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Proposed SoCalGas H2 System Pipeline Permit Identification, Strategy, and Risk

System 3 (Whitewater) and System 4 (Blythe)

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Acronyms and Abbreviations

Air Force Base	AFB
Alameda Corridor Transportation Authority	ACTA
Antelope Valley Air Quality Management District	AVAQMD
best available dust control measures	BACM
Bureau of Land Management	BLM
Bureau of Reclamation	BOR
Burlington Northern Santa Fe Railroad	BNSF
California Air Resources Board	CARB
California Code of Regulations	CCR
California Department of Fish and Wildlife	CDFW
California Department of Transportation	Caltrans
California Endangered Species Act	CESA
California Energy Commission	CEC
California Environmental Quality Act	CEQA
California Public Utilities Commission	CPUC
California's Assembly Bill 8	AB-8
Categorical Exclusion	CATEX
Clean Air Act	CAA
Clean Water Act	CWA
Coastal California Gnatcatcher	CAGN
Code of Federal Regulations	CFR
Conditional Use Permit	CUP
Council on Environmental Quality	CEQ
Department of Conservation	DOC
Department of Defense	DOD
Department of Parks and Recreation	DPR
Department of the Interior	DOI
Department of Transportation	DOT
Department of Water Resources	DWR
Desert Energy Renewable Conservation Plan	DRECP

Eastern Kern County Air Pollution Control District	KCAPCD
Endangered Species Act	ESA
Environmental Impact Statement	EIS
Environmental Assessment	EA
Environmental Impact Report	EIR
Environmental Protection Agency	EPA
Federal Energy Regulatory Commission	FERC
Federal Highway Administration	FHWA
Federal Land Policy and Management Act	FLPMA
Finding of No Significant Impacts	FONSI
Fixing America's Surface Transportation	FAST
Greenhouse Gas Reporting Program	GHGRP
Habitat Conservation Plan	HCPs
Hazardous Materials Business Plan	HMBP
Hazardous Materials Inventory Statement	HMIS
Hazardous Materials Management Plan	HMMP
Hazardous Release Response Plan and Inventory	HMRRP
Horizontal directional drilling	HDD
Incidental Take Permit	ITP
Interagency Operating Procedures	IOPs
kilovolt	kV
Lake and Streambed Alteration Agreement	LSAA
Los Angeles	L.A.
Master Special Use Permit	MSUP
Memorandum of Understanding	MOU
Mitigated Negative Declaration	MND
Mojave Desert Air Quality Management District	MDAQMD
National Environmental Policy Act	NEPA
National Historic Preservation Act	NHPA
National Marine Fisheries Service	NMFS
National Oceanic and Atmospheric Administration	NOAA
National Park Service	NPS
National Pollutant Discharge Elimination System	NPDES

Nationwide Permit	NWP
Native Plant Protection Act	NPPA
Natural Community Conservation Plan	NCCP
Notice of Intent	NOI
Office of Pipeline Safety	OPS
Office of the State Fire Marshall	CAL FIRE
Open Space	OS
Pipeline and Hazardous Materials Safety Administration	PHMSA
pre-construction notification	PCN
Port of L.A./Port of Long Beach	POLA/POLB
Proponent's Environmental Assessment	PEA
Railroad	RR
Record of Decision	ROD
Regional Water Quality Control Board	RWQCB
Rights-of-Way	ROW
Sage Grouse Management Area	SGMA
San Bernardino Nation Forest	SBNF
Significant Ecological Areas	SEAs
Southern Pacific Railroad	SPRR
South Coast Air Quality Management District	SCAQMD
Southern California Association of Governments	SCAG
Special Use Permit	SUP
Species of Special Concern	SSC
Standard Form	SF
State Water Resources Control Board	SWRCB
Stormwater Pollution Protection Plan	SWPPP
Surface Transportation Board	STB
toxic air contaminants	TACs
Transportation Security Administration	TSA
Union Pacific	UP
United States Army Corps of Engineers	USACE
United States Coast Guard	USCG
United States Fish and Wildlife Service	USFWS

Proposed SoCalGas H2 System
Pipeline Permit Identification, Strategy, and Risk

United States Forest Service

USFS

Water Discharge Requirements

WDRs

Waters of the United States

WOTUS

West Mojave Plan

WMP

Western Riverside County Multiple Species Habitat Conservation Plan

WRC-MSHCP

West-wide Energy Corridor

WWEC

1 Introduction

This Hydrogen (H₂) Pipeline Feasibility Study Permit Identification and Strategy Report (H₂ Permit Report) has been completed for SPEC Services, Inc. by D. Edwards, Inc. with the assistance of Rincon in support of the SoCalGas H₂ Pipeline Feasibility Study. The overarching H₂ Permit Report is divided into five stand-alone reports, each examining one specific pipeline System as provided by SPEC () in order to identify potential environmental permitting requirements and to inform a successful and efficient permitting strategy to deliver hydrogen gas for the “low,” “medium,” and “high” demand cases in the L.A. Basin of Southern California.

Reports will be provided for each Pipeline System below, with bold indicating the subject of this Report:

- System 1 – Five Points (Intrastate): California’s Central Valley to the L.A. Basin
- System 2 – Mojave (Intrastate): California’s Mojave Desert to the L.A. Basin
- System 3 – Whitewater (Intrastate): California’s Northern Coachella Valley to the L.A. Basin
- System 4 – Blythe (Intrastate): Eastern portion of Riverside County near the California border with Nevada to the L.A. Basin
- System 5 – Delta (Interstate): Central Utah through Nevada to the L.A. Basin in Southern California

This H₂ Permit Report provides a summary of anticipated regulatory and permitting requirements identified along System 3 (Whitewater) and System 4 (Blythe) Intrastate Alignments. System 3 and System 4 have been combined because the entirety of the System 3 Alignment is located within the System 4 Alignment. Specifically, the only difference in the Systems is that System 4 is a continuation of the System 3 Low Demand Alignment along Interstate 10 (I-10) for an additional east.

The “Medium Demand Alignment” includes the Low Demand Alignment and an additional loop segment from City of Santa Clarita (Santa Clarita) northeast to Palmdale, east to the City of Adelanto then south through San Bernardino, Riverside, and Orange Counties alignment from the City of Palmdale through the Counties of San Bernardino, Riverside, Orange, and Los Angeles to the POLA/POLB area. The “High Demand Alignment” includes the Medium Demand Alignment and an additional alternative trunk located north of the Low Demand Alignment through the cities of Riverside and Jurupa Valley.

Permitting and regulatory requirements have been identified at a conceptual level considering general federal, state and local jurisdictions, regional entities, existing pipeline corridors or rights of way, other known existing rights of way, or in some cases the need for new rights of way. Environmental, land, and permitting considerations have been presented with descriptions and summaries of the conditions present. Permit risk has focused on environmental regulations that would create unavoidable constraints to permitting of that pipeline route.

1.1 Background

As of December 2020, there were 1,608 miles of hydrogen pipeline in the United States (U.S.), which nearly all occur in dedicated hydrogen infrastructure. However, some U.S. operators have initiated projects to blend hydrogen and methane in natural gas pipelines (CRS 2020). Regulatory authorities differ for dedicated hydrogen pipelines and for natural gas pipes carrying hydrogen blends.

Currently, regulation of hydrogen (including commercial service, delivery, security, and safety) is divided among federal agencies and the states. Federal jurisdiction resides variously with the Surface Transportation Board (primarily for freight-train conveyance), the Federal Energy Regulatory Commission (FERC), the Transportation Security Administration (TSA), and the Pipeline and Hazardous Materials Safety Administration (PHMSA) within the Department of Transportation (DOT). However, this current regulation is primarily designed to regulate natural gas pipelines and does not address the specific requirements and challenges of hydrogen. How hydrogen pipelines fit into broader federal oversight of energy pipeline security is also unknown. The Department of Energy Hydrogen Program, led by the Hydrogen and Fuel Cell Technologies Office within the Office of Energy Efficiency and Renewable Energy, is currently conducting research and development into hydrogen production, delivery, infrastructure, storage, and multiple end uses. For transportation and delivery of hydrogen via pipeline, the Hydrogen Program is currently rooted in the research and development phase and has not yet progressed into policy or rule-making. Similarly, state governments, regional entities, counties, and cities also lack specific permitting paths for pipeline transportation of hydrogen. As a result, the information within this Report is likely to change as the industry develops and agencies are prompted to provide hydrogen-specific regulation and/or guidance. Regular updates to the information provided within this Report is advised in order to accurately representation current laws, regulations, requirements and guidelines.

1.2 Pipeline Route Descriptions

The proposed Project includes regulatory and permitting overview of five potential pipeline alignments. This Report provides a summary of the System 3 and System 4 Low Demand, Medium Demand, and High Demand Alignments located entirely within California. Lateral routes and distribution lines are not addressed in this Report.

System 3 and System 4 – Low Demand Alignment

The Low Demand Alignment for both systems includes two primary “trunks”; Trunk A begins in Santa Clarita in Los Angeles County and trends southeast through the City of Los Angeles to the Alameda Railroad Corridor. From the Alameda Railroad Corridor, the Low Demand Alignment Trunk A trends southwest terminating in the Port of L.A./Port of Long Beach (POLA/POLB) area.

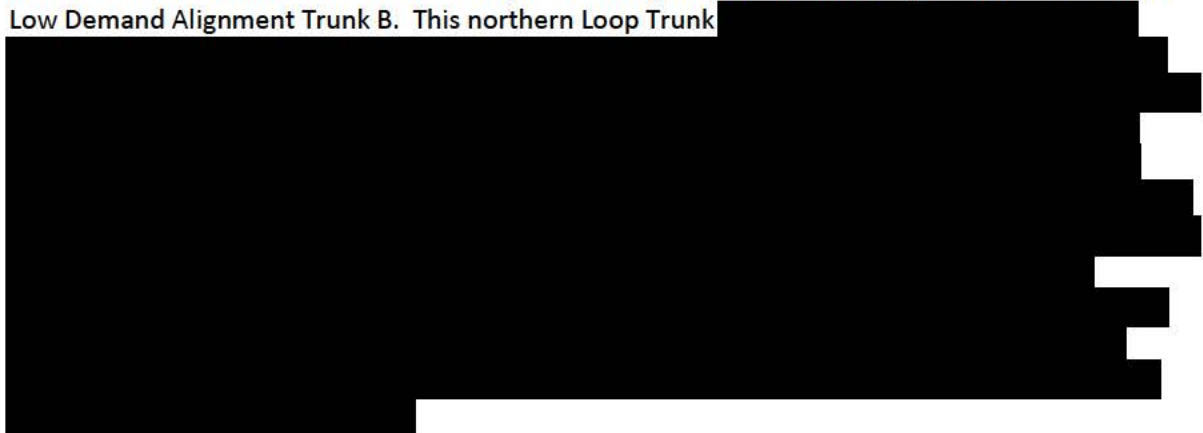
The System 4 – Low Demand Alignment Trunk B begins at






System 3 and System 4 – Medium Demand Alignment

The System 3 and System 4 Medium Demand Alignment includes the Low Demand Alignment as well as a northern trunk that creates a loop connecting the Low Demand Alignment Trunk A to the Low Demand Alignment Trunk B. This northern Loop Trunk



System 3 and System 4 – High Demand Alignment

The System 3 and System 4 – High Demand Alignment



2 Permit Identification

This Section provides an overview of the anticipated regulatory agencies, applicable permits and scheduling lead times associated with the System 3 and System 4 Alignments.

