



## MEMORANDUM

**Date:** July 9, 2019

**From:** Gerry Beaudin, Director of Community Development – Community Development Department

**Subject:** Case Nos. PUD-105 and P14-0852 / Johnson Drive Economic Development Zone (JDEDZ)  
Supplemental Air Quality Analysis

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Following the City's certification of the Supplemental Environmental Impact Report (SEIR) and approval of the JDEDZ, "an unincorporated association" of persons calling themselves Pleasanton Citizens for Responsible Growth (the "Petitioners") filed a lawsuit asking the court to rescind the City Council's JDEDZ approvals due to alleged violations of the California Environmental Quality Act (CEQA). Petitioners alleged that the SEIR had an incomplete air quality analysis related to the Stoneridge Apartment Community (located on the west side of I-680 near Stoneridge Mall at 6250 through 6450 Stoneridge Mall Road). In September 2018, the City and Costco agreed to rescind the JDEDZ approvals in order to perform supplemental air quality analysis for the JDEDZ project. In return, Petitioners dismissed the lawsuit.

In working with the City's outside counsel, Rick Jarvis of Jarvis, Fay & Gibson, LLP, and environmental consultant, Environmental Science Associates (ESA), the City decided to expand the scope of work beyond the supplemental air quality analysis in order to more comprehensively identify and mitigate for any additional impacts created by the JDEDZ. Accordingly, the City directed ESA to prepare the following analyses:

- Health Risk Assessment (HRA)
- Updated Air Quality Technical Memorandum – Criteria Pollutant Emissions Analysis
- Greenhouse Gas Analysis
- Energy Resources Technical Memorandum

The methodology and a summary of the findings, as well as any newly identified impacts and mitigations, unveiled by the analyses listed above is provided in subsequent sections of this memorandum. Full copies of each of the analyses, including their appendices and/or any attachments are attached to this memorandum and/or are available by request to the City's Planning Division.

Additionally, this memorandum includes a summary of the findings of the Economic Impact Analysis prepared by ALH Economics that was circulated for public comment as part of the Draft SEIR in 2015. No changes have been made to the Economic Impact Analysis; however, the City has agreed to recirculate this analysis for additional public comment pursuant to a request from the Petitioners. The full Economic Impact Analysis including any appendices and/or any attachments are attached to this memorandum and/or are available by request to the City's Planning Division.

JDEDZ

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**Health Risk Assessment**

The HRA evaluates potential health risks associated with toxic air contaminants (TACs) resulting from the JDEDZ. Health risks were assessed for exposure of nearby sensitive receptors to TAC emissions resulting from construction and operation of the JDEDZ. The HRA was conducted to evaluate whether construction and operation of the JDEDZ would expose sensitive receptors to substantial concentrations of TACs or respirable particulate matter, and whether JDEDZ project-level impacts related to TAC exposure would be significant. The HRA was also prepared to assess the exposure of sensitive receptors to cumulative concentrations of TACs and respirable particulate matter from construction and operation of the JDEDZ when combined with past, present and other reasonably foreseeable development in the vicinity, including existing permitted stationary sources and Interstates 680 and 580.

The HRA evaluates JDEDZ risks at existing on-site businesses and surrounding residential units, businesses and fitness clubs that are within 1,000 feet of the JDEDZ boundary. Both sensitive receptors and worker receptors within the study domain were included. Although the Bay Area Air Quality Management District (BAAQMD) does not consider worker receptors as sensitive receptors, and therefore does not require that HRAs include worker risk evaluation, the HRA includes worker risk for existing off-site and existing on-site worker exposures to provide a comprehensive and conservative assessment of potential risk associated with the JDEDZ.

