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Date Filed: 1/31/18
180th Day: 7/30/18
Staff: JB-SF
Staff Report: 2/23/18
Hearing Date: 3/9/18

STAFF REPORT: REGULAR CALENDAR

Application No.: 9-17-0297

Applicant: Plains Pipeline, L.P.

Project Location: Refugio State Beach, Santa Barbara County.

Project Description: Permanently authorize emergency oil spill work previously conducted under Emergency Permit No. G-9-15-0016, issued on July 6, 2015 for removal and backfill of approximately 20 cubic yards of oiled cobble material from the base of the bluff at Refugio State Beach in Santa Barbara County.

Staff Recommendation: Approval

SUMMARY OF STAFF RECOMMENDATION

On May 19, 2015 a 24-inch underground pipeline (line 901) owned by Plains Pipeline, L.P. (“Plains”) ruptured near Refugio State Beach in Santa Barbara County, causing the release of crude oil onto area beaches and into the Pacific Ocean. Oil flowed through natural swales and drainage culverts, under Highway 101 and the Union Pacific Railroad tracks, and eventually across the coastal bluff to the beach and ocean below. Approximately 124,000 gallons of heavy crude oil was released, of which an estimated 21,000 gallons reached the ocean.

In this application, Plains seeks authorization to make permanent the emergency oil spill work previously conducted under Emergency Permit No. G-9-15-0016, specifically for the removal and backfill of approximately 20 cubic yards of oiled cobble material at the base of the bluff at

Refugio State Beach in an area called Section 5. Section 5 refers to the bluff and cliff face area near the release site. During the release, oil flowed along a narrow blufftop swale, and then over the edge of the bluff along a near vertical bedrock cliff, and along a soil and rock chute leading downslope to the cobble zone at the base of the bluff. The cobbled shoreline area at the toe of the bluff is within the Coastal Commission's permit jurisdiction.

The work at Section 5 had the potential to impact marine resources, water quality, and cultural resources. For safety reasons, the beach in this area was closed until the cleanup was complete. The emergency permit addressed construction-related concerns by requiring biological and archeological monitors to be onsite during all Section 5 work. The permit also required implementation of a suite of best construction management practices to limit water quality impacts.

The Commission staff was concerned that the work could affect the long term geotechnical stability of the bluff in a high hazard area and could exacerbate erosion overtime. To address these concerns, the applicant implemented an extended monitoring program to ensure slope stability and to respond to any resurfacing of oil (*Cliff Face Area (Section 5) Monitoring Plan*, dated September 2, 2015). The monitoring plan required frequent inspections to evaluate the Section 5 area for re-oiling, geotechnical stability, environmental conditions, and erosion control. The inspection and monitoring program found no evidence of re-oiling or geologic instability.

Based on the conclusions of the monitoring program, and in consultation with the other resource agency with jurisdiction over the oil spill response work, the Commission staff believes the work undertaken at Section 5 did not destabilize the bluff and that no additional remedial actions are needed.

The Commission staff believes the project was undertaken consistent with the Chapter 3 policies of the Coastal Act and therefore recommends the Commission **approve** CDP 9-17-0297.

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EXHIBITS

Exhibit 1 – Location Map

Exhibit 2 – As-Built Project Plans

Exhibit 3 – Spyder Excavator Work

Exhibit 4 – Before-and-After Photos

Exhibit 5 – Emergency Coastal Development Permit No. G-9-15-0016, issued July 6, 2015

I. MOTION AND RESOLUTION

Staff recommends the Commission **approve** coastal development permit application 9-17-0297.

Motion:

*I move that the Commission **approve** Coastal Development Permit 9-17-0297.*

Staff recommends a **YES** vote on the foregoing motion. Passage of this motion will result in conditional approval of the permit and adoption of the following resolution and findings. The motion passes only by affirmative vote of a majority of the Commissioners present.

