

**SPILL PREVENTION CONTROL & COUNTERMEASURE PLAN**

**GENERAL INFORMATION**

- 1. Name of facility Banning Ranch - West Newport Field
- 2. Type of facility Onshore Producing Facility
- 3. Location of facility 1080 W. 17<sup>th</sup> Street, Costa Mesa  
Orange County, California  
bordering the city of Newport Beach
- 4. Name and address of owner or operator:  
Name West Newport Oil Company  
Address P.O. Box 1487  
Newport Beach, CA 92659
- 5. Designated person accountable for oil spill prevention at facility:  
  
Name and title Rick Swaringen, Richard Jenkins -supervisors, Tom McCloskey -engineer
- 6. Facility experienced a reportable oil spill event during the twelve months prior to Jan. 10, 1974 (effective date of 40 CFR. Part 112). (if YES, complete Attachment #1.) No

**MANAGEMENT APPROVAL**

This SPCC Plan will be implemented as herein described.

Signature \_\_\_\_\_

Name J. R. Stair

Title Vice President

**CERTIFICATION**

I hereby certify that I have examined the facility, and being familiar with the provisions of 40 CFR, Part 112, attest that this SPCC Plan has been prepared in accordance with good engineering practices. Procedures for inspections and testing are included herein. This Plan is adequate for the facility.

Thomas Downs McCloskey  
\_\_\_\_\_  
Printed Name of Registered Professional Engineer

(Seal) \_\_\_\_\_  
Signature of registered Professional Engineer

Date 6/4/14 Registration No. M025507 State CA

### Cross Referencing Index

#### SPCC Facility Specific Plan Reference to CFR Title 40 Part 112 – Oil Pollution Prevention and the Spill Prevention, Control and Countermeasure Plan

SPCC Plan Reference	CFR Reference
Page 11	Five Year Review (112.5(b)), Table G-1
Page 5	Oil Storage Containers (112.7(a)(3)(i)), Table G-2
Page 5	Secondary Containment and Oil Spill Control (112.6(a)(3)(i) and 112.7(c) and 112.9(c)(2)), Table G-3 and Table G-4
Page 8	Inspections, Testing, Recordkeeping and Personal Training (112.7 (e) and (f), 112.8 (c)(6) and (d)(4), 112.9(c)(3), 112.12(c)(6) and (d)(4)), Table G-5
Page 8	Security (112.7(g)), Table G-6
Page 7	Emergency Procedures and Notifications (112.7(a)(3)(iv) and 112.7(a)(5)), Table G-7
Page 7	Contact List (112.7(a)(3)(vi)), Table G-8
Page 7	NRC Notification Procedure (112.7(a)(4) and (a)(5)), Table G-7
Page 7 and 8	SPCC Spill Reporting Requirements (112.4)
Page 9, 10 and 11	Onshore Oil Production Facilities (112.9(b), (c) and (d)), Table G-11
Page 9, 10 and 11	Onshore Oil Drilling and Workover Facilities (112.10(b), (c) and (d)), Table G-12
Page 12	Attachment 1.1 – Five Year Review Log, Table G-13
Page 12	Attachment 1.2 – Technical Amendment Log, Table G-14
Page 9 and 18	Attachment 3 – Inspections, Dike Drainage and Personnel Training Logs
Page 19	Attachment 4 – Discharge Notification Form, Table G-20
Page 14 and 15	Attachment C – No Substantial Harm Certification

**SPCC Plan Table of Contents**

<b>Item</b>	<b>Page</b>
General Applicability	4
Field Background and Discussion	4, 5
Storage Containers, Potential Spills	6
Leak or Spill Response Procedures	7
Contact Agencies	8
Notification Procedures	8, 9
Inspection Records	10
Security	10
Training	10
Facility Drainage Procedure	11
Bulk Storage Tank Operations	11
Facility Transfer Operations	11, 12
Oil Drilling and Workover Procedures	12
Attachment 1 – Five Year Review and Amendment Log	13
Certification of non-Substantial Harm	14, 15
Valves and Pipeline Inspection Form	16
Water Disposal Facilities Inspection Form	17
Tank Storage Battery Inspection Form	18
Drainage Record Form	19
Discharge Notification Form	20
<b>Facility Maps Included As A Separate Exhibit</b>	
<ol style="list-style-type: none"> <li>1. Field Diagram – well locations, pipeline routing, spill containment features</li> <li>2. Oil/Water Separation Facility Detail – storage vessels, spill containment features</li> <li>3. Equipment List and Flow Diagram – references devices identified on the Facility Detail</li> <li>4. Scaled, Grid Map – site and oil/water separation facility</li> </ol>	

**General Applicability**

A discharge of oil to navigable waters or adjoining shorelines or upon waters of the contiguous zones is reportable. Navigable waters and shorelines are affected by the ebb and flow of the tide. The “Newport Shores” canal and slough complex are considered navigable waters and as such should be considered the primary focus of this SPCC. The Army Corps condemnation area and Santa Ana River are less likely areas to be impacted by a discharge of oil because of their setback from operations, but they too, are potential discharge areas.