***The maximum potential lifetime excess cancer risk associated with the JDEDZ is 5.4 in a million (occurs at an off-site residential receptor location), which would not exceed the BAAQMD cancer risk threshold of 10 in a million. The maximum potential chronic health risk associated with the JDEDZ is 0.52 (occurs at an off-site worker receptor location), which would not exceed the BAAQMD's hazard index threshold of 1. The maximum potential annual average PM<sub>2.5</sub> concentration associated with the JDEDZ is 0.22 micrograms per cubic meter (µg/m<sup>3</sup>) (occurs at an off-site worker receptor location), which would not exceed the BAAQMD's threshold of 0.3 µg/m<sup>3</sup>. Therefore, JDEDZ project-level impacts due to exposure of TACs to sensitive receptors would be less than significant.***

***The maximum potential cumulative lifetime excess cancer risk associated with the JDEDZ and all background TAC sources within 1,000 feet of the project is 86.5 in a million (occurs at an off-site worker receptor location), which would not exceed the BAAQMD cumulative cancer risk threshold of 100 in a million. The maximum potential cumulative chronic health risk associated with the JDEDZ is 0.64 (occurs at an off-site worker receptor location), which would not exceed the BAAQMD's hazard index threshold of 10. The maximum potential cumulative annual average PM<sub>2.5</sub> concentration associated with the JDEDZ is 0.59 µg/m<sup>3</sup> (occurs at an off-site worker receptor location), which would not exceed the BAAQMD's threshold of 0.8 µg/m<sup>3</sup>. Therefore, cumulative impacts due to exposure of TACs to sensitive receptors would be less than significant.***

**Updated Air Quality Technical Memorandum - Criteria Pollutant Emissions Analysis**

The technical memorandum presents the updated criteria pollutant emissions analysis for Section 4.B – Air Quality of the SEIR for the JDEDZ. As noted above, a HRA has been prepared and is also being added to the SEIR. Consistent with new modeling data used for the HRA, this technical memorandum supplements Section 4.B of the Draft SEIR with an updated analysis of criteria pollutants emissions including reactive organic carbon (ROG), nitrogen oxides (NO<sub>x</sub>), construction related exhaust particulate matter (PM), particulate matter with an aerodynamic diameter equal to or less than 10 microns (PM<sub>10</sub>), particulate matter with an aerodynamic diameter equal to or less than 2.5 microns (PM<sub>2.5</sub>), and carbon monoxide (CO).

**COMMUNITY DEVELOPMENT – P. O. BOX 520, Pleasanton, CA 94566-0802**

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The technical memorandum also discusses health effects of criteria pollutants along with the JDEDZ’s potential cumulative health-related impacts consistent with the California Supreme Court’s ruling in *Sierra Club v. County of Fresno* (2018) 6 Cal.5th 502.

Consistent with the HRA, this analysis uses the updated and conservative assumptions about the timing of construction and the scope of project-related activity within the JDEDZ project area. For near-term activities, such as the first phase of construction, realistic assumptions are made based on the anticipated construction activity and phasing of development. For longer-term activities that may occur beyond the first phase of development, such as the development of commercial and retail space during phase 2, more conservative assumptions were made in order to provide a worst-case analysis of potential JDEDZ impact, because the actual construction activity and phasing of this development is currently unknown. These assumptions are provided in greater detail in Chapter 1 of the technical memorandum.

For construction, this analysis shows the Project’s criteria pollutant emissions are below the corresponding BAAQMD significance thresholds except for NO<sub>x</sub> emissions from Phase 1 construction. Phase 1 construction NO<sub>x</sub> emissions are estimated to be an average of 55.74 pounds per day (lbs./day), exceeding the significance threshold of 54 lbs./day. Therefore, mitigation is required to reduce JDEDZ impacts during Phase 1 construction. As such, all off-road equipment greater than 50 horsepower would be required to have engines that meet United States Environmental Protection Agency (USEPA) Tier 3 off-road emission standards.

