



Los Angeles County Department of Regional Planning

Planning for the Challenges Ahead



Amy J. Bodek, AICP
Director of Regional Planning

Dennis Slavin
Chief Deputy Director,
Regional Planning

October 23, 2019

TO: Supervisor Janice Hahn, Chair
Supervisor Hilda L. Solis
Supervisor Mark Ridley-Thomas
Supervisor Sheila Kuehl
Supervisor Kathryn Barger

FROM:  Alex Garcia, Supervisor
Zoning Enforcement Special Projects

ADVISORY PANEL REPORT ON BOARD MOTION REGARDING THE OIL AND GAS STRIKE TEAM FOR UNINCORPORATED LOS ANGELES COUNTY (MARCH 29, 2016 – AGENDA ITEM NO. 12)

On March 29, 2016, the Los Angeles County Board of Supervisors (Board) passed a motion instructing the Director of Regional Planning (DRP), in coordination with the Fire Chief, Director of the Department of Public Health, and Director of the Department of Public Works to convene a Strike Team to assess the conditions, regulatory compliance and potential public health and safety risk associated with existing oil and gas facilities in unincorporated Los Angeles County. The Board instructed the Strike Team to report back on a biannual basis with a summary of its findings and any recommendations on legislative and regulatory positions that the Board should consider. The Strike Team's seventh biannual report was submitted to the Board on September 26, 2019.

The Board also requested that a five-member Advisory Panel be established, comprised of one appointee from each Supervisor with an expertise in oil and gas exploration and production, to work in conjunction with the Strike Team to assess the team's findings and recommendations and to provide a report to the Board on this assessment no later than 30 days after the Strike Team's report is submitted to the Board. The appointed Advisory Panel members are:

- First District Board Office appointee – Julia May
- Second District Board Office appointee – Andrew Weissman
- Third District Board Office appointee – Timothy O'Connor
- Fourth District Board Office appointee – Matt Rezvani

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- Fifth District Board Office appointee – R. Rex Parris

The Advisory Panel's public meeting was held on October 21, 2019 to discuss the Advisory Panel's assessment of the Strike Team's report. Those Advisory Panel members who participated in the meeting were:

- First District Board Office appointee – Julia May
- Third District Board Office appointee – Timothy O'Connor
- Fourth District Board Office appointee – Matt Rezvani

This submittal includes the Advisory Panel's assessment of the Strike Team's seventh biannual report, including written comments from Advisory Panel members appointed by the First, Third, and Fourth Supervisorial Districts. The Advisory Panel report can be accessed on DRP's web page at planning.lacounty.gov/oil-gas/strike.

The next Oil and Gas Strike Team report to the Board is due on March 29, 2020, and the Advisory Panel report will follow no later than 30 days after that date. Should you have any questions about this report, please contact Timothy Stapleton, Zoning Enforcement Special Projects section, at tstapleton@planning.lacounty.gov or (213) 974-6453.

AG:ts

Attachment: planning.lacounty.gov/assets/upl/project/oil-gas_advisory-panel_20191023-report.pdf

c: Executive Office, Board of Supervisors
Chief Executive Office
County Counsel
Fire Department
Department of Public Health
Department of Public Works

FIRST DISTRICT
ADVISORY PANEL MEMBER
JULIA MAY
COMMENTS

Date: 10/22/2019

From: Julia E. May, First District Representative, Los Angeles County Oil & Gas Striket team
Advisory Committee

To: Timothy Stapleton and Board of Supervisors

Re: **Comments on Oil and Gas Assessment Project Phase II – Report Number 2 County of Los Angeles September 24, 2019 on Abandoned & Orphaned Wells, Pipelines, Oil & Gas Storage, and Hazardous Materials use**

These are comments I presented at the Advisory Committee meeting yesterday. We had a robust discussion.