Resolution:

The Commission hereby approves Coastal Development Permit 9-17-0297 and adopts the findings set forth below on grounds that the development will be in conformity with the policies of Chapter 3 of the Coastal Act. Approval of the permit complies with the California Environmental Quality Act because either 1) feasible mitigation measures and/or alternatives have been incorporated to substantially lessen any significant adverse effects of the development on the environment, or 2) there are no further feasible mitigation measures or alternatives that would substantially lessen any significant adverse impacts of the development on the environment.

II. FINDINGS AND DECLARATIONS

The Commission finds and declares as follows:

A. PROJECT DESCRIPTION AND BACKGROUND

On May 19, 2015 a 24-inch underground pipeline (line 901) ruptured near Refugio State Beach in Santa Barbara County, causing the release of crude oil onto area beaches and into the Pacific Ocean. Line 901 ruptured approximately one hundred yards inland (north) of Highway 101. Oil flowed through natural swales and drainage culverts, under Highway 101 and the Union Pacific Railroad tracks, and eventually across the coastal bluff to the beach and ocean below. The oil spread both east and west from the spill site, impacting beaches in the vicinity and perhaps as far away as Los Angeles, Orange and San Diego counties. The responsible party, Plains All American Pipeline, L.P., initially estimated the total release at approximately 101,000 gallons of crude oil, of which an estimated 21,000 gallons reached the ocean. Later reports estimated that 124,000 gallons of crude oil were released from line 901 (PHMSA Failure Investigation Report, May 2016).

On June 8, 2015, Plains submitted an application to the Coastal Commission for an Emergency Coastal Development Permit (E-CDP) to cover spill-related response activities located within the Coastal Commission's permit jurisdiction. On June 8, 2015, Alison Dettmer, Deputy Director of the Coastal Commission's Energy, Ocean Resources and Federal Consistency Division, verbally

authorized the ongoing spill-related activities within the Coastal Commission's permit jurisdiction and informed Plains that a written E-CDP would be forthcoming. On July 6th, 2015, the Commission issued a written E-CDP for response activities within the Commission's jurisdiction. (See Exhibit 1).

Commission staff has reviewed all of the response activities performed and has determined that only Section 5 work in the Commission's original jurisdiction requires the need for a follow up Coastal Development Permit (CDP). The Commission staff concluded that temporary offshore operations (booming and skimming) as well as personnel along the shoreline using hand tools such as shovels and brushes to remove oil and oiled materials (no mechanized equipment or placement of structures) do not require a CDP. In this case, the use of heavy equipment to excavate and backfill cobble material below the mean high tide line (MHTL) at Section 5 constitutes "development" under the Coastal Act for which a CDP is required.

In this follow up CDP application, Plains does not propose any new development activity; it proposes only to authorize permanently the Section 5 work undertaken under the authority of Emergency Permit G-9-15-0016. That work included removing oily materials from the bluff lip, steep slope face, and cobbled beach area at Section 5 using a specialized excavator called a spyder excavator. The excavation was conducted in three phases: 1) removal and stockpiling of oiled materials; 2) installation of a boulder buttress upslope of the cobble area; and 3) backfill with clean materials similar to those removed. The spyder excavator crawled up the slope to remove soils and loose rock with its excavator arm and place the material downslope. Oiled materials, removed from the slope face and already on the beach, were loaded into "super sacks" or rock boxes staged on the beach at the base of the bluff. The loading area was surrounded with sandbags, which were covered with plastic sheeting and surrounded by absorbent boom as appropriate for secondary containment. A boulder buttress was installed upslope of the cobble area using existing large rocks adjacent to the base of Section 5 to promote slope stability. Plains transferred the excavated materials via helicopter to a nearby staging area. It replaced the approximately 20 cubic yards of oiled cobble material excavated from the base of the bluff with the same amount of appropriate/similar sized material.

B. COASTAL COMMISSION JURISDICTION AND STANDARD OF REVIEW

This CDP only authorizes response activities within the Coastal Commission's original permit jurisdiction (seaward of the Mean High Tide Line (MHTL) and in non-LCP certified areas). This includes the ocean, sandy beach, and areas of the rocky shoreline up to the MHTL. Portions of the project within the Commission's retained jurisdiction include the removal and backfill of approximately 20 cubic yards of oiled cobble material from the base of the bluff at Section 5.