2.1 Assumptions

The following list provides the assumptions used by Rincon during the evaluation of the proposed project's anticipated permit strategy and risks:

- [REDACTED]
- As an intrastate hydrogen pipeline, it is not expected to be subject to FERC's exclusive authority under the NGA.
- Within California, the pipelines are not regulated as a public utility by the CPUC; the CPUC is not assumed to be the lead agency under CEQA.
- Where feasible, pipelines will be routed within established pipeline, transportation, or energy corridors or routes that may have been previously assessed on past projects.
- Pipelines will be constructed underground and impacts from installation will be temporary.
- Pipelines will be constructed in accordance with current regulatory specifications. Unforeseen changes in regulations often have rippling effects in multiple issue areas.
- State and local regulatory agencies may reduce or increase permit times provided in this analysis based on the hydrogen-related permitting procedures in place at the time of application submittal.
- Pipeline routes are generally designed to avoid areas that would be considered highly challenging for environmental reasons such as national parks. However, since only a cursory review of environmental permitting was made, this study cannot consider all permitting scenarios. Permitting risk for the pipelines would be considered high.
- Where possible, pipelines routes have been located within public land or city ROW, and private ROW avoided to the extent feasible. This analysis assumes the [REDACTED]-foot buffer provided can be reduced in constrained urban and regulated areas.
- [REDACTED]
- The space necessary to lay pipelines is available within the existing pipeline route corridor; corridors can accommodate pipeline size and design specifications.
- Risk and hazards associated with locating multiple large diameter hydrogen pipelines operating at high pressure within the same corridor is not evaluated in this analysis.
- Pipeline operation is not anticipated to result in regulated emissions (e.g., flares) and CARB or California's local air districts (either air quality management districts [AQMDs] or Air Pollution Control Districts [APCDs] operational permits are not required).

2.2 Jurisdictions and Anticipated Permits

A primary factor in the development of utility-scale hydrogen distribution is regulation of siting, safety, and security. Regulations for hydrogen pipelines may differ depending on whether a pipeline is designed for hydrogen transmission only, or whether it is designed for blended use with natural gas or methane. Regulatory authority for the transmission of hydrogen is generally divided among federal and state agencies. Currently there is no specific federal authority to approve the siting of dedicated hydrogen pipelines, although federal approvals may be required for siting of specific pipeline segments (CRS 2021). As a result, the subsequent summary of agencies and permitting roles (Error! Reference source not found.) are based on current regulations and the latest information provided by agencies involved in natural gas or hazardous/flammable pipeline permitting and oversight.

System 3 and System 4 include pipeline routes through Los Angeles, Orange, Riverside and San Bernardino Counties. The list below shows applicable city jurisdictions within those counties.

California

Orange County

- Anaheim
- Buena Park
- Cypress
- La Palma
- Placentia
- Yorba Linda

Los Angeles County

- Bell
- Burbank
- Carson
- Cerritos
- Compton
- Cudahy
- Eastvale
- Glendale
- Huntington Park
- Lakewood

Riverside County

- Banning Beaumont
- Cathedral City
- Coachella
- Corona
- Eastvale
- Edgemont

San Bernardino County

- Adelanto
- Chino
- Chino Hills
- Fontana
- Ontario
- Rialto
- San Bernardino
- Victorville
- Long Beach
- Los Angeles
- Lynwood
- Maywood
- Palmdale
- San Fernando
- Santa Clarita
- South Gate
- Vernon
- Indio
- Jurupa Valley Moreno Valley
- Palm Springs
- Riverside

Table 1 below provides anticipated processing times by agency. It is important to note that the timelines shown in Table 1 reflect a schedule beginning once an application is deemed “complete” by the agency. Work conducted prior to an application being deemed complete will add to anticipated timelines and may include seasonal surveys, preparation of technical reports and applications, application submittal, and at least 30 days for agency completeness review. The permitting schedules may also require additional time to address agency letters of incompleteness or requests for additional information. For more detail on regulations and how they may affect the proposed Project, refer to Appendix A.

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Table 1 Summary of Agencies and Permitting Role

Agency or Entity	Subcategory (as applicable)	Authorization	Comments	Anticipated Lead Time (months) ¹	Low Demand Alignment	Medium Demand Alignment	High Demand Alignment
Federal							
NEPA	Lead agency variable	EIS	While not specifically regulated, FERC or other federal agency expect to be the lead agency for NEPA. Required for work on federal land (USFS, NPS, BLM, Military) and for the issuance of federal permits (e.g., Section 404 Certification Individual Permit). NEPA is assumed to be triggered since crossing federal lands. An EIS would be anticipated line-wide for a project of this scale and would satisfy the NEPA findings required for all other federal agencies.	12-24	X	X	X
National Historic Preservation Act (NHPA) Section 106	Historical Properties Consultation	Memorandum of Agreement/ Programmatic Agreement	Similar to NEPA, undertook when a federal nexus (permit, funding, federal land). Includes state and tribal consultation as well. Timeline should be the same as NEPA review and is assumed to be triggered line-wide since federal discretionary permits required.	12-24	X	X	X
BLM	ROW Grant	ROW Grant	Alignments cross BLM lands for all Demand Cases.	12-18	X	X	X
BLM	Areas of Critical Environmental Concern (ACEC)	ROW Grant		12-36	X	X	X
BIA (Individual Tribes)	Tribal Lands	Entry Agreement	Includes but is not limited to Federally recognized tribes have a preeminent right to be consulted on infrastructure projects, including pipelines, which potentially impact their lands, treaty rights, and protected resources. On January 26, 2021 President Biden issued a Presidential Memorandum that requires Federal agencies to prepare and periodically update a detailed plan of action to implement the policies and directives of Executive Order 13175 (Consultation and Coordination With Indian Tribal Governments). Consultation will occur concurrently with the NEPA timeline and will likely be directed by agency-specific guidance. For a ROW across tribal land, the applicant must obtain tribal consent, in the form of a tribal authorization and a written agreement with the tribe, if the tribe so requires, to a grant of right-of-way across tribal land. The consent document may impose restrictions or conditions; any restrictions or conditions automatically become conditions and restrictions in the grant.	6-24	X	X	X
U.S. Fish & Wildlife Service (USFWS)	Endangered Species Act (ESA)	Section 7 Consultation Biological Opinion	Process for take coverage where a federal nexus is present.	18-24	X	X	X
USFWS	ESA	Section 10 Habitat Conservation Plan	Required when a federal nexus is absent.	18-24		X	X
USFWS	Coachella Valley National Wildlife Refuge (NWR)	ROW Permit and SUP	Pre-application consultation is recommended, followed by submittal of a SF-299, Application for Transportation and Utility Systems and Facilities on Federal Lands. The USFWS may also request application of a SUP to cover temporary construction activities. Both permits can be processed concurrently.	18-24			
Federal Department of Defense (DOD)	March Air Reserve Base (ARB)	Military Base Approval	Military bases are separate entities that have their own method for implementing federal laws. Before private companies can access military bases, they must receive clearance from the base, and the base must clearly understand the scope of work, personnel who will be on-site, schedule, and all details associated with the project. It is important to understand military protocol to access the base, as base security is extremely strict.	6-18	X	X	X
U.S. Army Corps of Engineers (USACE)	Clean Water Act	404 Certification NWP 12	404 Certification required for any impacts to waters of the U.S., including jurisdictional wetlands, that could result in the discharge of dredged or fill materials into a waterbody or wetland. NWP 12 provides coverage for the construction, maintenance, repair, and removal of pipelines and associated facilities in Waters of the United States (WOTUS), provided the activity does not result in the permanent loss of greater than ½ acre of WOTUS (refer to Appendix A for details). New NEPA is not required for NWP 12. Some desert areas lack a nexus to a navigable waterway and coverage not needed. Recent guidance excludes ephemeral drainages.	6-12	X	X	X
USACE	Prado Dam	TRE Temporary Right of Entry (TRE)	The project is located on USACE-owned property (specifically, within the Prado Flood Risk Management Basin). Most of the work areas are within SoCalGas’ existing easement, though a small portion of the work areas occur	6-12	X	X	X

Agency or Entity	Subcategory (as applicable)	Authorization	Comments	Anticipated Lead Time (months) ¹	Low Demand Alignment	Medium Demand Alignment	High Demand Alignment
			outside of the easement and would require TRE on USACE-owned property. If NEPA review is required, it is anticipated that the Project would meet the following USACE NEPA Categorical Exclusion per CFR Title 33, Chapter II, Part 230, Section 230.9: (i)(2) Real estate grants for ROWs which involve only minor disturbances to earth, air, or water for minor utility distribution and collection lines, including irrigation.				
Section 368 WVEC Designated Areas	Relates to USFS SUP and BLM Right of entry	Variable by Federal agency	Section 368 of the Energy Policy Act of 2005 directs the Secretaries of Agriculture, Commerce, Defense, Energy, and Interior to designate corridors for oil, gas, and hydrogen pipelines on federal lands. The applicable federal agencies would adopt appropriate Interagency Operating Procedures (IOPs) to establish minimum requirements for management of individual energy transport projects. When evaluating a ROW application within a WVEC, the IOPs would assist the Agencies, project applicants, and others in evaluating applications for using the corridors by providing uniform processing and performance criteria for energy transport ROWs in the corridors. The Agencies have diagrammed each corridor using conflict criteria to depict areas where the corridor intersects low, medium, and high potential conflict areas to help the Agencies identify where a corridor revision, deletion, or addition could avoid environmentally sensitive areas. In practice, the coverage of WVECs is spotty and detail on specific IOPs would need to be obtained from the applicable agencies to determine whether streamlining would occur. Projects proposed within WVECs are still subject to appropriate site-specific environmental review pursuant to the requirements of NEPA and other applicable laws as applicable.	Variable	X	X	X
United States Bureau of Reclamation (BOR)	ROW Grant/ Right of Use	Use Authorization (SF-299)	[REDACTED]. Project proponents proposing to develop or cross any public BOR land, facility, or water body are required to obtain a written land use authorization. The BOR will determine if the requested use is compatible with authorized project purposes, in the best interests of the public, and consistent with appropriate resources management and environmental considerations for the area. 43 CFR 429 and Reclamation Manual LND 08-01 provide guidance regarding the types of projects requiring use authorization including: "Infrastructure, such as transportation, telecommunications, utilities, and pipelines." As with the BLM, Standard Form (SF) 299, "Application for Transportation and Utility Systems and Facilities on Federal Lands" is the application required for submittal.	6-18	X	X	X
State							
CEQA	Lead agency variable, to certify line-wide	EIR	Lead Agency currently undefined; may be CEC, Caltrans, CPUC or other local or state agency. The CPUC requires a Proponent's Environmental Assessment (PEA) which results in longer lead times. The CEC does not develop the EIR. However, for licensing thermal power plants with a net generating capacity of 50 megawatts (MW) (including all related facilities such as transmission lines, gas pipelines, water lines, access roads, etc.), the CEC develops a functionally equivalent document for the licensing process. The timeline is 12 months from completeness. While the CEC currently does not have regulatory authority over hydrogen pipelines, it is anticipated that they a designated as lead agency, a similar process and document may result.	12-24	X	X	X
California Department of Parks and Recreation (State Parks)	Chino Hills State Park	SUP	[REDACTED] CEQA Responsible Agency.	12-36	X	X	X
California Department of Transportation (Caltrans)	All state highways	ROW Encroachment / Transportation Permit	[REDACTED] CEQA Responsible Agency.	6-12	X	X	X
California Energy Commission (CEC)	Lead agency for thermal over 50kw or if funding provided	TBD	Not applicable to pipelines unless appurtenant to new thermal power plants. Potential involvement if funding is provided as a demonstration project.	n/a			
California Department of Fish and Wildlife (CDFW)	CESA	CESA ITP	Required for impacts (even temporary) to state protected species and habitat, such as Joshua trees, desert tortoise, and Mohave ground squirrel. CEQA needed. Refer to Appendix B for details.	12-36	X	X	X
CDFW	Lake/Streambed Impacts	§1600 Programmatic Short-term LSAA	Requires seasonal surveys. CEQA Responsible or lead agency.	12-18	X	X	X
RWQCB	Waters of the Unites States/State	Individual 401 Certification and Waste Discharge Reequipment (WDR)	Two different permit types for waters of the state (WDR) and when coterminous with federal jurisdiction (401 Certification). CEQA Responsible Agency. [REDACTED]	12-24	X	X	X
Regional: County/City/Community Plan/Special District							