1. **I appreciate the great deal of work** done on the most recent report.
2. **Thank you for adding CalEnviroScreen factors as a prioritization factor for action**, since the last report, as I requested. This identifies abandoned and orphaned wells in low income and highly pollution-burdened community census tracts. More information can be gleaned in the future from such data, although this will require a more detailed look.
3. **I also appreciate the comments of other Advisory Committee members including Timothy O'Connor and Matt Rezvani**, many which still need to be addressed, as do some of my own.
4. **Clearly there are data gaps or difficulties in accessing key information** on abandoned & orphaned wells, pipelines, hazardous material use, storage, and other issues. It appears from the discussion that many of this key infrastructure has not been tracked as necessary over time.
5. **As a result, this investigation is still at an interim point.** Many next steps have been identified, leading to developing recommendations later. Thus my comments are generalized at this point. However, it is clear the process has the potential to lead to much better coordinated and detailed data on oil and gas infrastructure and hazards.
6. **I have a few new requests and comments:**
 - a. **I am concerned about follow-up on Mr. Rezvani's comment regarding pipelines owned by larger companies, which have been sold to smaller companies that may not have the same resources.** I strongly support follow-up, as pipeline ruptures onto public streets have occurred in the past.
 - b. **Please provide specific locations (such as addresses) of abandoned and orphaned wells**, at least for the highest priority wells.
 - c. **Providing all report maps in interactive online format would make them much more useful.** As they are now, many points can be only seen as overlapping

clusters, rather than individual points, and don't provide the report reader with enough specific information on locations. Ability to zoom in with high resolution would make these maps meaningful to local folks.

- d. **There is a great need to consider earthquake impacts on health and safety relating to all of the oil and gas infrastructure discussed in the report.** I would appreciate highlighting this recommendation to the Board of Supervisors, since major earthquakes could happen any time. Earthquake issues would be consistent with the efforts to identify health and safety hazards relating to these operations. While it is a major subject, a start needs to be made.
- e. **Please include information in the next report about the dramatic explosion at Nustar petroleum storage last week in Northern California, and any similarities between this facility and other Oil and Gas storage facilities in unincorporated LA County.** While the Nustar explosion and burning of two tanks involved ethanol, many nearby tanks were threatened, including crude oil storage. This facility was connected by pipeline to other facilities including the nearby Phillips 66 refinery. The explosion caused shutdown of the nearby freeway for 7 hours, spilling traffic onto local roads, which may have delayed mutual support of other oil industry fire resources. (The fire marshall reported during a press conference that mutual aid fire fighting resources of the petroleum industry had arrived, but this was two hours after the fire started.) Nustar employees were reported to have fled for their lives, failing to turn on fire suppression, but locking the gate, impeding fire department access. The resulting brush fire on the hillside required a helicopter, tractor to cut fire lines, and dozens of fire fighters. There was speculation on whether a small earthquake the night before could have led to this dangerous malfunction.
- f. **Please include at least preliminary information in the next report about emergency response resources for fires and explosions relating to oil and gas infrastructure.** Although this is a major topic in itself, this fits with the reports' identified next steps to identify recommendations on health and safety evaluation relating to oil and gas infrastructure.
- g. **Please also provide in the next update the chemicals and amounts reported for each company in Table 5.1 -- Facilities with the Largest Quantity of Chemicals,** since the work of pulling this information together is already done. It would be helpful and appreciated for the reader to have the specific information.
- h. **It would be helpful to have minutes of the Advisory Committee discussion provided after the meeting to the members, and to the Board of Supervisors.**

Thank you to the County Board of Supervisors and staff for consideration.

Julia E. May, First District Representative, Advisory Committee, LA County Oil & Gas Striketeam (Senior Scientist, Communities for a Better Environment, CBE, julia@cbeval.org)

THIRD DISTRICT
ADVISORY PANEL MEMBER
TIMOTHY O'CONNOR
COMMENTS

October 22, 2019

Timothy Stapleton, AICP
Zoning Enforcement West
Department of Regional Planning
320 W. Temple Street
Los Angeles, CA 90012

Re: Comments of Tim O'Connor (District 3 rep.) and EDF on the LA County Oil Well Strike Team's Biannual Report No. 7 (Phase II, Report No. 2)

Dear Mr. Stapleton and members of the LA County Oil Well Strike Team,

Please accept these comments on the sixth report of the LA County Oil Well Strike Team (Phase II, Report No. 2).

We again commend the effort maintained by your staff and experts to make progress on the lengthy but necessary task of conducting a comprehensive evaluation of the oil and gas industry in Los Angeles - in conformance with the direction within the LA County Board of Supervisors March 29, 2016 motion and follow-on September 4, 2018 direction.