**Implementation of this mitigation measure would reduce this impact to a less-than-significant level.**

For operations, Phase 1 operational activities are estimated to be an average of 54.60 pounds of ROG per day (lbs./day), exceeding the significance threshold of 54 lbs./day. Therefore, mitigation is required to reduce JDEDZ impacts during Phase 1 operations. As such, the JDEDZ would require all future tenants and building owners to use low-volatile organic compound (VOC) paints during maintenance activities. The VOC content of paints shall not exceed 10 grams of VOCs per liter. **Implementation of this mitigation measure would reduce this impact to a less-than-significant level.**

Because of certain updated JDEDZ project details used in this analysis as compared to those used in the Draft SEIR (e.g. changes in square footage of some proposed land uses, construction phasing and equipment fleets), the conclusions with regard to the JDEDZ’s criteria pollutants emissions have changed with this updated analysis. ***For example, conclusions about construction emissions changed from less than significant for all criteria pollutants in the Draft SEIR to less than significant with mitigation in this updated analysis (due to average daily unmitigated emissions during Phase 1 construction exceeding the BAAQMD threshold); the conclusions about project operational emissions have changed from significant and unavoidable impacts (attributable to average daily and total annual NO<sub>x</sub> and PM<sub>10</sub> emissions) during full buildout operations in the Draft SEIR to less than significant for all operational scenarios including the full buildout operations.***

**Greenhouse Gas Analysis**

Following the original approval of the project and certification of the JDEDZ SEIR, the California Office of Planning and Research adopted amendments to the CEQA Guidelines, including changes to CEQA Guidelines section 15064.4 addressing analysis of GHG emissions. Further, Senate Bill 32 (2016) set a statewide GHG emissions reduction target of 40 percent below 1990 levels by 2030. The amendments became effective on December 28, 2018. The City’s adopted Climate Action Plan (CAP) is only considered qualified through 2020 for purposes of GHG analysis under CEQA, but project buildout is expected to occur beyond 2020. In

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JDEDZ

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accordance with these legislative changes, the City has added analysis of the project’s GHG emissions to the recirculated SEIR.

Pursuant to revised section 15064.4 and Appendix G of the Guidelines, the City has discretion whether to assess GHG emissions quantitatively or qualitatively and to establish thresholds of significance. Since there is no applicable quantitative threshold (e.g., neither the City’s CAP nor the Bay Area Air Quality Management District’s emissions threshold are qualified to be consistent with SB 32’s 2030 targets), the City used the qualitative threshold provided in CEQA Guidelines section 15064.4(b), which considers whether the Project complies with applicable plans, policies, regulations, and requirements adopted to implement a statewide, regional, or local plan for the reduction or mitigation of greenhouse gas emissions.

The California Air Resources Board’s 2017 Scoping Plan Update is intended to reduce GHG emissions to meet the statewide targets set forth in SB 32. The Association of Bay Area Governments’ (ABAG) and Metropolitan Transportation Commission’s (MTC) Plan Bay Area 2040 is designed to achieve regional GHG reductions from the land use and transportation sectors as required by SB 375 and the state’s long-term climate goals. The City’s CAP is designed to reduce local GHG emissions to support the statewide target for 2020 set forth in AB 32 and put the City on an emissions trajectory that is consistent with the State’s longer-term targets.

The City’s GHG analysis determined that the project would be consistent with the 2017 Scoping Plan Update, Plan Bay Area 2040, and the City’s CAP. The analysis found that because the Project is consistent with these applicable plans and policies to reduce GHG emissions, and because the Project implements certain project design features (e.g. EV charging stations), the Project would generate an incremental contribution to climate change compared to existing conditions, but would not generate enough GHG emissions on its own to significantly influence global climate change. **Therefore, the analysis determined that the project would not have a significant effect on the environment.**

**Energy Resources Technical Memorandum**

The technical memorandum analyzes the impacts on energy resources due to construction and operation of the JDEDZ. In accordance with the requirements of the CEQA Guidelines, specifically Appendix G, Environmental Checklist, and Appendix F, Energy Conservation, this assessment provides an estimate of energy consumption for the JDEDZ and the potential impacts from associated construction and operational activities. The assessment includes the categories and types of energy consumption resulting from the JDEDZ, the calculation procedures used in the analysis, and any assumptions or limitations.

