



Contra Costa County Board of Supervisors

Subcommittee Report

TRANSPORTATION, WATER & INFRASTRUCTURE COMMITTEE

6.

Meeting Date: 08/11/2016

Subject: CONSIDER report summarizing the Pipeline Safety Trust Report and DIRECT staff to submit the full report to the Board of Supervisors for consideration

Submitted For: Julia R. Bueren,

Department: Public Works

Referral No.: 15

Referral Name: Monitor the Iron Horse Corridor Program

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Referral History:

The Alamo Improvement Association (AIA) was awarded a Technical Assistance Grant by the Pipeline and Hazardous Materials Safety Administration, a division of the U.S. Department of Transportation. The grant included pipeline safety public outreach and education, and training for local first responders, and outreach regarding the 811 Call Before You Dig Program. The grant period was from October 2014 through September 2015.

AIA contracted with the Pipeline Safety Trust in 2015 to provide services intended to educate and inform the community about hazardous liquid pipelines and pipeline safety. The contract included presentation at two community workshops in June 2015 and the production of a report. The report, Pipeline Safety in Alamo, and surrounding areas within Contra Costa County, California (the Report) is attached as Appendix A and includes a summary of the work completed and recommendations.

The Hazardous Materials Commission reviewed the Report at their January 2016 and April 2016 meetings. The Planning and Policy Development Committee of the Hazardous Materials Commission reviewed the Report and recommendations at their October 2015, December 2015, January 2016 and February 2016 meetings.

At the January 2016 meeting, the Commission agreed that 7 of the recommendations contained in the report merit further consideration by the Board of Supervisors. Michael Kent, Executive Assistant to the Hazardous Materials Commission summarized the Hazardous Materials Commission's discussion and the recommendations at the Transportation, Water and Infrastructure (TWIC) Committee Meeting on April 14, 2016. The April 14, 2016 TWIC report is attached as Appendix B.

At the April 14, 2016 TWIC meeting, staff from the Departments of Conservation and Development and Public Works were directed to review the recommendations and report on how they could be implemented within the County. On May 23, 2016 staff from Conservation and Development, Public Works, the Office of Emergency Services, Health Services, Contra Costa County Fire Protection District and San Ramon Valley Fire District met to

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discuss the recommendations, what is currently being performed and any additional steps that can be taken to improve in these areas.

Staff reported back to TWIC on June 9, 2016. The June 9, 2016 TWIC report is attached as Appendix C. At that meeting staff were directed to bring a comprehensive report back to TWIC with an update on how we are implementing the recommendations of the Pipeline Safety Report, what we're currently doing or have planned for each of the recommendations, and what other Counties with hazardous materials pipelines are doing regarding land use restrictions for pipelines located near congregate facilities.

Referral Update:

Below are the recommendations from the Report's Executive Summary, what the County currently does and what additional steps can be taken.

The Federal Pipelines and Hazardous Materials Safety Administration (PHMSA) Could:

- Make information about a pipeline's High Consequence Area designation easily available to the public.
- Adopt regulations to implement the National Transportation Safety Board (NTSB) recommendations regarding needed improvements to the Integrity Management requirements for both gas and hazardous liquid pipelines.
- Adopt stronger regulations requiring automated valves consistent with the NTSB recommendations.
- Adopt stronger regulations that require better leak detection systems in hazardous liquid pipelines that could affect high consequence areas, and provide a clear performance standard for computational pipeline monitoring systems.

Response: When the County has an opportunity to provide input on state and federal legislation, the County may take a position and provide comments to the appropriate agency. The Public Works Department sent the report to PHMSA on August 2, 2016 for their review and consideration.

The State of California Could:

- Enforce excavation damage prevention laws. Currently authority is held with the Attorney General's office, but there is not adequate staffing or resources to respond to notifications of alleged violations or to investigate. Other agencies respond on a fragmented basis depending on the damaged utility involved.
- Work with the California Department of Education (CDE) on ways to implement CDE's suggestions for reducing the probability of a pipeline product release on schools, and reducing the severity and consequences of pipeline releases on schools.

Response: When the County has an opportunity to provide input on state and federal legislation, the County may take a position and provide comments to the appropriate agency. The Public Works Department sent the report to the State Attorney General and Department of Education on August 2, 2016 for their review and consideration.

The California Office of the State Fire Marshal Could:

- Make their maps, incident and inspection information accessible to the public by posting it online.
- Make information about a pipeline's High Consequence Area designation easily available to the public.
- Adopt regulations to implement the NTSB recommendations regarding needed improvements to the Integrity Management requirements that apply to intrastate hazardous liquid pipelines.

