



SCAG Rec'd
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CITY OF SIGNAL HILL

2175 Cherry Avenue ♦ Signal Hill, CA 90755-3799

August 29, 2019

The Honorable Peggy Huang, Chair
RHNA Subcommittee
Southern California Association of Governments
900 Wilshire Boulevard, Suite 1700
Los Angeles, CA 90017

Re: Regional Housing Needs Assessment (RHNA) Methodology

The City of Signal Hill would like to thank SCAG, and specifically the RHNA Subcommittee, for their important work in shaping the appropriate RHNA methodology for the region and all its member jurisdictions. Signal Hill takes our affordable housing production seriously and we are proud of the fact that to date we have produced 100% of our Extremely Low, Very Low, and Low income housing for our 5th Cycle RHNA allocation. **It should be noted that this was accomplished under Redevelopment Agency funding, a resource which is no longer available.**

We are in general agreement with the recommendations suggested in the Gateway Cities letter dated September 5, 2019; however, we have two overriding concerns which are specific to our City:

- 1. Signal Hill has specific and unique constraints directly related to our continued legacy as an active oil field, which impede our continued efforts to produce affordable housing.***
- 2. We disagree with the data in the Methodology document identifying 91% of Signal Hill as having access to high quality transit.***

We also point out that neither the Methodology document nor the Technical Appendices recognize our constraints related to oil production as a factor in the determination of our RHNA allocation. Therefore, although we have previously identified each constraint in our pre-survey meeting with SCAG staff, in our previous letters, and in our comments for the recent survey, we would like to take this time to provide specific data and examples of those unique constraints.

We hope that SCAG and the RHNA Subcommittee will consider the constraints documented in this letter, and our request to reconsider our transit access data during the completion of the 6th Cycle RHNA Methodology, before assigning Signal Hill's RHNA allocation.

Constraints Related to Oil and Gas Production

The most significant citywide constraints to development are directly related to our historic and current oil and gas production, as follows:

- 1. The number, density and location of abandoned and active oil and gas wells, storage tanks, and restricting easements.***
- 2. Conflicting State mandates from the California Department of Housing and Community Development and the California Division of Oil, Gas and Geothermal Resources.***
- 3. Costs associated with re-abandonment of oil and gas wells.***
- 4. Oil and gas related soil contamination.***
- 5. The Alquist Priolo Special Study Zone associated with the Newport –Inglewood fault.***

1. A Productive Oil Field

Signal Hill sits on top of one of the most productive oil fields in the world and, despite the City's development into an urban environment, only about one-third of the recoverable oil and gas resources of the field have been extracted to date. Oil and gas operations are expected to continue long into the future. Following the discovery of oil in Signal Hill in 1921, thousands of oil derricks sprung up across our 2.2 square mile city. **The area was so dense with oil derricks during the mid-century that it came to be known as "Porcupine Hill".**

Porcupine Hill



Over 2,900 wells have been drilled throughout our city. There are more than 2,400 abandoned wells, 400 active wells, numerous petroleum storage tanks and restrictive easements throughout the City. While the average number of wells is 1.2 per acre, in many cases there are more than 10 per acre. One recently developed property had twelve abandoned wells on a 3.75 acre site.

Signal Hill data in the Technical Appendices indicates a low population density compared to other Gateway Cities; however, the presence of oil and gas wells, and associated tanks and easements, continue to pose major constraints to both development and density. At

first glance, the large amount of vacant property in the Signal Hill could lead to an assumption of development opportunities. That assumption would be inaccurate. In fact, most of the remaining undeveloped land area is due to either existing oil field facilities, abandoned facilities, restrictive easements, or related soil contamination issues. All of those issues can be only partially remediated, at great cost.

2. Conflicting State Mandates

The City faces the challenge of how to effectively accommodate the restrictions to development of properties with abandoned wells imposed by the California Division of Oil, Gas and Geothermal Resources (DOGGR), which are in direct conflict with the State mandate to identify sites and produce affordable housing in compliance with the California Department of Housing and Community Development (HCD).