This SPCC Plan will be amended when there is a change in the facility design, construction, operation, or maintenance that materially affects the potential for a discharge to navigable waters or adjoining shorelines. Examples include adding or removing containers, reconstruction, replacement, or installation, of piping systems, changes to secondary containment systems, changes in product stored at this facility, or revisions to standard operating procedures. This Plan will be reviewed at least once every five years. Amended and reviewed Plans will be recertified and a log of such shall be kept.

**INFORMATION – 112.7****Field Background :**

- The West Newport Field was discovered in the 1920s. Production is from three zones ranging in depth from 800’ to 2500’. Development drilling began in the early 1940s. Enhanced oil recovery operations and infill drilling were applied in the 1960s through the 1980s. Production averaged 2600 B/D oil and 13000 B/D water from 195 production wells from 1970 through 1990.
- Crude oil production is characterized as heavy California crude (<15 deg API).
- Current production is less than 200 B/D from approximately 55 wells.
- The oil/water separation facility placed in service during the 1970s and thereafter is largely intact today.
- Process vessels have been maintained by inspection and repair of internal coatings, corrosion control and cathodic protection. Wastewater vessels have been converted to fiberglass tanks where practicable.
- SPCC Plans have been in effect and ongoing since 1981 (earliest records still on file).

**Operations Discussion :**

- The West Newport Field is manned 24 hours per day, seven days per week, 52 weeks per year. The production operations are under close surveillance. Visual inspection is the cornerstone of the SPCC.
- Oil pipelines flow to a central oil/water separation facility that is contained by a concrete block wall on three sides and topographically bounded on the fourth side.

- The secondary containment listed in the following table is sufficient to control 100% of the stored products and throughput. The secondary containment was designed for substantially larger stored volumes and throughput than exists today.
- Individual wells all have concrete well cellars and are inspected daily for mechanical integrity. Oil which accumulates in the well cellars is removed by vacuum trucks as necessary. Recovery oil is processed through the oil/water separation facility.
- There are three 60 barrel vacuum trucks on site.
- Well inspection records are maintained on site.
- Production pipelines have gate, block, and check valves for fluid emergency shut off. Direction of flow (run off) is west to southwest through natural drainage channels to the Santa Ana River.
- Production pipelines are largely located along roads with the roads being curbed with small earthen berms.
- There are several settling ponds or ditches along the drainage course where potential spills could be collected and removed. An earthen berm running from the northwest property corner, south along the western border, and then angling southeast to the Tank Farm spill containment is maintained. This berm provides additional containment for over 90% of the field's producing operations.
- Well numbers 22R, 29R, 37R2, 448 and 410 are isolated from potential spills by earthen berms which compartmentalize the producing sites.
- An earthen berm provides secondary containment for the City of Newport Beach wastewater pipeline and is routinely maintained. Well numbers 76R, 148, and 416 lie within the City wastewater pipeline containment berm.
- Drain valves in any berm are kept closed except when collected rainwater is to be released.
- There are backhoes, dump trucks, and skip loaders on site for cleanup activity if necessary. This equipment can be used to create temporary dikes and contain potential spills.
- Pipeline right-of-ways are kept clear to facilitate inspection and repair.
- The wastewater is characterized as an iron sulfide contaminated brine with oil generally present at concentrations less than 100 ppm. The majority of wastewater produced is injected back into the main producing reservoir.
- There is an established permit to dispose of excess wastewater into the local sewer system.
- There is an engineered soil remediation cell on site.
- There is a contract welder/fabricator on site during normal business hours to assist with repair and maintenance.