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- Adopt stronger regulations for intrastate pipelines requiring automated valves that apply to hazardous liquid pipelines along the lines of the NTSB recommendations.
- Adopt stronger regulations for intrastate pipelines that require better leak detection systems in high consequence areas, and that provide a clear performance standard for computational pipeline monitoring systems.

Response: The Public Works Department sent the report to the Office of the State Fire Marshal on August 2, 2016 for their review and consideration.

The California Department of Education Could:

- Expand School Site Pipeline Risk Analysis and the Potential Pipeline Hazard Mitigation/Management guidance in coordination with emergency response agencies to offer help for schools that already exist in close proximity to pipelines. Lead coordination efforts among the myriad of agencies that offer crisis planning assistance to schools, and suggest minimum information that should be included in these plans regarding pipelines.

Response: The Public Works Department sent the report to the California Department of Education on August 2, 2016 for their review and consideration.

The Contra Costa Board of Supervisors Could:

- Ensure the single staff point-of-contact for citizens with concerns about multiple utility issues and right of way questions has technical training on safety concerns, adequate resources to conduct regular and broad community outreach (especially along the Iron Horse Trail Corridor), and resources to work in close coordination with other related departments and advisory groups.

Response: The Public Works Department has a single staff contact^[1] for the corridor who is the Iron Horse Corridor Manager. The Corridor Manager works with the utilities, County Survey staff and property owners to address right of way questions. The Corridor Manager interacts with other departments to address corridor concerns and attends advisory committee meetings, as needed to share information with the community. The Department has contacts with all of the utilities and the State Fire Marshal so they can provide expertise, as needed. The Iron Horse Corridor utility contacts are posted on the Iron Horse Corridor website.

^[1] <http://www.co.contra-costa.ca.us/413/Iron-Horse-Corridor>

- Request appropriate staff conduct an analysis of all congregate facilities located in close proximity to transmission pipelines. Work with other emergency response agencies to develop a list of resources for emergency and evacuation planning expertise for congregate facilities near pipelines that include potential hazards from a pipeline incident, and mitigation strategies for those hazards based on site-specific considerations.

Response: The Fire District and Health Services will work with Community Awareness and Emergency Response (CAER) to develop a fact sheet to send to the congregate facilities that describes what to consider regarding pipelines when they're developing their emergency plans.

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The term congregate will need to be further defined to determine what facilities would receive this information. San Ramon Valley Fire Protection District has an evacuation video developed for this type of scenario that has been promoted to surrounding jurisdictions.

- Consider adding goals and policies regarding pipelines to the General Plan, and amending Contra Costa County Zoning Code 82.2.010 so that all gas and hazardous liquid transmission pipelines would be subject to land use regulations. Consider additional ordinances pertaining to zoning and land use that are proposed for construction, replacement, modification, or abandonment.

Response: The Land Use, Transportation and Circulation, Open Space, and Safety elements of the County General Plan contain references to pipelines that transport hazardous materials. The Land Use and Safety elements also contain policies, though they are few and their nature is more suggestive than directive. Because the County does not always have jurisdiction over pipeline projects, amending the General Plan to add goals and policies pertaining directly to pipeline development may have limited value. However, adding policies addressing the relationship of other land uses to pipelines could be useful. Examples of such policies could include, but not be limited to:

- *Discouraging placement of uses and facilities which primarily house or serve vulnerable or sensitive populations (elderly, ill, children, etc.) within X feet of a hazardous materials pipeline right-of-way.*
- *Requiring deed notifications for all newly subdivided lots within X feet of a hazardous materials pipeline right-of-way.*
- *Encouraging new buildings to be located away from hazardous materials pipeline rights-of-way when such design flexibility exists on the project site.*

Ordinance Code Section 82-2.010 currently states that pipelines are exempt from the County's zoning regulations. However, on May 24, 2016, the Board of Supervisors adopted an amendment to Section 82-2.010 clarifying that pipelines are subject to Ordinance Code Chapter 84-63, Land Use Permits for Development Projects Involving Hazardous Waste or Hazardous Materials. The amendment becomes effective 30 days after adoption. Staff believes the Ordinance Code provides for proper review of pipelines and sees no compelling need for additional regulation of pipeline construction, replacement, modification, or abandonment. Statutory exemptions exist for replacement/modification of pipelines and often these activities take place under order from a federal or state agency. Pursuant to Chapter 84-63, pipeline projects located more than 300 feet from residential or commercial properties are not "development projects" and therefore do not require a land use permit. If a pipeline is located within 300 feet of such properties and has a hazard score ^[2] of 80 or higher, then a land use permit is required and an environmental review will be performed. The Transportation Risk component of the hazard scoring rates pipelines as the preferred method for transporting hazardous materials relative to truck, rail, and marine vessel.