Although the City of Goleta does not have a certified Local Coastal Program (LCP), the Commission staff determined that oil spill response activities taking place within the Coastal Zone (landward and seaward of the MHTL) of the City of Goleta did not trigger the need for a CDP.

Santa Barbara County has coastal permit jurisdiction in areas landward of the MHTL, including inland areas at the Section 5 spill site, along the coastal bluff top, and on portions of the bluff/cliff face near the spill site. On December 23, 2016 the Santa Barbara County Zoning Administrator approved a local CDP for portions of the project in the County's jurisdiction (Case No. 15CDH-00000-00019). Although this permit was appealable to the Coastal Commission, no appeals were filed.

The standard of review for these project components is Chapter 3 of the Coastal Act.

C. EXCAVATION AND FILL OF COASTAL WATERS

Section 30233 of the Coastal Act states:

(a) The diking, filling, or dredging of open coastal waters, wetlands, estuaries, and lakes shall be permitted in accordance with other applicable provisions of this division, where there is no feasible less environmentally damaging alternative, and where feasible mitigation measures have been provided to minimize adverse environmental effects, and shall be limited to the following:

(1) New or expanded port, energy, and coastal-dependent industrial facilities, including commercial fishing facilities.

(2) Maintaining existing, or restoring previously dredged, depths in existing navigational channels, turning basins, vessel berthing and mooring areas, and boat launching ramps.

(3) In open coastal waters, other than wetlands, including streams, estuaries, and lakes, new or expanded boating facilities and the placement of structural pilings for public recreational piers that provide public access and recreational opportunities.

(4) Incidental public service purposes, including but not limited to, burying cables and pipes or inspection of piers and maintenance of existing intake and outfall lines.

(5) Mineral extraction, including sand for restoring beaches, except in environmentally sensitive areas.

(6) Restoration purposes.

(7) Nature study, aquaculture, or similar resource dependent activities.

For the purposes of Coast Act Section 30233, the removal and backfill of oiled cobble material at the base of the bluff at Section 5 is considered to be "dredging" and "fill" of such material. The project involved the excavation of 21.18 cubic yards of oiled cobble material and backfill of

20.53 cubic yards of clean cobbles and is therefore subject to the policies of Coastal Act Section 30233.

Projects that include excavation or fill of coastal waters must meet the three tests of Coastal Act Section 30233(a). The first test requires that the proposed activity fit into one of seven categories of uses enumerated in Coastal Act Section 30233(a)(1-7). The second test is that there be no feasible less environmentally damaging alternative. The third and final test mandates that feasible mitigation measures be provided to minimize the project's adverse environmental effects.

In this case, the express purpose of Plains' project was to restore the site to pre-incident conditions by removing the cobble material that was contaminated by crude oil. This type of "restoration" project is allowable under 30233(a)(6) and therefore satisfies the first test.

The second test of Section 30233 requires an assessment of whether there are feasible less environmentally damaging alternatives. Due to the complexities identified at Section 5 (heavy oiling, steep slopes, difficulty of access, limited space, high hazards, etc.), conventional cleanup methods consisting of personnel using hands tools was not feasible. The remedial excavation and backfill in this area was accomplished using a specialized excavator (spyder) specifically designed for earthwork on steep slopes and difficult terrain. Standard backhoe equipment could not access or safely remove oiled materials from this area. Other methods of remediation for the oiled cobbles material in this area, like surf washing, tumble cleaning, pressure washing, and even continued hand scraping were considered (and some field tested), but ultimately were determined not to be effective or safe at this location. Based on these considerations, the Commission finds that there are no feasible less environmentally damaging alternatives to the proposed excavation and fill at the base of the bluff at Section 5, and that the project therefore meets the second test of Coastal Act Section 30233.