Agency or Entity	Subcategory (as applicable)	Authorization	Comments	Anticipated Lead Time (months) ¹	Low Demand Alignment	Medium Demand Alignment	High Demand Alignment
Special Districts	Examples include Los Angeles Department of Water and Power (LADWP), Open Space Districts, Metropolitan Water District of Southern California (MWD)		<div></div> MWD requires project plans/utilities be submitted for all proposed activities that may impact facilities or ROW. Written approval from the water district must be obtained, prior to the start of any activity or construction in the area of the districts facilities or ROW.	6-12	X	X	X
Local Air District	Dust Control Plan	Clean Air Act	Project is located within multiple air districts including South Coast Air Quality Management District (SCAQMD), Mojave Desert Air Quality Management District (MDAQMD), and Antelope Valley Air Quality Management District (AVAQMD). Dust Control Plan may be required depending on air district	1-3	X	X	X
Regional Habitat Conservation Plans	Western Riverside County Multiple Species HCP	ESA Take authorization	Not anticipated to be required since in urban areas through these HCPs. <div></div>	n/a	--	--	--
Railroad (RR) Crossings	Alameda Corridor Transportation Authority (ACTA), Burlington Northern Santa Fe (BNSF), and Union Pacific (UP)	ROW, Encroachment potentially a SUP	<div></div> According to the UP website, applications take a minimum of 45-60 days for engineering review once design standards are met and a valuation of the encroachment property is submitted <div></div>	4 -36	X	X	X
Federal Aviation Administration (FAA)	Airport crossings	Notice of Proposed Construction	Pipeline crossings <div></div> <div></div> Coordination with the airports is recommended to determine preferable pipeline corridors in accordance with FAA.	4-6	X	X	X
County (Orange and Riverside Only in Incorporated Cities) Refer to risk table for a discussion of Code or General Plan Amendments							
Los Angeles	A-2 and OS zone District, Antelope Valley and Santa Clarita Area Plan	CUP	Discretionary Action. May include protected tree permit or SEA CUP. CEQA Responsible and potential lead agency.	6-12	X	X	X
	Protected Trees	Protected Tree Permit	Requires specific findings; utilities exempt	6-12	X	X	X
	Significant Ecological Areas (SEAs)	CUP	Biological impacts heavily scrutinized.	12-18	X	X	X
San Bernardino County	All unincorporated	Director Review	Ministerial review for state and federal projects (County Code §85.02.050, Alternate Review Procedures).	1-3		X	X
Primary Route Cities (Note Separate Land Use Authority than the County)							
	All Cities	Protected Tree Permit	Potential for Protected Tree Permits from all city agencies with tree protection regulations.	6-12	X	X	X
	City Governments	CUP Anticipated	Utility or crude oil pipelines not specifically regulated under the Zoning Code. If hydrogen pipeline not considered a “utility” or “public entity” then in the absence of an enumerated use most jurisdictions would default to requiring CUP (6-12 Months). CEQA Responsible Agency. Refer to risk table for a discussion of legislative Code or General Plan Amendments (12-36 months).	6-12	X	X	X
¹ Schedule from when application is deemed complete							

3 Permit Risk and Strategy

3.1 Potential Lead Agencies

As discussed above, Systems 3 and 4 are located entirely within California. As a result, lead agencies need to be identified for permitting and CEQA/NEPA review. Note that under CEQA all project elements must be considered, so in addition to the proposed pipelines, CEQA review may require analysis of hydrogen production. Furthermore, the Demand Alignments discussed in Section 2 above may also need to be included in the CEQA/NEPA review, which would affect the NEPA federal lead agency since federal holdings are more extensive for the other segments. Any alignment included in this analysis may become the basis for the required alternatives analysis even if it is not considered further as a viable option for System 3 and 4.

Potential Federal Lead Agencies

Under the current regulatory environment there is not a clear candidate for federal lead agency for hydrogen pipeline projects under NEPA. For interstate pipelines the DOT and FERC could act as NEPA lead agencies; however, for intrastate pipelines that have no energy-related federal nexus neither DOT nor FERC has clear path to fulfil that role. Given that System 3 and System 4 cross federally managed lands the BLM is anticipated to seek lead agency status under NEPA. USFS also has some jurisdiction but is more likely to act as a cooperating agency. The Alignment crosses a very narrow section of BOR lands through the Coachella Valley, but compared to other federal agencies the BOR is likely to act as a cooperating agency. If no change in federal regulation of hydrogen occurs prior to submittal of permitting applications on behalf of the project, and a federal energy regulatory agency declines to serve as the lead agency, the USFS, BLM, and BOR would need to coordinate on a NEPA analysis.

Potential State Lead Agencies

There has not yet been state agency assigned responsibility for the oversight of intrastate hydrogen pipelines. While the existing state regulatory structure does not address hydrogen pipelines; the CPUC regulates natural gas pipelines (General Order 112-F), and the California Office of the State Fire Marshal (OSFM) regulates crude oil (hazardous liquid) pipelines.

Potential CEQA lead agencies tasked with energy projects include the California Energy Commission (CEC) and the CPUC. However, the CEC is generally limited to projects involving thermal power generation. Unless the proposed project included electrical generation in excess of 50MW from a thermal source, the CEC would not be a CEQA lead agency. The Southern California Association of Governments (SCAG) or other Metropolitan Planning Organization is the lead agency Regional Transportation Plans including Sustainable Community Strategies; however, they are not expected to conduct CEQA review since utility scale hydrogen is not explicitly included in these plans.

Under current California legislation, the CPUC is responsible for utility projects. Hydrogen pipelines are not currently classified as a utility by the state or CPUC. However, if regulatory oversight under the CPUC changes to include hydrogen transmission then the CPUC would likely serve as the CEQA lead. The CPUC CEQA process requires submittal of an application for to complete the Certificate of Public Convenience and Necessity and the completion of a Proponent's Environmental Assessment (PEA). The CPUC requires applicants to provide extensive information in support of the PEA for

review in compliance with the mandates of CEQA. Typically, the PEA is a stringent process but once complete, results in a more streamlined CEQA timeline.

Without clear regulatory guidance or precedent, the path to CEQA lead agency remains unclear. The CDFW, Counties (i.e., Los Angeles), or SCAG have a lower potential to act as CEQA lead agency. Neither the California Air Resources Board (CARB) or the South Coast Air Quality Management District (SCAQMD) is anticipated to take a lead agency role since pipeline operation is not anticipated to result in regulated emissions.

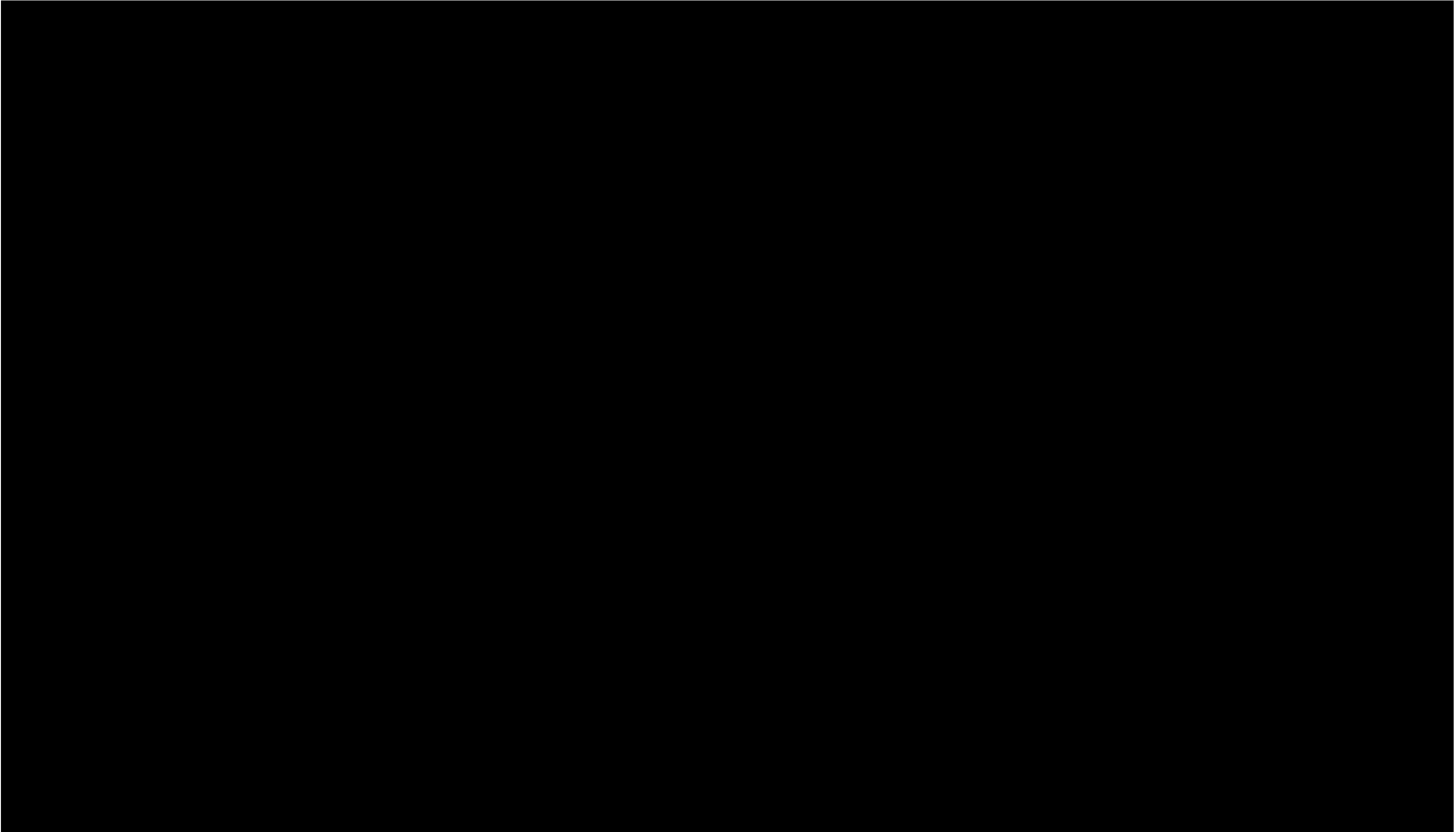
Without specific hydrogen regulations in effect, there is potential for long lead times associated with agency determination of CEQA lead. When more than one public agency has discretionary authority over a project and each has a substantial claim to be the CEQA Lead Agency, two agencies may meet to decide which should be the Lead Agency via mutual agreement. Generally, for private projects the lead agency is the agency “with general governmental powers” such as a city or county, as opposed to a single- or limited-purpose agency such as a school district, water district, or air pollution control district. Limited-purpose state agencies, such as the SWRCB and the CDFW typically serve as Responsible Agencies when a local government is the lead agency (State CEQA Guidelines Section 15051(b)(1)). However, in the absence of hydrogen project precedents it remains to be seen whether state agencies such as CPUC and CEC are likely to enter into such an understanding.

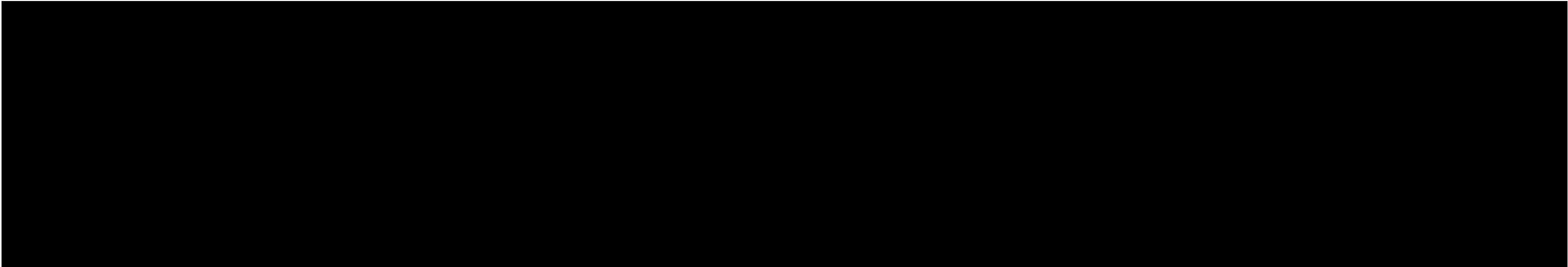
3.2 Permit Strategy and Risk Reduction

Table 2 (below) discusses the System 3 and System 4 permits with long lead times (shown in Table 1) or discretionary permits that require review and approval.

