CITY OF
LONG BEACH

Department of Public Works
411 West Ocean Boulevard, 5th Floor Long Beach, CA 90802
(562) 570-6383

April 20, 2021

R-16
REVISED

HONORABLE MAYOR AND CITY COUNCIL
City of Long Beach
California

RECOMMENDATION:

Adopt a Resolution, as a responsible agency, under the California Environmental Quality Act (CEQA), making Findings of Fact that the Final Environmental Impact Report (FEIR) certified by the City of Carson in November 2020 (State Clearinghouse No. 2020059038), has adequately analyzed all relevant CEQA topics relating to the Carson to Paramount Pipeline Conversion Project within the City of Long Beach; adopt a Statement of Overriding Considerations pursuant to Public Resources Code Section 21081; and adopt a portion of the Mitigation, Monitoring, and Reporting Program;

Determine that the conversion of subsurface and, where applicable, above ground pipeline "Line 4 and Line 12," within the City of Long Beach municipal boundaries, from crude oil to hydrogen gas, the permitting of their continued operation and maintenance, the removal of manual valves replaced with welded pipe, and the installation of one new manual valve near the intersection of South Street and Orizaba Avenue by World Energy, LLC, dba Paramount Pipeline, LLC, within the City of Long Beach, is Categorically Exempt from the requirements of CEQA in accordance with State CEQA Guidelines Section 15301 (Existing Facilities);

Approve the assignment of existing pipeline permits P-141-83, P-210-00, P-140-83 and P-230-04 from the previous owner of the pipelines to new owner, World Energy, LLC, dba Paramount Pipeline, LLC; and,

Authorize the City Manager, or designee, to issue a permit to World Energy, LLC, dba Paramount Pipeline, LLC, for the conversion and operation of pipelines previously used for transporting crude oil products for the transportation of a hydrogen gas product, subject to Conditions of Approval relating to public health and safety. (Districts 8, 9)

DISCUSSION

The City of Long Beach (City) regulates the placement and operation of pipelines that traverse within and through the City boundaries. Oftentimes, pipelines run through multiple cities and also through the Ports of Long Beach and Los Angeles, in which case each entity provides a separate but coordinated approval to the pipeline operator. Beginning with the first permit issuance in 1983, and the last one issued in 2004, the City has issued Delek US, operating as Paramount Petroleum, a series of pipeline permits (P-141-83, P-210-00, P-140-83 and P-230-04). Recently, Paramount Petroleum (Delek US) sold their assets of pipelines subject to the existing permits to World Energy, LLC (World Energy), the parent company of Paramount Pipeline, LLC (Paramount Pipeline). The requested approvals include a CEQA

determination; the assignment of the existing permits to the new World Energy ownership; and, the conditional approval and issuance of a permit for the conversion of use and the operation of the pipelines from crude oil petroleum products to hydrogen gas.

World Energy is one of the largest sellers of biofuels for over 20 years. World Energy is undertaking efforts to convert a former oil refinery in the City of Paramount, which it purchased in 2018, to a state of the art, low-carbon fueling hub, including the ability to produce 350 million gallons of sustainable aviation fuel and renewable diesel. Hydrogen is a necessary component in the production of renewable fuels, and the requested pipeline conversion and operation permit is to facilitate the manufacture of biofuels at their Paramount plant. Once converted, these hydrogen transmission pipelines will alleviate the need for World Energy to hire multiple tanker trucks to daily deliver hydrogen gas, keeping them off the City's rights-of-way. This decreases the risk of vehicular accidents occurring on City roadways and reduces the carbon footprint and congestion associated with diesel trucking.

To further their conversion goals, World Energy (Paramount Pipeline) has already applied to convert four of its regulated crude oil transmission pipelines and one newly constructed pipeline to service as a regulated hydrogen gas transmission pipeline system. This will enable the pipelines to transmit hydrogen gas instead of crude oil products. The conversion and operation of the pipeline is regulated by the federal Department of Transportation's Pipeline and Hazardous Materials Safety Administration (PHMSA). The California Public Utilities Commission (CPUC) is the agency that oversees the implementation of these regulations within California.

The transmission pipelines have diameter sizes ranging from 8 inches to 12 inches. The general locations of the pipelines are shown on the attached sketches (Attachment A – Long Beach Pipeline Route). The total combined lengths of the pipelines are 23,008 linear feet.

The conversion of pipelines to hydrogen gas is a newer technology. World Energy (Paramount Pipeline) has partnered with a leader in the operation and maintenance of hydrogen gas pipelines, Air Products and Chemicals, Inc., to specifically operate and maintain the subject pipeline, which traverses through Long Beach. To facilitate the change in service, numerous studies of the existing pipeline have been prepared and preparatory work has been completed to support the conversion of the line. On March 25, 2021, a Conversion to Service Plan was completed that includes an assessment of the condition of the pipes based on their maintenance history, and outlines the extensive testing and other measures that have been or will be taken to ensure safe operation of the pipelines, including ongoing monitoring and testing that will be conducted (Attachment B - Conversion to Service Plan, 2018-Present). The following list highlights the range of testing, improvements that have already been undertaken, and ongoing practices to ensure the safe conversion of the line (these actions are documented, and reports are prepared for the governing regulatory agencies):

(1) The pipelines were drained, chemically cleaned, and hydrotested to a pressure of 555 pound-force per square inch (PSI), which is more than three times the normal operating pressure, pursuant to the Conversion of Service documentation (January 2020 to March 2021).

(2) Vintage flanges on the pipeline system were removed and replaced with either fully-welded joints or new flanges. [Flanges are collars or rings attached to pipes to increase strength or connect with another pipe or object.] A remote terminal unit (RTU) gas monitor that will monitor and sound an alarm if any hydrogen is detected and an Automatic Shut Off Valve skid was installed at the Dominguez Pump station to shut the line down if an issue is detected (August 2020).

(3) A leak detection system will be installed on the pipeline. The system will alarm the operators if a leak situation exists on the pipeline, once the leak exceeds predetermined levels. On a leak alarm, the controller will act to close the appropriate valves and the leaking section will be discharged to flare at the Carson plant (August 2020 to October 2020).

(4) Pipelines will be patrolled bi-weekly to detect potential unauthorized excavation activity in the vicinity of the pipeline and for any changes along the pipeline route that require action to ensure pipeline safety.

(5) Completed the following assessments:

(a) Threat Risk Analysis for the Pipeline (June 2020);

(b) High consequence analysis (HCA) of the area the pipeline runs (June 2020); and,

(c) Automatic shutoff valve analysis (June 2020).

(6) Annual pipeline surveys for potential leaks.

Aside from the technical measures taken to ensure safety, the conversion and operations plans include public education and awareness actions including the installation of pipeline markers along the alignment that indicate the approximate location of underground pipelines along the pipeline rights-of-way and whenever a pipeline intersects a street, highway, or waterway. Each pipeline marker will display the pipeline operator's name, product being transported, and the emergency contact number. The applicant will also be notifying more than 8,000 properties along the alignment of the nearby pipeline and will be providing pipeline safety brochures in both English and Spanish that advise on how to ensure pipeline safety and provide resources and information on what do in the event of a problem (Attachment C - Pipeline Safety in Your Community Brochure).

As part of, and subsequent to, the environmental review process, the applicant prepared risk assessment studies to ensure the converted hydrogen pipelines can be operated at appropriate low risk levels; those studies have determined that by operating at the proposed pressure of 160 PSI they can operate in a safe manner, with minimal risk, in adherence with established low-risk thresholds. This determination is based on the specific proposed operations requirements, pipe design, and equipment ratings of the subject pipelines and the proposed project. The Environmental Impact Report (EIR) prepared by the City of Carson, as the lead agency for the project, further limits the project to this operational constraint as a mitigation measure. Additionally, an emergency plan has also been prepared to outline the measures that will be taken in the event of an emergency.

Due to the specialized technical nature of the studies, Rincon Consultants and GHD were commissioned to conduct a technical review on the City's behalf of the documentation provided by Paramount Pipeline. The review of the reports is especially prudent for the protection of public safety since it involves the change of use to existing infrastructure much of which is subsurface. Based on this technical review, it is recommended that Conditions of Approval be placed upon the permit. These conditions would be separate from compliance with any mitigation measures required as a part of the Final Environmental Impact Report (FEIR) (Attachment D – Final Environmental Impact Report). These conditions of approval will include, but not be limited to, the following:

- Provision to the City of copies of all reports and documentation submitted to federal and State regulatory agencies on an annual basis, including copies of audit findings filed with PHMSA;
- Specific notification to the City in the event of a pipeline emergency, including any that require pipeline shutoffs, such as an unplanned release of gas or third-party damage to the pipeline;
- Specific notification to the City if there is a change to operational conditions related to the operating pressure (any exceedance above 160 PSI), the type of fluid transported, or the route of the pipeline;
- Specific notification to both the Public Works and Fire Departments of the City in advance of street or lane closures associated with pipeline operation or maintenance;
- The provision of first responder training to the Fire Department and other City emergency personnel in the event of an emergency associated with pipeline operations, including an unplanned release; and,
- Other conditions, as may be reasonable and necessary, to ensure the ongoing safe operation of the proposed project.

The Public Works Department has received and reviewed the proposed pipeline conversion permit application and found it to be compatible with the proposed use and not an obstacle to any street use nor any known or proposed developments. This permit is also in compliance with Long Beach Municipal Code Section 15.44.070, Conditions for Use of City Property. There will be no excavations involved with this action.

A Certificate of Liability Insurance is approved by the Department of Human Resources, Risk Management along with the City Attorney's Office and is on file with the Public Works Department. A bond of $250,000 has also been approved and is on file with the Public Works Department.

ENVIRONMENTAL REVIEW/CEQA DETERMINATION

The project before the City Council is part of a larger project knows as the "Air Products Hydrogen Pipeline Project." The larger project consists of the construction of a new 0.5-mile pipeline segment to an existing 11.5-mile long series of pipelines from Air Products' existing hydrogen facility in the City of Carson to the World Energy Paramount Refinery in the City of

Paramount. The City of Carson, as lead agency, certified the FEIR in November 2020. The City of Carson acted as the lead agency under CEQA. The City of Carson was the appropriate lead agency since it had the primary responsibility for approving the Conditional Use Permit for the expansion of the facility in its jurisdiction. The FEIR assesses the change of use of the approximately 4.3 miles of pipeline, the removal of the valves, and the installation of a new manual valve all located within Long Beach. The City and Port of Long Beach are two of the responsible agencies identified. Responsible agencies are entities that have some discretionary approval over a part of the project. In this instance, the City Council is issuing permits for the conversion of the lines to hydrogen gas, which qualifies as discretionary. In its role as a responsible agency, the City relies upon the CEQA documents prepared by the lead agency, in this case the City of Carson. However, the City must still exercise its own independent judgement with regards to those aspects of the project within its jurisdiction. In February 2021, the Port of Long Beach approved the portion of the project within its jurisdiction.

Based on a review of the FEIR certified by the City of Carson in November 2020 (State Clearinghouse No. 2020059038), the City of Long Beach as a responsible agency, has made certain findings (Attachment B - Conversion to Service Plan, 2018 to Present, and Attachment C - Pipeline Safety in Your Community Brochure) pursuant to Public Resources Code section 21081 and Title 14 California Code of Regulations Section 15091, and makes certain findings regarding the Statement of Overriding Considerations pursuant to Public Resources Code Section 21081 and Title 14 California Code of Regulations Section 15093, and sets forth and adopts a Mitigation Monitoring and Reporting Plan (MMRP) that pertains to the change in use from petroleum products to hydrogen gas products and operation for the existing subsurface pipeline and aboveground "Line 4 and Line 12" within Long Beach, referred to on Figure 2-5 through Figure 2-9 of the FEIR pursuant to Public Resources Code Section 21081 and Title 14 California Code of Regulations Section 15097.

This matter was reviewed by Deputy City Attorney Erin Weesner-McKinley on April 5, 2021 and by Budget Management Officer Rhutu Amin Gharib on April 8, 2021.

TIMING CONSIDERATIONS

City Council action is requested on April 20, 2021, to ensure the new permit for the operation of the converted pipeline for transportation of hydrogen products is in place expeditiously.

FISCAL IMPACT

The annual hazardous pipeline fee revenue is $29,385, which will be adjusted annually based on the Consumer Price Index (CPI) and will continue to be deposited in the General Fund Group in the Public Works Department. There is no local job impact associated with this recommendation. This recommendation has no staffing impact beyond the normal budgeted scope of duties and is consistent with existing City Council priorities.

SUGGESTED ACTION:

Approve recommendation.

Respectfully submitted,

ERIC LOPEZ
DIRECTOR OF PUBLIC WORKS

APPROVED:

THOMAS B. MODICA
CITY MANAGER

EL:JH:RU:LL

ATTACHMENTS: CITY COUNCIL RESOLUTION
A – LONG BEACH PIPELINE ROUTE
B – CONVERSION TO SERVICE PLAN, 2018-PRESENT
C – PIPELINE SAFETY IN YOUR COMMUNITY BROCHURE
D – FINAL ENVIRONMENTAL IMPACT REPORT
E - CEQA FINDINGS

OFFICE OF THE CITY ATTORNEY
CHARLES PARKIN, City Attorney
411 West Ocean Boulevard, 9th Floor
Long Beach, CA 90802-4664

RESOLUTION NO.

A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF LONG BEACH CERTIFYING THAT THE FINAL ENVIRONMENTAL IMPACT REPORT CERTIFIED BY THE CITY OF CARSON FOR THE PARAMOUNT PIPELINE CONVERSION PROJECT (STATE CLEARINGHOUSE NO. 2020059038) HAS BEEN COMPLETED IN ACCORDANCE WITH THE PROVISIONS OF THE CALIFORNIA ENVIRONMENTAL QUALITY ACT AND STATE AND LOCAL GUIDELINES, AND MAKING CERTAIN FINDINGS AND DETERMINATIONS RELATIVE THERETO; AND ADOPTING A STATEMENT OF OVERRIDING CONSIDERATIONS PURSUANT TO PUBLIC RESOURCES CODE SECTION 21081; AND ADOPTING A PORTION OF THE MITIGATION, MONITORING, AND REPORTING PROGRAM

WHEREAS, the City of Long Beach regulates the placement and operation of pipelines that traverse within and through the City boundaries. Oftentimes pipelines run through multiple cities and also through the Ports of Los Angeles and Long Beach, in which case each entity provides a separate but coordinated approval to the pipeline operator; and

WHEREAS, beginning in 1983, the City has issued Delek US, operating as Paramount Petroleum, a series of pipeline permits: P-141-83, P-210-00, P-140-83 and P-230-04; and

WHEREAS, recently Paramount Petroleum (Delek US) sold their assets of pipelines, subject to the existing permits, to World Energy LLC (World Energy), the parent company of Paramount Pipeline LLC. The requested approvals include a CEQA

determination; the assignment of the existing permits to World Energy, and the conditional approval and issuance of a permit for the conversion of use and the operation of the pipelines from crude oil petroleum products to hydrogen gas; and

WHEREAS, World Energy is one of the largest sellers of biofuels and is undertaking efforts to convert a former oil refinery located in the City of Paramount to a state of the art, low-carbon fueling hub; and

WHEREAS, hydrogen is a necessary component in the production of renewable fuels, and the requested pipeline conversion and operation permit is to facilitate the manufacture of biofuels at their Paramount plant; and

WHEREAS, on March 25, 2021, a Conversion to Service Plan was completed which includes an assessment of the condition of the pipelines based on their maintenance history, and outlines the extensive testing and other measures that have been or will be undertaken to ensure the safe operation of the pipelines, including ongoing monitoring and testing that will be conducted; and

WHEREAS, as part of, and subsequent to, the environmental review process, Paramount Pipeline prepared risk assessment studies to ensure the converted hydrogen pipelines can be operated at appropriate low risk levels; and

WHEREAS, due to the specialized technical nature of the studies, Rincon Consultants and GHD were commissioned to conduct a technical review on the City's behalf of the documentation provided by Paramount Pipeline. Based on this technical review, Conditions of Approval will be placed upon the permit. These conditions will be separate and apart from compliance with any mitigation measures required as part of the Final Environmental Impact Report (FEIR); and

WHEREAS, Project implementation will require certification of the Final Environmental Impact Report (FEIR); and

WHEREAS, the Project is part of a larger project known as the Air Products Hydrogen Pipeline Project, which consists of the construction of a new 0.5 mile pipeline segment to an existing 11.5 mile long series of pipelines from Air Products existing

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hydrogen facility in the City of Carson to the World Energy Paramount Refinery in the City of Paramount, California. The City of Carson, as lead agency, certified the FEIR in November 2020. The City of Carson acted as the lead agency under the California Environmental Quality Act (CEQA) and was the appropriate lead agency since it had the primary responsibility for approving the Conditional Use Permit for the expansion of the facility in its jurisdiction; and

WHEREAS, the FEIR assess the change of use of the approximately 4.3 miles of pipeline, the removal of the valves and the installation of new manual valves, all located within the City of Long Beach; and

WHEREAS, the City of Long Beach and the Port of Long Beach are two of the responsible agencies identified in the DEIR and FEIR. Responsible agencies are entities that have some discretionary approval over a part of the Project. In this instance the City Council is issuing permits for the conversion of the lines to hydrogen gas which qualifies as a discretionary action; and

WHEREAS, in its role as a responsible agency, the City of Long Beach relies upon the CEQA documents prepared by the lead agency, in this case the City of Carson; and

WHEREAS, in February 2021, the Port of Long Beach approved the portion of the Project within its jurisdiction; and

WHEREAS, implementation and construction of the Project constitutes a "project" as defined by CEQA, Public Resources Code Sections 21000 et seq.;

WHEREAS, it was determined during the initial processing of the Project that it could have potentially significant effects on the environment, requiring the preparation of an EIR; and

WHEREAS, the City Council has read and considered all environmental documentation comprising the FEIR, including the DEIR, the comments and the responses to comments, and errata (if any) included in the FEIR, and has determined that the DEIR and FEIR consider all potentially significant environmental impacts of the

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Project and are complete and adequate and fully comply with all requirements of CEQA; and

WHEREAS, the City Council has evaluated and considered all significant impacts, mitigation measures, and project alternatives identified in the FEIR;

NOW, THEREFORE, the City Council of the City of Long Beach does hereby find, determine and resolve that:

Section 1. All of the above recitals are true and correct and are incorporated herein as though fully set forth.

Section 2. The FEIR certified by the City of Carson in November 2020 is adequate and has been completed in compliance with CEQA and the State CEQA Guidelines.

Section 3. The FEIR, which reflects the Long Beach City Council's independent judgment and analysis, is hereby adopted, approved, and certified as complete and adequate under CEQA.

