura)	Nuevo [Torch/Unocal]					CC-38-85/CC-39-85
(9)		Habitat	(1981)	(S.B.)	Nuevo [Texaco]					In 2/86, CCC <u>objected</u> to EPA consistency certifications for
(10)		Edith	(1983)	(Orange)	Nuevo [Torch/Unocal/Chevron]					two new proposed NPDES
(11)		Eureka	(1984)	(Orange)	AERA [CalRes. LLC/SWEPI]					General Permits. [The existing NPDES General Permit has
(12)		Harvest	(1985)	(S.B.)	Arguello, Inc. [Veneco/Chevron/Texaco]					been extended adminstratively by the EPA since 1984.]
(13)	↓	Hermosa	(1985)	(S.B.)	Arguello, Inc. [Veneco/Chevron]		ł		ł	
(14)		Hidalgo	(1986)	(S.B.)	Arguello, Inc. [Veneco/Chevron]					
(15)	CA0110020	Hogan	(1967)	(S.B.)	Pacific Operators / [Phillips]	3/	18/77	12/	31/81 ²	NO
(16)	CA0110028	Houchin	(1968)	(S.B.)	Pacific Operators / [Phillips]	3/18/77		12/31/81 ²		NO
(17)	CA0110397	Grace	(1979)	(Ventura)	Veneco [Chevron]	9/	30/93	7/.	31/98	CC-65-94 (11/15/94)
(18) (19)	CA0110419 CA0110419	Ellen Elly ³	(1980)	(Orange)	AERA [CalResources LLC/SWEPI]	9,	/9/93	7/3	1/98 ³	NO ⁴
(20)	CA0110648	Irene	(1985)	(S.B.)	Torch / [Unocal]	10	/13/93	6/	30/98	CC-45-94 (11/15/94)
(21)	CA0110737	Gail	(1987)	(Ventura)	Veneco [Chevron]	9/	30/93	5/	31/98	CC-68-93 (2/17/94)
(22) (23)	CA0110842 CA0110851	Harmony Heritage	(1992) (1992)	(S.B.) (S.B.)	Exxon	6.	/5/92	5/	29 / 97	CC-68-92 (8/12/92) & CC-85-92 (4/14/93)

NPDES Permits: OCS On & Gas Platforms Offshore California Table 1.

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¹ Twenty-three platforms are located in Outer Continental Shelf (OCS) waters offshore California. [Four producing platforms remain in <u>State</u> waters: Holly (Santa ¹ Barbara County) & Eva/Esther/Emmy (Orange County). These platforms are covered by NPDES permits issued by the Regional Water Quality Control Boards].
 ² NPDES Permit has been administratively extended by the U.S. EPA Region 9.
 ³ Discharges from Platforms Ellen and Elly, two separate platforms connected by a bridge, are authorized under one individual NPDES permit.
 ⁴ NPDES Permit renewal is not effective because not concurred with by the CCC (operator has not submitted CC).

1986 General NPDES Permits	Recent Individual NPDES Permits				
In 1986, the Commission	Since 1986, the Commission has reviewed for consistency with the				
objected to the EPA, Region 9's,	CCMP and concurred with <u>individual</u> NPDES permits or permit				
consistency certifications for two	renewals for discharges from Exxon Platforms Harmony and				
new general NPDES permits.	Heritage, Chevron Platforms Gail and Grace, and Torch Platform				
The Commission based its	Irene. The Commission's concurrence with these consistency				
objection on findings that the	certifications was based on findings that proposed activities under				
proposed general permits:	the NPDES permits addressed the concerns identified below.				
1. Provided insufficient	1. Provided sufficient protection of site-specific, sensitive marine				
protection of site-specific,	resources. The Commission found that the activities under the				
sensitive marine resources;	permits, as certified by the applicants, provided sufficient				
	protection of site-specific, sensitive marine resources;				
2. Did not comply with all state	2. Are consistent with state standards (or explain why, any				
water quality standards or	feasible standards are excluded). All the individual NPDES				
fully explain reasons for	permits incorporate applicable standards promulgated by the				
excluding feasible standards;	EPA in its 1993 Effluent Limitations Guidelines for offshore oil				
	and gas extraction point sources;				
3. Provided inadequate	3. Provide adequate monitoring procedures and testing methods to				
monitoring procedures to	detect toxicity levels				
control discharges and	• The NPDES permits require the permittees to: (1) conduct an				
ineffective testing methods to	American Petroleum Institute ("API") Retort Test and static				
detect levels of discharge	sheen test to determine if muds and cuttings contain oil (mud				
toxicity;	toxicity is highly correlated with the mud's oil content); and				
	(2) conduct a muds and a cuttings bioassay for each mud				
	system discharged to determine compliance with the permits'				
	muds and cuttings acute toxicity limit of 30,000 parts per				
	million ("ppm") in the suspended particulate phase;				
	• In order to address Commission concerns that bioassay tests				
	do not detect <u>chronic</u> effects of long-term exposure to waste				
	discharges on biologic communities or ecosystems, one				
	applicant, Torch, committed to collect after use and preserve				
	duplicate samples of mud and cuttings for each required				
	bioassay. If the bioassay yielded a 96 hour LC50 value that				
	complied with the 30,000 ppm limit but was also less than				
	100,000 ppm, Torch would (1) send the duplicate to an EPA-				
	approved laboratory for a "constituent analysis," and (2)				
	submit the analysis results to the executive director to aid in				
	identifying constituents of muds, cuttings, additives or well				
·	formations that may contribute to chronic toxicity.				

