PLAINS
PIPELINE, L.P.

June 6, 2015

By Hand Delivery
Captain Jennifer Williams
Federal On-Scene Coordinator
Coast Guard Sector Commander LA/LB
1001 S. Seaside Ave. Bldg 20
San Pedro, CA 90731-0208
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Plains Pipeline, LP
Order No. 2015-01-FPN A15017
Work Plan

Dear Captain Williams:

In accordance with Paragraph 18 of the May 27, 2015 Order for Removal, Mitigation or prevention of a Substantial Threat of Oil Discharge (Order No. 2015-01-FPN A15017, "Order"), Plains Pipeline, LP herby transmits by hand the attached Work Plan for your review and consideration. Copies of the referenced plans are included on the accompanying compact disc. This notification is also being provided to the following federal, state and local agencies per the Order:

U.S. Environmental Protection Agency, Ms. Michelle Rogow
California Department of Fish and Wildlife, Mr. Randy Imai
Santa Barbara County Office of Emergency Management (OEM), Director Ryan Rockabrand.

An e-mail copy of this cover letter and the Work Plan (without Attachments) has also been provided to the addressee and the listed federal, state and local agencies.

If you have any questions or concerns associated with this notification, please feel free to contact me at 713-498-5760.

Sincerely,

Wm. Dean Gore, Jr., PE
Managing Director, Environmental and Regulatory Compliance
Plains Pipeline, LP

Cc:

Ms. Michelle Rogow, U.S. Environmental Protection Agency
Mr. Randy Imai, California Department of Fish and Game
Director Ryan Rockabrand, Santa Barbara County Office of Emergency Management

United Stated Coast Guard Order No 2015-01-FPN A15017
Plains Pipeline, L.P. Work Plan
Refugio Incident
June 6, 2015

Plains Pipeline, L.P. (Respondent) has prepared this Work Plan in accordance with Order No. 2015-01-FPN A15017, *Order for Removal, Mitigation or Prevention of a Substantial Threat of Oil Discharge, dated May 27, 2015 (the Order)*. Paragraph 18 of the Order specifies that a Work Plan be prepared and submitted to the Federal On-Scene Coordinator (FOSC) to provide a concise description of proposed activities. The Order outlines eight categories of required information outlined in paragraph 18 as summarized below:

1. Measures to halt discharge of oil into the environment;
2. Measures to investigate the extent and concentrations of petroleum hydrocarbons and associated constituents related to the release from the pipeline in the Pacific Ocean, Refugio State Park, El Capitan State Beach, and other navigable waters and adjoining shorelines;
3. Measures to remove remaining oil and petroleum contamination;
4. Sampling plan including air, water, rocks, soil, and biota, as appropriate;
5. Quality assurance/quality control, data validation, and chain of custody procedures;
6. Disposal of oil and materials that were in contact with oil;
7. Confirmation sampling plan to determine when the response is complete and contingent cleanup measures in the event that additional contamination is discovered to be from pipeline release; and
8. Schedule for completing tasks in the Work Plan.

This Work Plan addresses each category in sequence as presented within Paragraph 18 of the Order. Notably, some elements of this Work Plan were previously approved by the Unified Command based on earlier plans. In those cases, the approved plans are described and incorporated by reference.

1.0 Measures to Halt Discharge into the Environment

The discharge of oil from the pipeline was halted on May 19, 2015. This was accomplished through shutting in block valves upstream and downstream of the release area. The National Response Center (NRC) was notified and first responders were mobilized to deploy containment boom. Subsequently, vacuum trucks were used to remove residual oil from the isolated pipeline segment. Free oil was vacuumed from the ground surface. Further, the entrance to a culvert that drains the release site area was blocked with sand bags.