Section 4. Pursuant to Public Resources Code Section 21081 and State CEQA Guidelines section 15091, the City Council has reviewed and hereby adopts the California Environmental Quality Act (CEQA) "Findings of Facts, Statement of Overriding Considerations and Mitigation Monitoring and Reporting Plan" for the Paramount Pipeline Conversion Project as shown on the attached Exhibit "A", which document is incorporated herein by reference as though set forth in full, word for word.

Section 5. The FEIR identifies certain significant environmental effects that would result if the Project is approved. All environmental effects can feasibly be avoided or mitigated and will be avoided or mitigated by the imposition of mitigation measures included with the FEIR. Pursuant to Public Resources Code section 21081.6, the City Council has reviewed and hereby adopts the Mitigation Monitoring and Reporting Program (MMRP) as shown on Exhibit "A" as referenced herein, which MMRP is incorporated herein by reference as though set forth in full, word for word, and further finds that the Mitigation Measures identified in the FEIR are feasible, and specifically

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makes each Mitigation Measure a condition of project approval.

Section 6. Pursuant to State CEQA Guidelines section 15091(e), the record of proceedings relating to this matter has been made available to the public at, among other places, the Department of Development Services, 411 West Ocean Boulevard, 5th Floor, Long Beach, California, and is, and has been, available for review during normal business hours.

Section 7. This resolution shall take effect immediately upon its adoption by the City Council, and the City Clerk shall certify the vote adopting this resolution.

I hereby certify that the foregoing resolution was adopted by the City Council of the City of Long Beach at its meeting of _____, 2021, by the following vote:

Ayes: Councilmembers: _____

_____

_____

_____

Noes: Councilmembers: _____

_____

Absent: Councilmembers: _____

_____

Recusal(s): Councilmembers: _____

_____

City Clerk

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EXHIBIT “A”

CALIFORNIA ENVIRONMENTAL QUALITY ACT

FINDINGS OF FACT, STATEMENT OF OVERRIDING CONSIDERATIONS,

AND MITIGATION MONIORING AND REPORTING PLAN

Application No. 2103-20 (EIR 01-22)
April 20, 2021

1. INTRODUCTION

Air Products and Chemicals, Inc. proposes to implement, operate, and maintain the Carson to Paramount Hydrogen Pipeline Project ("project"). The proposed pipeline will extend from Air Products' existing hydrogen facility in the City of Carson, California to the World Energy Bio-Fuels Facility in the City of Paramount, California. Existing pipeline segments to be utilized as part of this project are owned by Paramount Pipeline Company, LLC (Paramount Pipeline), a subsidiary of World Energy. Approximately 0.5 mile of new pipeline will be constructed as part of the project within the City of Carson. Air Products proposes to utilize existing pipeline(s) owned by Paramount Pipeline for the remainder of the approximately 11.5-mile pipeline route. One new pipe connection, in the City of Carson, would be required to connect segments of existing pipelines together. Air Products would also remove approximately ten existing manual valves, install one manual valve, and add one automatic shutoff valve at locations along the pipeline route. Paramount Pipeline is proposing to amend its pipeline permit with the City of Long Beach for portions of the pipeline traversing through the City. The overall project is organized into segments, segments 2, 3, 4 and 5 are within the City of Long Beach (please see attached figure from Appendix A of the Final Environmental Impact Report [EIR]).

There will be two active construction areas. The first is an alignment from the Air Products and Chemicals Carson Facility (located at Air Products' Carson Facility, 23300 S Alameda Street, Carson, CA 90810) to construct 0.5 mile of new pipeline to connect to existing pipeline on Sepulveda Boulevard. The second is located on Paramount Boulevard in Long Beach to connect two existing Paramount Pipeline pipelines. The pipeline will be owned by Paramount Pipeline and operated and maintained by Air Products and Chemicals, Inc.

Air Products and Chemicals, Inc. will be responsible for all operation and maintenance of the pipeline. The normal operating pressure will be approximately 260 pounds per square inch gauge[1] (psig), i.e., the term used for PSI in relation to atmospheric pressure). The pipeline will transfer a maximum of seven million cubic feet of hydrogen gas each day (MMSCFD) from the Air Products and Chemicals facility in Carson to the World Energy Bio-Fuels Facility in Paramount. The project would be operated as an alternative to the liquefied hydrogen currently delivered by four to six daily truck trips to the World Energy Bio-Fuels Facility.

Air Products and Chemicals, Inc. submitted an application to the City of Long Beach seeking in part, permission for a change-in-use from crude oil products to hydrogen gas for an existing subsurface pipeline that is owned by Paramount Pipeline and operated and maintained by Air Products and Chemicals, Inc.—"Line 4", Segment 5, Segment 4, Segment 3, and "Line 12" Segment 2 and as part of the pipeline permit request (P-502-21).

[1] With Mitigation Measure HM-2a the maximum operating pressure will not exceed 160psig.

On November 10, 2020, the City of Carson, as the Lead Agency certified the Final Environmental Impact Report (FEIR) (SCH 2020059038) for the Project. Based on a review of the Final EIR certified by the City of Carson, the City, as a Responsible Agency, herein makes certain findings pursuant to Public Resources Code Section 21081 and Title 14 California Code of Regulations 15091; makes findings regarding the Statement of Overriding Considerations pursuant to Public Resources Code Section 21081 and Title 14 California Code of Regulations Section 15093; and sets forth a Mitigation Monitoring and Reporting Plan (MMRP) that pertains to operation of "Line 4" and "Line 12" pursuant to Public Resources Code Section 21081 and Title 14 California Code of Regulations Section 15097.

2. RECORD OF PROCEEDINGS

For CEQA and these findings, the Record of Proceedings for the proposed project consists of the following documents:

A. Initial Study (https://ceqanet.opr.ca.gov/2020059038/3)**)**

B. Notice of Preparation (https://files.ceqanet.opr.ca.gov/262106-2/attachment/Pp6SYFW4QtMfCUCoNh35dPkgidJWwvBrYEj6shBOiVj4vSKY0HIu8wFCsX6VAFZXfkPliEgI_HytJgAN0)

C. Notice of Completion (https://files.ceqanet.opr.ca.gov/262106-2/attachment/O6G5XrnMBOD95EC5CG8SKHeGFmPPgBMMzz0oKhOnSQaJWN5g-pXnlERVPh9JP4pG0E6benxhX7qOrY580)

D. Notice of Availability (https://files.ceqanet.opr.ca.gov/262106-3/attachment/pGtxURHRYz3yX7FjelEN8W86T5f4G7-aOSmm-NDMM9X92s7ym52AHit6zJ-Ejw8SVQSM3_FxaYms1hfn0)

E. Draft EIR https://ceqanet.opr.ca.gov/2020059038/3

F. Appendix A through Appendix D (https://ceqanet.opr.ca.gov/2020059038/3)

G. The Final EIR (https://ci.carson.ca.us/content/files/pdfs/planning/docs/projects/HydrogenGas/FEIR_AirProductsHydrogenPipelineProjectR2_FinalEIR.pdf)

H. The November 10, 2020, Planning Commission Meeting (https://carson.granicus.com/MediaPlayer.php?view_id=2&clip_id=2249)

The documents above include hyperlinks for ease of reference. The documents are also available through one or more of the following sources, the City of Carson located at 701 E. Carson Street, Carson, CA 90745 (https://ci.carson.ca.us/CommunityDevelopment/HydrogenGas.aspx); State Clearinghouse, https://ceqanet.opr.ca.gov/Project/2020059038.

3. PROJECT DESCRIPTION

Approximately 0.5 mile of new pipeline will be constructed as part of the project within the City of Carson. Air Products and Chemicals proposes to utilize existing pipeline(s) owned by Paramount Pipeline for the remainder of the approximately 11.5-mile pipeline route. One new pipe connection would be required to connect segments of existing pipelines together. Air Products and Chemicals would also remove approximately ten existing manual valves, install one manual valve, and add one automatic shut-off valve at locations along the pipeline route.

The project route will traverse the City of Long Beach, includes Segments 2 through Segments 5, which includes both “Line 4” and “Line 12.”

4. FINDINGS

CEQA prohibits a public agency from approving or carrying out a project for which a CEQA document has been completed and identifies one or more significant adverse environmental effects of the project, unless the public agency makes one or more written findings for each of those significant effects, accompanied by a brief explanation of the rationale for each finding (CEQA Guidelines section15091).

These findings provide the written analysis and conclusions of the City of Long Beach, acting by and as a Responsible Agency, regarding the environmental impacts of the proposed project and the mitigation measures directly applicable to the change-in-use of “Line 4” and “Line 12”,which would change the use of an existing pipeline within the City of Long Beach boundaries from crude oil to hydrogen.

Significant and Unavoidable Impacts

Hazardous Materials/Risk of Upset. One significant and unavoidable (Class I) impact was identified for the proposed project (see Table ES-1) associated with an upset condition and release of hazardous materials into the environment (HM-2). In order to define a “significant hazard” under CEQA related to upset conditions, the Final EIR utilizes a quantitative approach to estimate risk levels and compares these to the baseline risk levels and the acceptability levels from other jurisdictions.

The Final EIR found that risk levels from a pipeline are driven by the volume of hydrogen located within the pipeline whereas the risks for trucking are driven by the number of truck trips. At a certain point, an increasing number of truck trips associated with an increasing volume of hydrogen transported generates more risk than a pipeline. This project, with the hydrogen pipeline compared to the trucking of liquefied hydrogen associated with the baseline, is close to that crossover point.

Impacts associated with the project operating at a pressure of 260 psig[2] are similar to, if not somewhat greater than, those presented by the baseline trucking operations as the FN (frequency versus consequence) curves for both activities lie in a similar band within the FN curves. Therefore, a reduction in risk levels over the baseline is not apparent. As risks would not be reduced from the baseline operations, the impacts in the event of an upset condition would be significant.

[2] With Mitigation Measure HM-2a the maximum operating pressure will not exceed 160psig.

The Final EIR concluded that mitigation measure HM-2a requires the pipeline be operated at a maximum pressure at any point in the pipeline of 260 psig, that the operator maintains operating pressure information, and that information on pipeline maintenance be reported to the City as requested by the City (HM-2a, was included to reduce the 260 psig, to 160 psig). Mitigation Measure HM-2b requires the pipeline be monitored on an annual basis for any issues that could indicate increased rates of the loss of pipeline integrity and operation at or below the Maximum Pressure Allowance of 160 psig at all times, ensuring operation that goes conservatively beyond industry recommendations to avoid hydrogen embrittlement. Monitoring of the pipeline shall include the following measures: 1) Cathodic system maintenance, including bi-monthly checks for proper operation; 2) Leak surveys with hydrogen gas detector every six months; 3) Quarterly patrols checking for unusual conditions or activity around the line; 4) Valve functionality assurance testing; 5) A leak detection (system) capable of detecting leaks as small as 0.25 inches in diameter; 6) Damage prevention, pipeline marking and surveillance activities; 7) Other pipeline inspections and any required repairs to address inspection findings; and 8) Destructive and metallurgical testing on any sections removed in the course of normal maintenance and operation. The monitoring procedure shall be documented and available for inspection upon request. Mitigation Measure HM-2c requires the pipeline continue to be pressure tested at a Maximum Allowable Operating Pressure to test pressure ratio of at least 3.0 to ensure pipeline integrity. The testing shall be performed annually for the first three years; subsequent tests may be relaxed to once every three to five years as per Pipeline and Hazardous Materials Safety Administration (PHMSA) requirements. Even with implementation of the required mitigation measures, impacts of HM.2 still fall in a range very similar to the baseline operations and would remain within the unacceptable region of the FN curves; potential impacts to people and the environment would be significant and unavoidable (Class I).

POTENTIALLY SIGNIFICANT IMPACTS WHICH CANNOT BE MITIGATED TO BELOW A LEVEL OF SIGNIFICANCE

The proposed project would create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment.

Finding: The City of Long Beach finds that: 1) the project creates a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment; 2) mitigation measures were incorporated into the project that serve to reduce this impact, but even with the inclusion of these mitigation measures, the impact cannot be reduced to less than significant levels; 3) such mitigation measures are within the jurisdiction of the City of Carson and the City of Long Beach; and 4) no feasible measures were identified in the Final EIR that would mitigate this significant adverse impact to below a level of significance.

Rationale for Finding: The project creates a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment. The Final EIR concluded that, even with application of feasible mitigation measures, this impact cannot be entirely avoided or reduced to less-than-significant levels. Three feasible mitigation measures that could potentially reduce the impact were evaluated in the Final EIR, but they would not reduce the level to less than significant. These mitigation measures are described in the Final EIR (HM-2a, HM-2b and HM-2c). Though these measures would not remove significant hazard of accidental release of hazardous materials, no other

feasible mitigation measures or project alternatives have been identified that would reduce the impact to a less-than-significant level. Therefore, the significant impact involving the release of hazardous materials into the environment is expected to remain significant and unavoidable following implementation of feasible mitigation measures.

POTENTIALLY SIGNIFICANT IMPACTS WHICH CAN BE MITIGATED TO A LEVEL OF INSIGNIFICANCE

Significant but Mitigatable Impacts

The Final EIR identified six potentially significant adverse environmental impacts that can be reduced to a level of insignificance with implementation of required mitigation measures. These impacts and related mitigation measures were identified for aspects of the project that apply solely to construction of the new pipeline connections, which would be located entirely within the City of Carson. As a result, these are not applicable to the Final EIR jurisdiction under the application for a permit (P-502-21) within the City of Long Beach. The construction-related environmental impacts include hazardous materials, transportation, and tribal cultural resources, which are discussed below.

The Final EIR identified six potentially significant adverse environmental impacts that can be reduced to a level of insignificance: (1) HM-4. Project could be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code §65962.5 (Cortese List); (2) T-1. Project could conflict with a program, plan, ordinance, or policy addressing the circulation system, including transit, roadway, bicycle, and pedestrian facilities; (3) T-4. Project could result in inadequate emergency access; (4) TC-1. Project could cause substantial adverse change in the significance of a historical or archaeological resource as defined in §15064.5; (5) TC-2. Project could disturb human remains, including those interred outsides of dedicated cemeteries; and (6) TC-3. Project could cause a substantial adverse change in the significance of a tribal cultural resource that is listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined inch Section 5020.1(k), or one that is determined by the lead agency to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 5024.1. Seven feasible mitigation measures that could potentially reduce these impacts were evaluated and found to reduce the impacts to a less-than-significant level. These mitigation measures are included in the Final EIR (HM-4, T-1, T-4, TC-1a, TC-1b, TC-2, and TC-3). Following implementation of the identified mitigation measures, project impacts HM-4, T-1, T-4, TC-1, TC-2, and TC-3 would be less than significant. These impacts and related mitigation measures were identified for aspects of the project which apply solely to construction of the new pipeline connections, which would be located entirely within the City of Carson. As a result, these are not applicable to the City of Long Beach jurisdiction.

The proposed project could overlap with the Metro West Santa Ana Branch Transit Corridor project and create potential risk of upset issues (Impact HM-Cum1). The Metro project would intersect the proposed Project pipeline near the tie-in location at Paramount Refinery. Construction activities could impact the pipeline sufficient coordination activities are not implemented which could result in potentially significant cumulative impacts.

Mitigation Measure HM-Cum1 requires coordination between the proposed Project and the Los Angeles County Metropolitan Transit Authority before any permit issuance. Implementation of MM HM-Cum1 will ensure overlapping design elements do not interfere with either project or increase the potential for risk of upset issues. Impacts would be less than significant with mitigation (Class

II). The proposed expansion of the World Energy Renewable Fuels Project located at the Paramount Refinery is another cumulatively significant project relative to the proposed Project. This project is currently in the CEQA review phase of project permitting and would involve the expansion of the existing renewable fuels project (3,500 barrels per day, (bpd)) into a facility that could process about 25,000 bpd of refinery input for the development of bio-based transportation fuels.

A part of the expansion project is the development of a hydrogen generation unit that would be capable of supplying all of the hydrogen needs of the expansion of the World Energy Renewable Fuels Project. The use of an onsite hydrogen generation unit could reduce or eliminate the need to have a hydrogen pipeline (or trucks) transport hydrogen to the Paramount Refinery on a long-term basis. Interim use of the pipeline would allow for the supply of hydrogen to the Paramount Refinery while this cumulative project is being permitted and built. The reduction or elimination of the use of the pipeline after the completion of the expansion of the World Energy Renewable Fuels Project would eliminate the long-term risks identified as significant in Section 4.3, Risk of Upset of the Final EIR. Risks would still remain significant but would be realized for a shorter period of time, thereby reducing the severity of the impact.

FINDINGS CONCLUSION

Changes or alterations have been incorporated into the project to mitigate or minimize the potentially significant adverse environmental effects associated with project-specific impacts to less than the applicable significance threshold, where feasible. No additional feasible mitigation measures or alternatives were identified that could further reduce the following:

- Significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment.

No additional feasible mitigation measures or alternatives to the project, other than those included in the Final EIR, have been identified that can further mitigate the identified potentially significant adverse project-specific impacts related to hazards while still meeting the basic objectives of the project. No additional feasible mitigation measures or alternatives were identified that could further reduce the significant cumulative environmental impacts identified.

The City of Long Beach further finds that all of the findings presented herein are supported by substantial evidence as analyzed in the Final EIR and in the administrative record as a whole.

The City of Long Beach further finds that there have been (1) no substantial changes to the project which would require major revisions of the Final EIR, (2) no substantial changes with respect to the circumstances under which the project is being undertaken which would require major revisions in the Final EIR, and (3) no new information has become available which was not known or could have been known at the time the Final EIR was certified as complete.

5. STATEMENT OF OVERRIDING CONSIDERATIONS

The Final EIR identified the following significant and unavoidable impact: 1) the project creates a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment. Public Resources Code and Section 15093(b) of the CEQA Guidelines provide that when the decisions of the public agency allow the occurrence of significant impacts identified in the FEIR that are not substantially lessened or avoided, the lead agency must state in writing the reasons to support its

action based on the Final EIR and/or other information in the record. Title 15, California Code of Regulations, Sections 15000 et seq. requires, pursuant to Section 15093(b) of the CEQA Guidelines, that the decision maker adopt a Statement of Overriding Considerations at the time of approval of a project if it finds that significant adverse environmental effects identified in the Final EIR cannot be substantially lessened or avoided. These findings and the Statement of Overriding Considerations are based on substantial evidence in the record, including but not limited to the Final EIR, the source references in the Final EIR, and other documents and material that constitute the record of proceedings.

Accordingly, the City of Long Beach adopts the following Statement of Overriding Considerations. The City of Long Beach recognizes that a significant and unavoidable impact will result from implementation of the project. Having (i) adopted all feasible mitigation measures, (ii) rejected as infeasible alternatives to the project, (iii) recognized all significant, unavoidable impacts, and (iv) balanced the benefits of the project against the project's significant and unavoidable impacts, the City of Long Beach hereby finds that each of the project's benefits, as listed below, outweighs and overrides the significant unavoidable impact of the project.