[REDACTED]

To address long lead time permits or those with ambiguous requirements early consultation and advocacy with key staff from federal, state, and local agencies is recommended.





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Appendix A

Summary of Regulations, Agencies, and Permitting Role

Administering Agency or Regulation	Permit, Approval, or Clearance	Project Applicability
Federal		
National Environmental Policy Act (NEPA)	Environmental Impact Review (anticipated to be an Environmental Impact Statement (EIS), NEPA Certification and Record of Decision (ROD)	<p>Required for any federal action, approval, or funding. The NEPA of 1969 was created to ensure federal agencies consider the environmental impacts of their actions and decisions. Federal agencies are required to systematically assess the environmental impacts of their proposed actions and consider alternative ways of accomplishing their missions, which are less damaging to and protective of the environment. NEPA is implemented through the Environmental Quality Regulations for Implementing NEPA (40 CFR Parts 1500-1508) published by the Council on Environmental Quality (CEQ). NEPA applies to projects where a federal agency is asked to issue a discretionary permit. NEPA requires the lead federal agency to evaluate the impacts of the proposed action. If the impacts are not significant, the agency issues a Finding of No Significant Impacts (FONSI). If a Lead Agency decides that there are significant effects, then an Environmental Impact Statement (EIS) will be prepared by the Lead Agency. The Lead Agency solicits comments from other Government agencies and the public prior to making a decision. The EIS is certified, and a Record of Decision recorded. (40 Code of Federal Regulations (CFR) 1500 et seq.)</p> <p>Under the current regulatory environment there is not a clear candidate for federal lead agency for hydrogen pipeline projects under NEPA. For interstate pipelines the DOT and FERC could act as NEPA lead agencies; however, for intrastate pipelines that have no energy-related federal nexus neither DOT nor FERC has clear path to fulfil that role. Selection of a Federal Lead Agency may vary based on pipeline jurisdictions. Lead and responsible agencies may include Bureau of Land Management (BLM), U.S. Fish and Wildlife Service (USFWS), Department of Transportation (DOT) (generally for interstate), and/or U.S. Fish and Wildlife Service (USFWS). It is anticipated that a Joint NEPA/CEQA document (an EIS/EIR) will be completed to address the Project as a whole as it traverses both federal and state jurisdictions. See the discussion on CEQA for detail on potential state Lead Agencies.</p> <p>NEPA is implemented through the Environmental Quality Regulations for Implementing NEPA (40 CFR Parts 1500-1508) published by the Council on Environmental Quality (CEQ). NEPA applies to projects where a federal agency is asked to issue a discretionary permit or receives federal funding. The role of a federal agency in the NEPA process depends on the agency's expertise and relationship to the proposed action and in some cases more than one federal agency may be involved in the proposed action. In this situation, a lead agency is designated to supervise the preparation of the environmental analysis. Federal agencies, together with state, tribal or local agencies, may then act as joint lead agencies. A federal, state, tribal, or local agency having special expertise with respect to an environmental issue or jurisdiction by law may be a cooperating agency. The NEPA Process generally consists of the following steps:</p> <ol style="list-style-type: none">Determine Lead Agency (Difficult – most agencies do not want the Lead Agency Role).Determine if project qualifies for a Categorical Exclusion (CATEX), which meets the definition contained in 40 CFR 1508.4 or the definition in the lead agency NEPA regulations (Due to the nature of the proposed Project, CATEX will not be likely).Lead Agency prepares an Environmental Assessment (EA). If no significant effects identified, Finding of No Significant Impact (FONSI) is published. The EA/FONSI is then released for public comment. (Due to the nature of the proposed Project, it is anticipated that an Environmental Impact Study (EIS) will be required).If Lead Agency decides after the EA that there are significant effects, then an EIS will be prepared by the Lead Agency.Public and other agency comments are solicited for a minimum of 45 days. (Generally, more controversial projects are allotted a longer comment period).The Lead Agency then responds to the comments in the Final EIS (FEIS) that is reviewed.A decision is made on the Project and a Record of Decision published. <p>In July 2020, under the Trump Administration, the CEQ released new regulations marking the first update to NEPA guidelines in over 40 years. The goal of the updates was to clarify existing regulations, streamline the NEPA review process, and facilitate inter-agency cooperation. New thresholds of significance were added and the list of potential NEPA exemptions expanded. The new rules set specific time frames for document completion. Federal agencies must complete the EIS, and sign the record of decision, within 2 years from the date of the issuance of the Notice Of Intent (NOI). An EIS may include no more than 150-300 pages depending on their complexity (40 C.F.R. §1502.7). These limits do not include graphics or appendices and can be waived via written authorization by a senior official of the lead agency. (§§1502.7, 1508.1(v).) The new regulations also no longer require agencies to engage in new studies or research for environmental analyses, further indicating an intent to simplify the environmental review process (§1502.23).</p> <p>As of April 2021, the Biden Administration is reworking the 2020 Trump-era environmental review standards. While revisions are crafted, the 2020 standards will remain in place, because they are not “causing any imminent harm to opponents.” On June 21, 2021, a federal district court in Virginia dismissed a lawsuit filed by environmental groups against the Trump-era overhaul of regulations under the NEPA. Additional court cases are pending or are on hold pending the anticipated CEQ revisions to the NEPA regulations under the Biden Administration.</p>
Fixing America's Surface Transportation Act	Fast-41 No permit	In 2015, the Fixing America’s Surface Transportation (FAST) Act was signed into law. Title 41 of the FAST Act (FAST-41) (42 U.S.C. § 4370m) was designed to “improve the timeliness, predictability, and transparency of the Federal environmental review and authorization process for covered infrastructure projects”. FAST-41 establishes new procedures that standardize interagency consultation and coordination practices and creates a new authority for agencies to issue regulations for the collection of fees to direct resources to critical functions within the interagency review process. FAST-41 codifies into law the use of a federal Permitting Dashboard to track project timelines. Project sponsor participation in FAST-41 is voluntarily and designed for use for utility-scale eligible green renewable projects. It is not anticipated that Fast-41 will provide benefit to the project since intrastate and joint document times lines are CEQA dependent.
Pipeline and Energy Regulations		Currently, regulation of hydrogen siting, commercial service, security, and safety is divided among federal agencies and the states. Federal jurisdiction resides variously with the Surface Transportation Board (STB), the Federal Energy Regulatory Commission (FERC), the Transportation Security Administration (TSA), and the Pipeline and Hazardous Materials Safety Administration (PHMSA) within the Department of Transportation (DOT) (see below for detail) (CRS 2021).
Surface Transportation Board (STB)	NA	The STB is an independent federal agency charged with the economic regulation of various modes of surface transportation, primarily freight rail. However, since hydrogen distribution under the proposed Project is anticipated to be conducted via pipeline and not via rail, the SBT will not require a permit and is not anticipated to be a responsible agency under NEPA.
Federal Energy Regulatory Commission (FERC)	Applicability to hydrogen currently unknown. Certification and siting of interstate natural gas pipelines	The FERC is an independent federal agency composed of five President-appointed Commissioners that regulate interstate transmission of electricity, natural gas, and oil. FERC reviews applications for construction and operation of interstate natural gas pipelines under the authority of Section 7 of the Natural Gas Act. FERC review ensures that applicants certify that they will comply with Department of Transportation safety standards. FERC’s approvals include terms and conditions designed to address impacts on the environmental resources including water and air quality, land use and recreation, erosion control, cultural resources, and wildlife and endangered species. For natural gas pipelines, FERC is often the Federal Lead Agency under NEPA. FERC’s Strategic Plan (2018 – 2022) currently includes an objective to streamline the permitting process through formal review of the Commission’s 1999 Certificate Policy Statement for Natural Gas Pipelines. However, the Federal government has yet to make a determination as to how the government will regulate the construction of hydrogen infrastructure.

Administering Agency or Regulation	Permit, Approval, or Clearance	Project Applicability
Pipeline and Hazardous Materials Safety Administration (PHMSA) [Department of Transportation (DOT)]	Applicability to hydrogen currently unknown. Special Permit or Waiver may be required for transport of hydrogen within natural gas pipeline infrastructure in lieu of regulatory guidance	Under the DOT, PHMSA establishes national policy, sets and enforces safety standards, and conducts research for the “safe, reliable, and environmentally sound operation” of the U.S. pipeline system (49 CFR Parts 190-199). PHMSA currently regulates approximately 700 miles of hydrogen pipelines, primarily through 49 C.F.R. Part 192.31. The majority of existing pipeline regulations are focused on the transportation and distribution of natural gas. However, due to a broad definition of “flammable gas” hydrogen has historically been included within this overarching regulatory umbrella. 40 C.F.R. §§ 173.301 and 173.302 impose general requirements on the transportation of compressed gases, including compressed hydrogen. However, while these regulations provide some guidance on the use of hydrogen, they do not provide a comprehensive regulatory framework for hydrogen transport. Several hydrogen-specific transportation regulations under C.F.R. §§ 173.230, 173.301, and 173.302 focus primarily on the design, filling, and marking of hydrogen fuel cells and not with the design, construction, or operation of pipelines. As a result, PHMSA is currently using its research and development branch to address challenges associated with hydrogen delivery through local distribution infrastructure for refueling stations and stationary power sites. As the industry develops, it is anticipated that PHMSA may introduce hydrogen-specific storage and transportation requirements. Until then, the PHMSA may issue DOT special permits or waivers to a pipeline operator to satisfy federal pipeline safety regulations if they feel compliance would not be appropriate due to unique circumstances. PHMSA may grant a Special Permit, at its discretion, if sufficient alternative safeguards to the public safety are implemented. For on-land pipelines that cross state lines the DOT PHMSA would have primary jurisdiction and oversee the minimum safety standards for the design and installation of these types of pipelines. It is anticipated that PHMSA may play a Lead Agency Role in NEPA.
Federal Highway Administration (FHWA) (DOT)	Right-of-Way (ROW) Use Agreements	The FHWA Division Offices and State Departments of Transportation (DOTs) Federal Highway Administration (FHWA) works with State DOTs to permit renewable energy projects within highway ROWs. State DOTs may permit pipeline as utilities that require a specific Utility Accommodation Permit (23 CFR part 645 A) or as non-utilities requiring a ROW agreement (23 CFR part 710 R). For non-Interstate projects, FHWA may assign approval authority to the state through their 23 U.S.C. 106(c) Stewardship and Oversight Agreement.
Section 368 West-Wide Energy Corridor Designated Areas	Relates to USFS SUP and BLM Right of entry	Section 368 of the Energy Policy Act of 2005 directs the Secretaries of Agriculture, Commerce, Defense, Energy, and Interior to designate corridors for oil, gas, and hydrogen pipelines on federal lands in the 11 contiguous Western States (including the Project States of Utah, Nevada, and California), to perform environmental reviews, and to incorporate the designated corridors into relevant agency land use and resource management plans. A primary goal of the Section 368 West-Wide Energy Corridors is to expedite regulatory processes for future projects in these energy corridors. Section 368 does not require that Agencies consider or approve specific projects, applications for ROWs, or other permits within designated energy corridors. Instead, agencies may use the information from siting reports associated with the corridors to inform their decision-making process in granting permits or authorizations. Under Section 368, the applicant would have to apply for a ROW authorization, and the Agencies would consider each application by applying appropriate project-specific reviews under requirements of laws and related regulations including, but not limited to, the NEPA, the Clean Water Act (CWA), the Clean Air Act (CAA), Section 7 of the Endangered Species Act (ESA), and Section 106 of the National Historic Preservation Act (NHPA), etc. The applicable federal agencies would adopt appropriate Interagency Operating Procedures (IOPs) to establish minimum requirements for management of individual energy transport projects. When evaluating a ROW application within a Section 368 energy corridor. The IOPs would assist the Agencies, project applicants, and others in evaluating applications for using the corridors by providing uniform processing and performance criteria for energy transport ROWs in the corridors.
Office of Pipeline Safety (OPS)	Pipeline safety requirements	<p>The federal government has primary responsibility for the pipeline safety regulations for both interstate (pipelines that cross state boundaries) and intrastate pipelines (pipelines that are contained within the borders of a state) and has exclusive authority over interstate lines. Although OPS can designate a state to act as its agent in the inspection of interstate lines, OPS remains solely responsible for enforcement. That said, most states (primarily through their fire marshals) work with OPS in the oversight of the pipelines that run through their state in what OPS commonly refers to as the "federal/state partnership." Within DOT, the Pipeline and Hazardous Materials Safety Administration (PHMSA), through the OPS C.F.R. Parts 190-199.</p> <p>For additional detail on pipeline safety requirements see Office of the State Fire Marshall (CAL FIRE), below.</p>
Federal Land and Right-of-Way (ROW) Regulation		
Bureau of Land Management (BLM) [Department of the Interior (DOI)]	ROW Application (SF-299)	<p>The Bureau of Land Management (BLM) promotes multiple-use on public lands, consistent with Title V of the Federal Land Policy and Management Act of 1976, as amended (FLPMA) (43 USC 1763), 43 CFR 2800. A BLM ROW grant is required for an oil or gas pipeline to cross federal lands under BLM's jurisdiction or the jurisdiction of two or more federal agencies (43 CFR 2881.11). It is anticipated that the BLM will schedule and participate in at least two pre-application meetings prior to accepting a ROW application for a large-scale utility project. Generally, a ROW is granted for a term appropriate for the life of the project. To manage public lands, the BLM prepares land-use plans, also known as Resource Management Plans. Resource Management Plans serve as blueprints for keeping public landscapes healthy and productive for multiple-use (See DRCEP, below).</p> <p>Applications for proposed ROWs over, upon, under, or through public lands, including, but not limited to energy conveying pipelines require a ROW. The processing of ROW applications must comply with BLM regulatory requirements, including those for planning, environmental, and ROW. BLM may approve the application, approve the application with modifications, or deny the application. BLM ensures that if other permits are required from other agencies, they are obtained (i.e., biological opinion, water permits, etc.). BLM also ensures that NEPA is addressed.</p> <p>The Desert Energy Renewable Conservation Plan (DRECP) is a collaborative, interagency landscape-scale planning effort covering 22.5 million acres in seven California counties—Imperial, Inyo, Kern, Los Angeles, Riverside, San Bernardino, and San Diego. The DRECP has been developed as an interagency plan by the BLM, the U.S. Fish and Wildlife Service (USFWS), the California Energy Commission (CEC), and the California Department of Fish and Wildlife) to:</p> <ul style="list-style-type: none">▪ Advance federal and state natural resource conservation goals and other federal land management goals;▪ Meet the requirements of the Federal Endangered Species Act, California Endangered Species Act, Natural Community Conservation Planning Act, and FLPMA; and▪ Facilitate the timely and streamlined permitting of renewable energy projects, all in the Mojave and Colorado/Sonoran desert regions of Southern California. <p>The primary biological resources goals of the DRECP LUPA are landscape and habitat connectivity, ecosystem and ecological function, and species conservations.</p> <p>Through the DRECP, the BLM is adopting a variety of incentives to steer future renewable energy development to Development Focus Areas. Under the LUPA, these incentives are applicable to solar, wind, and geothermal. Consistent with 43 CFR 1610.5(a) and 43 CFR 2804.26(a)(1), the BLM could deny renewable energy applications that do not conform to the land use plan.</p>
U.S. Department of Interior (DOI), Fish and Wildlife Service (USFWS) National Wildlife Refuge System	USFWS ROW Permit USFWS SUP (SF-299)	National Wildlife Refuge System Administration Act (16 U.S.C. 668 <u>et seq.</u>). Under this act, pipeline ROWs that cross USFWS lands, and/or involve interests in lands administered by the Service, require an ROW permit from the appropriate Service Regional Director (RD). To issue this ROW permit, the RD must make a finding that the pipeline ROW will be compatible with the purposes of the involved refuge. The RD may also require ROW mitigation measures in order to make a finding of compatibility. 50 CFR Part 29.21-9 applies to ROWS for pipelines for the transportation of oil, natural gas, synthetic liquid or gaseous fuels, or any refined