In support of the Strike Team's effort, and to help ensure the work both lays a transparent foundation for appropriate action, and considers the most up to date information, please accept these comments and recommendations for inclusion in the Strike Team report as follows:

Comments on idle, abandoned and hazardous wells

- The Strike Team report proposes a prioritization matrix for idle, abandoned and hazardous wells based on a series of factors, including age of wells/field, proximity to people, and whether the well is in a disadvantaged community as identified within the Cal EnviroScreen 3.0 tool. While the clarity and transparency of the factors going into this prioritization seems appropriate, there may be other relevant indicators of the propensity of a well to leak and cause impacts to human health and the environment. For this reason, the Strike team should affirmatively seek out an external review of the chosen factors / prioritization matrix it has developed. Researchers at Stanford University led by Rob Jackson - rob.jackson@stanford.edu – would be especially capable of performing this review.
- My prior comments made after the first report in this series stated that additional criteria should be considered for the prioritization matrix, such as 1) water level recordings during regular tests by operators and 2) observations in county or other well records of negative integrity indications. While several of my other recommendations for inclusion were taken, an explanation of why these were not would be appreciated.
- In my prior comments I recommended the Strike team seek out water level records from DOGGR (now CalGEM) and add to the matrix a score for whether well records indicate any

communication between well liquids and the surrounding geologic formation. The report includes a reference to this work on page 13, saying that “DOGGR provided DRP with an excel spreadsheet with water level data from idle wells within the Los Angeles County.” However, my review of the report did not find anything related to what that data showed or any incorporation into the prioritization matrix. The strike team should provide an explanation of what that data showed and a discussion of its usefulness for evaluating well integrity.

- Recently the California state legislature passed AB 1328 related to idle and abandoned well testing. This bill, thereafter signed by the Governor will result in significant testing for human health and local air contaminants coming from these wells across California. The Strike Team should reach out to state officials at CalGEM in charge of implementing this bill to ensure they are aware of the prioritization matrix that has been developed, and to capitalize on the investment in air monitoring that will be conducted by the state – making sure it is being deployed to advance the study of wells envisioned in this project.
- With respect to the next steps in this process, it is clear that the Strike Team plans to visit some or all high priority wells and evaluate their condition. Some of these wells are likely to be located under structures or on private land. Further, some of these wells are likely going to be leaking hydrocarbons or other compounds. To ensure the strike team performs a meaningful assessment of each of these wells, a clear protocol for site evaluation is needed. The Strike team should therefore share the draft site evaluation protocol with the panel before it becomes final and put to use, including the methodology that will be employed for finding the well, notifying the well owner in advance, sampling air emissions at the well, and dealing with wells that are inaccessible.

Comments on the evaluation of pipelines

- Based on the report and comments at the October 21, 2019 meeting of the Advisory Panel, it appears that the Strike Team plans to create a prioritization matrix for pipelines as it is doing for idle wells. This is an important task and the proposed criteria being used appear to be appropriate for this action. In addition to those proposed for evaluation though (and included in my prior letter from April 2019), the Strike team should include the additional factor of whether the pipeline operator has paid for and is maintaining a valid certificate of conveyance for operation in the public right-of-way. Operators who are not maintaining their permits according to the law are less likely to be keeping abreast of pipeline quality, and thus may be an indicator of pipeline integrity.
- As stated in the report, the actual miles of pipe listed for natural gas does not include So Cal Gas data. To the extent the report includes a number for miles of pipe in natural gas service, it should strive for accuracy by seeking out and including So Cal Gas pipeline data.

Comments on the evaluation of oil and gas storage facilities

- Although this comment was made in my prior letter of April 2019 to the Strike Team, it is of renewed relevance because the Strike Team is only now getting to the evaluation of storage

systems. The Strike Team should conduct a thorough assessment of the Playa Vista gas storage facility owned and operated by So Cal Gas. At that facility, nearby residents have complained for years of strong odors and releases of gas. As a result, the Strike team should seek out the information for nearby residents and open the door to enhanced participation in this area of the report. To the extent that the county decides the facility is not within the charge area of the study, the Strike Team should provide a clear explanation why not, and then evaluate the lateral extent of subsurface stored gas to determine whether any below-ground gas storage extends into the county as opposed the facility fence line.