2.0 Measures to Investigate Petroleum Hydrocarbons and COCs related to the release

Measures used to investigate petroleum hydrocarbons and COC's related to the release are detailed in Unified Command (UC) approved work plans including:

- Emergency Response Sampling and Analysis Work Plan – Approved May 21, 2015;
- Forensics Analysis Sampling and Analysis Plan – Approved June 2, 2015;
- Seep Oil/Sheen Sampling Plan for Refugio Incident- Approved June 2, 2015;
- Shoreline Cleanup Assessment Team (SCAT) Protocols; and
- Reconnaissance methods including overflights, marine observations, diver operations and use of Sonar equipment.
- Sunken Oil Assessment Plan – Approved May 27, 2015

The Emergency Response Environmental Sampling and Analysis Plan (SAP) addresses water, sediment, soil, and source oil sampling. The Emergency Response (ER) Environmental SAP describes the sampling protocols and analytical methods. The analytical results may be used to fingerprint different sources of oil, delineate the area of impact, establish background concentrations, and provide empirical data to support decisions regarding public health and the environment.

The Forensics Analysis Sampling and Analysis Plan outlines the types of samples to be collected, the sample collection process, analytical methods, interpretation of forensics analysis, and decisions made to distinguish naturally-occurring oil from oil released from the pipeline during the incident.

The Seep Oil/Sheen Sampling Plan outlines the objectives and methods to collect representative samples of oil/sheen from natural seeps in the Santa Barbara Channel. This information will be used to characterize and differentiate seep oil from the oil released from the pipeline during the incident.

SCAT operations were implemented to determine the location of the oil, the quantity and condition of the oil, and to determine the shoreline or habitat types. SCAT also provides shoreline treatment recommendations (STRs) and helps identify endpoints in the cleanup process. The three stages of SCAT include controlling the source of oil to the environment, removal of the free oil from water, SCAT reconnaissance and initiating the shoreline cleanup (Stage I); cleanup of shorelines after free oil is removed and beginning the detailed SCAT surveys (Stage II); and natural recovery, cleanup sign-off and restoration (Stage III). SCAT operations will continue until endpoints have been achieved.

The Sunken Oil Assessment Plan was approved by the Unified Command (UC) on May 27, 2015. The plan consisted of the following components: (1) detailed multi-beam sonar surveys to map

the bathymetry and identify possible locations of sunken oil accumulation, (2) side scan sonar surveys to identify benthic habitats and features to identify possible locations of sunken oil accumulation, (3) video and GoPro camera photographs deployed on a remotely operated vehicle (ROV) to visually identify sunken oil, and (4) diver inspections of priority sites to look for and recover sunken oil or oiled wrack on the bottom.

3.0 Measures to Remove Remaining Oil and Petroleum Contamination

Remaining oil and petroleum contamination will continue to be removed from soil, rocks, beaches and ocean water to the extent practical using methods outlined in the following plans.

- Incident Action Plans (IAPs) (as updated each operational period)
- Phase II – Guidelines for Terrestrial, Marine Waters and Shoreline habitat Cleanup Endpoints (Phase II Endpoints), Attachment 3 (Remedial Alternatives for Shoreline Type)- Approved June 1, 2015.
- Plan for Cleaning Rocks- Approved May 24, 2015
- Soil Cleanup Plan (Section 4)-Approved May 30, 2015
- Waste Management Plan – Approved May 21, 2015

Updated IAPs detail plans are available on an ongoing basis for oil recovery efforts within ICS 204 forms.

Attachment 3 to the Phase II Endpoints document presents a matrix which includes preferred methods for oil removal in distinct areas. These areas include boulder, cobble areas, and fine to medium grain sandy beach, sandstone cliff face, and wave cut platforms. Methods include manual oil removal, scraping, washing, natural recovery, use of heavy equipment, and sediment relocation. SCAT teams recommend preferred cleanup options through issuance of Shoreline Treatment Recommendations (STR) as presented in ICS 204 forms.

The plan for cleaning rocks outlines measures to address immovable boulders imbedded in the beach within the tidal zone. Clean up techniques include manually scraping oil from the surface and using a wire brush to remove remaining oil. Removed oil will be contained and collected for disposal per the Waste Management Plan. The plan specifies that no mussels or other invertebrates attached to the rocks are to be removed and also addresses the potential for a qualified biological monitor or archaeological monitor to accompany cleanup crews.