Summarized below are the benefits, goals, and objectives of the project. These provide the rationale for approval of the project. Any one of the overriding considerations of economic, social, aesthetic and environmental benefits individually would be sufficient to outweigh the significant unavoidable impact of the project and justify the approval, adoption or issuance of all of the required permits, approvals and other entitlements for the project and the certification of the completed Final EIR.

Having reduced the potential effects of the proposed project through all feasible mitigation measures as described previously in this statement and balancing the benefits of the project against its potential unavoidable adverse impact involving the potential for release of hazardous materials into the environment during operation, the City of Long Beach finds that the following legal requirements and benefits of the project individually and collectively outweigh the potentially significant unavoidable adverse impacts for the following reasons:

1. Substantial mitigation has been provided to further reduce impacts. Impacts have been mitigated to the maximum extent feasible and the level of risk, while significant, has a low probability of occurrence and the analysis conducted is conservative to provide for the maximum level of scrutiny and disclosure. With regards to mitigation, the approach of the measures in the Final EIR is to reduce the impacts, by reducing the size of a release, or reducing the frequency of a release. The mitigation measures require operations of the pipeline at a lower pressure in order to reduce the size of a potential release and decrease the potential for exposure. Mitigation measures HM-2a, HM-2b and HM-2c would be applicable and accomplish reductions in size of a potential release and potentially reduce the frequency of a release through an enhanced monitoring and testing regimen.

2. Improvement over ongoing hydrogen trucking and traffic reduction. The pipeline project would provide an improvement in risk levels over the alternative of the future trucking of hydrogen to the Paramount Refinery. As detailed in the Final EIR, use of the pipeline would result in similar risk levels to the baseline. World Energy currently receives liquefied hydrogen at its Paramount Refinery by tanker truck from a third-party supplier located at Praxair Facility in Ontario, California, approximately 45 miles away. Without the proposed project, the Paramount Refinery would continue to receive five to seven tanker trucks trips per day of hydrogen, with associated hazards

of hauling a flammable liquid on public roadways, as well as increased highway and local traffic and associated air quality emissions.

The existing pipelines, proposed to be repurposed for hydrogen, would be used for the transport of hydrogen, and eliminate the potential risk impacts of the ongoing trucking of liquefied hydrogen from Ontario to Paramount.

3. The project would support production of clean, renewable fuels. Air Products and Chemicals proposes to utilize this pipeline route to connect its facility with a new customer in the City of Paramount, who uses hydrogen to produce renewable biofuels (biodiesel and biojet) for the transportation market. The Paramount Refinery produces renewable jet fuel and renewable diesel fuel from non-edible vegetable oil and high-quality beef tallow. World Energy has been in partnership with Paramount Petroleum since 2013 when the Paramount Refinery began the process of converting portions of its oil refinery into renewable fuels production under the Renewable Fuels Project. World Energy's renewable products support California and Federal Low Carbon Fuel Standards. The goals of the standards are to reduce carbon intensity of transportation fuels, complement other State measures for reducing greenhouse gases, transform and diversify the transportation fuel pool, reduce petroleum dependency, and reduce overall air emissions. World Energy currently supplies renewable gasoline, diesel, and jet fuel to fleet services such as UPS, United Airlines, Boeing, the Department of Defense, and several California municipalities and school systems, reducing both truck and airline emissions. World Energy's renewable products meet regulatory and commercial specifications without requiring engine modifications.

4. Supports California energy independence (economic considerations and region-wide or statewide environmental benefits). Production of crude oil has been substantially reduced in California over the past decades resulting in the need to import oil to produce fuels. The Paramount Refinery has been repurposed to handle different products (e.g., non-edible vegetable oils and beef tallow) into diesel and jet fuels that would be used in the area instead of oil produced elsewhere. The project will provide needed hydrogen to the Refinery and as such contribute to the manufacture of clean fuels. These clean fuels would supplant the use of local crude oil production and/or will likely displace some imported foreign crude due to the demand for this commodity. Replacement of foreign crude with production of clean fuels would reduce GHG and criteria pollutant emissions from ocean tankers and other emissions generated during production of oil overseas. In addition, as California works towards its renewable power and zero emission vehicle goals, there will remain a need for fossil fuel in both the transportation and power sectors. Currently, more than 70 percent of oil entering California to meet the state's needs is from outside of California and is delivered primarily by marine tanker. In 2019, over 58 percent of crude oil supplied to California refineries was shipped from foreign sources. The largest suppliers of foreign oil to California are Saudi Arabia, Ecuador, Colombia, and Iraq followed by smaller supplies from Brazil, Mexico, Africa, and the Arabian Gulf. The project will contribute to reducing importation of foreign crudes and supports the state's energy independence.

In balancing the benefits of the overall project described above with the project's unavoidable and significant adverse environmental impacts, the City of Long Beach finds that the project's benefits individually and collectively outweigh the unavoidable adverse impact, such that this impact is acceptable. The City of Long Beach further finds that substantial evidence presented in the Final EIR and the administrative record as a whole, supports approving the project despite the project's potential adverse impact.

6. MITIGATION, MONITORING, AND REPORTING PLAN (MMRP)

The California Environmental Quality Act (CEQA) requires that public agencies adopting Environmental Impact Reports (EIRs) take affirmative steps to determine that approved mitigation measures and project design features are implemented subsequent to project approval. The lead or responsible agency must adopt a reporting and monitoring program for the mitigation measures incorporated into a project or included as conditions of approval. The program must be designed to ensure compliance with the EIR during project implementation (Public Resources Code, Section 20181.6(a)(1)).

The mitigation, monitoring and reporting requirements identified in the plan will be enforced through conditions upon the franchise permit issued by the City of Long Beach. Specifically, HM-2a, HM-2b, and HM-2c of the mitigation measures are applicable to the project within Long Beach. The mitigation measures are primarily the responsibility of Paramount Pipeline and the operator and any future permit holder.

The MMRP is organized in a table format and lists mitigation measures that correspond to the mitigation measures adopted by the City of Carson in the MMRP for the Air Products Hydrogen Pipeline Project; the mitigation measures as reflected, apply to activities associated with the changes to the line from petroleum products to hydrogen gas.

The analysis in the FEIR concluded that, even with application of feasible mitigation measures, one impact cannot be entirely avoided or reduced to less than significant levels. Adoption of a Statement of Overriding Considerations would be necessary to approve the staff-recommended Air Products Hydrogen Pipeline Project. The Final EIR (State Clearinghouse No. SCH 2020059038) identifies an impact in Hazardous Materials and Risk of Upset as a significant environmental effect which is considered unavoidable. The identified significant and unavoidable impact is **HM-2. Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment**. Several mitigation measures adopted as conditions of approval will serve to reduce these impacts, but even with the inclusion of these conditions, the impacts cannot be reduced to less than significant levels.

Substantial mitigation has been provided to reduce impacts. Impacts have been mitigated to the maximum extent feasible and the level of risk, while significant, has a low probability of occurrence and the analysis conducted is conservative to provide for the maximum level of scrutiny and disclosure. With regards to mitigation, the approach of the measures in the EIR is to reduce the impacts, by reducing the size of a release, or reducing the frequency of a release. The mitigation measures require operation of the pipeline at a lower pressure in order to reduce the size of a potential release and decrease the potential for exposure. Mitigation measures HM-2a, HM-2b and HM-2c would be applicable and accomplish reductions in size of a potential release and potentially reduce the frequency of a release through an enhanced monitoring and testing regimen. The proposed Project also includes measures for pipeline monitoring, leak detection, inspections, cathodic protection systems to reduce corrosion, coatings, and line markings to further reduce the risk of leaks.

Mitigation Monitoring and Reporting Program (MMRP)

MM #	MM Title	Monitoring/ Reporting Action	Timing & Method of Verification	City Responsibility	Applicant Responsibilities
HM-2a	Maximum Pressure Allowance	Maximum operating pressure at any point in the pipeline of 160 psig.	During Operation	City reviews information on pipeline operating pressure and pipeline maintenance.	Operate the pipeline at a max. pressure at any point in the pipeline of 160 psig. Maintain information on operating pressure. Report information on pipeline maintenance to City.
HM-2b	Testing and Monitoring	Monitor pipeline for issues that could indicate increased rate of the loss of pipeline integrity.	During Operation	City reviews information on pipeline monitoring procedure and inspections.	Monitor and inspect pipeline. Document pipeline monitoring procedure.
HM-2c	Pressure Testing	Pressure test pipeline at 556 psig. Perform testing per PHMSA requirements.	During Operation	City monitors compliance.	Continue to pressure test the pipeline at 556 psig. Perform testing per PHMSA requirements

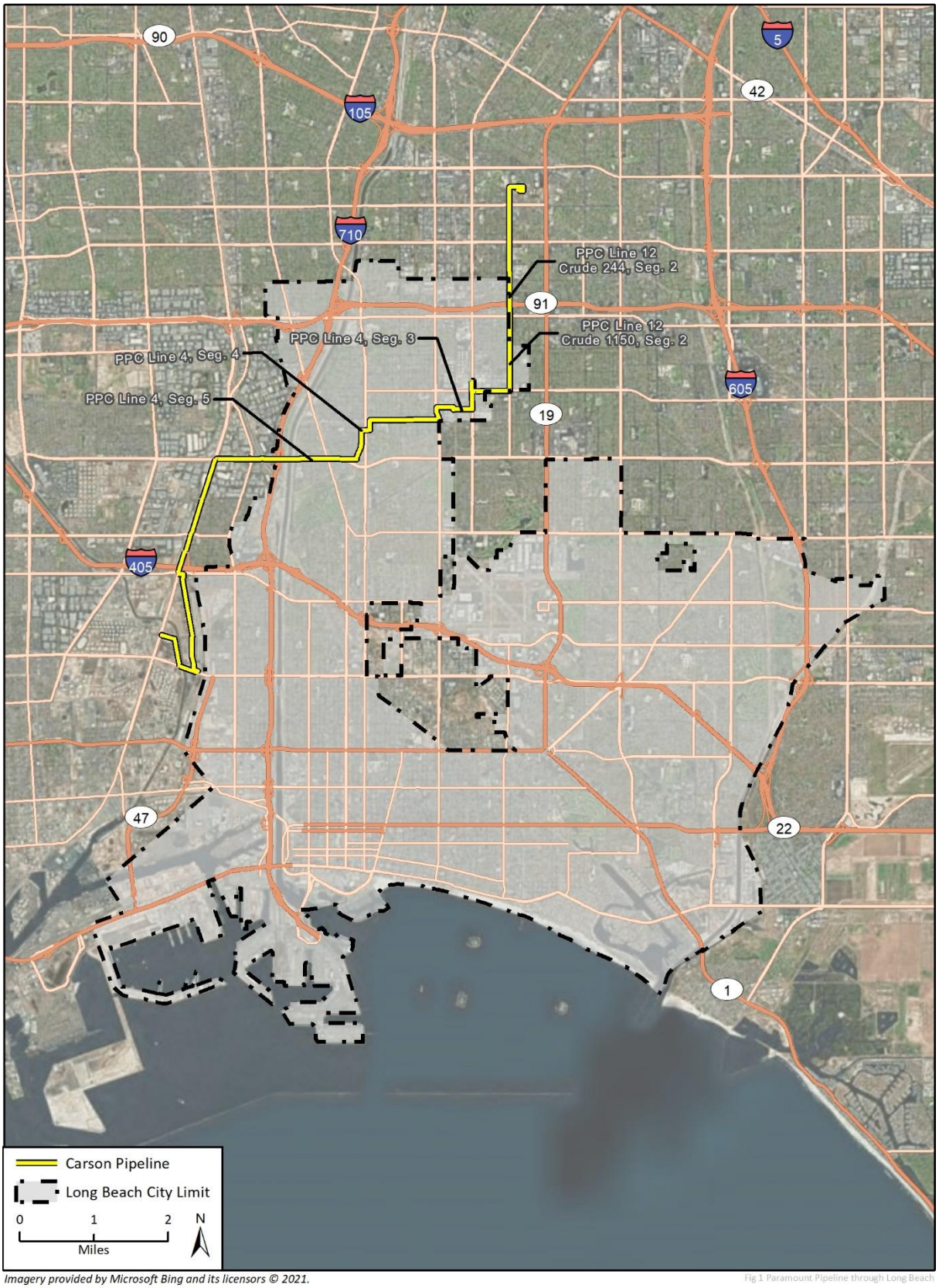

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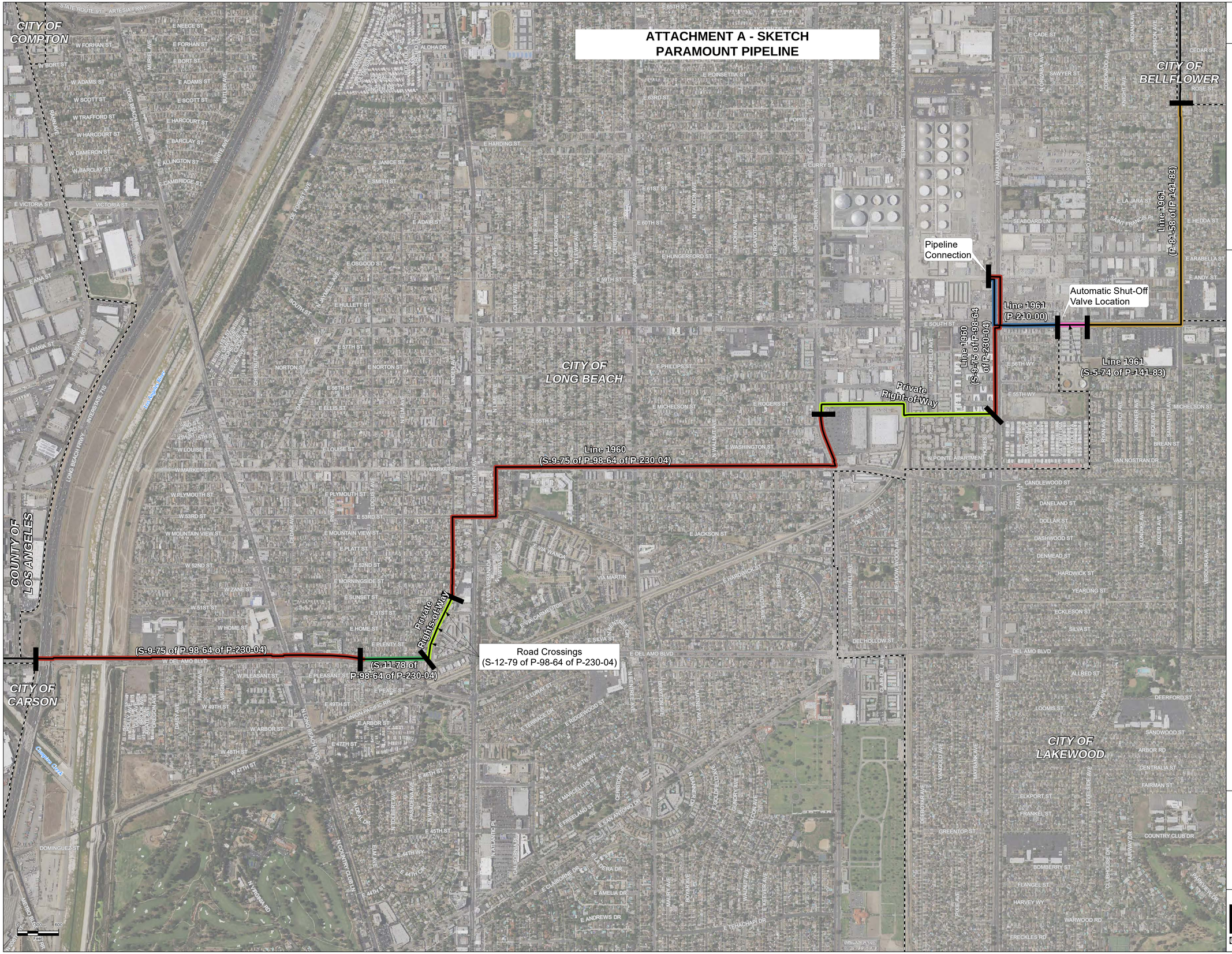
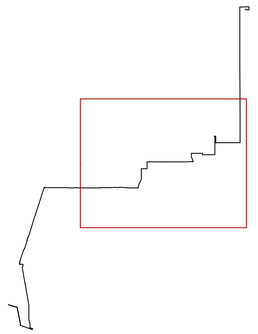
Fig 1 Paramount Pipeline through Long Beach

ATTACHMENT A - SKETCH
PARAMOUNT PIPELINE



REGIONAL LOCATOR MAP:



LEGEND:

- City Boundary
- Existing Pipeline Segment

Long Beach Right-of-Way Segments

- Line 1960 (S-11-78 of P-98-64 of P-230-04)
- Line 1960 (S-9-75 of P-98-64 of P-230-04)
- Line 1961 (P-210-00)
- Line 1961 (P-81-58 of P-141-83)
- Line 1961 (S-5-74 of P-141-83)
- Private Right-of-Way

Source: Paramount Pipeline Co., NAIP Imagery 2016, County of Los Angeles
Coordinate System: NAD 1983 StatePlane California V FIPS 0405 Feet
Notes: This map was created for informational and display purposes only.

PIPELINE ROUTE
LONG BEACH SEGMENT

CARSON TO PARAMOUNT
HYDROGEN PIPELINE PROJECT
LOS ANGELES COUNTY, CA

padre associates, inc.
ENGINEERS, GEOLOGISTS & ENVIRONMENTAL SCIENTISTS

N

PROJECT NO. 1802-2611
DATE: FEBRUARY 2021
SHEET NO. 1

Attachment B

Paramount Pipeline LLC

49 CFR 192 Conversion to Service Plan

For Converting Hazardous Liquid Pipeline Facilities to Hydrogen Gas Service

Initial guidance documentation developed by Integrity Solutions® Ltd for further development by Paramount Pipeline LLC.

July 10, 2020

DEVELOPMENT NOTES

Integrity Solutions® Ltd (ISltd®) developed the initial documentation for this preliminary Conversion to Service (CTS) Plan based on information provided by Paramount Pipeline LLC (Paramount). This preliminary CTS Plan was developed in cooperation with Paramount and per Paramount's provided documentation. It is intended to provide guidance for completing a comprehensive CTS Plan.

ISltd's development of this document considered PHMSA requirements published in the Code of Federal Regulations (CFR) Title 49, Chapter I, Subchapter D, *Pipeline Safety* (Part 190 to Part 199) of the DOT regulations. The Paramount pipeline assets included in this Plan are currently operated under the jurisdiction of PHMSA regulations in Part 195, *Transportation of Hazardous Liquids by Pipeline* and are proposed to be converted to service for Part 192, *Transportation of Natural and Other Gas by Pipeline: Minimum Federal Safety Standards*.