 Table 2.
 Consistency Review Comparisons

	1	986 General NPDES Permits		Recent Individual NPDES Permits
	4.	Provided inadequate	4.	Provided adequate enforcement measures to ensure permit
		enforcement measures to		compliance. Pursuant to their NPDES permits, the permittees
		ensure permit compliance;		submitted and are implementing a detailed compliance plan that
				allows for more comprehensive government surveillance in
				order to reduce the potential for NPDES permit violations, particularly knowing violations. The permittees also committed
				to train platform personnel on NPDES permit
				requirements/regulatory compliance, and to provide personnel
				with communication avenues to report suspected or potential
				non-compliance events;
				To address other Commission concerns with compliance and
				self-monitoring by permittees, the applicants committed to the
				implementation of a "Third Party Compliance Monitoring
				Workplan" developed by Commission and MMS staffs that
				provides for random third-party monitoring of produced water
				discharges. The Workplan provides for unannounced
Ì				inspections by MMS personnel plus any additional monitoring
				and inspections that the MMS may perform on behalf of the
	5	Did not address the feasibility	5.	EPA; Submittal of updated information on (1) barging muds and
	у.	of alternative less	5.	cuttings to shore, and (2) reinjection of produced water. The
		environmentally sensitive		platforms covered by the individual permits were either existing
		sites; and		or under construction; therefore alternative <u>platform</u> sites were
				not feasible. Based on information available at the time of the
				consistency reviews, alternative discharge locationse.g.,
				barging muds and cuttings and reinjecting produced water
				were shown to be infeasible. For example, in the 1993 Effluent
				Limitations Guidelines, the EPA did not authorize operators of
				platforms sited 3+ nautical miles offshore (1) to barge non-
				oiled muds and cuttings due to adverse transportation-related impacts and a lack of permitted land disposal sites that can
				accept the volumes produced on OCS platforms, and (2) to
				reinject wastes due to adverse production impacts and cost.
				The Commission found, however, that updated information on
				the barging-to-shore alternative and the feasibility of partial and
				complete waste reinjection must be submitted in future
				consistency reviews;
	6.	Did not mitigate potential	6.	Mitigate to the maximum extent feasible any potential adverse
		adverse impacts to coastal		impacts to land or water uses or natural resources of the coastal
		zone resources to the		zone. Among other mitigations included in the individual
		maximum extent feasible.		NPDES permits, the permits set maximum discharge limits for
				drill muds, drill cuttings, and produced water (i.e., maximum volumes based on an estimate of the volumes of muds and
				cuttings and produced water that would be generated during a
				full year of drilling).
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 Table 2.
 Consistency Review Comparisons, continued



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Fiscal Year	No. sampling events	No. different platforms sampled	Platform Name (No. times sampled)
1990	22	11	A (2), B (2), C (2), Edith (2), Gail (3), Gilda (2), Grace (2), Habitat (2), Hillhouse (2), Hogan (2), Irene (1)
1991	21	12	A (2), B (2), C (2), Edith (1), Ellen (1), Ellen/Elly (1), Gail (2), Gilda (2), Grace (2), Habitat (2), Hillhouse (2), Hogan (2)
1992	11	10	A (1), B (1), C (2), Edith (1), Gail (1), Gilda (1), Grace (1), Habitat (1), Hillhouse (1), Hogan (1)
1993	8	i	i
1994	13	13	A (1), B (1), C (1), Edith (1), Gail (1), Gilda (1), Habitat (1), Harmony (1), Harvest (1), Hermosa (1), Hidalgo (1), Hillhouse (1), Hogan (1)
1995 ⁱⁱ	5	5	A (1), Gail (1), Harmony (1), Harvest (1), Hogan (1)
1996	2	i	i
1997	0	i	i
1998	14	i	i
1999	i	i	i

"Preliminary Summary of Past Sampling Events" Table 3.

ⁱ Commission staff is working with MMS staff to complete the summary for FY93, FY95, and subsequent years. Staff will update this table when information becomes available. ⁱⁱ At the present time, data for only the months of September and October are available.