Facility diagrams are included. These diagrams are described as follows:

5. Field Diagram – well locations, pipeline routing, spill containment features
6. Oil/Water Separation Facility Detail – storage vessels, spill containment features
7. Equipment List and Flow Diagram – references devices identified on the Facility Detail
8. Scaled, Grid Map – site and oil/water separation facility

Storage Containers, Potential Spills - Prediction and Control :

Source	Type of Failure	Product	Quantity (Bbls)	Rate - Bbls/hr	Direction of Flow	Secondary Containment
Tank Farm 1 - 1000 Bbl tank 1 - truck loading rack	Leak or Rupture	Crude Oil	1,000	15	West	Concrete Block Wall
Diesel Tank – double walled	Leak or Rupture	Diesel Fuel	12	12	Southwest	Tank inside a tank
Process Vessels – FWKO, heater treater	Leak or Rupture	Oil/Water, 3% - 99%	500	20	West	Concrete Block Wall
Wastewater Tanks – Tank Farm Area Sumps, Separator	Leak or Rupture	Wastewater, < 100 ppm oil	1,000	250	West	Concrete Block Wall
Wastewater Tank – Sewer Connection	Leak or Rupture	Wastewater, < 100 ppm oil	100	150	West	Concrete Block Wall
Oil Production Wells and Pipelines	Leak or Rupture	Oil/Water mixture, 97% water	1,000	300	Southwest	Well Cellars, Ditches, Settling Ponds, Earthen Berms
City of Newport Beach Wastewater Pipeline	Leak or Rupture	Wastewater, < 100 ppm oil	300	75	West	Earthen Berm – redundant berms

The volume of fluid capable of being contained within the oil/water separation facility and concrete block wall is estimated to be greater than 50,000 barrels. Total fluid volume within the tank farm at any time is less than 3,000 barrels. Total fluid flow (oil and water, 97% water) from the field is less than 6,000 barrels per day.

### Information – 112.7

Leak or Spill Response Procedures (40 CFR 112.7(a)(5)):

- Repair and maintenance parts inventory will be maintained on site. These parts include –
  - Pipe repair clamps
  - Common sized fittings and valves
  - Wellhead consumables
  - Valves and gauges
- Pipeline leaks and spills –
  - Containment or diversionary structures or equipment to prevent oil from reaching navigable waters are practicable. These systems include –
    - Concrete block walls
    - Earthen berms
    - Heavy equipment on site
  - On site operator will isolate the leak
    - Shut down equipment and production into the pipeline
    - Close valves to isolate flow in the damaged portion
  - Onsite operator will assess repairs required
    - Repair with inventory materials if appropriate
    - Notify on call supervisor for assistance if necessary
    - Log the incident in the duty book
  - Leaks and spills will be cleaned up in a timely manner to be determined by the operations supervisor. Repairs will be effected in the same way.
  - Contaminated soils will be impounded in the remediation cell.
- Storage vessel leaks –
  - Containment or diversionary structures or equipment to prevent oil from reaching navigable waters are practicable. Storage vessels are located within the oil/water separation facility, surrounded on three sides by a concrete block wall and contained by topographical relief on the fourth side.
  - On site operator will isolate the leak by closing valves and/or diverting flow.
  - All major process vessels are spared – one vessel on line, another in standby.
    - Operator will contact supervisor on call prior to switching into the standby vessel
  - Repairs will be made in a timely manner as directed by the operations supervisor.
- If necessary, the field can be shut down and all production secured within one hour.
- Estimated on site response time by on call supervisor and support personnel is 45 minutes.
- If a reportable incident occurs – the list of agencies to be contacted and reporting protocol is as follows:

### Agencies to Report Oil Spills

1.	National Response Center	800 – 424 – 8802 <a href="http://www.nrc.uscg.mil">www.nrc.uscg.mil</a>
2.	U.S. Coast Guard	673 – 0420
3.	State of California Office of Emergency Services	800 – 852 – 7550
4.	Division of Oil and Gas	714 – 816 – 6847
5.	Fish and Game Department	310 – 590 – 5132
6.	City of Newport Beach	640 – 2151
7.	Advanced Cleanup Technologies	310 – 763 – 1423 800 – 334 – 2284

A discharge of oil to navigable waters or adjoining shorelines or upon waters of the contiguous zones is reportable. Navigable waters and shorelines are affected by the ebb and flow of the tide. The “Newport Shores” canal and slough complex are considered navigable waters and as such should be considered the primary focus of this SPCC. The Army Corps condemnation area and Santa Ana River are less likely areas to be impacted by a discharge of oil because of their setback from operations, but they too are potential discharge areas.