The fundamental CTS requirements are listed in §192.14, *Conversion to Service Subject to This Part*. Additionally, ISltd considered PHMSA's September 2014 publication *Guidance for Pipeline Flow Reversals, Product Changes, and Conversion to Service* and the identically titled PHMSA Advisory Bulletin ADB-2014-04, also issued at that time, as well as PHMSA responses to frequently asked questions (FAQs) and industry interpretation letters. ISltd also considered certain industry standards and specifications, and particularly any of these that are incorporated by reference (IBR) into PHMSA regulations.

This preliminary CTS Plan provides Paramount with an outline of PHMSA's expectations with respect to complying with existing regulations (in particular, §192.14 and §195.5) and also contains recommendations that Paramount should consider prior to implementing flow reversals, product changes, a CTS process. Paramount may perform more than one of these changes simultaneously. Each applicable section of this document should be reviewed for each type of change being made to minimize the effect on safe operations and to ensure pipeline facility integrity. Paramount is required to submit a comprehensive written CTS Plan to the appropriate PHMSA regional office or California Public Utilities Commission (CPUC) office regarding these changes prior to implementation per §192.14(c) and §195.5(d).

While not directly part of ISltd's development of documentation for this CTS Plan, ISltd notes the potential that California state gas pipeline safety regulations may impact the future operations and maintenance of the new pipeline system. In particular, attention should be given to CPUC General Order No. 112, *State of California Rules Governing Design, Construction, Testing, Operation, and Maintenance of Gas Gathering, Transmission, and Distribution Piping Systems*, which contains certain requirements supplemental to the federal regulations.

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INTRODUCTION

Purpose

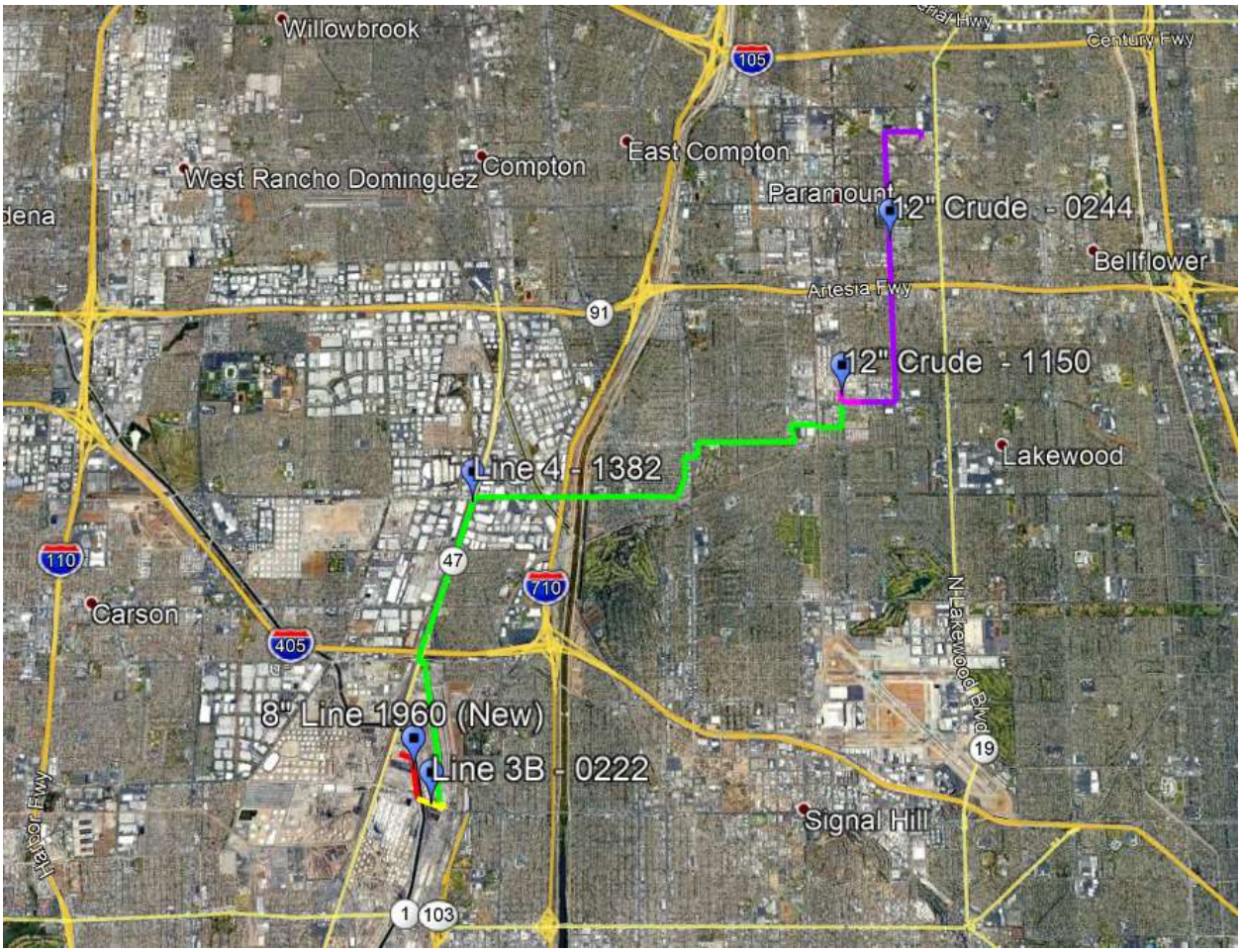
Paramount Pipeline LLC (Paramount) has recently proposed for four of its Part 195 regulated crude oil transmission pipelines and one newly constructed pipeline to be converted to service as a Part 192 regulated gas transmission pipeline system. This Part 192 Conversion to Service (CTS) Plan documents Paramount's analysis of regulated pipeline facilities and proposed actions to address §192.14 CTS requirements. The CTS analysis of these five pipeline facilities is based upon available information that will become subject to the gas pipeline safety regulations in Part 192.

The table in Appendix A details the status of each specific action item during the CTS Plan implementation, to be updated as CTS Plan items are accomplished.

Asset Description

The five subject Paramount pipeline facilities are intended to be used for transporting hydrogen from Air Product's Carson Plant to Paramount's Plant facility. Figure 1 shows an overview of the facilities.

Figure 1: Overview of Proposed Gas Transmission Pipeline Facilities



The pipeline facilities within the scope of this CTS Plan include the following five transmission pipelines:

- **Paramount 8" Line 1960 Pipeline (New)** – Transports hydrogen from the Air Products Carson Plant site to Paramount's 6"/8" Line 3B Pipeline, a distance of 0.49 miles. This pipeline segment is classified as a 49 CFR 192 regulated transmission pipeline
- **Paramount 6"/8" Line 3B -0222 Pipeline** – Transports hydrogen from the Paramount Newly Constructed Pipeline 8" to Paramount 6"/8" Line 4 Pipeline, a distance of 1.17 miles. This pipeline segment is classified as a 49 CFR 192 regulated transmission pipeline
- **Paramount 6"/8" Line 4 - 1382 Pipeline** – Transports hydrogen from Paramount 6"/8" Line 3B Pipeline to Paramount 12" Crude 0244 Pipeline, a distance of 9.11 miles. This pipeline segment is classified as a 49 CFR 192 regulated transmission pipeline
- **Paramount 12" Crude - 0244 Pipeline** – Transports hydrogen from Paramount 6"/8" Line 4 Pipeline and Paramount 12" Crude 1150 Pipeline, a distance of 3.54 miles. This pipeline segment is classified as a 49 CFR 192 regulated transmission pipeline
- **Paramount 12" Crude - 1150 Pipeline** – Transports hydrogen from Paramount 12" Crude 0244 Pipeline to Paramount's Plant Facility, a distance of 0.48 miles. This pipeline segment is classified as a 49 CFR 192 regulated transmission pipeline

Table 1 lists the pipelines that are the subject of the proposed hydrogen transmission pipeline system conversion analysis documented in this Plan, along with additional details.

Table 1: Summary of Identified Regulated Transmission Pipelines

Pipeline	Diameter (in)	Length (ft)	Length (miles)	Proposed MAOP (psi)	% SMYS at MAOP	Install Year
Line 3B - 0222	8.625/6.625	6,170	1.17	300	17%	1952
Line 4 - 1382	8.625/6.625	48,129	9.12	300	28%	1923
12" - 1150	12.75	2,545	0.48	300	24%	1920
12" - 0244	12.75	18,688	3.54	300	24%	1958
8" Line 1960 - New	8.625	2,612	0.49	300	17%	2020

The Paramount transmission pipelines all will have a desired maximum allowable operating pressure (MAOP) of 300 psig, and all will operate at less than 30% of specified minimum yield strength (SMYS) (based on assumed pipe grades of 24,000) as shown in Table 1, based on proposed operations requirements, pipe design, and equipment ratings. MAOP determinations for each pipeline are addressed in the Maximum Allowable Operating Pressure Determination section of this Plan.

CONVERSION TO SERVICE WRITTEN PLAN

Converting pipeline facilities to 49 CFR 192 jurisdiction starts with meeting the explicit §192.14 code requirements and should also consider PHMSA CTS guidance documents. The CTS requirements are as follows.

Per §192.14(a), a steel pipeline previously used in service not subject to 49 CFR 192 qualifies for use under Part 192 if the operator prepares and follows a written procedure and implements a plan to address:

1. The design, construction, operation, and maintenance history of the pipeline. Where sufficient historical records are not available, appropriate tests must be performed to determine if the pipeline is in a satisfactory condition for safe operation.
2. The pipeline right-of-way (ROW), all aboveground segments of the pipeline facilities, and appropriately selected underground segments must be visually inspected for physical defects and operating conditions which reasonably could be expected to impair the strength or tightness of the pipeline.
3. All known unsafe defects and conditions must be corrected, including those related to Subpart C – *Pipe Design*; Subpart D – *Design of Pipeline Components*; and Subpart G – *General Construction Requirements for Transmission Lines and Mains* of 49 CFR 192.
4. The pipeline must be pressure tested in accordance with Subpart J – *Test Requirements* to substantiate the MAOP permitted by Subpart L – *Operations* of 49 CFR 192.

It is Paramount's intent to follow PHMSA guidance, but where that is not the case this CTS Plan documents Paramount's technical justification for the chosen course of action. In most cases, these will be addressed with general Part 192 requirements to be accomplished prior to the CTS Plan completion.

The following sections cite the relevant regulatory requirements and document Paramount's response necessary for compliance.

PIPELINE DESIGN, CONSTRUCTION, AND OPERATIONS AND MAINTENANCE HISTORY

Converting pipelines to Part 192 gas transmission service requires a thorough review of all relevant design, construction, and operations and maintenance (O&M) information in conformance with §192.14(a)(1) to ensure that the pipeline facilities being converted can operate at the same safety and reliability standards as pipelines that were originally constructed to these standards. ADB-2014-04 provides additional recommendations and requirements.

Paramount's responses to these requirements are detailed in the following subsections.

Design Pressure

Although not currently required under existing Part 192 CTS requirements, as a prudent operator Paramount will review available design information for each pipeline in accordance with 49 CFR 192 Subpart C – *Pipe Design* requirements.

- A historical records review will be performed to determine pipe wall thickness for the four existing pipelines including (but not limited to) a review of alignment sheets, as-built drawings, and integrity assessment records. In the event that historical wall thickness

records cannot be identified, field inspections at multiple aboveground and buried locations along the four pipelines will be performed to determine the wall thickness for all pipelines. As part of the visual inspections to be completed as part of the CTS Plan (refer to the Visual Inspection section of this Plan), Paramount plans to determine wall thickness measurements in accordance with §192.109(a), by measuring the wall thickness of each piece of pipe at quarter points (12, 3, 6, and 9 o'clock positions) on one end for 10 joints or 10% of all joints, whichever is greater. If the wall thickness measurements per §192.109(a) result in a different wall thickness, the design pressure calculations will be revisited. Per §192.109(b), if the pipe is of uniform grade, size, and thickness and there are more than 10 lengths, only 10 percent of the individual lengths, but not less than 10 lengths, need be measured. The thickness of the lengths that are not measured must be verified by applying a gauge set to the minimum thickness found by the measurement. The nominal wall thickness to be used in the design formula in §192.105 is the next wall thickness found in commercial specifications that is below the average of all the measurements taken. However, the nominal wall thickness used may not be more than 1.14 times the smallest measurement taken on pipe less than 20 inches (508 millimeters) in outside diameter, nor more than 1.11 times the smallest measurement taken on pipe 20 inches (508 millimeters) or more in outside diameter.

- If pipe grade is unknown, Paramount assumes a pipe grade of 24,000 psi for all pipelines, as allowed by §192.107(b)(2), until further information is acquired. Cutouts of pipeline segments with unknown grade, performed during the construction activity associated with Paramount's CTS project, will be sent for a metallurgical lab analysis, as needed, and data will be incorporated accordingly.
- Pipe seam type is unknown for some portions of the pipelines. Based on installation dates and Paramount standard practices, seam type is assumed to be electric-resistance-welded (ERW). Only Line 4 – 1382's historical records review identified lap-welded pipe, and the associated seam factor was applied in the internal design pressure calculation. Cutouts of pipeline segments with unknown seam type and any future pipe samples sent for metallurgical analysis will include seam type determination. If any evidence of furnace lap-welded or furnace butt-welded pipe is found at any time, design pressure calculations must be revisited.
- The 8" New Hydrogen Pipeline was designed using 8" ERW, X-42 pipe with a nominal wall thickness of 0.322 in. Refer to 49 CFR 192 Subpart C and Subpart G for more information regarding pipeline design and construction requirements.

Per §192.105, the internal design pressure is determined using the formula presented in Equation 1.

Equation 1: Internal Design Pressure (P) Calculation

$$P = 2\left(\frac{S * t}{D}\right) \times E \times F \times T$$

Where:

S = yield strength (psi) as specified in Table 2

t = nominal wall thickness as specified in Table 2

D = nominal outside diameter as specified in Table 2

E = seam joint factor (assumed 1.0 based on assumption of ERW seam type)

F = design factor

T = Temperature derating factor (assumed 1.0 based on assumptions associated with product characteristics)

Table 2 summarizes the values used for the internal design pressure calculation, based on the weakest pipe element or most conservative value for each pipeline. Table 2 also shows the resulting internal design pressures and proposed operating stress for the five pipelines.

Table 2: Transmission Pipelines Minimum Design Summary

Pipeline	Diameter (in.)	Wall Thickness (in.)	Grade (psi)	Internal Design Pressure (psi)	Desired MAOP (psig)	% SMYS at MAOP
Line 3B - 0222	8.625	0.322	24,000	896	300	17%
Line 4 - 1382	8.625	0.322	24,000	538	300	28%
12" - 1150	12.75	0.33	24,000	621	300	24%
12" - 0244	12.75	0.33	24,000	621	300	24%
8" Line 1960 - New	8.625	0.322	24,000	896	300	17%

Component Design Determination

Paramount has reviewed the design information for each existing pipeline component in accordance with 49 CFR 192 Subpart D – *Design of Pipeline Components* requirements.

All components are reported as being ANSI 300, rated for 740 psig, for the four existing pipelines. Paramount will compile an inventory of all appurtenances and equipment for each existing pipeline's facilities to confirm the ANSI 300 rating. All visible and known equipment will be included in the inventory. The inventory documentation will be updated as new equipment is identified or installed. The equipment inventory will be maintained in Paramount's Records File Room.

- The 8" New Hydrogen Pipeline has pipeline components designed for ANSI 300, rated for 740 psig. Refer to 49 CFR 192 Subpart D and Subpart G for more information regarding requirements for pipeline facility components and construction.

Construction

Paramount has reviewed the construction-related information for each existing pipeline facility in accordance with 49 CFR 192 Subpart G – *General Construction Requirements for Transmission Lines and Mains* requirements. Construction records are limited for the four existing pipeline facilities. Available construction records were reviewed, and no items of concern were identified.

- The 8" New Hydrogen Pipeline will be constructed for hydrogen transmission service in alignment with 49 CFR 192 Subpart G.

Also, to ensure that the construction of the existing pipelines is acceptable, the entire hydrogen transmission pipeline system will be inspected as detailed in the Visual Inspection of Transmission Facilities section and hydrostatically tested as detailed in the Pressure Test section of this Plan.

Operation and Maintenance

Paramount has reviewed the O&M-related information for each existing pipeline in accordance with 49 CFR 192 Subpart L – *Operations* and Subpart M – *Maintenance* requirements. Available O&M records were reviewed for the four existing pipelines and no items of concern were identified.

New O&M and emergency procedures and activity forms will be developed in alignment with Part 192 before the proposed hydrogen transmission pipeline system is placed into service. Additionally, Part 192 training materials will be developed and training will be provided to stakeholders to communicate the impacts to O&M and emergency procedures as required by §192.805 – *Qualification Program*.

The proposed hydrogen transmission pipeline system will be inspected and pressure tested as described by this CTS Plan.

Additional Design Measures

As practical, Paramount will determine and document actual wall thickness and observe pipe seam types during future excavations of these existing and proposed pipeline facilities. Additionally, Paramount will complete a metallurgical lab analysis (including pipe grade, wall thickness, seam type, and possible manufacturing specification [e.g., API 5L]) of any removed pipe segments. Data will be incorporated accordingly, and design pressure calculations will be revisited.

Pressure Relief

Per §192.619 requirements, Paramount will install pressure relief devices designed for gas service to limit the Part 192 regulated pipeline system's pressure under its established MAOP and Paramount will create and maintain an inventory list of the pressure relief devices. The pressure relief device list will be maintained in the Paramount records file room and will be updated as operational conditions change or new equipment is installed.

Leak Detection

Per §192.935, *What additional preventive and mitigative measures must an operator take?*, and because the hydrogen transmission pipelines are located within a high consequence area (HCA), Paramount will complete an automatic shutoff valve (ASV) and remote control valve (RCV) analysis prior to the existing pipelines being converted to gas service.

Also, effective leak detection technology will be utilized on the pipelines to identify pinhole and rupture-sized leaks.

Per §192.625(b)(4), Paramount has determined that odorization is not required for the hydrogen transmission pipeline system. Leakage patrol methods for unodorized hydrogen will be modified to meet §192.706 transmission leakage survey requirements, including addressing the following:

- Leaks cannot be smelled
- Hydrogen flames cannot be seen
- Specialized leakage detection equipment will be used
- ROW patrol methods will vary from natural gas

- Line markers will correctly identify the product carried in the pipeline per §192.707

Additionally, the definition of a hazardous leak may need to be modified for these hydrogen lines.

Compatibility of Product Transported

PHMSA guidance for CTS states that items listed in the Change in Product Transported section of ADB-2014-04 also apply to CTS to ensure that the commodity being carried is chemically compatible with the pipeline and components.