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Discouraging pipeline development through unnecessary regulation could have the unintended consequence of incentivizing the use of less safe transportation methods, especially since increasing the frequency of truck, rail or vessel deliveries typical would not require a County review.

[2] The hazard score is calculated pursuant to Ordinance Code Section 84-63.1004 and represents a project-specific risk assessment based on the following factors (possible points for each factor are indicated in parentheses): Transportation Risk (0-10); Community Risk – Distance from Receptor (1-30); Community Risk – Type of Receptor (4-7); Facility Risk – Size of Project (Total Amount Change in Tons; 0-30); Facility Risk – Size of Project (Percentage Change; 0-6); and Hazard Category of Material or Waste (1-3).

- Adopt clear policies and deterrents regarding preventing encroachments including review of setback variances by municipal advisory councils or committees and department staff, so that properties and vegetation along utility corridors do not encroach on pipelines.

Response: The County has clear policies that prevent encroachments. Property owners and contractors are required to apply for a permit to access and/or perform work in the Iron Horse Corridor. The Public Works Department is looking into different methods to communicate this information to property owners adjacent to the Iron Horse Corridor, such as informational letters that remind residents of the corridor property lines, utilities in the corridor and the requirement to call Underground Service Alert when digging. Other possibilities include Board of Supervisors email communication and markers in the corridor designating the property line in various locations. The County and cities along the corridor have setback requirements in place. Utilities companies, specifically Kinder Morgan routinely clears vegetation over their easement. When property owners apply for a setback variance the application may go to the appropriate municipal advisory committee for review and a recommendation.

- Work in coordination with pipeline operators to develop a technical advisory body that can review the integrity management plans (similar to the Santa Barbara County System Safety Reliability Review Committee) and other technical assessments of the pipelines in order to cultivate informed technical expertise in the county and increase public trust and awareness.

Response: The Hazardous Materials Commission discussed this recommendation and did not support it.

The Contra Costa County Department of Conservation and Development Could:

- Consider adding goals and policies regarding pipelines to the General Plan, and amending Contra Costa County Zoning Code 82-2.010 so that all gas and hazardous liquid transmission pipelines would be subject to (and not exempt from) the General and Land Use District regulations (divisions 82 and 84). Consider additional ordinance(s) pertaining to zoning and land use permitting for hazardous liquid pipelines and possibly also intrastate gas transmission pipelines that are proposed for construction, replacement, modification, or abandonment.

Response: See response to the same recommendation under Board of Supervisors

- Review all development applications for opportunities to improve existing ingress/egress where currently limited, and where possible, include conditions on approvals to improve connectivity and avoid exacerbation of access problems.

Response: The Contra Costa County Fire Protection District and San Ramon Valley Fire District review development applications to determine based on the size of the development whether a second access is required. Access requirements are determined by the Contra Costa County Fire Code.

The Contra Costa County Health Services Department Could:

- Expand the scope of the Hazardous Materials Ombudsman and the Hazardous Materials Commission regarding pipelines to provide an ongoing review of pipeline operators' emergency plans and an active role in possible county efforts regarding additional coordinated technical review of pipeline integrity management planning.

Response: The Hazardous Materials Commission discussed this recommendation and did not support it.

The Contra Costa County Public Works Department Could:

- Plan emergency evacuation ingress/egress for areas in Alamo west of Danville Boulevard and the Iron Horse Corridor where a single east-west pipeline crossing road is the only access for numerous homes and facilities (e.g., Hemme Road, Camille Road) with the goal of creating public accessibility across these 'dead-end' neighborhoods that necessitate crossing the pipeline to access any services.

Response: The San Ramon Valley Fire Protection District is in the preliminary phase of developing evacuation maps for neighborhoods on the west side of the trail in the Danville area. They have requested feedback from the Danville Police Department and will look at the Alamo area next. The information will be incorporated into a mailer and is anticipated to be sent to residents in fiscal year 2016-17. In some emergency situations, Shelter in Place may be the most appropriate option.

- Ensure the county has complete and accurate records of corridor and right of way locations and widths. Continue to coordinate with Kinder Morgan and other utilities on resolution of encroachments into pipeline rights of way.

Response: The County has current maps that show property lines and utility easements. Staff continues to work with the utilities and property owners to address encroachments.

