

GENERAL GUIDELINES FOR WORK ON AND ADJACENT TO AIRPORT FUEL PIPELINES

ACTIVE Fuel Lines:

SFO FUELS manages all active fuel lines within the airport boundary. Any time excavation or drilling operations are planned, the location of all underground utilities shall be marked. The Airport Fire Marshal and SFO FUELS Operations manager shall be notified a minimum of 48 hours before any such work when it is within seven feet of the active pipeline. Be further advised that critical emergency fuel shut off underground utilities are also installed in close proximity to such lines. A BICE permit which has been reviewed by Airport Fire Prevention shall be obtained before the start of work.

INACTIVE (ABANDONED) Fuel Lines:

SFO FUELS does not manage inactive pipeline or pipeline marked on Airport utility maps as “abandoned”. The Airport Fire Marshal shall be notified a minimum of 48 hours before any excavation work within 7 feet of these lines. Such lines can be found in various locations around the Airport. The current state of abandonment on each line is often not well-known in the different areas where work is scheduled. Even when lines have been evacuated, pockets of fuel can exist and are not easily removed without the lightweight slurring operation. With that in mind, the Fire Department reviews each project on a case by case basis with the engineering design that is presented.

All underground pipeline which is not monitored or inspected shall be considered as “abandoned” and shall be closed or removed in an acceptable manner. When abandoned fuel lines are known to exist within a project boundary and excavation is planned or when such utilities are encountered during construction activities, a specific work plan and safety plan shall be submitted to the Airport Fire Marshal which shall encompass the following:

1. Safe removal of all fuel lines as is practicable after evacuating fuel from lines. And,
2. Where not practical to remove such lines, provide for the safe abandonment-in-place of fuel pipelines. All such work shall be done from between existing access points. Where insufficient points are located within the project zone, additional access points shall be added. Project boundary shall not be the sole criteria for the extent of such abandonment activities.

Requirements prior to the start of work:

1. Obtain a BICE permit which has included the review by Airport Fire Prevention.
2. Obtain a hot work fire permit, if needed. Fire Permits shall only be issued to qualified individuals. Fire Permit applications shall be obtained from this web page or through the Office of the Airport Fire Marshal. Work plans, safety plans and required qualifications shall be submitted with fire

permit applications. Include specific welder qualifications, A-Haz licensing, and evidence of experience in the specific job tasks as deemed necessary and as indicated in the project specifications and/or BICE Fire comments. Hot tapping, welding, cold cutting, grinding, torch cutting, fuel handling, and other operations shall only be done by qualified individuals with appropriate licensing. Such permits may require up to 48 hours for processing and shall only be requested after obtaining the BICE permit.

3. Obtain all reference utilities drawings that are available from Airport and SFO FUELS.
4. Marking of all underground utilities by a qualified line locator.
5. Submittal of a safe excavation/pipeline exposure plan which has been reviewed by the Airport Fire Marshal (and SFO FUELS Operations Manager, if involving live fuel line). Be advised that all work within 7 feet of any fuel pipeline shall be done with extreme caution, including but not limited to the use of hand tools and vacuum.
6. Notify Airport Fire Prevention and SFO FUELS a minimum of 48 hours in advance of any excavation or drilling in the area of live fuel lines.
7. Notify Airport Fire Prevention a minimum of 48 hours in advance of and excavation or drilling in the area of abandoned fuel lines.
8. Provide immediate notification to SFO FUELS, Airport Fire Marshal, and BICE when any suspected fuel line is encountered unexpectedly. Such operations shall not proceed further without authorization.

Code References:

California Fire Code 2016 ed., Sections 5703.6.2 and 5704.2.14.1(3) and 5704.2.14.1(3)Exception and Engineering Best Practice References:

A.S.M.E. B31.3 – 2012 ed. Process Piping. Sections 300(d), 3002., and Appendix G Section G300.3 Engineered Safeguards

A.S.M.E. 31.4 – 2012 ed. Pipeline Transportation Systems for Liquid Hydrocarbons and Other Liquids, Section 457

The Fire Department uses references in the A.S.M.E. B 3.14 as a Best Practice in accomplishing fuel line abandonment where piping is to remain in the ground.