Paramount evaluated the potential hydrogen transmission pipeline system impacts due to a product change from crude oil to hydrogen in four existing pipeline facilities and the construction of one new pipeline facility. The Paramount hydrogen transmission pipeline system receives pure hydrogen, free of contaminants, directly from a process plant so internal corrosion is not expected to be an integrity threat. Therefore, the hydrogen transported does not contain a corrosive gas applicable to internal corrosion addressed by §192.475 – *Internal Corrosion Control: General*, §192.476 – *Internal Corrosion Control: Design*, and §192.477 – *Internal Corrosion Control: Monitoring*.

After the hydrogen transmission pipeline system is constructed, pressure tested, cleaned, and dried before placing it into operation no additional internal cleaning, liquids removal, or internal corrosion mitigation measures are anticipated by Paramount. However, whenever a pipe is removed the internal surface will be inspected for evidence of internal corrosion, the gas stream will be monitored for contaminants, existing drips will be checked, and if needed, smart tools will be run to identify potential internal corrosion anomaly growth.

Paramount will develop internal corrosion control procedures and update construction records/maps as necessary, as well as take appropriate steps to minimize internal corrosion discovered during periodic O&M activities.

Paramount will confirm that the hydrogen product is compatible with existing and new carbon-steel pipe and all pipeline components prior to the pipelines' in-service date. Refer to the action item table in Appendix A regarding Paramount's plan to address items associated with the change in product.

VISUAL INSPECTION

Per §192.14(a)(2), converting pipelines to Part 192 gas transmission service requires that the pipeline ROW, all aboveground segments of the pipeline, and appropriately selected underground segments must be visually inspected for physical defects and operating conditions that reasonably could be expected to impair the strength or tightness of the pipeline.

Paramount will visually inspect the hydrogen transmission pipeline system's ROW, all aboveground segments of the pipeline and associated pipeline facilities, and selected underground pipeline segments based on a rigorous inspection process. Any physical defects or operating conditions that could impair the strength or tightness of the pipeline will be evaluated and remediated to ensure adequate integrity and safe operations.

Visual Inspection of Pipeline Right-of-Way

As part of the CTS Plan, Paramount will conduct a visual inspection of the pipeline ROW for all five pipelines and document findings by July 31, 2020. Items of concern that Paramount will be looking to identify include, but are not limited to, the following:

- Soil erosion
- Exposed pipe
- Overbuild structures
- Access restrictions

Visual Inspection of Aboveground Facilities

As part of the CTS Plan, Paramount will conduct a visual inspection of all aboveground pipeline facilities for all five pipelines by July 31, 2020. At each inspection location, the mainline pipe and pipeline components will be assessed for internal and external corrosion and other defects, pipe supports will be evaluated, pipe wall thickness readings will be taken at quarter points (12, 3, 6, and 9 o'clock positions), and pipe paint and interface coating will be inspected.

Any necessary repairs that are identified by these inspections will be addressed in accordance with §192.711 – *Transmission lines: General requirements for repair procedures*, §192.713 – *Transmission lines: Permanent field repair of imperfections and damages*, §192.715 – *Transmission lines: Permanent field repair of welds*, and §192.719 – *Transmission lines: Testing of repairs* requirements, as well as a Subpart J pressure test..

Documentation of inspection findings and corrective actions will be available in the Paramount DOT Records File Room and maintained for the pipeline's life in accordance with §192.709 – *Transmission lines: Record keeping* requirements.

Visual Inspection of Underground Facilities

As part of the CTS Plan, during the first and second quarter of 2020 Paramount will conduct a visual inspection of selected underground segments for the four existing pipelines that were previously in hazardous liquid service. At each inspection location, the mainline pipe will be assessed for internal and external corrosion and other defects, pipe wall thickness readings will be taken at quarter points (12, 3, 6, and 9 o'clock positions), and pipe coating will be inspected.

Any necessary repairs that are identified by these inspections will be addressed in accordance with §192.711 – *Transmission lines: General requirements for repair procedures*, §192.713 – *Transmission lines: Permanent field repair of imperfections and damages*, §192.715 – *Transmission lines: Permanent field repair of welds*, and §192.719 – *Transmission lines: Testing of repairs* requirements, as well as a Subpart J pressure test. Additionally, four of the five pipelines in the scope of this CTS have segments located in underground vaults. Each vault will be inspected prior to the pipeline's in-service date and any necessary repairs identified during these inspections will be addressed.

Documentation of inspection findings and corrective actions will be available in the Paramount DOT Records File Room and maintained for the pipeline's life in accordance with §192.709 – *Transmission lines: Record keeping requirements*.

UNSAFE DEFECTS AND CONDITIONS

Per §192.14(a)(3), all known unsafe defects and conditions must be corrected in accordance with Part 192.

Paramount will address any unsafe defects and conditions discovered during the CTS process and these will be evaluated, remediated, and documented per the requirements of 49 CFR 192.

Based on Paramount's completed review of the existing four pipelines' design, construction, operation, and maintenance history there are no known unsafe defects or conditions at this time. Paramount will address any pressure-reducing defects or pipeline failures identified from the visual inspections or pressure testing in accordance with applicable 49 CFR 192 requirements.

PRESSURE TEST

Per §192.14(a)(4), the pipeline must be tested in accordance with Part 192 Subpart J to substantiate the MAOP permitted by Subpart L.

Paramount will pressure test the four existing pipelines and one newly constructed pipeline in accordance with applicable Part 192, Subpart J (§§192.501–192.517) requirements to substantiate the 300 psig MAOP established under §192.619, which is less than 30% of SMYS at MAOP. In particular, this CTS pressure test will meet the requirements of §192.503, §192.507, and §192.517.

Pressure Test Plan

Paramount will perform a Part 192, Subpart J pressure test for all five pipelines per the timeframes outlined in Table 3. The pressure test schedule for the five pipelines aligns with the completion of the newly constructed 8 in. Line - 1960 hydrogen pipeline.

Table 3: Transmission Pipelines Pressure Test Summary

Pipeline	Test Medium	Test Duration	Proposed Minimum Test Pressure (psi)	Proposed Test Date
Line 3B - 0222	Water	8 hours	570	1Q 2021
Line 4 - 1382	Water	8 hours	570	1Q 2021
12" - 1150	Water	8 hours	570	1Q 2021
12" - 0244	Water	8 hours	570	1Q 2021
8" Line 1960 - New	Water	8 hours	570	1Q 2021

Per §192.507 – *Test requirements for pipelines to operate at a hoop stress less than 30 percent of SMYS and at or above 100 psi (689 kPa) gage* and §192.619 – *Maximum allowable operating pressure: Steel or plastic pipelines* requirements, each hydrostatic test's duration will be 8 hours at a pressure equal to or greater than one and a half times the proposed MAOP (1.5 × MAOP). The test medium will be water (liquid) as allowed in §192.503(b).

An explanation will be provided for any pressure discontinuities, including test failures that appear on the pressure recording charts. Any test failures will be repaired in accordance with appropriate procedures and 49 CFR 192 regulations.

Maximum Allowable Operating Pressure Determination

Operators must not exceed the documented MAOP of the pipeline as determined per §192.619(a) through (d), as applicable.

Table 4 summarizes the MAOP determination for each of the five subject hydrogen transmission pipelines. The internal design pressure calculation is based on the data in Table 2 (above). All components are reported as being ANSI 300# for the five pipelines. Additionally, a Subpart J pressure test, at a pressure equal to 1.9 times MAOP or more of the proposed MAOP, is scheduled for the five pipelines as listed in Table 3 (above). Based on these pressures, the proposed MAOP for all five pipelines is 300 psig.

Table 4: Transmission Pipelines MAOP Summary

Pipeline	Internal Design Presure of Pipe (psi)	Component Design Pressure (psi)	TP/MAOP	Proposed MAOP (psi)
Line 3B - 0222	896	740	1.9	300
Line 4 - 1382	538	740	1.9	300
12" - 1150	621	740	1.9	300
12" - 0244	621	740	1.9	300
8" Line 1960 - New	896	740	1.9	300

CORROSION CONTROL

Per §192.452, the CTS process for cathodic protection (CP) allows for the CP system to be installed within 12 months of activation of the pipeline to transmission service, meeting the requirements of Part 192, Subpart I – *Requirements for Corrosion Control*.

Paramount has an existing CP system on the four existing pipelines and will install CP on the newly constructed 8" pipeline. The most recent CP survey was conducted on August 9, 2019 and all test stations had acceptable pipe-to-soil readings. Annual CP surveys historically were completed consistent with §195.573(a)(1) and will be continued under the proposed new operations per §192.465.

Documentation of CP survey findings and corrective actions will be available in the Paramount DOT Records File Room and maintained for the pipeline's life in accordance with §192.709 – *Transmission lines: Record keeping* requirements.

RECORDS

Per §192.14(b), operators must keep—for the life of the pipeline—a record of the investigations, tests, repairs, replacements, and alterations made as part of the CTS.

Paramount will keep a record of the investigations, tests, repairs, replacements, and alterations made under this CTS for the life of these hydrogen transmission pipelines. Files will be consolidated and permanently filed upon completion of this CTS. Documentation of inspection findings and corrective actions will be available in the Paramount DOT Records File Room and maintained for the pipeline's life in accordance with §192.709 – *Transmission lines: Record keeping* requirements.

CONVERSION TO SERVICE REPORTING REQUIREMENTS

Per §192.14(c), Paramount must submit its CTS Plan to PHMSA 60 days prior to beginning the proposed conversion process. Paramount is proposing to convert this pipeline system February 2021. By submitting the CTS Plan to PHMSA in 2Q of 2020, the requirement of §192.14(c) is met, however, in no case will Paramount begin operations under Part 192 without approval from PHMSA

OTHER CONSIDERATIONS

Before being operational, the five pipelines are intended to be operated by Air Products, which currently operates other gas pipelines under Part 192 pipeline programs. Therefore, the five hydrogen pipeline facilities will be incorporated into the current Air Products manuals and procedures already in place. Regarding operator qualification requirements, the required O&M activities will be inventoried, scheduled, and assigned to appropriately trained personnel for the covered tasks.

Furthermore, Air Products will develop a line-specific emergency response plan as required for the new hydrogen pipeline operations. Any hydrogen pipeline segments determined to be located within HCAs or moderate consequence areas (MCAs) will be incorporated under the existing Air Products' Integrity Management Program (IMP) and, as appropriate, the Part 192 Subpart O studies will be completed (i.e., leak detection review, risk analysis, threat screening, assessment planning, etc.).

Finally, Paramount will include the five hydrogen pipelines under its gas Control Room Management (CRM) program and Public Awareness (PA) program, including both public mailings and emergency responder training/awareness.

SUMMATION

Paramount proposes that the four existing pipelines currently considered as subject to 49 CFR 195, as well as a newly constructed pipeline, should be reclassified as Part 192 regulated gas transmission pipelines once the §192.14 CTS process is completed. These five pipelines include:

- Paramount 8" Line 1960 (New)
- Paramount 6"/8"" Line 3B - 0222 Pipeline
- Paramount 6"/8" Line 4 -1382 Pipeline
- Paramount 12" Crude - 0244 Pipeline
- Paramount 12" Crude - 1150 Pipeline

Therefore, Paramount's responses to each §192.14 CTS requirement applicable to these subject pipelines are as follows:

- Prepare and follow a written procedure. Per §192.14(a), a steel pipeline previously used in service not subject to Part 192 qualifies for use under Part 192 if the operator prepares and follows a written procedure.

  Response – This CTS Plan, including Appendix A, documents Paramount's analysis of regulated pipeline facilities and proposed actions to address §192.14 requirements.

- Review design, construction, operation, and maintenance history and, where sufficient historical records are not available, perform appropriate tests to determine if the pipeline is in satisfactory condition for safe operation.

  Response – Paramount has reviewed design information for each pipeline in accordance with Part 192 Subpart C – *Pipe Design*; Subpart D – *Design of Pipeline Components*; Subpart G – *General Construction*; Subpart L – *Operations;* and Subpart M – *Maintenance* requirements. Refer to the Pipeline Design, Construction, and Operations and Maintenance History section of this Plan and Table 2 (above) for more information regarding the design information for each pipeline.

- Visually inspect the ROW, all aboveground segments, and appropriately selected underground segments for physical defects and operating conditions that reasonably could be expected to impair the strength or tightness of the pipeline.

  Response – As part of the CTS Plan, Paramount will conduct a visual inspection of the pipeline ROW and aboveground piping for all five pipelines by July 31, 2020. Paramount will conduct a visual inspection of selected underground segments for all five pipelines during the first quarter of 2020.

- Correct all known unsafe defects and conditions in accordance with Part 192.

  Response – There are no known unsafe defects or conditions at this time. Paramount will address any pressure-reducing defects or pipeline failures identified from the visual inspections or pressure testing in accordance with §192.703(b).

- Test pipeline in accordance with Part 192, Subpart J to substantiate the MAOP permitted by §192.619.

  Response – Paramount will perform a Part 192, Subpart J pressure test for all five pipelines as part of the CTS per the dates outlined in Table 3 (above).

- Comply with corrosion control requirements of Part 192, Subpart I within 12 months after the pipeline is placed into service, notwithstanding any previous deadlines for compliance.

  Response – Paramount has an existing CP system on its four existing pipelines and will install CP on the newly constructed 8" pipeline. The most recent CP survey was conducted on August 9, 2019. Annual CP surveys were completed consistent with §195.573(a)(1) and will be continued under the proposed new operations per §192.465.

- Keep, for the life of the pipeline, a record of the investigations, tests, repairs, replacements, and alterations made under the requirements of the CTS.

  Response – Paramount will keep a record of the investigations, tests, repairs, replacements, and alterations made under this CTS for the life of the Paramount hydrogen transmission pipelines. Files will be consolidated and permanently filed upon completion of this CTS.

- Notify PHMSA 60 days before the conversion occurs, as required by §191.29.

  Response – Paramount has proposed "conversion" to be February 2021 for the five hydrogen pipelines pending approval from PHMSA.

Refer to Appendix A for details of each specific action item's status during the CTS Plan implementation, to be updated as CTS Plan items are accomplished.

APPENDIX A: CTS ACTION ITEMS SUMMARY

Item No.	Action Item	CTS Plan Section	Code Timing Requirement	Target Completion Date	Status
1	Write Transmission CTS Plan for Hydrogen Pipeline Facilities	Conversion to Service Reporting Requirements	Prior to placing the converted transmission pipeline in Part 192 service	6/1/2020	Completed
2	Notify PHMSA before CTS occurs.	Conversion to Service Reporting Requirements	60 days prior to CTS	12/1/2020	In progress
3	Submit Transmission Conversion to Service of Hydrogen Pipeline for submittal to PHMSA	Conversion to Service Reporting Requirements	Prior to CTS Plan implementation	7/17/2020	In progress
4	Review each transmission pipeline's design, construction, operation, and maintenance history.	Pipeline Design, Construction, and Operations and Maintenance History	Prior to placing the converted transmission pipeline in Part 192 service	4/24/2020	Completed
5	Visually verify all equipment and verify rating is within proposed MOP. Update equipment inventory and revisit MOP determination as necessary.	Component Design Determination	Prior to placing the converted transmission pipeline in Part 192 service	Prior to converting line	In progress
6	As practical, conduct a metallurgical lab analysis (including pipe grade, wall thickness, seam type, and possible manufacturing specification [i.e., API 5L]) of any removed pipe segments. Data to be incorporated accordingly, and design pressure calculations will be revisited.	Additional Design Measures	Life of Facilities	Ongoing	In progress
7	Complete an overpressure study and install effective gas pressure relief devices designed to prevent regulated pipeline's MAOP exceedance	Pressure Relief	Prior to placing the converted transmission pipeline in Part 192 service	Prior to converting line	In progress

Item No.	Action Item	CTS Plan Section	Code Timing Requirement	Target Completion Date	Status
8	Include any new gas pressure relief devices on maintenance list for required periodic inspection and testing.	Pressure Relief	Prior to placing the converted transmission pipeline in Part 192 service	Prior to converting line	In progress
9	Compile and maintain a pressure relief device list.	Pressure Relief	Life of Facilities	Prior to converting line	In progress
10	Complete a leak detection study and install effective leak detection system	Leak Detection	Prior to placing the converted transmission pipeline in Part 192 service	Prior to converting line	In progress
11	Establish leak detection process and procedures based on remote pressure monitoring.	Leak Detection	Prior to placing the converted transmission pipeline in Part 192 service	Prior to converting line	In progress
12	Modify leak detection equipment and methods for hydrogen gas service.	Leak Detection	Prior to placing the converted transmission pipeline in Part 192 service	Prior to converting line	In progress
13	Update pipeline records and maps	Compatibility of Product Transported	Prior to placing the converted transmission pipeline in Part 192 service	Prior to converting line	In progress
14	Conduct HCA and MCA studies	Compatibility of Product Transported	Prior to placing the converted transmission pipeline in Part 192 service	Prior to converting line	In progress

Item No.	Action Item	CTS Plan Section	Code Timing Requirement	Target Completion Date	Status
15	If line is determined to have HCA segments, conduct ASV analysis.	Compatibility of Product Transported	Prior to placing the converted transmission pipeline in Part 192 service	Prior to converting line	In progress
16	Whenever a pipe is removed, inspect the internal surface for evidence of internal corrosion	Compatibility of Product Transported	Life of Facilities	Ongoing	In progress
17	Establish monitoring process for product contaminates.	Compatibility of Product Transported	Prior to placing the converted transmission pipeline in Part 192 service	Ongoing	In progress
18	Update pipeline markings and facility signs for hydrogen with appropriate spacing.	Compatibility of Product Transported	Prior to placing the converted transmission pipeline in Part 192 service	Prior to converting line	In progress
19	As practical, measure actual wall thickness and observe seam type during any aboveground pipe inspections or buried pipe excavations to examine transmission pipe condition.	Visual Inspection	Prior to placing the converted transmission pipe in Part 192 service	2Q 2020	In progress
20	Visually inspect the entire transmission pipeline ROW.	Visual Inspection of Pipeline ROW	Prior to placing the converted transmission pipeline in Part 192 service	2Q 2020	In progress
21	Visually inspect all aboveground transmission pipe and appurtenances.	Visual Inspection of Aboveground Facilities	Prior to placing the converted transmission pipe in Part 192 service	2Q 2020	In progress
22	Visually inspect underground and buried pipe.	Visual Inspection of Underground Facilities	Prior to placing the converted transmission pipe in Part 192 service	2Q 2020	In progress

Item No.	Action Item	CTS Plan Section	Code Timing Requirement	Target Completion Date	Status
23	Address any pressure reducing defects.	Unsafe Defects and Conditions	Prior to placing the converted transmission pipeline in Part 192 service	TBD after inspections are completed	In progress
24	Complete pressure tests.	Pressure Test	Prior to placing the converted transmission pipeline in Part 192 service	1Q 2021	Completed
25	Confirm that pipelines are compliant with Subpart I Corrosion Control requirements.	Corrosion Control	Within 12 months of activation of pipeline	Pipeline is already compliant	Completed
26	Cathodic protection (CP) system in operation on transmission pipeline underground segments with known deficiencies addressed/corrected.	Corrosion Control	Within 12 months of activation of pipeline	Pipeline is already compliant	Completed
27	Create a system of record for investigations, tests, repairs, replacements, and alterations made under CTS Plan. Records must be kept for the life of the pipeline.	Records	Life of Facilities	Ongoing	Ongoing
28	Adopt converted pipelines under Air Products existing 192 Program Manuals	Other Considerations	Prior to placing the converted transmission pipeline in Part 192 service	Prior to converting line	In progress
29	Review changes to training material and provide training to communicate the impacts to O&M and emergency procedures as required by 192.805.	Other Considerations	Prior to placing the converted transmission pipeline in Part 192 service	Prior to converting line	In progress

Item No.	Action Item	CTS Plan Section	Code Timing Requirement	Target Completion Date	Status
30	Schedule and assign OQ tasks to appropriately trained personnel for the covered tasks as part of OQ program. (Including corrosion prevention requirements under Subpart I)	Other Considerations	Prior to placing the converted transmission pipeline in Part 192 service	Prior to converting line	In progress
31	If line is determined to have HCA segments, then incorporate under the existing Air Products GAS IMP program and as appropriate, the 192.452 complete the necessary IMP studies and planning (i.e. leak detection review, risk analysis, threat screening, assessment planning, etc.).	Other Considerations	Prior to placing the converted transmission pipeline in Part 192 service	Prior to converting line	In progress
32	Adopt the pipelines into current liquid CRM program and Public Awareness Program; To Include both public mailings and emergency responder trainings/awareness.	Other Considerations	Prior to placing the converted transmission pipeline in Part 192 service	Prior to converting line	In progress

AIR PRODUCTS

Air Products now operates a Hydrogen pipeline in your area

At Air Products, *Safety is our number one priority*.