The third test under section 30233 requires that the project include feasible mitigation measures to minimize adverse environmental effects. To avoid impacts to the beach, intertidal zone, and rocky shoreline, the spyder excavator was mobilized from Refugio State Beach parking lot, west along the beach during a low tide event. The spyder excavator mobilization was overseen by an approved biological monitor. To avoid the possibility of oiled materials entering the water during construction, the excavated material was stockpiled at the toe of the bluff on a pad lined with plastic sheeting, surrounded by absorbent materials and separated from tidal surge and wave action by an engineered sandbag wall. Backfill material, consisting of clean cobble, was approved by the Coastal Commission's coastal engineer, who confirmed that the type, size, and color of cobble used was similar to that found naturally at this beach and would not cause adverse environmental impacts.

As described in other sections of this report, the project also included several mitigation measures related to marine resources and water quality, cultural resources, spill prevention, and coastal hazards. Thus, the Commission finds that the third test of Coastal Act Section 30233(a) has been met.

For the reasons above, the Commission has determined that the proposed project represents the least environmentally damaging feasible alternative and includes feasible mitigation measures, and is therefore consistent with Section 30233 of the Coastal Act.

D. MARINE RESOURCES AND WATER QUALITY

Coastal Act Section 30230 states:

Marine resources shall be maintained, enhanced, and where feasible, restored. Special protection shall be given to areas and species of special biological or economic significance. Uses of the marine environment shall be carried out in a manner that will sustain the biological productivity of coastal waters and that will maintain healthy populations of all species of marine organisms adequate for long-term commercial, recreational, scientific, and educational purposes.

Coastal Act Section 30231 states:

The biological productivity and the quality of coastal waters, streams, wetlands, estuaries, and lakes appropriate to maintain optimum populations of marine organisms and for the protection of human health shall be maintained and, where feasible, restored through, among other means, minimizing adverse effects of waste water discharges and entrainment, controlling runoff, preventing depletion of ground water supplies and substantial interference with surface waterflow, encouraging waste water reclamation, maintaining natural vegetation buffer areas that protect riparian habitats, and minimizing alteration of natural streams.

The project site is at the base of the bluff at Refugio State Beach. In this area, the Pacific Ocean frames sandy beaches which transition into rocky intertidal zones backed by scattered cobbles and large rock outcroppings across the beach. An abundance of marine resources, species, and sensitive habitats can be found in the area.

The excavation and backfill work had the potential to adversely impact marine resources during construction due to the presence of cleanup personnel, heavy equipment use, and construction disturbances. The work conducted near the ocean had the potential for oil or oily materials to enter marine waters. In the longer term, there is potential for ongoing oil seepage from the bluff and re-oiling of the environment.

A least one biological monitor was onsite to make sure the work was undertaken consistent with their permit requirements. Each day, prior to the commencement of cleanup operations, biological monitors surveyed the work area, identified any sensitive species or areas of biological concern, and relayed that information to crew supervisors. No sensitive species were encountered.

Section 5 remediation procedures were conducted consistent with the *Detailed Plan – Remediation of Cliff Face Area (Section 5)*, dated July 2, 2015. The Detailed Plan describes in

detail the applicant's proposed measures to prevent and minimize potential impacts to marine resources and water quality during construction. These measures include: careful handling and staging of excavated materials above areas of tidal surge and wave attack; placing of sandbag barriers and absorbent boom around work areas; and use of secondary containment around material loading areas. In addition, Coastal Commission Emergency Permit G-9-15-0016 required that: all work take place during daylight hours; low pressure balloon tires be used on the spyder excavator; access to the work site was allowed only at low tides to avoid contact with ocean waters and intertidal areas; all activities avoided contact with sensitive habitat areas; and cleanup activities avoided surface expressions of bedrock and tidepool areas to the maximum extent feasible.