Comments on the evaluation of hazardous chemicals

- My prior letter of April 2019 includes numerous comments on this issue. I reiterate those here since the Strike team has made little progress on this issue.
- As it relates to hazardous chemicals, the report seems to miss a discussion of the chemicals and constituents that are naturally entrained in the oil itself (and brought to the surface through produced water), or contained in leaks from oil and gas sites. As a result, it appears that the Strike Team is reading its direction from the board on this issue “Review chemicals at oil and gas facilities not identified in Hazardous Materials Business Plans” in an overly narrow manner – because there are many chemicals that can be found from the oil and gas itself.
- As to the chemicals entrained in oil and gas leaks, there has been a lot of research – one such research report was written by EDF and summarizes a lot of the science on the hazardous compounds found in leaks. - https://www.edf.org/sites/default/files/california-monitoring_filling-the-void.pdf You can also see a CARB report on chemicals included in oil and gas leaks by Sage Environmental – CARB, (2015), “Air Resources Board RFP No. 13-414: Enhanced Inspection & Maintenance for GHG & VOCs at Upstream Facilities— Final (Revised),” Prepared by Sage ATC Environmental Consulting LLC, https://www.arb.ca.gov/cc/oil-gas/sage_i&m_ghg_voc_dec2016.pdf
- Given that the hazardous chemicals associated with hydraulic fracturing processes can additionally be used in on-site storage facilities and transportation of oil and gas, information related to their usage in such processes.
- As to produced water, much has been written about this. In considering spills of produced water, the Strike Team should investigate further the presence of hazardous chemicals such as benzene and compare the level of chemicals present to established exposure limits.

Thank you for considering these comments moving forward.

Sincerely,

Timothy O’Connor
County District 3 Representative, Oil and Gas Strike Team Advisory Panel
Senior Director and Senior Attorney, Energy Program, Environmental Defense Fund

FOURTH DISTRICT
ADVISORY PANEL MEMBER
MATT REZVANI
COMMENTS

October 17, 2019

Timothy Stapleton, AICP
Zoning Enforcement West
Department of Regional Planning
320 W. Temple Street
Los Angeles, CA 90012

Subject: Strike Team's Biannual Report number 7 - Comments of Matt Rezvani, representing 4th District.

Dear Mr. Stapleton and members of the LA County Strike Team,

We appreciate the efforts of the strike team and the staff in this lengthy task of obtaining an inventory and determining the status of oil and gas wells, pipelines and facilities in unincorporated sections of LA County.

My comments on this report addresses three areas: Abandoned and Orphan Wells, Hazardous Liquid Pipelines and Chemicals present in LA County.

Abandoned and Orphan Wells

As is evident in the report, there are significant numbers of abandoned and orphan oil and gas wells in LA County. Some of which, from time to time, present safety and possibly health hazards to members of the community. As it has been appropriately reported, rework and closure of these old wells is the responsibility of DOGGR. The county should advocate additional state funding for identifying and prioritizing and closing of the old orphan wells according to the latest well closure standard.

Hazardous Liquid Pipelines

The report does a great job of identifying federal and state laws and regulations, as wells as the regulatory agencies having jurisdiction over oil and gas pipelines. The report also identifies the number of lines and the operators. Unfortunately, the report lacks the maintenance data the status, and the leak history on these lines.

In the past few years a great number of oil pipelines in California, and in LA County that were historically owned and operated by reputable large oil companies have been acquired by investment firms with limited resources. It is significantly important for the county to understand the status of these pipelines, their maintenance records and leak history. Additionally, aside from Hazardous Liquid Pipelines there may be a number of pipelines that carry hazardous materials that may not be included in the definition of Hazardous Liquid Lines. Those could be lines transporting hazardous liquids and/or gases such as Anhydrous Ammonia,

Hydrogen, Sulfuric acid and other hazardous liquids and gases. I recommend the county consider obtaining an inventory of these lines and their status. It is vital for the County to understand the safety hazards of such lines, their locations and potential safety and health consequences in case of a leak.

Chemicals Present in LA County

Finally, the report identifies significant amount of chemical being used and stored in LA County. It would be helpful to have a section on the report from the Health Department on impact of such chemical, if any, on public health, considering the quantities reported in the report.

Matt Rezvani