We operate our pipelines safely to ensure the protection of our employees, public safety and environmental protection. We conduct aerial patrols of the pipeline route, and our pipeline maintenance team conducts regular maintenance and inspections along the right-of-way. Our pipelines help our customers meet their needs safely, reliably and efficiently.

PROPERTIES				
Products	Description	Vapors	Health Hazards	Fire Hazard
Hydrogen	Colorless, odorless gas	Lighter than air	Extremely high concentrations may cause asphyxiation	Extremely flammable and easily ignited

ATTACHMENT C

DO YOU KNOW HOW TO RECOGNIZE A LEAK?

USE YOUR SENSES.

SIGHT
A spot of dead vegetation in an otherwise green location, flames hovering near the ground.

SOUND
Listen for whistling noises or gurgling in water.

SMELL
Air Products gas is odorless, but may have hydrocarbon smell if leaking.

ATTACHMENT C

AIR PRODUCTS

P.O. Box 3151 · Wichita, KS 67201-3151

Presort Std
U.S. Postage
PAID
Wichita, Ks
Permit No. 504

811 Know what's **below.** **Call** before you dig.

CALL 811 BEFORE YOU DIG!

It's SAFE. It's FREE. It's the LAW!

For more information, please visit:
www.airproducts.in/company/sustainability/care/safety/pipeline-safety
or call us 24/7 at 1-800-572-6521.

21APC

ATTACHMENT C

Pipeline safety in your community

SCAN THIS PAGE WITH PAV*

*Instructions on back

811

Know what's **below.**
Call before you dig.

Please share this important information with others in your community

ATTACHMENT C

Pipelines are near you

You have received this information because of the presence of pipelines and/or facilities near you. These pipelines, operated by the companies whose fact sheets accompany this booklet, are part of the network of over 2.6 million miles of gathering, transmission, and distribution pipelines in the United States, transporting two-thirds of the energy we use each year.

National Pipeline Mapping System (NPMS)

To view and download maps of transmission pipelines in your county, see the National Pipeline Mapping System website, https://www.npms.phmsa.dot.gov. This online platform is used by government officials, pipeline operators, and the general public for a variety of tasks including emergency response, smart growth planning, critical infrastructure protection, and environmental protection.

How you can help keep pipelines safe

While no other method of transporting natural gas and petroleum products is as safe as pipelines, you can help by:

- Becoming familiar with the operators of pipelines and pipeline facilities in your area and keeping the enclosed fact sheets for future reference.
- Understanding the One-Call requirements and damage prevention laws in your area by utilizing the following site.
  - https://primis.phmsa.dot.gov/comm/DamagePreventionSummary.htm
- **Reporting any suspicious activity or unauthorized excavation taking place near pipelines or facilities by calling 911 and the pipeline company.**
  - Anyone inquiring about security status, personnel and vehicles or attempting to acquire official vehicles, uniforms or identification/access cards, company facility, operations, etc.
  - Attempts to circumvent security measures.
  - Fencing that has been cut or fence ties that have been broken to include any tampering of locks on gates, buildings or storage facilities.
  - Items left in areas where they don't belong, i.e. backpacks, boxes, etc.
- Completing and returning the enclosed postage-paid survey.

ATTACHMENT C

Call before you dig

99%* of all incidents involving injury, damage to property and the environment, or utility service outages can be avoided by making a FREE CALL to 811 at least two to three business days prior to excavating. Examples of activities that require a call to 811 include:

- Building a fence
- Landscaping
- Installing a pool
- Installing a sprinkler system

Once the lines have been marked, you will know their approximate location and can safely begin your dig, following safe excavation practices.

** CGA Dirt Report 2013*

Additionally, third-party contractors are subject to the Occupational Safety and Health Administration's (OSHA) requirements. OSHA cites in its "General Duty Clause" possible regulatory enforcement action that could be taken against excavation contractors who place their employees at risk by not utilizing proper damage prevention practices. The lack of adequate damage prevention could subject the excavator to OSHA regulatory enforcement.

How to recognize the location of a pipeline

Markers are located in the pipeline right-of-way and indicate the approximate location, but not the depth, of a buried pipeline.

Although not present in certain areas, these can be found at road crossings, fence lines, and street intersections. The markers display the product transported in the line, the name of the pipeline operator, and a telephone number where the operator can be reached in the event of an emergency.

From left to right: TriView™ Marker, Dome Marker, Flat Marker, Round Marker, Aerial Marker, Casing Vent Markers.

Pipeline rights-of-way

Rights-of-way are often recognizable as corridors that are clear of trees, buildings or other structures except for the pipeline markers. Encroachments upon a pipeline right-of-way inhibit the pipeline operator's ability to reduce the chance of third party damage, provide right-of-way surveillance and perform routine maintenance and required federal/state inspections. Keeping trees, shrubs, buildings, fences, structures and any other encroachments well away from the pipeline ensures that the pipeline integrity and safety are maintained.

Digging safely around pipelines

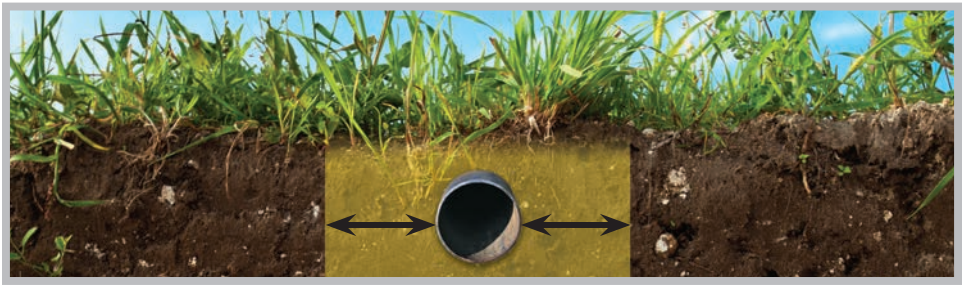
State laws require you to maintain minimum clearance, or tolerance zone, between the point of excavation and a marked pipeline.

Even the most minor damage to a pipeline can have serious consequences. If you cause, witness or suspect even minor damage to a pipeline or its protective coating:

- Evacuate the area, call 911 ***and*** the pipeline company immediately
- Do not excavate further
- Do not cover up or backfill
- Do not inspect or investigate
- Do not attempt to move the equipment, even if it appears to be lodged

The Tolerance Zone is a defined horizontal space from the outside wall or edge of an underground line or pipe. Some state laws and/or pipeline operators require excavators to notify the pipeline operator when they are digging within a specific number of feet of the pipeline, for example, 25 feet. However, the exact footage requirement can vary. Be familiar with your state law and local pipeline operator requirements. For more information on the tolerance zone requirements in your state, please visit:

https://primis.phmsa.dot.gov/comm/DamagePreventionSummary.htm



ATTACHMENT C

If you suspect a pipeline leak*

Do:

- Make sure gas appliances are turned all the way OFF.
- Leave the area.
- Telephone 911 ***and*** the pipeline company from a safe location upwind, well away from the location of the leak.
- If it is safe to do so, warn others against entering the leak area and/or creating ignition sparks.

Do not:

- Start an engine of any kind.
- Strike matches or create a flame of any kind.
- Use a telephone or cell phone, unless from a safe location upwind, well away from the location of the leak.
- Turn on or off any light switches, garage door openers or other electrical switches.
- Touch, breathe or make contact with leaking product.
- Drive into a leak or vapor cloud area.

* *https://primis.phmsa.dot.gov/comm/EmergencyResponse.htm*

How to recognize a pipeline leak

Sight - Natural gas and Highly Volatile Liquids (HVL) are colorless and nearly invisible to the eye. Small leaks can be identified by looking for dying or discolored vegetation in a naturally green area.

Hazardous liquids produce a strong sheen or film standing on a body of water. A HVL leak may be identified by a fog-like vapor cloud in areas of high humidity. Natural gas is colorless, but blowing dirt around a pipeline area may be observed, or vapor and “ground frosting” may be visible at high pressures, regardless of temperature.

Other ways to recognize a leak may include: water bubbling up or standing in an unusual area, a mist or vapor cloud, a powerful fire or explosion with dense smoke plumes, or an area of petroleum-stained ground.

Sound - The volume of a pipeline leak can range from a quiet hissing to a loud roar, depending on the size and nature of the leak.

Smell - An unusual smell, petroleum or gaseous odor will sometimes accompany pipeline leaks. Natural gas and HVLs are colorless, tasteless and odorless unless odorants, such as Mercaptan, are added.

Most HVLs contain a slight hydro-carbon or pungent odor. Most are non-toxic; however, products such as ammonia are considered a toxic chemical and can burn the senses when it seeks out moisture (eyes, nose or lungs). If inhaled, HVLs may cause dizziness or asphyxiation without warning.

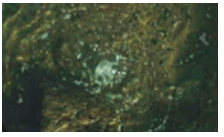
What a pipeline company does if a leak occurs

To prepare for the event of a leak, pipeline companies regularly communicate, plan and train with local emergency responders. Upon notification of an incident or leak, the pipeline company will immediately dispatch trained personnel to assist emergency responders. Pipeline companies and emergency responders are trained to protect life, property, and facilities in the case of an emergency. Pipeline companies will also take steps to minimize the amount of product that leaks out and to isolate the pipeline emergency.

Vapor Cloud

Sheen on Water

Dead Vegetation



Bubbling Water

Maintaining safety and integrity of pipelines

Pipeline companies invest significant time and capital maintaining the quality and integrity of their pipeline systems. Most active pipelines are monitored 24 hours a day via manned control centers. Pipeline companies also utilize aerial surveillance and/or on-ground observers to identify potential dangers. Control center personnel continually monitor the pipeline system and assess changes in pressure and flow. They notify field personnel if there is a possibility of a leak. Automatic shut-off valves are sometimes utilized to isolate a leak.

Gas transmission and hazardous liquid pipeline companies have developed supplemental hazard and assessment programs known as Integrity Management Programs (IMPs). **IMPs have been implemented for areas designated as "high consequence areas" (HCAs) in accordance with federal regulations. More specific information on HCA's in your area may be available from your local pipeline operator(s) by contacting them directly.**

911 and Telephone Text (TTY)*

The Americans with Disabilities Act requires that people with disabilities who use TTY or other devices have direct, equal access to emergency response services. In the event of an emergency, TTY users should call 911 directly.

** A TTY (Telephone Text) also called a TDD (Telecommunication Device for the Deaf), is a special device that lets people who are deaf, hard of hearing, or speech-impaired use the telephone to communicate, by allowing them to type text messages.*

ATTACHMENT C

Hay líneas de tuberías cerca de usted

Usted ha recibido esta información debido a la presencia de líneas de tuberías y/o de instalaciones cerca de usted. Estas líneas de tuberías, las cuales son operadas por las compañías que presentan sus hojas de datos en este folleto, son partes de la red de más de 2.6 millones de millas de líneas de tuberías de recolección, transmisión y de distribución en los Estados Unidos, y que transportan dos terceras partes de la energía que utilizamos cada año.

Sistema Nacional de Mapas de Líneas de Tuberías ("NPMS" por sus siglas en inglés)

Para ver o para descargar los mapas de líneas de transmisión que se encuentran en su condado, vea el sitio web del Sistema Nacional de Mapas de Líneas de Tuberías, https://www.npms.phmsa.dot.gov. Esta plataforma en línea es utilizada por los oficiales del gobierno, los operadores de las líneas de tuberías y por el público en general para una variedad de funciones incluyendo la respuesta a emergencias, planificación de crecimiento inteligente, protección de las infraestructuras críticas y para la protección del medio ambiente.

Como usted puede ayudar a mantener seguras las líneas de tuberías

Aunque no hay ningún otro método tan seguro en el transporte de gas y de productos de petróleo como lo son las líneas de tuberías, usted puede ayudar haciendo lo siguiente:

- Familiarizándose con los operadores de las líneas de tuberías y con las instalaciones de líneas de tuberías que se encuentran en su área y conservando las hojas de datos incluidas con este folleto para referencia futura.
- Comprendiendo los requisitos de Una-Llamada y las leyes de prevención de daños de su área utilizando el siguiente sitio del internet.
  - https://primis.phmsa.dot.gov/comm/DamagePreventionSummary.htm
- **Reportando cualquier actividad sospechosa o excavación no autorizada que se esté llevando a cabo cerca de las líneas de tuberías o de las instalaciones llamando al 911 y a la compañía de las líneas de tuberías.**
  - Cualquier persona haciendo averiguaciones acerca del estado de seguridad, del personal y de vehículos o intentando adquirir vehículos oficiales, uniformes o tarjetas de identificación/acceso, o averiguando acerca de las instalaciones de la compañía, las operaciones, etc.
  - Intento de eludir las medidas de seguridad.
  - Cercas que han sido cortadas empates de cercas que han sido rotos incluyendo cualquier alteración a los candados de portones, edificios o instalaciones de almacenamiento.
  - Artículos abandonados en áreas done no deberían estar, por ejemplo mochilas, c ajas, etc.
- Completando y enviando la encuesta y la tarjeta de comentarios incluida con franqueo pre-pagado.

ATTACHMENT C

Llame antes de excavar

El 99%* de los incidentes que envuelven lesiones, daños a la propiedad y al medio ambiente, o interrupción de servicios de utilidades pueden ser prevenidos haciendo una LLAMADA GRATIS al 811 por lo menos dos a tres días laborables antes de comenzar a excavar. Algunos ejemplos de las actividades que requieren una llamada al 811 incluyen:

- Construir una cerca
- Ajardinamiento
- Instalar un alberca
- Instalar un sistema de aspersores

Una vez las líneas de tuberías han sido marcadas, usted sabrá la ubicación aproximada de estas y podrá comenzar a excavar con seguridad, siguiendo las prácticas de excavación seguras.

** CGA Dirt Report 2013*

Además, los contratistas externos están sujetos a los requisitos de la Administración de Seguridad y Salud Ocupacional ("OSHA" por sus siglas en inglés). OSHA cita en su "Cláusula de Obligaciones Generales" posibles medidas de cumplimiento de regulaciones que podrían adoptarse contra contratistas de excavación que ponen a sus empleados en situaciones de peligro al no utilizar prácticas apropiadas de prevención de daños. La falta de una prevención contra daños adecuada podría someter al excavador al cumplimiento de regulaciones de OSHA.

Como reconocer la ubicación de una línea de tuberías

Los marcadores están ubicados en el derecho de paso de la línea de tuberías e indican la ubicación aproximada, pero no la profundidad, de una línea de tuberías enterrada.

Aunque no siempre están presentes en ciertas áreas, estos marcadores se pueden encontrar en los cruces de ferrocarriles, las cercas y en las intersecciones de calles. Los marcadores muestran el producto que es transportado en la línea, el nombre del operador de la línea de tuberías y un número de teléfono donde puede contactar al operador en el caso de una emergencia.

De izquierda a derecha: Marcador TriView™, Marcador Domo, Marcador Plano, Marcador Redondo, Marcador Aéreo, Marcadores de Tubos de Ventilación.

Derechos-de-paso de una línea de tuberías

ATTACHMENT C

Los derechos-de-paso usualmente son reconocidos como pasillos en el terreno que se encuentran libres de árboles, edificios y de otras estructuras con excepción de los marcadores de líneas de tuberías. Las intrusiones en el derecho-de-paso de una línea de tuberías impiden la habilidad del operador de la línea de tuberías de poder reducir los daños ocasionados por terceras personas, proveer vigilancia en el derecho de paso y de realizar el mantenimiento y las inspecciones requeridas por las leyes federales/estatales. El mantener árboles, arbustos, edificios, cercas, estructuras y cualquier otra intrusión bien alejadas de la línea de tuberías asegura que se mantenga la integridad y la seguridad de la línea de tuberías.

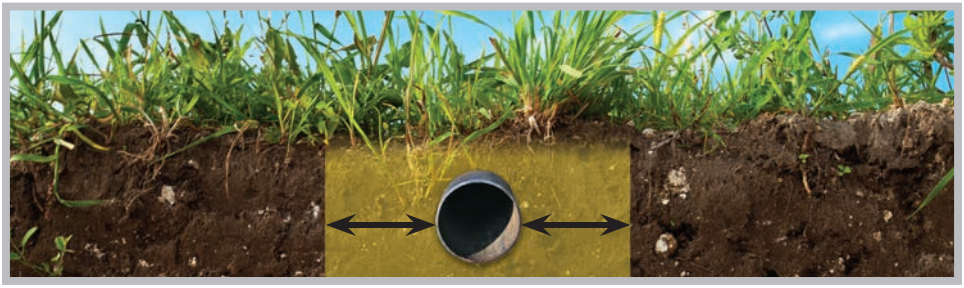
Excavando con seguridad alrededor de las líneas de tuberías

Las leyes estatales exigen que usted mantenga un espacio libre mínimo, o zona de tolerancia, entre el punto de excavación y una línea de tuberías marcada.