Administering Agency or Regulation	Permit, Approval, or Clearance	Project Applicability
Coachella Valley National Wildlife Refuge		<p>product produced therefrom and states that when the ROW occupies other Federal lands as well as Service fee title lands, the BLM is responsible for issuing the pipeline ROW grant for all Federal lands. Service mitigation measures will be included in the stipulations for such a pipeline ROW grant.</p> <p>The USFWS recommends requesting a pre-application consultation with the refuge manager, in order to ask questions and obtain USFWS feedback before investing significant resources to prepare an application. Any proposed new construction should be discussed at the pre-application meeting. Submittal of a SF-299, Application for Transportation and Utility Systems and Facilities on Federal Lands is required. The SF-299 is used for new permits as well as revisions or amendments to existing permits. The Department of the Interior has adopted this standard form to streamline the application process and the agency’s review process.</p> <p>Applications should be submitted in accordance with the procedures outlined in 50 CFR Part 29.21-2, which the USFWS is currently working to streamline. An appraisal is required,</p> <p>The USFWS may also request submission of an application for a SUP to cover temporary construction activities. This can be processed concurrently with the ROW permit.</p>
Federal Department of Defense (DOD)	Military Base Approval	Military bases are separate entities that have their own method for implementing federal laws. Before private companies can access military bases, they must receive clearance from the base, and the base must clearly understand the scope of work, personnel who will be on-site, schedule, and all details associated with the project. It is important to understand military protocol to access the base, as base security is extremely strict.
Bureau of Reclamation (BOR)	Use Authorization (SF-299)	Project proponents proposing to develop or cross any public BOR land, facility, or water body are required to obtain a written land use authorization. The BOR will determine if the requested use is compatible with authorized project purposes, in the best interests of the public, and consistent with appropriate resources management and environmental considerations for the area. 43 CFR 429 and Reclamation Manual LND 08-01 provide guidance regarding the types of projects requiring use authorization including: “Infrastructure, such as transportation, telecommunications, utilities, and pipelines.” As with the BLM, Standard Form (SF) 299, “Application for Transportation and Utility Systems and Facilities on Federal Lands” is the application required for submittal.
Railroad (RR) Crossings and the Alameda Railway Corridor	ROW Permit, Encroachment Potentially a Special Use Permit (SUP)	<p>[REDACTED]. The southern California project region is generally served by two major rail operators, Burlington Northern Santa Fe (BNSF), and Union Pacific (UP). Both the BNSF and the UP require licensing agreements for pipeline crossings or encroachments within RR ROW. Generally, all pipelines carrying caustic, flammable, or explosive materials fall under the provisions for high-pressure gas and liquid fuel lines. According to the UP website, applications take a minimum of 45-60 days for engineering review once design standards are met, and a valuation of the encroachment property is submitted. Encroachment permits take a minimum of 6 months for engineering review plus an additional 30 days for delivery of the agreement. According to the BNSF website, agreement processing generally requires 30-60 days for agreement processing. [REDACTED]</p> <p>The Alameda Corridor is a 20-mile freight rail "expressway" owned by the Alameda Corridor Transportation Authority (ACTA) that connects the national rail system near downtown Los Angeles, to the ports of Los Angeles and Long Beach, running below Alameda Street. The ACTA maintains over 65 miles of freight rail track, with 125 turnouts, 10 rail bridges, signals at 48 locations, seven grade crossings, and several storm water pump stations. Construction along the Alameda Corridor is on-going. Crossings and encroachments within the Alameda Corridor are less clear and procedures and permitting requirements would likely be based on the specific locations of the crossings and the proximity of the pipeline to the ROW.</p>
Endangered Species Regulation		
U.S. Department of Interior (DOI), Fish and Wildlife Service (USFWS) National Oceanic and Atmospheric Administration (NOAA)/National Marine Fisheries Service (NMFS)	Endangered Species Act (ESA) Consultation Section 7 Informal/Formal Consultation (federal Nexus) Section 10 10(a)(1)(B) Habitat Conservation Plan (no federal nexus)	<p>Species protected by federal law are listed as threatened or endangered and may have designated critical habitat. Any activity, such as displacement or habitat disturbance, that may affect listed or proposed Threatened and Endangered species requires consultation with either the USFWS or NOAA-NMFS. Generally, USWS manages land and freshwater species, and NOAA-NMFS is the lead agency for listed marine species (i.e., marine mammals, sea turtles, marine and anadromous fish and marine invertebrates and plants). Candidate species are not protected under the ESA but are subject to special review requirements under Section 7 of the ESA.</p> <p>The ESA prohibits "taking" of listed fish and wildlife species by any person and also prohibits malicious damage or destruction of listed plant species by federal actions. As defined in the ESA, to take means "to harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect, or to attempt to engage in any such conduct." Where a nonfederal entity (e.g., private individual, corporation, local agency, state agency) will be conducting an activity that would result in take of wildlife or fish species listed under ESA, that entity must obtain a permit from the Services for such taking or it will be in violation of ESA.</p> <p>Determination if the project will impact protected species or habitat is based upon a literature search of the project site, a review of the project site using the USFWS IPaC planning and consultation tool and/or a site visit by a qualified biologist. The USFWS IPaC map tool provides a list of critical habitat, listed species, migratory birds or other natural resources that may be affected by the project. Similarly, NOAA Fisheries can provide a list of species in the project area.</p> <p>Critical habitat includes areas identified under Section 7 of the FESA (15 U.S.C. § 1531–1544, FESA Section 3(5)(A)). Designated critical habitats are described in 50 C.F.R. Parts 17 and 226. Critical habitat consists of two types of specific areas for federally listed special-status species: (1) areas that fall within the geographic area occupied by the species at the time the species is listed in accordance with the provisions of Section 4 of the FESA, and that contain physical or biological features (constituent elements) essential to the conservation of the species and that may require special management consideration or protection; and (2) specific areas outside of the geographical area occupied by the species at the time it is listed in accordance with the provisions of Section 7 of the FESA, if the Secretary of the Department of Interior determines that such areas are essential for the conservation of the species.</p> <p>Where other federal permits are present Section 7 of the FESA requires the federal permitting entity to consult with USFWS/NMFS when the federal permit "may affect" listed species or designated critical habitat. A Biological Assessment should be submitted with the federal permit application, describing the effects on the species along with a finding as to whether the effects are "adverse." If the BA finds that the effects are not adverse (“May affect, but is not likely to adversely affect”) and the USFWS/NMFS concurs, a concurrence letter is provided, and consultation is concluded. If effects are adverse ("May affect, and is likely to adversely affect"), then formal consultation is initiated and a Biological Opinion granting take coverage is typically issued. In extreme cases, the Biological Opinion may find that the project would jeopardize the continued existence of a listed species or result in the destruction or adverse modification of critical habitat; in these instances, alternatives will need to be explored and adopted.</p> <p>Habitat Conservation Plans (HCPs) are required as part of an application for an Incidental Take Permit under Section 10 of the FESA if not within an area covered by a programmatic or other existing permit. HCPs also include Natural Communities Conservation Plans, which identify measures necessary to conserve and manage natural biological diversity within the planning area while allowing compatible and appropriate economic development, growth, and other human uses. Each HCP describes the anticipated effects of the proposed taking, how those impacts would be minimized or mitigated, and how the HCP is to be funded.</p> <p>Most moderate-scale projects can avoid take of species through seasonal or spatial restrictions of work; biologists can assist project designers in avoidance methods. If there is no federal permit, and no potential to avoid species (rare in most proposed actions), use existing HCPs if possible. If no existing HCP applies, the Applicant must prepare and file an HCP to demonstrate how impacts to species will be mitigated by long-term</p>