The applicant monitored the site for any resurfacing of oil. Monitoring included weekly inspections and reporting for 12 weeks, followed by monthly inspection and reporting for 12 months, as well as inspections and reporting after significant events (rainfall, storms, extreme tides, earthquakes, etc.) for a period of one year. 13 weekly, 12 monthly and 15 trigger event inspections were conducted, and a strike team was deployed twice for minor cleanup (scraping of oil from cliff face). On February 17, 2017, the final trigger (Trigger Event 15) for Section 5 (3.5 inches of rain within a 24-hour timeframe) was met. Due to heavy wet weather conditions, Trigger Event 15 was completed on February 24, 2017. This final inspection noted that erosion control measures remain intact and in good condition and that there was no evidence of re-oiling.

As proposed and as carried out consistent with the conditions in the emergency permit, the Commission finds that the project will adequately protect marine resources and water quality and is therefore consistent with Sections 30230 and 30231 of the Coastal Act.

E. SPILL PREVENTION AND RESPONSE

Section 30232 of the Coastal Act states:

Protection against the spillage of crude oil, gas, petroleum products, or hazardous substances shall be provided in relation to any development or transportation of such materials. Effective containment and cleanup facilities and procedures shall be provided for accidental spills that do occur.

Section 30232 of the Coastal Act requires in part measures for effective containment and cleanup should accidental spills occur.

The project activities occurred near the ocean and intertidal areas and required consideration of tides and wave action that may come into contact with construction equipment or staged materials and cause a spill.

Section 5 remediation procedures were conducted consistent with the *Detailed Plan – Remediation of Cliff Face Area (Section 5), dated July 2, 2015*. The Detailed Plan describes in detail the applicant's proposed measures to prevent spills and effectively cleanup accidental spills. These measures include: careful handling and staging of excavated materials above areas of tidal surge and wave attack; placing of sandbag barriers and absorbent boom around work

areas; and use of secondary containment around material loading areas. A surplus of adsorbent boom and material was maintained onsite for use as needed. Plastic sheeting was also used to prevent clean cobble from being impacted as excavation continued on the bluff. Sandbags and absorbent boom were inspected and maintained frequently during excavation activities in response to tide fluctuations and a surplus of adsorbent boom and material was maintained onsite for use as needed. Upon completion of the remedial excavation and backfill operations, the spyder excavator was placed on plastic sheeting and cleaned using brushes. The plastic sheeting and oil material from the spyder excavator's tires, carriage, and buckets were collected and disposed of. The spyder excavator was demobilized with oversight by the approved biological monitor.

In addition, Coastal Commission Emergency Permit G-9-15-0016 required that: work be accomplished only when weather and ocean conditions allowed dislodged slope debris and oiled sediment to be effectively controlled and fully contained; the construction site maintained good construction site housekeeping controls and procedures (e.g., clean up all leaks, drips, and other spills immediately, keep materials covered and out of the rain); and equipment washing, decontamination, refueling and/or servicing were done with secondary spill containment measures in place.

Therefore, the Commission finds that the proposed development, as conditioned in the emergency permit, includes necessary measures to prevent and contain spills and is consistent with Section 30232 of the Coastal Act.

F. CULTURAL RESOURCES

Coastal Act Section 30244 states:

Where development would adversely impact archaeological or paleontological resources by the State Historic Preservation Officer, reasonable mitigation measures shall be required.

The project site, located along the resource-rich shoreline of Santa Barbara County, has the potential to contain cultural and archeological resources.

All cleaning activities in Section 5 were monitored by archaeologists and Native Americans. This included mobilization and de-mobilization of equipment (spider excavator, helicopter, and refuse bins) as well as whenever crews were working in the vicinity of a known archeological site. A sparse scatter of lithic debris was discovered during brush clearing and access route development activities in Section 5. In order to minimize impacts to the site, carpet and sandbags were placed over all areas where artifacts were discovered. Cleanup crews at Section 5 were limited to movement and staging of materials on the carpet and sandbag areas. According to the archaeological/cultural monitoring report prepared for the Commission, no cultural resources were observed or impacted in the Commission's jurisdiction at Section 5.

Thus, the Commission finds that the project protected cultural and archeological resources consistent with Coastal Act Section 30244.