The release site has been categorized in to 4 sections. Section 1 (release site) includes the release point southeast to a point at or near the Highway 101 north right-of-way; Section 2 (drainage pipe) includes the drainage under Highway 101; Section 3 (culvert) includes the culvert under the railroad tracks; and Section 4 (bluff and cliff) includes the area southeast of

the railroad culvert to the cliff/beach interface. A soil cleanup plan has been developed (approved May 30, 2015) for Section 4 (Coastal Bluff Terrace). Additional soil cleanup plans will be developed for Sections 2 and 3, if appropriate, to address potential soil impacts that may be identified. The completed soil cleanup plan involves excavation and disposal of affected soils and replacement with clean backfill material.

The waste management plan addresses the proper disposal and quantification of recovered materials during the response and recovery operations. The plan details methods for waste stream separation (liquids, solids, vegetation and wildlife), quantification, waste classification and disposal.

Responders will continue working with the Unified Command to ensure cleanup activities achieve the greatest net environmental benefit while ensuring protection of public health and mitigation of environmental impact.

4.0 Sampling Plan

Environmental samples for the Refugio Incident are collected in accordance with the UC-approved ER Environmental Sampling and Analysis Plan which was signed by UC on May 21, 2015. The ER Environmental SAP covers all affected matrices including water, sediment, soil, and source oil; however; a separate plan was prepared for air (see below). Other media or incident specific plans have been developed and approved and additional plans will be prepared and approval sought from the UC as needed.

The ER Environmental SAP describes the sampling protocols and analytical methods. The analytical results may be used to fingerprint different sources of oil, delineate the area of impact, establish background concentrations, and provide empirical data to support decisions regarding public health and the environment.

Air monitoring and analytical air sampling is being conducted in accordance with the UC-approved Air Sampling and Analysis Plan (Version 1.0 signed on May 20, 2015; Version 1.1 signed on May 22, 2015, the UC-approved Worker Exposure Sampling Plan at Line 901 Release Site signed on May 25, 2015, and the UC-approved Air Sampling and Analysis Refinement Plan signed on June 2, 2015). These plans outline the real-time air monitoring and analytical air sampling methodology, instrumentation, and relevant site specific action levels used during the response efforts. Air monitoring and analytical air sampling may be used to evaluate the absence or presence of airborne crude oil associated compounds in response-related work areas and in the adjacent communities to provide data to support decisions regarding public and worker health. All quality assurance for sample collection, handling, storage, and analysis was conducted in accordance with the Quality Assurance Project Plan.

The Pinniped Recovery Plan (approved May 29, 2015) outlines measures to address oiled live and dead pinnipeds, unoiled live pinnipeds, and unoiled dead pinnipeds. Regions included within the plan include Gaviota – Coal Oil Point (Division I – N); Coal Oil Point – Rincon Point (Ventura/Santa Barbara County Line); and North of Gaviota or South of the Ventura County Line. The plan addresses oil sampling on live and dead animals with samples to be taken according to oil spill processing protocols.

5.0 Quality Assurance/Quality Control, Data Validation, and Chain of Custody Procedures

A Quality Assurance Project Plan (QAPP) Emergency Response Refugio Incident (V 1.0) has been developed and submitted to UC for approval to document the planning, implementation, and assessment procedures conducted by RP consultants and local, state, and federal agencies. The QAPP includes Quality Assurance and Quality Control (QA/QC), data validation, and chain of custody procedures are detailed within this document for sampling and analyses procedures with regards to air monitoring, air sampling, and environmental sampling. The QAPP provides assurances that monitoring and sampling activities conducted have consistent sample collection procedures and data is suitable for its intended use. The methods and procedures described within the QAPP were developed in general accordance with conventionally-accepted QA/QC objectives and meet UC objectives and sampling and quality directives as outlined in the Order. Furthermore, data sharing and documentation will be conducted in accordance with the *Common Operating Platform Information* and *Data Sharing Plan and Document and Data Management Plan* approved through UC.

6.0 Disposal of Oil and Materials that Were in Contact with Oil

Disposal of oil and materials that were in contact with oil will be managed in accordance with the Waste Management Plan as approved by the Unified Command dated May 21, 2015. In addition, these materials will be managed and characterized in accordance with local, state and federal regulations as well as the California Department of Fish and Wildlife (DFW) requirements.