Administering Agency or Regulation	Permit, Approval, or Clearance	Project Applicability
		conservation measures. An HCP fits the DOI and USFWS categorical exclusion criteria if the effects of the HCP are minor or negligible on federally listed, proposed or candidate species and their habitats, if the effects of the HCP are minor or negligible on all other components of the human environment, including environmental values and environmental resources after implementation of the minimization and mitigation measures and if the incremental impacts of this HCP, considered together with the impacts of other past, present and reasonably foreseeable future actions not result, over time, in cumulative significant effects to the human environment. If an HCP does not fit the above criteria, the permit action cannot be categorically excluded from additional NEPA analysis (EA/EIS).
USFWS/BLM/NMFS	Regional Habitat Conservation Plans (HCPs)	<p>Conservation areas include areas that have been identified as part of HCPs, Natural Communities Conservation Plans, or other approved local, regional, state, or federal HCPs. Regional habitat conservation planning is a proactive approach to addressing species conservation and economic growth and development over a large geographic area. Regional conservation planning can encompass many other biological objectives beyond threatened and endangered species issues, such as the conservation of wetlands, biodiversity, watersheds, and ecosystems. This form of proactive planning is in contrast to project-specific permitting that takes place reactive to proposed projects in compliance with the ESA.</p> <p>Refer to the State Section below where the Natural Community Conservation Plan (NCCP) is the state counterpart to the federal habitat conservation plan and provides coverage to species protected under the California Endangered Species Act (CESA).</p>
USFW/NOAA	Fish and Wildlife Coordination Act Review	The Fish and Wildlife Coordination Act authorizes the Secretaries of Agriculture and Commerce to provide assistance to and cooperate with federal and state agencies to protect, rear, stock, and increase the supply of game and fur-bearing animals, as well as to study the effects of domestic sewage, trade wastes, and other polluting substances on wildlife. The amendments enacted in 1946 require consultation with the Fish and Wildlife Service and the fish and wildlife agencies of states where the "waters of any stream or other body of water are proposed or authorized, permitted or licensed to be impounded, diverted or otherwise controlled or modified" by any agency under a federal permit or license. Consultation is to be undertaken for the purpose of "preventing loss of and damage to wildlife resources."
Waters Permits and Regulation		
USACE EPA	Clean Water Act (CWA)	The CWA (Title 33 USC Sections 1251 through 1376) provides guidance for restoration and maintenance of the chemical, physical, and biological integrity of the nation’s waters.
USACE / RWQCB	CWA Section 401	CWA Section 401 requires that an applicant for a federal license or permit that allows activities resulting in a discharge to Waters of the United States (WOTUS) (i.e., Section 404 Certification) must obtain a state certification that the discharge complies with other provisions of the CWA. In California, Regional Water Quality Control Boards (RWQCBs) administer the certification program.
EPA / SWRCB	CWA Section 402	CWA Section 402 establishes a permitting system for the discharge of any pollutant (except dredge or fill material) from a point source into WOTUS. all point-source discharges, including, but not limited to, construction-related stormwater discharges to surface waters, are regulated through the National Pollutant Discharge Elimination System program. Project sponsors must obtain a National Pollutant Discharge Elimination System permit from the SWRCB. Refer to the SWRCB discussion of SWPPP, below.
USACE	CWA Section 404 Certification	<p>CWA Section 404 establishes a permit program administered by USACE for discharge of dredged or fill material into WOTUS, including wetlands.</p> <p>The Navigable Waters Protections Rule (NWPR) finalized a revised definition of “waters of the United States,” as regulated under CWA Section 404, and became effective in June 2020. The NWPR aims to streamline the definition so that it includes simple categories of jurisdictional waters, provides clear exclusions for water features that traditionally have not been regulated, and defines terms in the regulatory text that were previously undefined in statute. The NWPR regulates the nation’s navigable waters and the core tributary systems that provide perennial or intermittent flow into them. The new definition eliminated the application of a significant nexus test and relies more explicitly on surface water connectivity to determine jurisdiction. Perennial and intermittent creeks are considered WOTUS if they are hydrologically connected to other jurisdictional waters (typically a navigable water). The ephemeral drainages and Antelope Valley drainages no longer fall under USACE jurisdiction. Refer to CDFW and RWQCB discussion below for a discussion of regulation of jurisdictional features in absence of USACE regulation.</p> <p>Nationwide Permit (NWP) 12 (a general permit) covers the construction, maintenance, repair, and removal of utility lines and associated facilities in WOTUS, provided the activity does not result in the loss of greater than ½-acre of WOTUS for each single and complete project. Covers for the construction, maintenance, repair, and removal of pipelines and associated facilities in WOTUS, provided the activity does not result in the permanent loss of greater than ½ acre of WOTUS for each single and complete project. A preconstruction notification (PCN) is required. New NEPA findings are not required for NWP 12.</p>

Administering Agency or Regulation	Permit, Approval, or Clearance	Project Applicability
USACE	Section 10 of the Rivers and Harbors Act, DA Permit/Authorization	<p>Section 10 of the Rivers and Harbors Act requires authorization from the Secretary of the Army, acting through the Corps of Engineers, for the construction of any structure in or over any navigable water of the U.S. Structures or work outside the limits defined for navigable WOTUS require a Section 10 permit if the structure or work affects the course, location, or condition of the water body. The law applies to any dredging or disposal of dredged materials, excavation, filling, re-channelization, or any other modification of a navigable WOTUS, and applies to all structures, from the smallest floating dock to the largest commercial undertaking. It further includes, without limitation, any wharf, dolphin, weir, boom breakwater, jetty, groin, bank protection (e.g., riprap, revetment, bulkhead), mooring structures such as pilings, aerial or subaqueous power transmission lines, intake or outfall pipes, permanently moored floating vessel, tunnel, artificial canal, boat ramp, aids to navigation, and any other permanent, or semi-permanent obstacle or obstruction. (33 U.S.C. 403.).</p> <p>Section 10 of the Rivers and Harbors Act requires authorization from the USACE for the construction of any structure in or over any navigable WOTUS.</p>
Cultural and Historic Resources		
BLM	Section 106 of the National Historic Preservation Act, Consultation and H-1780 Guidelines for Improving and Sustaining BLM-Tribal Relations	In accordance with the National Historic Preservation Act, Section 106 consultations are required when a project involving federal action, approval, or funding may affect properties that qualify for the National Register of Historic Places.
National Park Service (NPS) National Historic Trails Association	Consultation [Old Spanish National Historic Trail and National Trails Highway (Route 66)]	Consultation should be provided to the National Historic Trails Association describing potential impacts to nearby trails and allowing the Agency to submit any comments.
Miscellaneous Resources		
U.S. Environmental Protection Agency (EPA)/California Air Resources Board (CARB)	Air Quality regulation; permits issued at state level from local air districts	<p>Under the Greenhouse Gas Reporting Program (GHGRP), owners or operators of facilities that produce hydrogen must report emissions from hydrogen production processes and all other source categories located at the facility for which methods are defined in the rule. Owners and operators are required to collect emission data, calculate GHG emissions, and follow the specified procedures for quality assurance, missing data, recordkeeping, and reporting per the requirements of 40 CFR Part 98 Subpart P – Hydrogen Production. The EPA issues no permits in relation to hydrogen production or transport via pipeline. Permitting associated with the EPA generally has to do with construction and criteria pollutants. U.S. EPA has set National Ambient Air Quality Standards for six air pollutants, including ozone and particulate matter. These are referred to as the “criteria” pollutants. CARB has set California Ambient Air Quality Standards for the same six pollutants, as well as for four additional pollutants. The CARB also identifies other air pollutants as toxic air contaminants (TACs) - pollutants that may cause serious, long-term effects, such as cancer, even at low levels. Most air toxics have no known safe levels, and some may accumulate in the body from repeated exposures. CARB has identified about 200 pollutants as air toxics, and measures continue to be adopted to reduce emissions of air toxics. Both criteria pollutants and TACs are measured statewide to assess the adequacy of programs for cleaning the air. CARB works with local air pollution control districts to reduce air pollution from all sources. For specific air quality regulation refer to Regional Agencies and Entities below.</p>

Administering Agency or Regulation	Permit, Approval, or Clearance	Project Applicability
State of California		
Pipeline and Energy Regulations		
California Environmental Quality Act (CEQA) Various state agencies, depends on the discretionary actions required for the project		<p>CEQA (Res. Code §21000 et seq.) was promulgated in 1970 to (1) inform governmental decision makers and the public about the potential, significant environmental effects of proposed activities, (2) identify the ways that environmental damage can be avoided or significantly reduced, (3) prevent significant, avoidable damage to the environment by requiring changes in projects through the use of alternatives or mitigation measures when the governmental agency finds the changes to be feasible, and (4) disclose to the public the reasons why a governmental agency approved the project. CEQA is implemented through the CEQA Guidelines in CCR Title 14 Chapter 3. CEQA applies to projects undertaken by state and local agencies or private entities which require some discretionary approval. Where a project is to be carried out or approved by more than one public agency, one public agency (termed the Lead Agency) is responsible for preparing the appropriate environmental document. If a project subject to CEQA will not cause any adverse environmental impacts, a Negative Declaration (ND) is prepared. If the project may cause adverse environmental impacts, the Lead Agency must prepare a more detailed Environmental Impact Report (EIR). An EIR contains in-depth studies of potential impacts, measures to reduce or avoid those impacts, and an analysis of alternatives to the project. The CEQA process provides the opportunity for the public to review and provide input on both NDs and EIRs. It is anticipated that all pipeline routes will result in discretionary actions and potential effects necessitating an EIR.</p> <p>Selection of a CEQA Lead Agency may vary based on jurisdictions. Lead agencies and responsible agencies may include the California Energy Commission (CEC), the California Public Utilities Commission (CPUC), with the lesser potential California Department of Fish and Wildlife (CDFW), Counties, or Southern California Association of Governments (SCAG). The California Air Resources Board (CARB) or the South Coast Air Quality Management District (SCAQMD) are not anticipated to take a lead agency role since pipeline operation would not result in emissions.</p> <ol style="list-style-type: none">Once the review is complete, if the impacts are determined to be acceptable, the agency issues a Negative Declaration (ND). If the lead agency determines that mitigation measures are required, then it issues a Mitigated Negative Declaration (MND). If the project may cause adverse environmental impacts, the Lead Agency must prepare a more detailed study called an Environmental Impact Report (EIR). An EIR contains in-depth studies of potential impacts, measures to reduce or avoid those impacts and an analysis of alternatives to the proposed project. The public is then given opportunity to review and provide input on NDs and EIRs. It is anticipated that all pipeline routes associated with the proposed project will result in discretionary actions that trigger the CEQA process and necessitate completion of an EIR. The EIR will be based on the most recent CEQA Guidelines when the project is initiated. For completion of an EIR, a timeline of at least 24 months is generally anticipated; however, unlike NEPA, there is no specific time frame for which CEQA must be completed, and more complex or controversial projects generally take longer as the proponent provides relevant studies and information to the Lead Agency.The CEQA Process generally consists of the following steps:Determine Lead Agency (difficult – most agencies do not want the Lead Agency role). If Lead Agency is CPUC, CPUC's Rules of Practice and Procedure Rule 2.4 (CEQA) will apply.Determine if project is exempt (Categorical Exemption [CE]) per CEQA Guidelines. (Due to the nature of the proposed Project, CE is not anticipated).Prepare Initial Study (IS) and submit to Lead Agency for Review (IS a detailed report that addresses the impacts of the project). It is important to note that in some cases, where a Project is already known to cause potential impacts, the Lead Agency will forgo the IS and opt instead to directly complete an EIR. (Skip to #7 below).If project does not result in significant impacts, a ND is prepared, and public notice is provided. (Due to the nature of the proposed Project, a ND will not be applicable).Public comment period lasts 30 days (may be extended in some circumstances for controversial projects under some circumstances).Comments addressed. If there are no further issues, Lead Agency issues a decision on the project through ND or MND (Due to the nature of the proposed Project, it is anticipated that an EIR will be required).If Lead Agency decides after the IS that there are significant impacts, then a draft Environmental Impact Report (EIR) is prepared by the Lead Agency.Notice of Completion, public notice, and public review period.Responses to the comments are reviewed and included in the final EIR that is reviewed, and a decision is then made on the project. <p>It is anticipated that a Joint NEPA/CEQA document (and EIS/EIR) will be completed to address the project as a whole as it traverses both federal and state jurisdictions. See the discussion on NEPA for detail on potential Federal Lead Agencies. NEPA and CEQA are similar both in intent and in the review process. As a result, both statutes encourage a joint federal and state review for projects requiring both federal and state approvals. A joint review process, in theory, avoids redundancy, improves efficiency, and allows for interagency cooperation. However, there are several differences between NEPA and CEQA statutes that may complicate the coordination between the Federal and state agencies in practice. To avoid these pitfalls, the NEPA and CEQA Handbook for Integrating Federal and State Environmental Reviews (Office of the President and California Governor’s Office of Planning and Research 2014) was published to provide guidance to lead agencies to facilitate cooperation on projects that are subject to both NEPA and CEQA. The handbook provides a framework for establishing the Memorandum of Understanding (MOU) between two or more agencies entering a joint NEPA/CEQA review process. Since its publication in 2014, the MOU guidance has allowed Federal, state and local agencies to cooperate in the environmental review of projects ranging from infrastructure to renewable energy permitting. It is important to note, however, that few Joint EIS/EIR documents have been completed in the past 2 years under the revisions to the CEQ NEPA Guidelines promulgated by the Trump Administration. It has yet to be seen how lead agencies will navigate these new NEPA policy regulations, and whether joint EIR/EIS documents will continue to be completed as a comprehensive single report or whether new procedures for permitting under NEPA/CEQA will result.</p>
California Public Utilities Commission (CPUC)	Permitting potential unknown, Potential Lead Agency under CEQA	<p>The CPUC is the agency authorized to oversee intrastate gas pipeline facilities in California. Gas pipelines are subject to the federal requirements of Title 49 Parts 190 through 192 and administered by the Federal Office of Pipeline Safety (OPS). California is certified under 49 USC Subtitle VIII, Chapter 601, §60105 to oversee the Federal OPS requirements. CPUC guidelines generally enhance the Federal OPS requirements. General Order No. 112-F, “State of California Rules Governing Design, Construction, Testing, Operation, and Maintenance of Gas Gathering, Transmission, and Distribution Piping Systems,” provides additional state requirements for gas pipelines. While the CPUC is responsible for implementation of the federal and state regulations and guidelines, currently no specific regulation regarding the transport of utility scale hydrogen has been drafted. Regulatory agencies at the federal level are funding programs to identify safety standards and design requirements for hydrogen pipelines, but these programs remain in the research and development phase and are not yet at a stage to inform policy. As a result, hydrogen is not currently specifically regulated as a public utility regulated by the CPUC.</p> <p>CPUC may act as a CEQA lead agency for pipeline routes within California, but at this time it is unknown what permitting would act as a trigger. As a lead agency, the CPUC requires Proponent's Environmental Assessment (PEA) which results in longer lead times than other agencies. The PEA requirements are outlined in the PEA Guidelines (State of California Public Utilities Commission Information and Criteria List, Appendix B, Section V), as well as the CPUC’s requirements for a Permit to Construct (PTC).</p> <p>Since not CPUC regulated, counties (and to a lesser extent cities) may determine that a non-utility pipeline use needs to be defined and regulated separately in their code and general plan.</p>