#### Designated Facility Personnel

1. Ricky Swaringen, operations supervisor, (949) 547-1326
2. Richard Jenkins, oil/water facility supervisor, (714) 876-7075
3. Tom McCloskey, engineer, (949) 290-4568

#### **Notification Information and Procedures to report if a discharge occurs;**

- The supervisor on site will establish a record of the following information and make it available as necessary (40 CFR 112.7(a)(4)). See Attachment 4.
  1. Facility address – 1080 West 17<sup>th</sup> Street, Costa Mesa, CA 92627,
  2. Phone number – supervisor’s cell and tank farm cell (949)735-9904,
  3. Date and Time of the discharge,
  4. The type material discharged (ie. crude oil),
  5. Estimate of the quantity discharged oil or associated fluids (barrels or gallons),
  6. The source of the discharge,
  7. Description of impacted areas,
  8. Damages or injuries,
  9. Actions to stop, remove, or mitigate the effects of the discharge,
  10. Evacuations taken if required,
  11. The names of individuals and organizations contacted.

Information to the EPA Regional Administrator (RA) and to the appropriate State agencies shall be submitted within 60 days from the following event (112.4) –

- A single discharge of more than 1000 gallons of oil to navigable waters or adjoining shorelines
- Two discharges to navigable waters or adjoining shorelines each more than 42 U.S. gallons of oil occurring within any twelve month period

The following information should be submitted to the RA –

1. Name of the facility
2. Your name
3. Location of the facility
4. Maximum storage of handling capacity of the facility and normal daily throughput
5. Corrective action and countermeasures taken, including a description of equipment repairs and replacements
6. An adequate description of the facility, including maps. Flow diagrams and topographical maps as necessary
7. The cause of the reportable discharge, including a failure analysis of the system or subsystem in which the failure event occurred
8. Additional preventative measures taken or contemplated to minimize the possibility of recurrence
9. Other information that the RA may require

## Inspections and Records

A record of the inspections, are attached.

inspection sheet exhibits are attached–

Above Ground Valves and Pipelines

Salt Water Disposal Facilities

Tank Battery

Diked and Bermed Area and Drainage

Attachment #3 – Bulk Storage Tanks - Drainage

Formal inspections and records will be conducted and documented on a quarterly basis. The inspection records will be signed (initials) by a responsible employee. The records will be presented to the operations manager for filing and retention for a minimum of three years.

## Security

The production facility/field is secured by a perimeter chain link fence, topped with triple strand barbed wire or other CADOGGR approved fencing. The fence line shall be kept clear so that inspection and repairs can be easily effected.

## Personnel Training and Spill Prevention Procedures

Daily inspection procedures -

- Visual inspection of wellhead and cellars.
- Visual inspection of pipelines for leaks.
- Visual inspection of tank farm areas for leaks.
- Visual inspection of diesel storage tanks.
- Visual inspection of wastewater tanks for oil accumulation and leaks.
- Operators can use smell and sound for leak detection during daily inspections.

Training -

A. Personnel are properly instructed in the following:

- 1) an operating manual for the oil/water separation facility is made available for each operator
- 2) the supervisor will train and review procedures for the operation and maintenance of equipment to prevent oil discharges
- 3) the operations manager will review the applicable pollution control laws, rules, and regulations operating staff and personnel

B. Scheduled spill prevention briefings for the operating personnel are conducted frequently enough to assure adequate understanding of the SPCC Plan. A copy of the SPCC Plan will be maintained in the oil/water separation facility office.

C. The production supervisor will review the SPCC Plan quarterly with each field operator. These briefings should include a discussion of known spill events or failures, malfunctioning components and recently developed precautionary measures. Each tour will record noteworthy events in the operating log book.

**Facility Drainage Procedure -**

1. Drainage from diked storage areas is controlled as follows:
  - Manually operated valves are sealed in a closed position and are rarely opened to drain rainwater.
  - Rainwater which collects in the tank farm can be pumped into the wastewater system.
  - During periods of prolonged, heavy rain, containment rainwater may be released into natural drainage paths.
  
2. The procedure for supervising the drainage of rainwater from secondary containment into natural drainage courses is as follows (a record of inspection and drainage events is to be maintained on a form similar to Attachment #3):
  - The field operator will visually inspect the condition of the water for the presence of oil before releasing the water.
  - Drain valves will be kept closed except when necessary to drain rainwater.
  - A record shall be maintained of each such event (see Attachment #3).
  
3. Field drainage ditches, cellars, or other such potential oil traps are inspected at regularly scheduled intervals for accumulations of oil.