Wastes are separated by three geographical areas of impact as follows: Shoreline/Offshore Waste, Culvert Waste and Onshore Waste. Each area segregates waste streams into eight waste streams: Soil/Sand, Vegetation, Oily Debris, Absorbents (Adsorbent boom and pads), Oil Adsorbing snares (pom-poms), Wildlife, Recovered Oil and Decontamination Water.

Proper shipping documents will be provided for each roll-off bin or vacuum truck load. The shipping papers are carbon copies to ensure the generator receives a shipment copy from the

generation site and a receipt copy from the treatment storage and disposal facility (TSDF) for each load shipped. Designated TSDF's are as follows:

- Clean Harbors Environmental in Buttonwillow CA (Class 1 Landfill)
- Soil Safe Technologies, Adelanto CA (soil thermal desorption and recycling)
- DeMenno Kerdoon, Compton CA (Liquids Treatment & Recycling)
- Crosby & Overton, Long Beach CA (Liquids Treatment & Recycling

For solid waste the TSDF weighs each receptacle and provides tickets stipulating tare and gross weights. Liquids waste is quantified by a flow totalizer at the disposal facility and total gallons are rectified on the shipping papers.

Oil quantification in soil is conducted by obtaining a representative composite sample from each fifth bin. Samples are analyzed for TPH (G)(D) &(O) and represent petroleum hydrocarbon content for five bins chronologically inventoried in an area specified above. The analytical results along with API gravity will be used to calculate the total oil content representing the net oil quantity for the five roll-off bins. This quantification method is in accordance with California Code of Regulations, Title 14, and Section 877.

Recent laboratory results from representative samples taken indicate all waste streams except the oil, oil & water, and decontamination water have been classified as Non Hazardous Oil impacted waste. Oil is classified as excluded recyclable materials and final quantification with the input from California Fish & Wildlife OSPR personnel will be conducted. The oil will be recycled back into Plains Pipeline LP inventory. Oily water and decontamination water is currently pending characterization; once characterized, these materials will be appropriately handled and/or disposed.

7.0 Confirmation Sampling Plan and Contingent Cleanup Measures

Confirmation soil samples will be collected in accordance with the approved sampling plan and associated addenda. A plan entitled "Confirmation Soil Sampling and Analysis Plan for Refugio Incident – Pipeline Excavation Area," approved by UC on June 3, 2015 is in place which pertains to soil in the immediate release area (Section 1). That Confirmation Sampling Plan describes the sampling methodology required to establish background concentrations of constituents of concern for the release site. The plan also describes the sample locations and density to confirm that petroleum impacted soils with concentrations above the agreed upon cleanup standards have been remediated to appropriate standards. In addition, this plan defines the analytical methods for soil analysis and describes the certification of clean backfill sources. In the event that confirmation samples indicate the need for additional remediation, a contingency has been made to conduct additional soil excavation and re-sampling, as may be appropriate.

Addenda to the approved Confirmation Sampling Plan will be developed as appropriate for outside of the immediate release area to address specific requirements of the federal, state and local regulatory authorities including the U.S.EPA, Central Coast Regional Water Quality Control Board and Santa Barbara County Environmental Health Services. For remedial work on the coastal terrace bluff, it is recognized that site-specific aspects (including access, geotechnical stability, worker safety, and cultural considerations) may necessitate an adjustment in cleanup levels with prior approval and oversight of the Central Coast Regional Water Quality Control Board and Santa Barbara County Environmental Health Services.

For shoreline segments, the SCAT teams will determine when each segment has been cleaned to an acceptable degree. This will be done using best professional judgment and experience with the goal to minimize further risk to the environment, water quality, wildlife, cultural resources and people.

8.0 Schedule of Tasks

The schedule for implementation of specific tasks will be dependent on priorities of tasks identified in the IAP, STR's and on-going discussions within the UC. The Respondent will continue to coordinate with the FOSC one day prior to any field work. Oil removal and site control operations will continue until completed to endpoints per the approved Phase II: Guidelines for Terrestrial, Marine Waters and Shoreline habitat Cleanup Endpoints Plan.