Administering Agency or Regulation	Permit, Approval, or Clearance	Project Applicability
California Energy Commission (CEC)	No permit, approval, or clearance required	<p>In accordance with California’s Assembly Bill 8 (AB-8), the CEC is responsible for the administration of funds in support of the Clean Transportation Program, dedicating up to \$20 million per year to the development of hydrogen fueling stations in California. The CEC develops its funding programs in cooperation with the California Air Resources Board (CARB). AB-8 requires CEC and CARB to regularly analyze historical and projected progress for the current and future needs of the hydrogen fueling network development.</p> <p>The CEC role is as permitting agency is not currently defined for utility scale hydrogen (except where includes thermal energy over 50 kilowatt hours). Hydrogen pipelines may be regulated by the CEC if the agency provides funding allocated under AB-8.</p>
Office of the State Fire Marshall (CAL FIRE)	No permit required. OSFM receives hydrostatic pressure test results within 30 days of the test	<p>The California State Fire Marshal has jurisdiction for hazardous liquid pipelines. In 1987, the State Fire Marshal and PHMSA entered into a Hazardous Liquid Pipeline Safety Program Interstate Agent Agreement. The agreement divides pipeline safety between federal and state. The U.S. Department of Transportation Pipeline and Hazardous Materials Safety Administration (PHMSA) has exclusive federal authority over interstate pipeline facilities (49 USC § 60101, et seq.) while CAL FIRE - Office of the State Fire Marshal, Pipeline Safety Division has sole authority for the inspection and enforcement of federal and state regulations for intrastate pipelines within California. State and federal laws outlining the Pipeline Safety Division’s authority include: Elder Pipeline Safety Act of 1981 (California Government Code §51010-51019.1); California Code of Regulations (CCR), Title 19 §2000-2075; Federal Law 49 U.S.C. §60101-60141; and Code of Federal Regulations, Title 49 Part 195. OSFM provides regulation regarding hydrotesting requirements for new construction, relocations, and replacement pipelines and provides standards for notification and results submittal.</p> <p>OSFM is also one of five state organizations involved in the Unified Program and is responsible for ensuring the implementation of the California Fire Code Hazardous Materials Management Plan/Hazardous Materials Inventory Statement (HMMP/HMIS) and the Aboveground Petroleum Storage Act program elements. The HMMP/HMIS program consolidates the administration, permits, inspections, and enforcement activities of several programs; CALFIRE administers the Hazardous Release Response Plan and Inventory (HMRRP) or Hazardous Materials Business Plan (HMBP) program.</p>
Land and Right-of-Way (ROW) Regulation		
State of California Department of Parks and Recreation (DPR)	Special Use Permit (SUP)	<p>Projects that impact a State Park must receive permission to enter the Park. If the project results in the construction of new infrastructure, an SUP may be required as well. DPR may act as a CEQA Responsible Agency under California Public Resources Code 501.5, 5003, 500, 14 CCR 4003.</p> <p>SoCalGas has an agreement DPR called the Chino Hills State Park Access Plan, which facilitates the existing easement rights of SoCalGas and the duty of CHSP to protect sensitive resources and protect users of CHSP. The agreement provides for SoCalGas the right to lay, construct, maintain, operate, repair, replace, and change the size of and remove one or more pipelines, with metering, regulating and other equipment for the transportation of gas over and through, under, along, and across the specified land within their easements. In addition, the easements provide SoCalGas with certain rights to construct, operate, and maintain patrol roads along the right-of-way (ROW), with the right of reasonable ingress and egress over CHSP lands. Only activities within the SoCalGas’ existing easements would be covered by this agreement.</p> <p>Any procedure for maintenance actions outside the terms of the existing ROW easements would be required to comply with all state and federal environmental laws and regulations, including CEQA review if applicable, which will be coordinated with DPR.</p>
California Department of Transportation (Caltrans)	ROW Encroachment Permit or Transportation Permit	<p>Caltrans is responsible for the oversight of state highways, inter-city rail services, and public-use airports within California. Streets and Highways Code Section 117 grants Caltrans the authority to issue permits, under Chapter 3 (commencing with Section 660), for the location in the ROW of any structures or fixtures necessary to telegraph, telephone, or electric power lines or of any ditches, pipes, drains, sewers, or underground structures. An encroachment permit must be obtained from Caltrans for all work done within a state highway ROW.</p> <p>Caltrans is likely to serve as a responsible or Lead Agency under CEQA.</p>
California Department of Conservation (DOC)	Clearance	<p>Clearance is required if the proposed development encroaches or impacts an existing oil or gas well, or if the project calls for the abandonment of a gas or oil well.</p>
California Department of Water Resources (DWR)	Encroachment Permit	<p>The California DWR manages the California aqueduct, which crosses the project pipeline near several areas. Pursuant to CCR, an encroachment permit is required for utility work in or on DWR ROW (Title 23, Division 2, Chapter 6, Article 1, § 612.6, Utility Crossings). Approval of an encroachment permit generally requires consistency with design requirements specified under CCR § 612.70. CCR § 610.1(c), Environmental Review, requires encroachment applications to be evaluated for CEQA compliance. However, ROW Encroachment Permit for aqueduct crossings is typically ministerial.</p>
Endangered Species Act		
California Department of Fish and Wildlife (CDFW)	California Endangered Species Act (CESA) Incidental Take Permit (ITP)	<p>The CESA is a state environmental law that conserves and protects plant and animal species at risk of extinction. The CDFW works with agencies, organizations, and other interested persons to study, protect, and preserve CESA-listed species and their habitats. The CDFW derives its authority from the Fish and Game Code of California. CESA (Fish and Game Code Section 2050 et. seq.) prohibits “take” of state listed threatened, endangered or fully protected species. Take of individual listed species is defined differently on a federal or state level. Under the CESA, “take” is defined as "hunt, pursue, catch, capture, or kill, or attempt to hunt, pursue, catch, capture, or kill." CESA is restricted to direct mortality of a listed species and does not prohibit indirect harm by way of habitat modification. The CDFW also prohibits take for species designated as fully protected under the Code.</p> <p>Incidental Take Permits (ITPs) allow a permittee to take a CESA-listed species if such taking is incidental to, and not the purpose of, carrying out an otherwise lawful activity. These permits are most commonly issued for construction, utility, transportation, and other infrastructure-related projects. Permittees must implement species-specific minimization and avoidance measures, and fully mitigate the impacts of the project. CDFW’s issuance of an ITP is considered a discretionary action as defined in Title 14 of the CCR, under CEQA. Therefore, before CDFW can issue the permit the applicant must have completed the necessary steps under CEQA.</p> <p>For species that are jointly listed under federal and state ESAs, CDFW may grant take coverage via a Section 2080.1 consistency determination rather than an ITP. For this to apply, CDFW must concur that the federal permit is stringent enough to meet the criteria for permit issuance under CESA. The process takes 30 days and is non-discretionary (no CEQA required). However, the federal permit must be final before the 2080.1 review can commence, and CDFW cannot amend or add measures to the federal permit when evaluating whether CESA standards are met.</p> <p>California Fish and Game Code Section 3503, 3503.5, and 3511 describe unlawful take, possession, or destruction of birds, nests, and eggs. Fully protected birds (Section 3511) may not be taken or possessed except under specific permit. Section 3503.5 of the Code protects all birds-of-prey and their eggs and nests against take, possession, or destruction.</p>