During each shift (8 hour tour), the field operator will visually inspect for accumulations of oil on roads, ditches, and other production facilities. Accumulated oil will be picked up by a vacuum truck or disposed of by approved methods as required. Necessary repairs and/or troubleshooting efforts will be made as soon as possible.

**Bulk Storage Tanks**

1. All oil storage tanks are bolted steel, 10 or 12 gauge steel. Tanks are equipped with external liquid level indicators for quick gauging. The diesel storage tank is double walled with built in secondary containment. The diesel tank has an external liquid level indicator. The wastewater system tanks are fiberglass to prevent excessive corrosion.
2. The design, construction material, and volume of the secondary containment for the oil storage tanks is as follows:

Product	Construction	Containment Vol., Bbls
Crude Oil and Wastewater, Tank Farm	Concrete Block Wall	>50,000
Diesel	Double walled, steel	>12

+

3. Visual examination will be made daily for leaks at chimes and flanges and for the condition of the foundations for tank support. The tanks shall be examined quarterly by a trained field operator and his observations shall be recorded (see Attachment #3).

**Facility Transfer Operations**

1. Above ground valve and pipelines are examined and recorded quarterly. Wellhead production equipment is examined daily. Wastewater production and disposal

equipment are examined daily. Wastewater system is examined daily. Oil accumulation is either skimmed by integral piping systems or serviced by vacuum trucks. Field and facility systems are inspected continuously as routine operations are conducted.

2. Records of pipeline maintenance repairs and leaks are kept and used in a maintenance and replacement program. Scale and corrosion inhibitors are injected into key production and wastewater lines. Where applicable, plastic or fiberglass piping systems are used.
3. Diesel storage tank is examined and findings recorded quarterly. Diesel storage tank is located within the block wall of the oil/water separation facility. Diesel storage tank secondary containment shell is valved shut and kept free of rainwater. Drainage of Diesel storage tank secondary containment is per Facility Drainage Procedures described herein.
4. Wastewater streams/vessels are skimmed for oil accumulations. Skimmed volumes are reprocessed.
5. Accumulated solids from separation vessels and other blowdown is disposed offsite to a regulated third party disposal site.

#### **Oil Drilling and Workover Facilities**

1. Well cellars are inspected and serviced by on site vacuum trucks to remove accumulated fluids as necessary.
2. Well service rigs will be positioned on impermeable membranes when practicable.
3. Any well site oil contaminated soils will be removed and impounded in the remediation cell for treatment.
4. A blowout preventer (BOP) assembly and well control system is installed before drilling below any casing string and, as required during workover operations.
5. This BOP assembly is capable of controlling any expected wellhead pressure.
6. Casing and BOP installations conform to state regulations.

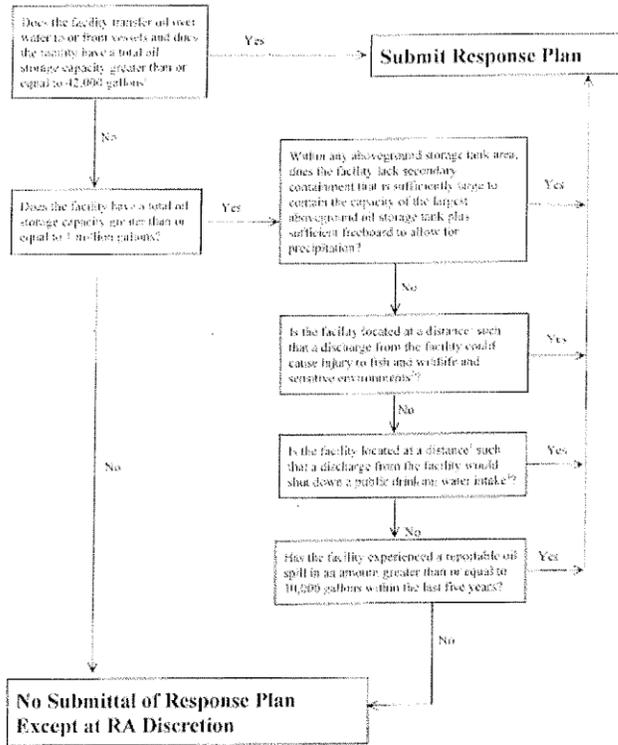


Certification for Facilities that do not pose Substantial Harm (40 CFR Part 112, Appendix C, Section 3.0)

ATTACHMENTS TO APPENDIX C

Attachment C-1

Flowchart of Criteria for Substantial Harm



<sup>1</sup> Calculated using the appropriate formula in Attachment C-III to this appendix or a comparable formula.