Incluso un daño menor a una línea de tuberías puede tener graves consecuencias. Si usted causa, es testigo o sospecha incluso daños menores a una línea de tuberías o su capa protectora:

- Evacue el área, llame inmediatamente al 911 ***y*** a la compañía de la línea de tuberías
- No continúe excavando
- No la tape ni la rellene
- No trate de inspeccionar o de investigar
- No intente mover ningún equipo, incluso si parece estar atascado

La Zona de Tolerancia es un espacio horizontal definido que va desde la pared exterior o desde el borde de una línea o tubería subterránea. Algunas leyes estatales requieren que los excavadores notifiquen al operador de la línea de tuberías cuando van a cavar dentro de una cantidad de pies especifica de la línea de tuberías, por ejemplo, a 25 pies. Sin embargo, el requisito de cantidad especifica de pies puede variar. Familiarizase con su ley local y con los requisitos locales del operador de la línea de tuberías. Para obtener más información acerca de los requisitos de las zonas de tolerancias de su estado, por favor visite: https://primis.phmsa.dot.gov/comm/DamagePreventionSummary.htm



Si usted sospecha que hay una fuga en una línea de tuberías*

Debe:

- Asegurarse que todos los aparatos de gas estén completamente APAGADOS.
- Abandonar el área.
- Llamar al 911 ***y*** a la compañía de la línea de tuberías desde un lugar seguro que esté en contra del viento y muy lejos del lugar de la fuga.
- Si es posible hacerlo con seguridad, alertar a otros a que no entren al lugar de la fuga ni que crean ninguna chispa de encendido.

No debe:

- Encender ningún motor de ningún tipo.
- Encender ningún fósforo ni ocasionar ningún tipo de llama.
- Usar ningún teléfono ni ningún celular, a menos que se encuentre en lugar seguro y en contra del viento, muy alejado de la ubicación de la fuga.
- Encender ni apagar ningún interruptor de luz, ningún abridor automático para puertas de garaje ni ningún otro interruptor eléctrico.
- Tocar, inhalar ni hacer contacto con la fuga del producto.
- Manejar en la dirección del área de una fuga o de una nube de vapor.

* *https://primis.phmsa.dot.gov/comm/EmergencyResponse.htm*

Como reconocer una fuga en una línea de tuberías

Vista - El gas natural y los Líquidos Altamente Volátiles (HVL por sus siglas en inglés) no tienen color y son casi invisibles al ojo humano. Las fugas pequeñas pueden ser identificadas al ver vegetación que se está muriendo o que está descolorida en un área que usualmente es verde.

Los líquidos peligrosos producen un brillo o una capa sólida sobre un cuerpo de agua. Una fuga de “HVL” puede ser identificada por una nube de vapor que parece neblina en áreas de alta humedad. El gas natural no tiene color, pero puede que se vea tierra siendo soplada alrededor del área de una línea de tuberías, o vapor y “tierra congelada” podría ser visible a presiones altas, independiente a la temperatura.

Otros modos de como reconocer una fuga puede incluir: agua burbujeando o estancada en un área inusual, una nube de rocío o de vapor, un fuego o una explosión potente con columnas densas de humo, o una área de tierra manchada por petróleo.

Sonido - El volumen de sonido de una fuga en una línea de tuberías puede variar entre un silbido silencioso y un rugido fuerte, dependiendo del tamaño y de la naturaleza de la fuga.

Olor - A veces un olor inusual, un olor gaseoso o de petróleo puede acompañar las fugas en una línea de tuberías. El gas natural o los HVLs no tienen color, sabor ni olor a menos que se le haya añadido odorantes como el Mercaptano.

Casi todos los HVLs contienen un olor suave de hidrocarburo o un olor acre. La mayoría no son tóxicos; sin embargo, los productos como el amoniaco son considerados como un químico tóxico y pueden quemar los sentidos cuando se unen a humedad (ojos, nariz o los pulmones). Si los HVLs son inhalados pueden causar mareos o asfixia sin ningún previo aviso.

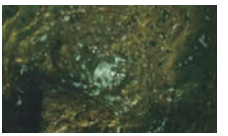
Lo que una compañía de líneas de tuberías hace si ocurre una fuga

Para estar preparados en caso de una fuga, las compañías de líneas de tuberías regularmente se comunican, planean y entrenan con los respondedores locales de emergencias. Al recibir una notificación de un incidente o fuga, la compañía de líneas de tuberías enviará inmediatamente su personal entrenado para asistir a los respondedores de emergencias. Los operadores de líneas de tuberías y los respondedores de emergencias están entrenados para proteger vidas, propiedades e instalaciones en caso de una emergencia. Los operadores de líneas de tuberías también tomarán pasos para minimizar la cantidad de producto que se esté escapando y aislar la emergencia en la línea de tuberías.

Nube de Vapor

Brillo en el Agua

Vegetación Muerta



Agua Burbujeando

Manteniendo la seguridad y la integridad de las líneas de tuberías

Las compañías de líneas de tuberías invierten una cantidad considerable de tiempo y capital para conservar la calidad e integridad de sus sistemas de líneas de tuberías. La mayoría de las líneas de tuberías activas son monitoreadas las 24 horas del día a través de centros de control con personal. Las compañías de líneas de tuberías también utilizan vigilancia aérea y/o observadores sobre el terreno para identificar daños potenciales. El personal del centro de control monitorea continuamente el sistema de líneas de tuberías y evalúa cambios en presión y flujo. Ellos le notifican al personal de campo si hay una posibilidad de una fuga. Las válvulas de cierre automático a veces son utilizadas para aislar una fuga.

Los operadores de líneas de tuberías de transmisión de gas y de líquidos peligrosos han desarrollado programas suplementarios de evaluación de peligros conocidos como Programas de Manejo de Integridad ("IMP" por sus siglas en inglés). **Los "IMP" han sido implementados para las áreas designadas como "áreas de alta consecuencia" ("HCA" por sus siglas en inglés) en conformidad con las regulaciones federales. Usted puede obtener información más específica acerca de las HCA en su área contactando directamente al (los) operador(es) locales de la línea de tuberías.**

El 911 y el Teléfono de Texto ("TTY" por sus siglas en inglés)*

La Ley de Estadounidenses con Discapacidades exige que las personas con discapacidades que usan TTY u otros dispositivos, tengan acceso directo e igualitario a los servicios de respuesta de emergencia. En caso de una emergencia, los usuarios de TTY deben llamar al 911 directamente.

* *Un TTY (siglas en inglés de Teléfono de Texto), también llamado TDD (siglas en inglés de Dispositivo de Telecomunicaciones para Sordos), es un dispositivo especial que permite a las personas sordas, con problemas de audición o con discapacidad del habla usar el teléfono para comunicarse, permitiéndoles escribir mensajes de texto.*

ATTACHMENT C

Download the Pipeline Awareness Viewer™ (PAV) app to learn about pipelines, including:

Tap to visit

- How to find transmission pipelines in your area

Tap to visit

- The 811 process

How to recognize a pipeline leak

- How to recognize a pipeline leak

Pipeline industry overview

- An overview of the pipeline industry

Pipeline marker location and information

- How to recognize the location of a pipeline

Tap to visit

- Take online survey

How to use PAV:

- Launch the app on your device.
- Review the brief instructions.
- Tap the SCAN button and aim your camera at the brochure cover.*
- When the buttons appear, tap the lock icon to view the available content.
- Tap the buttons to view important pipeline safety information.

ANDROID APP ON Google play

Download on the App Store

**For best results, enable Wi-Fi on your device prior to using the PAV app.*

ENVIRONMENTAL IMPACT REPORT

(Referenced documents are hyperlinked. The links may also be accessed by copy and pasting the link into your browser.

A. Draft EIR: **https://ceqanet.opr.ca.gov/2020059038/3**

B. Appendix A through Appendix D: https://ceqanet.opr.ca.gov/2020059038/3

C. The Final EIR: https://ci.carson.ca.us/content/files/pdfs/planning/docs/projects/HydrogenGas/FEIR_AirProductsHydrogenPipelineProjectR2_FinalEIR.pdf

CALIFORNIA ENVIRONMENTAL QUALITY ACT

FINDINGS OF FACT, STATEMENT OF OVERRIDING CONSIDERATIONS,

AND MITIGATION MONIORING AND REPORTING PLAN

Application No. 2103-20 (EIR 01-22)
April 20, 2021

1. INTRODUCTION

Air Products and Chemicals, Inc. proposes to implement, operate, and maintain the Carson to Paramount Hydrogen Pipeline Project ("project"). The proposed pipeline will extend from Air Products' existing hydrogen facility in the City of Carson, California to the World Energy Bio-Fuels Facility in the City of Paramount, California. Existing pipeline segments to be utilized as part of this project are owned by Paramount Pipeline Company, LLC (Paramount Pipeline), a subsidiary of World Energy. Approximately 0.5 mile of new pipeline will be constructed as part of the project within the City of Carson. Air Products proposes to utilize existing pipeline(s) owned by Paramount Pipeline for the remainder of the approximately 11.5-mile pipeline route. One new pipe connection, in the City of Carson, would be required to connect segments of existing pipelines together. Air Products would also remove approximately ten existing manual valves, install one manual valve, and add one automatic shutoff valve at locations along the pipeline route. Paramount Pipeline is proposing to amend its pipeline permit with the City of Long Beach for portions of the pipeline traversing through the City. The overall project is organized into segments, segments 2, 3, 4 and 5 are within the City of Long Beach (please see attached figure from Appendix A of the Final Environmental Impact Report [EIR]).

There will be two active construction areas. The first is an alignment from the Air Products and Chemicals Carson Facility (located at Air Products' Carson Facility, 23300 S Alameda Street, Carson, CA 90810) to construct 0.5 mile of new pipeline to connect to existing pipeline on Sepulveda Boulevard. The second is located on Paramount Boulevard in Long Beach to connect two existing Paramount Pipeline pipelines. The pipeline will be owned by Paramount Pipeline and operated and maintained by Air Products and Chemicals, Inc.

Air Products and Chemicals, Inc. will be responsible for all operation and maintenance of the pipeline. The normal operating pressure will be approximately 260 pounds per square inch gauge[1] (psig), i.e., the term used for PSI in relation to atmospheric pressure). The pipeline will transfer a maximum of seven million cubic feet of hydrogen gas each day (MMSCFD) from the Air Products and Chemicals facility in Carson to the World Energy Bio-Fuels Facility in Paramount. The project would be operated as an alternative to the liquefied hydrogen currently delivered by four to six daily truck trips to the World Energy Bio-Fuels Facility.

Air Products and Chemicals, Inc. submitted an application to the City of Long Beach seeking in part, permission for a change-in-use from crude oil products to hydrogen gas for an existing subsurface pipeline that is owned by Paramount Pipeline and operated and maintained by Air Products and Chemicals, Inc.—"Line 4", Segment 5, Segment 4, Segment 3, and "Line 12" Segment 2 and as part of the pipeline permit request (P-502-21).

[1] With Mitigation Measure HM-2a the maximum operating pressure will not exceed 160psig.

On November 10, 2020, the City of Carson, as the Lead Agency certified the Final Environmental Impact Report (FEIR) (SCH 2020059038) for the Project. Based on a review of the Final EIR certified by the City of Carson, the City, as a Responsible Agency, herein makes certain findings pursuant to Public Resources Code Section 21081 and Title 14 California Code of Regulations 15091; makes findings regarding the Statement of Overriding Considerations pursuant to Public Resources Code Section 21081 and Title 14 California Code of Regulations Section 15093; and sets forth a Mitigation Monitoring and Reporting Plan (MMRP) that pertains to operation of "Line 4" and "Line 12" pursuant to Public Resources Code Section 21081 and Title 14 California Code of Regulations Section 15097.

2. RECORD OF PROCEEDINGS

For CEQA and these findings, the Record of Proceedings for the proposed project consists of the following documents:

A. Initial Study (https://ceqanet.opr.ca.gov/2020059038/3)**)**

B. Notice of Preparation (https://files.ceqanet.opr.ca.gov/262106-2/attachment/Pp6SYFW4QtMfCUCoNh35dPkgidJWwvBrYEj6shBOiVj4vSKY0HIu8wFCsX6VAFZXfkPliEgI_HytJgAN0)

C. Notice of Completion (https://files.ceqanet.opr.ca.gov/262106-2/attachment/O6G5XrnMBOD95EC5CG8SKHeGFmPPgBMMzz0oKhOnSQaJWN5g-pXnlERVPh9JP4pG0E6benxhX7qOrY580)

D. Notice of Availability (https://files.ceqanet.opr.ca.gov/262106-3/attachment/pGtxURHRYz3yX7FjelEN8W86T5f4G7-aOSmm-NDMM9X92s7ym52AHit6zJ-Ejw8SVQSM3_FxaYms1hfn0)

E. Draft EIR https://ceqanet.opr.ca.gov/2020059038/3

F. Appendix A through Appendix D (https://ceqanet.opr.ca.gov/2020059038/3)

G. The Final EIR (https://ci.carson.ca.us/content/files/pdfs/planning/docs/projects/HydrogenGas/FEIR_AirProductsHydrogenPipelineProjectR2_FinalEIR.pdf)

H. The November 10, 2020, Planning Commission Meeting (https://carson.granicus.com/MediaPlayer.php?view_id=2&clip_id=2249)

The documents above include hyperlinks for ease of reference. The documents are also available through one or more of the following sources, the City of Carson located at 701 E. Carson Street, Carson, CA 90745 (https://ci.carson.ca.us/CommunityDevelopment/HydrogenGas.aspx); State Clearinghouse, https://ceqanet.opr.ca.gov/Project/2020059038.

3. PROJECT DESCRIPTION

Approximately 0.5 mile of new pipeline will be constructed as part of the project within the City of Carson. Air Products and Chemicals proposes to utilize existing pipeline(s) owned by Paramount Pipeline for the remainder of the approximately 11.5-mile pipeline route. One new pipe connection would be required to connect segments of existing pipelines together. Air Products and Chemicals would also remove approximately ten existing manual valves, install one manual valve, and add one automatic shut-off valve at locations along the pipeline route.

The project route will traverse the City of Long Beach, includes Segments 2 through Segments 5, which includes both “Line 4” and “Line 12.”

4. FINDINGS

CEQA prohibits a public agency from approving or carrying out a project for which a CEQA document has been completed and identifies one or more significant adverse environmental effects of the project, unless the public agency makes one or more written findings for each of those significant effects, accompanied by a brief explanation of the rationale for each finding (CEQA Guidelines section15091).

These findings provide the written analysis and conclusions of the City of Long Beach, acting by and as a Responsible Agency, regarding the environmental impacts of the proposed project and the mitigation measures directly applicable to the change-in-use of “Line 4” and “Line 12”,which would change the use of an existing pipeline within the City of Long Beach boundaries from crude oil to hydrogen.

Significant and Unavoidable Impacts

Hazardous Materials/Risk of Upset. One significant and unavoidable (Class I) impact was identified for the proposed project (see Table ES-1) associated with an upset condition and release of hazardous materials into the environment (HM-2). In order to define a “significant hazard” under CEQA related to upset conditions, the Final EIR utilizes a quantitative approach to estimate risk levels and compares these to the baseline risk levels and the acceptability levels from other jurisdictions.

The Final EIR found that risk levels from a pipeline are driven by the volume of hydrogen located within the pipeline whereas the risks for trucking are driven by the number of truck trips. At a certain point, an increasing number of truck trips associated with an increasing volume of hydrogen transported generates more risk than a pipeline. This project, with the hydrogen pipeline compared to the trucking of liquefied hydrogen associated with the baseline, is close to that crossover point.

Impacts associated with the project operating at a pressure of 260 psig[2] are similar to, if not somewhat greater than, those presented by the baseline trucking operations as the FN (frequency versus consequence) curves for both activities lie in a similar band within the FN curves. Therefore, a reduction in risk levels over the baseline is not apparent. As risks would not be reduced from the baseline operations, the impacts in the event of an upset condition would be significant.

[2] With Mitigation Measure HM-2a the maximum operating pressure will not exceed 160psig.

The Final EIR concluded that mitigation measure HM-2a requires the pipeline be operated at a maximum pressure at any point in the pipeline of 260 psig, that the operator maintains operating pressure information, and that information on pipeline maintenance be reported to the City as requested by the City (HM-2a, was included to reduce the 260 psig, to 160 psig). Mitigation Measure HM-2b requires the pipeline be monitored on an annual basis for any issues that could indicate increased rates of the loss of pipeline integrity and operation at or below the Maximum Pressure Allowance of 160 psig at all times, ensuring operation that goes conservatively beyond industry recommendations to avoid hydrogen embrittlement. Monitoring of the pipeline shall include the following measures: 1) Cathodic system maintenance, including bi-monthly checks for proper operation; 2) Leak surveys with hydrogen gas detector every six months; 3) Quarterly patrols checking for unusual conditions or activity around the line; 4) Valve functionality assurance testing; 5) A leak detection (system) capable of detecting leaks as small as 0.25 inches in diameter; 6) Damage prevention, pipeline marking and surveillance activities; 7) Other pipeline inspections and any required repairs to address inspection findings; and 8) Destructive and metallurgical testing on any sections removed in the course of normal maintenance and operation. The monitoring procedure shall be documented and available for inspection upon request. Mitigation Measure HM-2c requires the pipeline continue to be pressure tested at a Maximum Allowable Operating Pressure to test pressure ratio of at least 3.0 to ensure pipeline integrity. The testing shall be performed annually for the first three years; subsequent tests may be relaxed to once every three to five years as per Pipeline and Hazardous Materials Safety Administration (PHMSA) requirements. Even with implementation of the required mitigation measures, impacts of HM.2 still fall in a range very similar to the baseline operations and would remain within the unacceptable region of the FN curves; potential impacts to people and the environment would be significant and unavoidable (Class I).

POTENTIALLY SIGNIFICANT IMPACTS WHICH CANNOT BE MITIGATED TO BELOW A LEVEL OF SIGNIFICANCE

The proposed project would create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment.

Finding: The City of Long Beach finds that: 1) the project creates a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment; 2) mitigation measures were incorporated into the project that serve to reduce this impact, but even with the inclusion of these mitigation measures, the impact cannot be reduced to less than significant levels; 3) such mitigation measures are within the jurisdiction of the City of Carson and the City of Long Beach; and 4) no feasible measures were identified in the Final EIR that would mitigate this significant adverse impact to below a level of significance.

Rationale for Finding: The project creates a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment. The Final EIR concluded that, even with application of feasible mitigation measures, this impact cannot be entirely avoided or reduced to less-than-significant levels. Three feasible mitigation measures that could potentially reduce the impact were evaluated in the Final EIR, but they would not reduce the level to less than significant. These mitigation measures are described in the Final EIR (HM-2a, HM-2b and HM-2c). Though these measures would not remove significant hazard of accidental release of hazardous materials, no other

feasible mitigation measures or project alternatives have been identified that would reduce the impact to a less-than-significant level. Therefore, the significant impact involving the release of hazardous materials into the environment is expected to remain significant and unavoidable following implementation of feasible mitigation measures.