Conflicting DOGGR Mandates

DOGGR has regulatory authority over the oil and gas resources and current and past oil and gas well drilling, operations, maintenance, and abandonment. Because of the State's regulatory authority, the City is generally preempted from controlling how oil and gas activities are carried out. Sections 3208 and 3255(a)(3) of the Public Resources Code also give DOGGR the authority to order re-abandonment of any previously abandoned wells. This creates a significant constraint to development.

Before a property with existing or previous oil-related activity can be developed, it must achieve compliance with stringent Federal, State and local regulations. Regulations for building over or in close proximity to abandoned wells have historically been established by DOGGR. DOGGR conducts a Construction Site Plan Review (CSR) for all development proposed on properties with oil or gas wells. As a result of CSR, DOGGR recommends that development **NEVER** occur near or over wells, and also places the expense and liability of future re-abandonments on the developer or the "permitting authority" should they not follow DOGGR's "no build" recommendation. Following CSR review, **DOGGR provides a review letter with recommendations that are restrictive to development as follows:**

- Maintain physical access to all oil and gas wells.
- Ensure that the abandonment of all oil and gas wells is to current standard.

Due to underlying geology, virtually all wells in Signal Hill fail to meet the most current DOGGR abandonment standards.

Since there are more than 2,400 abandoned wells and over 400 active wells throughout our 2.2 square mile City, the "no build" recommendation is an additional significant constraint.

DOGGR regulations have increased in stringency since 2010. Although the City spent ample resources from 2010 to 2015 documenting safe procedures under which to allow development over and in close proximity to abandoned wells, the majority of abandoned wells were abandoned before the 1970s and virtually none meet the most current DOGGR regulations. This fact typically results in limited or no development on all or on

portions of a property. In addition, many developers choose not to participate in the expensive and time consuming procedures required to make a determination of whether wells meet abandonment standards. Even fewer are willing to take on the risk and cost associated with re-abandonment with no guarantee of successfully developing a property.

The most recent and restrictive regulation change occurred in 2018, resulting in the virtual abolishment of the allowance to build over or in close proximity to abandoned wells due to the historic co-mingling of hydrocarbon zones caused by geologic conditions. As an example, a residential development approved in 2014, which consists of 25 homes on a three-acre site has 19 wells. There are 17 abandoned wells, two active wells, and three associated storage tanks. The area housing the active wells and storage tanks could not be developed at all. Eight homes were at risk of not being developed due to the location of the abandoned wells; however, they demonstrated they could meet the City's standard for building over or in close proximity to wells, and proper methane assessment and mitigation was installed at additional expense.

Under the newest 2018 DOGGR regulations, eight homes could only be constructed if the City and the developer accepted the liability of assuming the expense of re-abandoning the wells in the future if required by DOGGR.

Active Oil Well Constraints

There are also significant constraints associated with the more than 400 active wells operating throughout the City. Oil and gas drilling sites pose unique risks and can jeopardize public health or environmental quality. The State is the primary regulator of the drilling operations, and the most significant restriction to development are the large areas of land designated as access easements and surface rights, where no development is allowed. DOGGR requires all development to maintain a minimum 50-foot by 20-foot area for well rig access. The Los Angeles County Fire Code regulates safety setbacks and building requirements for structures, and specifically for residential structures, in close proximity to active oil and gas wells. The Fire Code requires between 50- and 100-foot setbacks for residential structures. New wells cannot be drilled within 300 feet of some structures. In addition to limitations on the distance development must maintain from active wells, the building and fire codes restrict the type of construction, and limit or restrict windows, doors, and landscaping for development facing active wells. Signal Hill also has seven active drill sites throughout the City, which house multiple active wells and must maintain a minimum dimension of 200 feet in any direction. Finally, while most pipelines and pipeline easements are located in right-of-ways, pipelines on private property may not be developed over.