Construction of the JDEDZ would occur in two phases. Phase 1 would begin in 2020 with a one-year duration and Phase 2 would begin in 2030 with a one-year duration. Each of the construction phases would utilize energy for necessary on-site construction activities and to transport materials, soil, and debris to and from the site. Phase 1 construction would consume approximately 114,345 gallons of diesel and 19,813 gallons of gasoline during the one-year construction timeframe. Phase 2 construction would consume approximately 64,504 gallons of diesel and 14,051 gallons of gasoline during the one-year construction timeframe.

Phase 1 diesel consumption would represent approximately 0.10 and 0.003 percent of total 2017 diesel fuel consumption in Alameda County and California, respectively. Phase 1 gasoline consumption would represent approximately 0.006 and 0.0002 percent of County and State 2017 gasoline consumption, respectively. Phase 2 diesel consumption would represent approximately 0.06 and 0.002 percent of County and State 2017 diesel consumption, respectively. Phase 2 gasoline consumption would represent approximately 0.002 and 0.0001

**COMMUNITY DEVELOPMENT – P. O. BOX 520, Pleasanton, CA 94566-0802**

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percent of County and State 2017 gasoline consumption, respectively. The estimated annual average construction fuel usage would represent a very small fraction of annual (2017) fuel usage in Alameda County and the State. As stated in the HRA prepared for the JDEDZ, Phase 1 would not require haul trucks to export rubble resulting from the demolition of existing buildings at the site; all rubble and new construction and demolition debris would be reused on-site. By using this material on-site as construction base, the JDEDZ would eliminate both disposal trips for the demolition debris and haul trips for new aggregated fill material, thus eliminating the diesel fuel consumption associated with each truck trip. The JDEDZ would comply with applicable construction regulations that affect energy demand, such as idling restrictions that would result in less fuel combustion and energy consumption and minimize the JDEDZ's construction-related energy use. **As a result, construction energy impacts would be considered less than significant.**

Operational energy consumption would occur from building energy needs (electricity and natural gas), off-site water supply and wastewater treatment, and from transportation fuels (e.g., diesel and gasoline) used for vehicles traveling to and from the site, transportation refrigeration units (TRUs), and emergency generators. JDEDZ operations would occur in two phases. Phase 1 operations would commence in 2021 and Full Buildout operations would commence in 2031.

Phase 1 operations would have an annual electricity demand of approximately 5.19 million kilowatt-hours (kWh), which represents approximately 0.006 percent of Pacific Gas & Electric Company (PG&E) network sales for 2017. Phase 1 operations would represent approximately 0.05 percent of electricity supplied by PG&E to the County in 2017. Phase 1 operations would have an annual natural gas demand of approximately 4.43 million standard cubic feet (scf), which represents approximately 0.002 percent of the PG&E network sales for 2017. Phase 1 operations would represent approximately 0.01 percent of natural gas supplied by PG&E to the County in 2017.

Phase 1 operations would consume approximately 94,880 gallons of diesel and 1,089,881 gallons of gasoline annually associated with vehicle trips. Phase 1 diesel consumption would represent approximately 0.08 percent and 0.002 percent of County and State 2017 diesel consumption, respectively. Phase 1 gasoline consumption would represent approximately 0.19 percent and 0.007 percent of County and State 2017 gasoline consumption, respectively.

Full Buildout operations would have an annual electricity demand of approximately 7.07 million kWh, which represents approximately 0.009 percent of PG&E's network sales for 2017. Full Buildout operations would represent approximately 0.06 percent of electricity supplied by PG&E to the County in 2017. Full Buildout operations would have an annual natural gas demand of approximately 4.73 million scf, which represents approximately 0.002 percent of PG&E's network sales for 2017. Full Buildout operations would represent approximately 0.01 percent of natural gas supplied by PG&E to the County in 2017.