The Contra Costa County Office of Public Education and Local School Districts Could:

- Expand emergency preparedness resources to include information about pipelines and pipeline-specific risks. Assist individual schools in developing crisis plans and emergency preparedness plans that include pipelines on the emergency maps and assess how ingress/egress may be affected by a pipeline incident.

Response: As stated in the previous response, CAER will include pipeline information in the next update to the Model Emergency Plan for Schools which can be used to prepare school site specific emergency preparedness plans.

The Contra Costa County Community Awareness and Emergency Response (CAER) Group Could:

- Include specific reference to oil and gas pipeline in the list of potential hazards listed in the hazard assessment in the next update to the Model Emergency Plan for Schools.

Response: CAER will address this in the next update to the Model Emergency Plan for Schools.

Pipeline Operators Could:

- Reach out to the schools along pipeline easements and offer to provide technical assistance assessing pipeline risks and evacuation strategies given possible incidents that could occur in close proximity to the schools.
- Consistently undertake assessments of existing Right of Way encroachments to determine whether there are safety implications. Coordinate with Contra Costa County to resolve encroachments with neighboring property owners.
- Become members of the Contra Costa County Community Awareness and Emergency Response Group, and participate consistently in quarterly meetings and responses.
- Contract for an independent technical seismic vulnerability study on HCA pipelines affected by potentially active faults to feed into the pipeline risk analysis, and make the study available to the public.
- Work in coordination with the Board of Supervisors to develop a technical advisory body that can review the integrity management plan (similar to the Santa Barbara County System Safety Reliability Review Committee) and other technical assessments of the pipelines in order to cultivate informed technical expertise in the county and increase public trust and awareness. *As stated in the TWIC report dated April 14, 2016, the Hazardous Materials Commission did not support this recommendation.*

Response: The Public Works Department sent the report on August 2, 2016 to all of the pipeline operators that have franchise agreements with Contra Costa County for their review and consideration.

Local Fire Districts Could:

- Designate a single point-of-contact to coordinate with pipeline operators, familiarize themselves with the operators' emergency response and spill response plans, know the facilities where people congregate (schools, churches, hospitals, nursing facilities, etc.) in close proximity to the pipeline, and be involved with any emergency planning done by those facilities.

Response: The local Fire Districts will coordinate pipeline operators as determined by each local agency, to exchange information regarding emergency response plans. Local Fire Districts will support facilities located in close proximity to the pipeline with emergency planning resources when requested by the facility administrator.

At the June TWIC meeting the Committee directed staff to research how other Counties are restricting or managing pipelines. Below is a sample of policies from Sonoma, Solano, San Joaquin, Kern, and Sacramento Counties:

Sonoma County:

1. County Zoning Ordinance section 29-7– requires a consolidated permit to store or handle hazardous materials. Consolidated permits issued pursuant to this chapter shall be valid for 3 years. Facilities must submit updated information and fees annually.
2. General Plan Public Facilities and services element, Policy PF-2T – Review proposals for new transmission lines or acquisition of easements for new transmission lines for consistency with GP. Request wherever feasible that such facilities not be located within designated community separators or biotic resource areas. Give priority to the use of existing utility corridors over new ones.
3. General Plan Open Space and Resource Conservation Element – Review and condition proposed natural gas wells through use permit process.

Solano County:

1. County Zoning Ordinance Section 28.78.20 (B) (8) Pipeline... inside of R.O.W.- Public utility, electric, gas, water, oil, and telephone transmission and distribution lines shall be permitted in any district without the necessity of first obtaining a use permit; provided, that maps showing proposed routes of such heights and right-of-way widths, shall be submitted to the Planning Commission, and routes mutually acceptable to the Planning Commission and utility agencies concerned shall be determined in writing prior to acquisition of any rights-of-way. Each transmission line route proposal submitted in accordance herewith shall be accompanied by a fee or fees as may be set by the Board of Supervisors by resolution pursuant to Section 11-111 of this Code. No part of such fee shall be refundable.
2. County Zoning Ordinance Section 28.78.20 (B) (9) Pipeline... outside of R.O.W. - All utility accessory uses and structures for transmission or distribution of electricity, gas, water, oil, gasoline, telephone, television or other utility services may be permitted in any district. Utility accessory uses and structures include, but are not limited to, compression, drying, regeneration stations, substations, or pumping stations.
3. County General Plan Resources Element, Policy RSP-55 – Require responsible extraction, storage and transportation of natural gas resources that minimize impacts on the environment.