3. Re-abandonment Costs

As previously noted, DOGGR has the authority to require re-abandonment of wells at any time. This would typically be required if wells are not abandoned to DOGGR requirements, or if the well is found to be leaking methane. The cost of re-abandonment is highly variable and can range from **hundreds of thousands of dollars to over one million dollars per well**. In addition, the new DOGGR abandonment standard requires all hydrocarbon zones to be isolated. Due to historic geologic conditions, the zones under Signal Hill have been co-mingled for likely hundreds of years. **There is no expectation**

that any well can be successfully re-abandoned to DOGGR standards, which would render the area over it undevelopable, even following an overwhelming expenditure. As an example, two residential projects completed in 2007 and 2010 were required to re-abandon 13 wells at a total cost of \$4,450,000 (an average cost per well of \$314,000).

Project Re-abandonment Costs

Aragon	81 condominium units	3 acre site	9 Previously abandoned wells	Total Abandonment Cost \$3,500,000	Cost Per Well \$390,000
Signal Hill Collection	54 condominium units	2.25 acre site	4 Previously abandoned wells	Total Abandonment Cost \$950,000	Cost Per Well \$238,000

4. Soil Contamination

The State Regional Water Quality Board and State Department of Toxic Substances Control require any soils contamination (including hydrocarbons related to oil production) to be exported or remediated to satisfactory levels before dwellings may be constructed.

The character of Signal Hill remains entwined with oil production. This legacy results in substantial constraints to development and negatively impacts the availability of land suitable for residential development in the City. The situation is worsened because traditional lending institutions are more reluctant to finance development in former oil field areas.

5. Earthquake Faults

Due to the presence of three active splinter faults associated with the Newport-Inglewood Fault, sizable portions of Signal Hill are located within the Alquist-Priolo Special Studies Zone. This accounts for the geologic movement resulting in the co-mingling of the hydrocarbon zones related to oil recovery, and the reason DOGGR reports that well abandonments don't meet their standards, and should not be built over. **The fault zone cuts diagonally across the entire City.** In addition, the State Geologist and State Law prohibit structures from being constructed across the trace of an active fault or within 50 feet of the fault trace. This effectively creates a 100-foot "no build" zone along the length of any fault, across the entire City.

The precise locations of earthquake faults can only be determined upon exhaustive geologic investigation. Recent investigations in Signal Hill have discovered extensive faulting. In 2001, for example, the approved site plan for the residential development of the South Slope of the hilltop area had to be modified to respond to the discovery of previously unknown faults. This resulted in a 17 percent reduction in the number of dwellings ultimately built (100 on 36.4 acres instead of 121).

Implementation of the setback requirements of State Law as contained in the Alquist-Priolo Special Studies Zone Act significantly reduces the availability of land in Signal Hill suitable for urban development.

RHNA Methodology Transit Data

As previously noted, Signal Hill disagrees with the Methodology data regarding “high quality transit access”. Upon review of the RHNA Methodology document, we note that one of the factors identified in the determination of the existing housing need is access to “high quality transit”. **We would like to submit a formal comment that the data identifying Signal Hill as being 91% accessible to high quality transit is inaccurate.** We believe a more refined definition of what constitutes “high quality transit” will result in more accurate data. Signal Hill is crossed by Long Beach bus service; however, to conflate that with an assumption that the majority of the City has walkable access to work and services distorts the intent of the data. As an example, there is no walkable access to rail or bus services for a majority of the population of the City.

In conclusion, we note that there are no constraints listed in the Methodology document that consider oil field activities. Conversely there are multiple other constraints such as flood hazard zones, endangered species, and sea rise level areas, to name only a few that are recognized constraints. This is likely due to the fact that most oil production areas throughout the State are located in rural rather than urban areas where impacts aren’t as significant. Signal Hill is centrally located in the Los Angeles basin and surrounded by the city of Long Beach. We are in close proximity to the largest ports in the United States and the economic hub of one of the three largest cities in the country.

The noted unique and significant constraints to development, density and affordability, which most other communities in the State do not have, serve to greatly limit the number of available development sites and significantly impact the density of development in Signal Hill.

In addition, we oppose the designation that Signal Hill is 91% accessible to “high quality transit”. We respectfully request that these considerations be reflected in the 6th Cycle RHNA methodology and allocation for our City.

Sincerely,



Lori Y. Woods
Honorable Mayor
City of Signal Hill