POTENTIALLY SIGNIFICANT IMPACTS WHICH CAN BE MITIGATED TO A LEVEL OF INSIGNIFICANCE

Significant but Mitigatable Impacts

The Final EIR identified six potentially significant adverse environmental impacts that can be reduced to a level of insignificance with implementation of required mitigation measures. These impacts and related mitigation measures were identified for aspects of the project that apply solely to construction of the new pipeline connections, which would be located entirely within the City of Carson. As a result, these are not applicable to the Final EIR jurisdiction under the application for a permit (P-502-21) within the City of Long Beach. The construction-related environmental impacts include hazardous materials, transportation, and tribal cultural resources, which are discussed below.

The Final EIR identified six potentially significant adverse environmental impacts that can be reduced to a level of insignificance: (1) HM-4. Project could be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code §65962.5 (Cortese List); (2) T-1. Project could conflict with a program, plan, ordinance, or policy addressing the circulation system, including transit, roadway, bicycle, and pedestrian facilities; (3) T-4. Project could result in inadequate emergency access; (4) TC-1. Project could cause substantial adverse change in the significance of a historical or archaeological resource as defined in §15064.5; (5) TC-2. Project could disturb human remains, including those interred outsides of dedicated cemeteries; and (6) TC-3. Project could cause a substantial adverse change in the significance of a tribal cultural resource that is listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined inch Section 5020.1(k), or one that is determined by the lead agency to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 5024.1. Seven feasible mitigation measures that could potentially reduce these impacts were evaluated and found to reduce the impacts to a less-than-significant level. These mitigation measures are included in the Final EIR (HM-4, T-1, T-4, TC-1a, TC-1b, TC-2, and TC-3). Following implementation of the identified mitigation measures, project impacts HM-4, T-1, T-4, TC-1, TC-2, and TC-3 would be less than significant. These impacts and related mitigation measures were identified for aspects of the project which apply solely to construction of the new pipeline connections, which would be located entirely within the City of Carson. As a result, these are not applicable to the City of Long Beach jurisdiction.

The proposed project could overlap with the Metro West Santa Ana Branch Transit Corridor project and create potential risk of upset issues (Impact HM-Cum1). The Metro project would intersect the proposed Project pipeline near the tie-in location at Paramount Refinery. Construction activities could impact the pipeline sufficient coordination activities are not implemented which could result in potentially significant cumulative impacts.

Mitigation Measure HM-Cum1 requires coordination between the proposed Project and the Los Angeles County Metropolitan Transit Authority before any permit issuance. Implementation of MM HM-Cum1 will ensure overlapping design elements do not interfere with either project or increase the potential for risk of upset issues. Impacts would be less than significant with mitigation (Class

II). The proposed expansion of the World Energy Renewable Fuels Project located at the Paramount Refinery is another cumulatively significant project relative to the proposed Project. This project is currently in the CEQA review phase of project permitting and would involve the expansion of the existing renewable fuels project (3,500 barrels per day, (bpd)) into a facility that could process about 25,000 bpd of refinery input for the development of bio-based transportation fuels.

A part of the expansion project is the development of a hydrogen generation unit that would be capable of supplying all of the hydrogen needs of the expansion of the World Energy Renewable Fuels Project. The use of an onsite hydrogen generation unit could reduce or eliminate the need to have a hydrogen pipeline (or trucks) transport hydrogen to the Paramount Refinery on a long-term basis. Interim use of the pipeline would allow for the supply of hydrogen to the Paramount Refinery while this cumulative project is being permitted and built. The reduction or elimination of the use of the pipeline after the completion of the expansion of the World Energy Renewable Fuels Project would eliminate the long-term risks identified as significant in Section 4.3, Risk of Upset of the Final EIR. Risks would still remain significant but would be realized for a shorter period of time, thereby reducing the severity of the impact.

FINDINGS CONCLUSION

Changes or alterations have been incorporated into the project to mitigate or minimize the potentially significant adverse environmental effects associated with project-specific impacts to less than the applicable significance threshold, where feasible. No additional feasible mitigation measures or alternatives were identified that could further reduce the following:

- Significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment.

No additional feasible mitigation measures or alternatives to the project, other than those included in the Final EIR, have been identified that can further mitigate the identified potentially significant adverse project-specific impacts related to hazards while still meeting the basic objectives of the project. No additional feasible mitigation measures or alternatives were identified that could further reduce the significant cumulative environmental impacts identified.

The City of Long Beach further finds that all of the findings presented herein are supported by substantial evidence as analyzed in the Final EIR and in the administrative record as a whole.

The City of Long Beach further finds that there have been (1) no substantial changes to the project which would require major revisions of the Final EIR, (2) no substantial changes with respect to the circumstances under which the project is being undertaken which would require major revisions in the Final EIR, and (3) no new information has become available which was not known or could have been known at the time the Final EIR was certified as complete.

5. STATEMENT OF OVERRIDING CONSIDERATIONS

The Final EIR identified the following significant and unavoidable impact: 1) the project creates a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment. Public Resources Code and Section 15093(b) of the CEQA Guidelines provide that when the decisions of the public agency allow the occurrence of significant impacts identified in the FEIR that are not substantially lessened or avoided, the lead agency must state in writing the reasons to support its

action based on the Final EIR and/or other information in the record. Title 15, California Code of Regulations, Sections 15000 et seq. requires, pursuant to Section 15093(b) of the CEQA Guidelines, that the decision maker adopt a Statement of Overriding Considerations at the time of approval of a project if it finds that significant adverse environmental effects identified in the Final EIR cannot be substantially lessened or avoided. These findings and the Statement of Overriding Considerations are based on substantial evidence in the record, including but not limited to the Final EIR, the source references in the Final EIR, and other documents and material that constitute the record of proceedings.

Accordingly, the City of Long Beach adopts the following Statement of Overriding Considerations. The City of Long Beach recognizes that a significant and unavoidable impact will result from implementation of the project. Having (i) adopted all feasible mitigation measures, (ii) rejected as infeasible alternatives to the project, (iii) recognized all significant, unavoidable impacts, and (iv) balanced the benefits of the project against the project's significant and unavoidable impacts, the City of Long Beach hereby finds that each of the project's benefits, as listed below, outweighs and overrides the significant unavoidable impact of the project.

Summarized below are the benefits, goals, and objectives of the project. These provide the rationale for approval of the project. Any one of the overriding considerations of economic, social, aesthetic and environmental benefits individually would be sufficient to outweigh the significant unavoidable impact of the project and justify the approval, adoption or issuance of all of the required permits, approvals and other entitlements for the project and the certification of the completed Final EIR.

Having reduced the potential effects of the proposed project through all feasible mitigation measures as described previously in this statement and balancing the benefits of the project against its potential unavoidable adverse impact involving the potential for release of hazardous materials into the environment during operation, the City of Long Beach finds that the following legal requirements and benefits of the project individually and collectively outweigh the potentially significant unavoidable adverse impacts for the following reasons:

1. Substantial mitigation has been provided to further reduce impacts. Impacts have been mitigated to the maximum extent feasible and the level of risk, while significant, has a low probability of occurrence and the analysis conducted is conservative to provide for the maximum level of scrutiny and disclosure. With regards to mitigation, the approach of the measures in the Final EIR is to reduce the impacts, by reducing the size of a release, or reducing the frequency of a release. The mitigation measures require operations of the pipeline at a lower pressure in order to reduce the size of a potential release and decrease the potential for exposure. Mitigation measures HM-2a, HM-2b and HM-2c would be applicable and accomplish reductions in size of a potential release and potentially reduce the frequency of a release through an enhanced monitoring and testing regimen.

2. Improvement over ongoing hydrogen trucking and traffic reduction. The pipeline project would provide an improvement in risk levels over the alternative of the future trucking of hydrogen to the Paramount Refinery. As detailed in the Final EIR, use of the pipeline would result in similar risk levels to the baseline. World Energy currently receives liquefied hydrogen at its Paramount Refinery by tanker truck from a third-party supplier located at Praxair Facility in Ontario, California, approximately 45 miles away. Without the proposed project, the Paramount Refinery would continue to receive five to seven tanker trucks trips per day of hydrogen, with associated hazards

of hauling a flammable liquid on public roadways, as well as increased highway and local traffic and associated air quality emissions.

The existing pipelines, proposed to be repurposed for hydrogen, would be used for the transport of hydrogen, and eliminate the potential risk impacts of the ongoing trucking of liquefied hydrogen from Ontario to Paramount.

3. The project would support production of clean, renewable fuels. Air Products and Chemicals proposes to utilize this pipeline route to connect its facility with a new customer in the City of Paramount, who uses hydrogen to produce renewable biofuels (biodiesel and biojet) for the transportation market. The Paramount Refinery produces renewable jet fuel and renewable diesel fuel from non-edible vegetable oil and high-quality beef tallow. World Energy has been in partnership with Paramount Petroleum since 2013 when the Paramount Refinery began the process of converting portions of its oil refinery into renewable fuels production under the Renewable Fuels Project. World Energy's renewable products support California and Federal Low Carbon Fuel Standards. The goals of the standards are to reduce carbon intensity of transportation fuels, complement other State measures for reducing greenhouse gases, transform and diversify the transportation fuel pool, reduce petroleum dependency, and reduce overall air emissions. World Energy currently supplies renewable gasoline, diesel, and jet fuel to fleet services such as UPS, United Airlines, Boeing, the Department of Defense, and several California municipalities and school systems, reducing both truck and airline emissions. World Energy's renewable products meet regulatory and commercial specifications without requiring engine modifications.

4. Supports California energy independence (economic considerations and region-wide or statewide environmental benefits). Production of crude oil has been substantially reduced in California over the past decades resulting in the need to import oil to produce fuels. The Paramount Refinery has been repurposed to handle different products (e.g., non-edible vegetable oils and beef tallow) into diesel and jet fuels that would be used in the area instead of oil produced elsewhere. The project will provide needed hydrogen to the Refinery and as such contribute to the manufacture of clean fuels. These clean fuels would supplant the use of local crude oil production and/or will likely displace some imported foreign crude due to the demand for this commodity. Replacement of foreign crude with production of clean fuels would reduce GHG and criteria pollutant emissions from ocean tankers and other emissions generated during production of oil overseas. In addition, as California works towards its renewable power and zero emission vehicle goals, there will remain a need for fossil fuel in both the transportation and power sectors. Currently, more than 70 percent of oil entering California to meet the state's needs is from outside of California and is delivered primarily by marine tanker. In 2019, over 58 percent of crude oil supplied to California refineries was shipped from foreign sources. The largest suppliers of foreign oil to California are Saudi Arabia, Ecuador, Colombia, and Iraq followed by smaller supplies from Brazil, Mexico, Africa, and the Arabian Gulf. The project will contribute to reducing importation of foreign crudes and supports the state's energy independence.

In balancing the benefits of the overall project described above with the project's unavoidable and significant adverse environmental impacts, the City of Long Beach finds that the project's benefits individually and collectively outweigh the unavoidable adverse impact, such that this impact is acceptable. The City of Long Beach further finds that substantial evidence presented in the Final EIR and the administrative record as a whole, supports approving the project despite the project's potential adverse impact.

6. MITIGATION, MONITORING, AND REPORTING PLAN (MMRP)

The California Environmental Quality Act (CEQA) requires that public agencies adopting Environmental Impact Reports (EIRs) take affirmative steps to determine that approved mitigation measures and project design features are implemented subsequent to project approval. The lead or responsible agency must adopt a reporting and monitoring program for the mitigation measures incorporated into a project or included as conditions of approval. The program must be designed to ensure compliance with the EIR during project implementation (Public Resources Code, Section 20181.6(a)(1)).

The mitigation, monitoring and reporting requirements identified in the plan will be enforced through conditions upon the franchise permit issued by the City of Long Beach. Specifically, HM-2a, HM-2b, and HM-2c of the mitigation measures are applicable to the project within Long Beach. The mitigation measures are primarily the responsibility of Paramount Pipeline and the operator and any future permit holder.

The MMRP is organized in a table format and lists mitigation measures that correspond to the mitigation measures adopted by the City of Carson in the MMRP for the Air Products Hydrogen Pipeline Project; the mitigation measures as reflected, apply to activities associated with the changes to the line from petroleum products to hydrogen gas.

The analysis in the FEIR concluded that, even with application of feasible mitigation measures, one impact cannot be entirely avoided or reduced to less than significant levels. Adoption of a Statement of Overriding Considerations would be necessary to approve the staff-recommended Air Products Hydrogen Pipeline Project. The Final EIR (State Clearinghouse No. SCH 2020059038) identifies an impact in Hazardous Materials and Risk of Upset as a significant environmental effect which is considered unavoidable. The identified significant and unavoidable impact is **HM-2. Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment**. Several mitigation measures adopted as conditions of approval will serve to reduce these impacts, but even with the inclusion of these conditions, the impacts cannot be reduced to less than significant levels.

Substantial mitigation has been provided to reduce impacts. Impacts have been mitigated to the maximum extent feasible and the level of risk, while significant, has a low probability of occurrence and the analysis conducted is conservative to provide for the maximum level of scrutiny and disclosure. With regards to mitigation, the approach of the measures in the EIR is to reduce the impacts, by reducing the size of a release, or reducing the frequency of a release. The mitigation measures require operation of the pipeline at a lower pressure in order to reduce the size of a potential release and decrease the potential for exposure. Mitigation measures HM-2a, HM-2b and HM-2c would be applicable and accomplish reductions in size of a potential release and potentially reduce the frequency of a release through an enhanced monitoring and testing regimen. The proposed Project also includes measures for pipeline monitoring, leak detection, inspections, cathodic protection systems to reduce corrosion, coatings, and line markings to further reduce the risk of leaks.

Mitigation Monitoring and Reporting Program (MMRP)

MM #	MM Title	Monitoring/ Reporting Action	Timing & Method of Verification	City Responsibility	Applicant Responsibilities
HM-2a	Maximum Pressure Allowance	Maximum operating pressure at any point in the pipeline of 160 psig.	During Operation	City reviews information on pipeline operating pressure and pipeline maintenance.	Operate the pipeline at a max. pressure at any point in the pipeline of 160 psig. Maintain information on operating pressure. Report information on pipeline maintenance to City.
HM-2b	Testing and Monitoring	Monitor pipeline for issues that could indicate increased rate of the loss of pipeline integrity.	During Operation	City reviews information on pipeline monitoring procedure and inspections.	Monitor and inspect pipeline. Document pipeline monitoring procedure.
HM-2c	Pressure Testing	Pressure test pipeline at 556 psig. Perform testing per PHMSA requirements.	During Operation	City monitors compliance.	Continue to pressure test the pipeline at 556 psig. Perform testing per PHMSA requirements

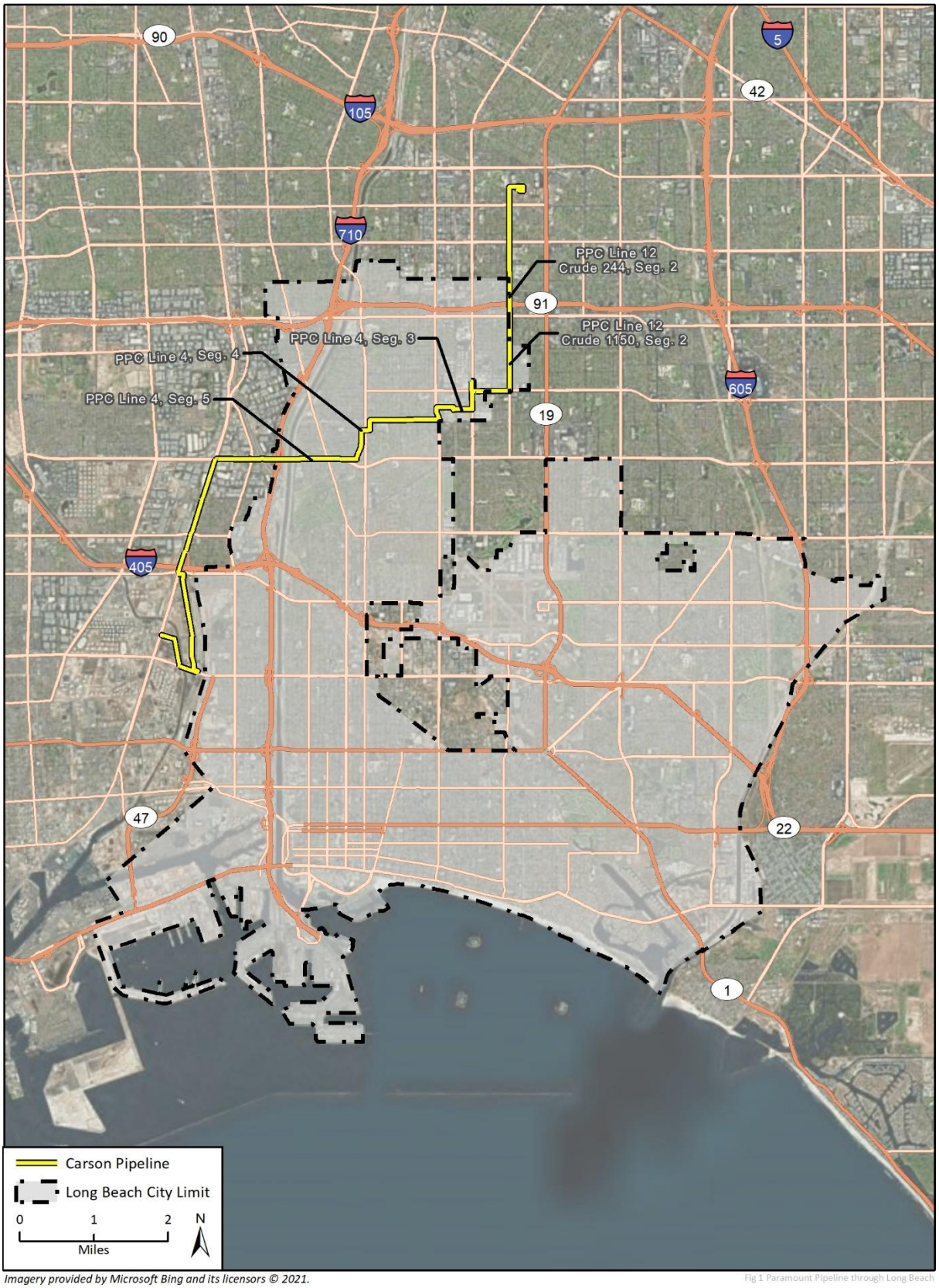


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Fig 1 Paramount Pipeline through Long Beach