San Joaquin County:

1. Zoning Ordinance Section 9-1155.2(b)Location for Underground Facilities - Underground distribution facilities for public utilities shall be located in a public right-of-way or public utility easement. No public utility distribution facilities shall be located outside a public right-of-way or public utility easement except in providing service to the parcel on which they are located.
2. General Plan Vol 3, Ch. 2. Section D, pages 35-36 – Policies on oil and natural gas lines – Concerns over the hazardous nature of the product being transported require pipeline systems be constantly monitored and accessible. Major pipelines, particularly pumped systems, require periodic control centers which function as monitoring stations as well as flow regulation and service access points. Physical access to the system is assured through dedicated R.O.W. and visual inspection of the system over difficult terrain is accomplished

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by aerial patrolling....A major source of natural gas within the county is in the form of several local gas fields. Pipes conveying gas after odorizing and dehydration at source vary from 4"-12" in diameter. The operation of these fields is undertaken by private concerns with PG&E contracting to buy and distribute... The design and operation guidelines of such systems is subject to conformity with CPUC General Order #112D.

Kern County:

1. County Ordinance Chapter 19.98 – Oil and Gas Production – Oil and gas activities in the County are divided into 5 tier areas.
 - Tier 1 Area is defined as all areas in which oil and gas activity is the primary land use. The existing well and activity densities preclude almost all other uses except for passive uses such as grazing.
 - Tier 2 Area is defined as all areas that are classified exclusive agriculture (A) or limited agriculture (A-1) districts, have agriculture as the primary surface land use, and are not included in Tier 1.
 - Tier 3 Area is defined as other areas not within a Tier 1 Area that are located in one (1) of the following zone districts: Natural resources, recreational forestry, light industrial, medium industrial, heavy industrial, floodplain primary, drilling island, petroleum extraction combining districts
 - Tier 4 Area is defined as areas not within Tier 1, 2, or 3, that include at least one (1) of the following zone districts: estate, low/med/high density residential, commercial zoning districts, mobile home park
 - Tier 5 are areas including all current and future specific plan boundaries either adopted with a Special Planning (SP) District or which include specific provisions for oil and gas operations. Oil or gas exploration and production activities would be allowed with a conditional use permit or as permitted by the regulations contained within the adopted specific plan in Tier 5 areas.

Ministerial permits for tiers 1,2,3, 5 available after applying for oil and gas conformity review or minor activity review (applies only to first 3,647 new well permits in a calendar year, 3,648th such permit requires conditional use permit)

Conditional use permit required for tier 4.

*Pipelines subject to Minor activity review, no conditional use permit required

Sacramento County:

1. County Zoning Ordinance Section 301-13 – If not otherwise authorized as a permitted or conditional use... in this code, the project planning commission may, after public hearings..., permit a public utility or public service use as a conditional use in any zone if the commission determines that the use is necessary for the public health, convenience, safety, or public welfare.
2. County Zoning Ordinance Section 301-19 – Oil and/or gas sites proposed to be developed on either industrial or agriculturally zoned land shall not be located within 1000 feet of the boundary of property zoned for residential, interim residential, interim estate, or recreational purposes. Additionally, no proposed oil and/or gas well site shall be located within 300 feet of a structure used for human habitation.
3. General Plan Public Facilities Element Policy PF-112 – New natural gas wells are subject to permitting process as regulated by the State Conservation Department, Division of Oil, Gas, and Geothermal resources, as well as Sacramento County Zoning Code 301-19
4. General Plan Public Facilities Element Policy PF-113 – Route new gas mains within existing railway and electric transmission corridors, along collector roads and, whenever possible, within existing easements. If not feasible, gas mains shall be placed as close to easements as possible.

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[1] <http://www.co.contra-costa.ca.us/413/Iron-Horse-Corridor>

[2] The hazard score is calculated pursuant to Ordinance Code Section 84-63.1004 and represents a project-specific risk assessment based on the following factors (possible points for each factor are indicated in parentheses): Transportation Risk (0-10); Community Risk – Distance from Receptor (1-30); Community Risk – Type of Receptor (4-7); Facility Risk – Size of Project (Total Amount Change in Tons; 0-30); Facility Risk – Size of Project (Percentage Change; 0-6); and Hazard Category of Material or Waste (1-3).

Recommendation(s)/Next Step(s):

CONSIDER report summarizing the Pipeline Safety Trust Report and staff reports in response to the recommendations, and DIRECT staff to submit the full report to the Board of Supervisors for consideration.

Fiscal Impact (if any):

No fiscal impact.

Attachments-Y

Appendix A

Appendix B

Appendix C