Administering Agency or Regulation	Permit, Approval, or Clearance	Project Applicability
CDFW	Native Plant Protection Act (NPPA)	The CDFW also has authority to administer the NPPA (Fish and Game Code Section 1900 et seq.). The NPPA requires the CDFW to establish criteria for determining if a species, subspecies, or variety of native plant is endangered or rare. Under Section 1913(c) of the NPPA, the owner of land where a rare or endangered native plant is growing is required to notify the department at least 10 days in advance of changing the land use to allow for salvage of the plant.
CDFW	Natural Community Conservation Planning (NCCP) Act	A NCCP is the state counterpart to the federal habitat conservation plan (HCP). It provides a means of complying with the NCCP Act (California Fish and Game Code, §§ 2800–2835) that was enacted to encourage broad-based planning to provide for effective protection and conservation of the state’s wildlife resources while continuing to allow appropriate development and growth. and securing take authorization at the state level. The NCCP Act is broader than FESA and the CESA. The primary objective of the NCCP program is to conserve natural communities at the ecosystem scale while accommodating compatible land uses. To be approved by the CDFW, an NCCP must provide for the conservation of species and protection and management of natural communities in perpetuity within the area covered by permits NCCPs may be implemented that identify measures necessary to conserve and manage natural biological diversity within the planning area while allowing compatible and appropriate economic development, growth, and other human uses.
Waters		
CDFW	§1600 Lake and Streambed Alteration Agreement (LSAA)	<p>Perennial and intermittent streams and associated riparian vegetation, when present, also fall under the jurisdiction of the CDFW. Section 1600 et seq. of the Fish and Game Code (Lake and Streambed Alteration Agreements) gives the CDFW regulatory authority over work within the stream zone (which could extend to the 100-year flood plain) consisting of, but not limited to, the diversion or obstruction of the natural flow or changes in the channel, bed, or bank of any river, stream, or lake.</p> <p>An LSAA regulates Species of Special Concern (SSC) is a category used by the CDFW for those species which are considered to be indicators of regional habitat changes or are considered to be potential future protected species. SSC do not have any special legal status except that which may be afforded by the Fish and Game Code as noted above. The SSC category is intended by the CDFW for use as a management tool to include these species into special consideration when decisions are made concerning the development of natural lands.</p>
Regional Water Quality Control Board (RWQCB)	Individual 401 Certification	The State Water Resources Control Board (SWRCB) and the local RWQCB have jurisdiction over “waters of the State,” pursuant to the Porter-Cologne Water Quality Control Act, which are defined as any surface water or groundwater, including saline waters, within the boundaries of the state. The SWRCB has issued general Waste Discharge Requirements (WDRs) regarding discharges to “isolated” waters of the state (Water Quality Order No. 2004-0004-DWQ, Statewide General Waste Discharge Requirements for Dredged or Fill Discharges to Waters Deemed by USACE to be Outside of Federal Jurisdiction). The project may be covered by Pre-Certified NWP 12 when co-terminus with federal jurisdiction.
RWQCB	Waste Discharge Requirement (WDR)	<p>The Porter-Cologne Water Quality Control Act regulates discharges that could affect the quality of waters of the state and requires that a waste discharge requirements form be obtained for discharges, including fill of wetlands that are not otherwise authorized by Section 404 or Section 402 of the Federal CWA. Application under waste discharge requirements requires filing of a report of waste discharge. See Appendix B for more detail.</p> <p>Any entity proposing to discharge a waste must file a Report of Waste Discharge with the appropriate Regional Water Quality Control Board or SWRCB. The Regional Water Quality Control Boards are responsible for implementing CWA Sections 401, 402, and 303(d). CCR Title 23, § 3855(b)(1) states that "an application for water quality certification shall be filed with the state board executive director... whenever a potential discharge from a proposed activity: (A) may fall under the jurisdiction of more than one regional board." Porter-Cologne also provides for the development and periodic reviews of basin plans that designate beneficial uses of California’s major rivers and groundwater basins and establish water quality objectives for those waters. In 2019, the SWRCB adopted its proposed State Wetland Definition and Procedures for Discharges of Dredge or Fill Material to Waters of the State (Procedures). Among other provisions, the Procedures define certain “wetlands” as “waters of the State” under Porter-Cologne. The Procedures also provide a jurisdictional framework for the determination of aquatic features as “wetlands.” Such wetland features under the Procedures are identified and analyzed as “aquatic resources” throughout this document. The SWRCB has published the “State Wetland Definition and Procedures for Discharges of Dredged or Fill Materials to Waters of the State”, which became effective in 2020.</p>
State Water Resources Control Board (SWRCB)	Notice of Intent (NOI) for a Stormwater Protection Plan (SWPPP)	<p>This permit is applicable to projects that have 1 or more acres of soil disturbance by themselves or in conjunction with any common plan of development. This permit applies to both traditional and linear projects. Flow charts of how to make this determination are included in Environmental Standard 104.073/G8714. SWRCB Order No. 2009-0009-DWQ as amended by 2010-0014-DWQ and 2012-0006-DWQ. Not discretionary and CEQA is not required.</p> <p>Some cities have adopted local ordinances regulating stormwater. If a project is in a city with a local ordinance, a Stormwater Management Plan (SWMP) may be required.</p> <p>A SWMP may also be required to accompany the Caltrans Encroachment Permit application for projects that are 1 acre or more and that encroach upon Caltrans ROW.</p>
Regional Agencies and Entities		
Tribal Consultations	Coordination with CEQA/NEPA Lead Agency	For proposed actions with potential impacts on Tribes, regulations implementing CEQA (under Assembly Bill 52) and NEPA (Sections 1501.2 and 1501.7 of the CEQ Regulations and Executive Order 13175) require an agency to consult with Tribes. Federal agencies including the BLM provide communication and notification to Tribes on behalf of projects; however, early outreach to Tribes is recommended for any construction activities that will traverse tribal lands. Depending on the Tribe, early outreach may be beneficial prior to or during the NEPA process. The California Governor’s Office of Planning and Research recently issued a technical advisory aimed at providing guidelines for consultation with Native American tribes under the California Environmental Quality Act (CEQA), following the enactment of Assembly Bill 52.

Administering Agency or Regulation	Permit, Approval, or Clearance	Project Applicability
South Coast Air Quality Management District (SCAQMD)	A facility survey and report will be required for any asphalt, concrete pads/foundations, and buildings planned for demolition or removal. 10-day notification CEQA Review (Air Quality)	The SCAQMD encompasses 10,473 square miles and includes portions of Los Angeles, Riverside and San Bernardino counties and all of Orange County. The SCAQMD has rules and regulations that would apply to the proposed project. These include the following along with a brief description of what the rule addresses: <ul style="list-style-type: none">▪ Rule 401. Visible Emissions: Restricts the level of opacity of discharged air contaminants▪ Rule 402. Nuisance: Prohibits discharge from any source where such quantities of air contaminants or other material cause injury, detriment, nuisance, or annoyance to any considerable number of persons▪ Rule 403. Fugitive Dust: Requires the implementation of best available dust control measures (BACM) during active operations capable of generating fugitive dust▪ Rule 1166 and/or Rule 1466. Minimizes emissions from contaminated soils▪ Rule 1403. Asbestos Emissions from Demolition/Renovation: Mandates asbestos surveying, reporting, removal, handling, disposal, labeling, and documentation. Applicable for construction work within existing facilities such as vaults, or within areas where existing pipelines are present.
Mojave Desert Air Quality Management District (MDAQMD)	A facility survey and report may be required for any asphalt, concrete pads/foundations, and buildings planned for demolition or removal. 10-day notification CEQA Review (Air Quality)	The Mojave Desert Air Quality Management District is geographically the second largest of the state’s 35 air districts and includes portions of Kern and San Bernardino County. The MDAQMD encompasses approximately █████ of the project pipeline and will have primarily responsible for implementing non-discretionary duties, approving air quality permits, and reviewing the air quality sections of CEQA documents within its jurisdiction. MDAQMD Rule 403 regulates fugitive dust emissions and requires standard dust control measures on all Projects involving construction or demolition of structures. Fugitive dust emissions from grading, excavation, and loading will be subject to this rule, which prohibits visible dust with specific opacity requirements at the property line in a given time period. However, a Dust Control Plan is not required. The MDAQMD has rules and regulations that would apply to the proposed project. These include the following along with a brief description of what the rule addresses: <ul style="list-style-type: none">▪ Rule 302. Asbestos Survey Requirements. Asbestos surveys are required prior to renovation and demolition. Asbestos must be removed prior to activities that may disturb it▪ Rule 401. Visible Emissions: Restricts the level of opacity of discharged air contaminants▪ Rule 402. Nuisance: Prohibits discharge from any source where such quantities of air contaminants or other material cause injury, detriment, nuisance, or annoyance to any considerable number of persons▪ Rule 403. Fugitive Dust: Requires the implementation of BACM during active operations capable of generating fugitive dust (see MDAQMD description below for detail)
Antelope Valley Air Quality Management District (AVAQMD)	A facility survey and report will be required for any asphalt, concrete pads/foundations, and buildings planned for demolition or removal. 10-day notification CEQA Review (Air Quality)	The Antelope Valley Air Quality Management District (AVAQMD) includes the northern desert portion of Los Angeles County. The District’s boundaries start on the south just outside of Acton, north to the Kern County line, east to the San Bernardino County line, and west to the Quail Lake area. Approximately █████ of project pipeline are located within the AVAQMD. The AVAQMD has rules and regulations that would apply to the proposed project. These include the following along with a brief description of what the rule addresses: <ul style="list-style-type: none">▪ Rule 302. Asbestos Survey Requirements. Asbestos surveys are required prior to renovation and demolition. Asbestos must be removed prior to activities that may disturb it.▪ Rule 401. Visible Emissions: Restricts the level of opacity of discharged air contaminants▪ Rule 402. Nuisance: Prohibits discharge from any source where such quantities of air contaminants or other material cause injury, detriment, nuisance, or annoyance to any considerable number of persons▪ Rule 403. Fugitive Dust: Requires the implementation of BACM during active operations capable of generating fugitive dust (see MDAQMD description below for detail)
Eastern Kern County Air Pollution Control District (KCAPCD)	A facility survey and report will be required for any asphalt, concrete pads/foundations, and buildings planned for demolition or removal. 10-day notification CEQA Review (Air Quality)	The Eastern Kern Air Pollution Control District (KCAPCD) boundary is that portion of Kern County which lies east of the Sierra Nevada Mountain Range and north of Rosamond to near the San Bernardino County Line. Approximately █████ of project pipeline are located within the KCAPCD. The KCAPCD has rules and regulations that would apply to the proposed project. These include the following along with a brief description of what the rule addresses: <ul style="list-style-type: none">▪ Rule 302. Asbestos Survey Requirements. Asbestos surveys are required prior to renovation and demolition. Asbestos must be removed prior to activities that may disturb it.▪ Rule 401. Visible Emissions: Restricts the level of opacity of discharged air contaminants▪ Rule 402. Nuisance: Prohibits discharge from any source where such quantities of air contaminants or other material cause injury, detriment, nuisance, or annoyance to any considerable number of persons▪ Rule 403. Fugitive Dust: Requires the implementation of BACM during active operations capable of generating fugitive dust (see MDAQMD description below for detail)
Local Ministerial (County or City)	Ministerial Permits	Local ministerial permits are those that are granted based upon determinations that the proposed project complies with established standards set forth in local plans or ordinances such and building permits, road crossing permits, franchise agreements. Ministerial permits also include those that may be required by a Planning Department where new development or introduction of a use requires staff (not decision maker) review and approval. Public Works Departments may require permits for encroachment into ROWs, grading, traffic or other ministerial actions.
Local Discretionary (County or City)	Conditional Use Permit (CUP)	Direct use project requirements are based on the end use(s), which are resource and location specific (i.e., district heating, spa/pool, aquaculture, greenhouses, etc.). Crude oil pipelines usually require a CUP. For uses or development not enumerated is the zoning/municipal code, such as a hydrogen pipelines not considered at utility by the CPUC, the County/City will often default to a discretionary CUP. Generally Natural Gas pipelines regulated by the CPUC are exempt from local land use controls that are in conflict with “the paramount authority of the State.” Article XI, Section 7 of the California Constitution says: “A County or City may make and enforce within its limits all local, police, sanitary and other ordinances and regulations not in conflict with general laws. If otherwise valid local legislation conflicts with state law, the local law is preempted by State law and is void as applied to the particular project.” Additionally, Constitution Article XII, Section 8 states that “[a] city, county, or other public body may not regulate matters over which the Legislature grants regulatory power to the [Public Utilities] Commission.” The Public Utilities Code authorizes the CPUC to “do all things, whether specifically designated in this act or in addition thereto, which, are necessary and convenient in the exercise of such power and jurisdiction” (California Public 7 Utilities Code Section 701). Other Public Utilities Code provisions generally authorize the CPUC to modify facilities, secure adequate service or facilities, and operate so as to promote health and safety. Cities include: California City, Lancaster, Palmdale, Santa Clarita, Los Angeles, San Fernando, Burbank, Glendale, Vernon, Huntington Park, South Gate, Cudahy, Bell, Lynwood, Compton, Wilmington (from North to South)

Administering Agency or Regulation	Permit, Approval, or Clearance	Project Applicability
County or City as applicable	Protected tree permit (ministerial or discretionary)	Protected trees are trees or tree communities that have special significance and are afforded protection by, and specifically identified in, County and City ordinances, codes, or general plans. The types of trees and specific physical characteristics that meet the local definitions vary by city and county. Protected tree permits (either ministerial or discretionary) may be required for removal, cutting, trimming, or encroachment upon root zones of protected trees.
County of Riverside	Western Riverside County Multiple Species Habitat Conservation Plan (WRC MSHCP) Take Coverage	<p>The WRC-MSHCP allows the participating jurisdictions to authorize "Take" and serves as an HCP pursuant to Section 10(a)(1)(B) of FESA, as well as a provides State CESA coverage as an NCCP. It allows Riverside County and its cities to better control local land-use decisions and maintain a strong economic climate in the region while addressing the requirements of CESA/FESA. [REDACTED]</p> <p>[REDACTED]</p> <p>[REDACTED]. Coverage under the WRC-MSHCP is not anticipated, but if needed (e.g., excavation in Delhi Sands Flower loving sand fly soils) coverage available could be available via the WRC-MSHCP if SoCalGas considers becoming a Participating Special Entity.</p>