G. COASTAL HAZARDS

Coastal Act Section 30253 states, in relevant part:

New development shall do all of the following:

- (a) Minimize risks to life and property in areas of high geologic, flood, and fire hazard.*
- (b) Assure stability and structural integrity, and neither create nor contribute significantly to erosion, geologic instability, or destruction of the site or surrounding area or in any way require the construction of protective devices that would substantially alter natural landforms along bluffs and cliffs.*

The project site is located in an area of high geologic and flood hazard. Near vertical bedrock surfaces, difficult rocky terrain, and the close proximity to the ocean waves and high tides make excavation work difficult in this area.

The Commission staff was concerned that the work could affect the long term geotechnical stability of the bluff in a high hazard area and could exacerbate erosion overtime. To address these concerns, the applicant implemented an extended monitoring program to ensure slope stability and respond to any resurfacing of oil (*Cliff Face Area (Section 5) Monitoring Plan*, dated September 2, 2015). The monitoring plan required frequent inspections to evaluate the Section 5 area for re-oiling, geotechnical stability, environmental conditions, and erosion control. The inspection and monitoring program found no evidence of re-oiling or geologic instability.

The Commission's staff coastal engineer was consulted with in the drafting of the detailed remediation plan and reviewed the extended monitoring program. Based on the conclusions of the monitoring program, and in consultation with the other resource agency with jurisdiction over the oil spill response work, the Commission staff believes the work undertaken at Section 5 did not destabilize the bluff and that no additional remedial actions are needed.

Thus, the Commission finds that the proposed project is consistent with Coastal Act Section 30253.

H. PUBLIC ACCESS

Coastal Act Section 30211 states:

Development shall not interfere with the public's right of access to the sea where acquired through use or legislative authorization, including, but not limited to, the use of dry sand and rocky coastal beaches to the first line of terrestrial vegetation.

Coastal Act Section 30240(b) states:

Development in areas adjacent to environmentally sensitive habitat areas and parks and recreation areas shall be sited and designed to prevent impacts which would significantly

degrade those areas, and shall be compatible with the continuance of those habitat and recreation areas.

The project location on the back beach near the Refugio State Park campground is an area heavily used by the public for beach access and various recreational purposes, including walking, hiking, and running on the beach, swimming, fishing, surfing, kayaking, tide pooling, and general observation and enjoyment of the surrounding coastal resources.

For safety reasons, the beach in this area was closed until the cleanup was complete. The beach closure lasted until July 17, 2015. Implementation of the work at Section 5 was necessary in order to reopen this section of beach to the public. Given that the monitoring program shows that this bluff face and beach area is not re-oiling, the work was successful in removing oiled rocks and sand from the beach allowing access to and recreating along this section of beach.

For these reasons, the Commission finds that the Section 5 work was needed to ensure the public's right of access to the sea along this stretch of oil-stained beach and prevent ongoing impacts to adjacent parks and recreational areas as required by Sections 30211 and 30240(b) of the Coastal Act.

III. CALIFORNIA ENVIRONMENTAL QUALITY ACT

Section 13096 of the Commission's administrative regulations requires Commission approval of CDP applications to be supported by a finding showing the application to be consistent with any applicable requirements of the California Environmental Quality Act (CEQA). Section 21080.5(d)(2)(A) of the CEQA prohibits approval of a proposed development if there are feasible alternatives or feasible mitigation measures available that would substantially lessen any significant impacts that the activity may have on the environment. As proposed and conditioned in the emergency permit issued by the Commission's Executive Director, mitigation measures that minimized or avoided all significant adverse environmental impacts were required during cleanup of the oil spill. In addition, as described in Section III(C) above, alternative cleanup methods were considered and the least environmentally damaging alternative chosen. There are no feasible alternatives or feasible mitigation measures available which would substantially lessen any significant adverse impact that the activity would have on the environment. Therefore, the Commission finds that the proposed project can be found consistent with the requirements of the Coastal Act and to conform to CEQA.

**APPENDIX A:
SUBSTANTIVE FILE DOCUMENTS**

File for Emergency Coastal Development Permit No. G-9-15-0016

File for Coastal Development Permit Application No. 9-17-0297