<sup>2</sup> For further description of fish and wildlife and sensitive environments, see Appendices I, II, and III to DOC/NOAA's "Guidance for Facility and vessel response Plans: Fish and Wildlife and Sensitive Environments" 159 FR 14713, March 29, 1994) and the applicable Area Contingency Plan.

<sup>3</sup> Public drinking water intakes are analogous to public water systems as described at CFR 143.2(c).

View or download PDF

ATTACHMENT C-II—CERTIFICATION OF THE APPLICABILITY OF THE SUBSTANTIAL HARM CRITERIA

Facility Name: West Newport Field- Banning Ranch

Facility Address: 1080 West 17<sup>th</sup> Street, Costa Mesa, 92627

1. Does the facility transfer oil over water to or from vessels and does the facility have a total oil storage capacity greater than or equal to 42,000 gallons?

Yes \_\_\_ No

2. Does the facility have a total oil storage capacity greater than or equal to 1 million gallons and does the facility lack secondary containment that is sufficiently large to contain the capacity of the largest aboveground oil storage tank plus sufficient freeboard to allow for precipitation within any aboveground oil storage tank area?

Yes \_\_\_ No

3. Does the facility have a total oil storage capacity greater than or equal to 1 million gallons and is the facility located at a distance (as calculated using the appropriate formula in Attachment C-III to this appendix or a comparable formula<sup>1</sup>) such that a discharge from the facility could cause injury to fish and wildlife and sensitive environments? For further description of fish and wildlife and sensitive environments, see Appendices I, II, and III to DOC/NOAA's "Guidance for Facility and Vessel Response Plans: Fish and Wildlife and Sensitive Environments" (see appendix E to this part, section 13, for availability) and the applicable Area Contingency Plan.

Yes \_\_\_ No

4. Does the facility have a total oil storage capacity greater than or equal to 1 million gallons and is the facility located at a distance (as calculated using the appropriate formula in Attachment C-III to this appendix or a comparable formula<sup>1</sup>) such that a discharge from the facility would shut down a public drinking water intake?<sup>2</sup>

<sup>1</sup>If a comparable formula is used, documentation of the reliability and analytical soundness of the comparable formula must be attached to this form.

<sup>2</sup>For the purposes of 40 CFR part 112, public drinking water intakes are analogous to public water systems as described at 40 CFR 143.2(c).

Yes \_\_\_ No

5. Does the facility have a total oil storage capacity greater than or equal to 1 million gallons and has the facility experienced a reportable oil discharge in an amount greater than or equal to 10,000 gallons within the last 5 years?

Yes \_\_\_ No

Certification

I certify under penalty of law that I have personally examined and am familiar with the information submitted in this document, and that based on my inquiry of those individuals responsible for obtaining this information, I believe that the submitted information is true, accurate, and complete.

*Tom McCloskey*

Signature

Tom McCloskey

Name (please type or print)

Engineer

Title

6/4/2014

Date

Banning Lease – Above Ground Valves and Pipeline Inspection

Date	Area Inspected	Findings	Inspector (Initls.)

West Newport Oil Field – Banning Lease Area

Operator – West Newport Oil Company

Banning Lease – Salt Water Disposal Facilities Inspection

Date	Area Inspected	Findings	Inspector (Initls.)

West Newport Oil Field – Banning Lease Area

Operator – West Newport Oil Company

Banning Lease – Tank Battery Inspection

Date	Area Inspected	Findings	Inspector (Initls.)

West Newport Oil Field – Banning Lease Area

Operator – West Newport Oil Company

SPCC Attachment #3  
Banning Lease – Facility Bulk Storage Tanks – Drainage System

- Inspection Procedure:
  - Operating conditions of the valves and pipelines will be checked quarterly.
  - Visual inspection of the rainwater for pollutants will be made before each drainage.
  - Drainage incidents will be logged and summarized below.

Date of Drainage	Bypass Dates – if necessary	Date of Inspection	Oil Removed	Inspector (Initls.)

West Newport Oil Field – Banning Lease Area

Operator – West Newport Oil Company

**Attachment 4 – Discharge Notification Form**

Discharge/Discovery Date and Time	
Facility Name	
Facility Location	
Reporting Individual and phone #	
Type of material discharged	
Quantity discharged	
Source of discharge	
Media impacted – water, soil other	
Actions taken	
Damage of injuries	
Evacuation procedures	
Organizations contacted and time called	National Response Center Advanced Cleanup Technologies Facility personnel State Agencies City agencies Coast Guard Other -