Full Buildout operations would consume approximately 237,540 gallons of diesel and 1,342,830 gallons of gasoline annually associated with vehicle trips. Full Buildout diesel consumption would represent approximately 0.21 and 0.006 percent of County and State 2017 diesel consumption, respectively. Full Buildout gasoline consumption would represent approximately 0.23 and 0.009 percent of County and State gasoline 2017 consumption, respectively.

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The amount of energy used would represent an insubstantial fraction of the region’s available energy supply and capacity. The JDEDZ would be consistent with energy efficiency standards in the applicable Title 24 Energy Efficiency Standards for Nonresidential Buildings and the Title 24 Building Energy Efficiency Standards, referred to as the California Green Building Standards (CALGreen) Code and include electric vehicle supply equipment (EVSE) to promote transportation energy efficiency. Additionally, the Costco warehouse would be designed to include solar at the time of opening which would reduce its consumption of electricity provided by PG&E.

**Because the JDEDZ would be consistent with energy efficient building standards and promote transportation energy efficiency, it would not result in the wasteful, inefficient, and unnecessary consumption of energy or preclude opportunities for improving overall fuel efficiency and future energy conservation. The JDEDZ project also would not conflict with or obstruct a state or local plan for renewable energy or energy efficiency. As a result, operational energy impacts would be considered less than significant.**

**Economic Impact Analysis**

The Economic Impact Analysis prepared by ALH Economics, was circulated for public comment as part of the Draft SEIR in 2015. No changes have been made to the Economic Impact Analysis; however, the City has agreed to recirculate this analysis for additional public comment pursuant to a request from the Petitioners.

**As a refresher, the Economic Impact Analysis indicates that impacts generated by the JDEDZ on the market area’s<sup>1</sup> existing retail environment would be limited.** The Economic Analysis projects that Phase I sales in the JDEDZ (i.e., the sales resulting from a club retail use and a limited amount of general retail uses) could result in a decrease in annual sales by existing market retailers of approximately \$26.7 million, or 0.9 percent of the market area’s existing \$3 billion in annual retail sales, which is a nominal impact.

The proposed JDEDZ’s effect on the local economy is projected to be focused in three specific retail categories: gasoline stations, home furnishings and appliances, and food and beverages. In the first two categories (gasoline stations, and home furnishings and appliances), sales within the JDEDZ would amount to a combined 1.1 percent or less of existing market area sales, which would not be considered substantial when spread among the numerous gas stations and home furnishing and appliance stores in the market area. While food and beverage sales within the JDEDZ would amount to 7.4 percent of existing market sales, the new market demand alone generated between now and buildout of the JDEDZ would be sufficient to recompense existing businesses for these potentially diverted sales. Accounting for the fact that sales diverted from existing stores to a club retail use would be widely dispersed among numerous supermarkets, ethnic food stores, and other small food markets (rather than concentrated in a single store or small number of stores), there would be limited effects on existing food and beverage retailers.

**The Economic Impact Analysis also concludes that the JDEDZ would have no adverse economic effects on downtown businesses,** primarily because downtown offers a unique and different shopping environment than a club retailer, and most downtown businesses sell goods that are quite different from those sold at club retailers. On the positive side, the economic study also notes that a Costco could generate enhanced visibility for existing businesses in the proposed JDEDZ, benefits associated with local availability of low-cost food and gas, and possible long-term increases in property values.

<sup>1</sup> The “market area” for this study comprises 18 full census tracts and three partial census tracts spanning the City of Pleasanton, the majority of the City of Dublin, and some unincorporated Alameda County areas south of the City of Pleasanton and northwest of the City of Dublin. The market area was determined through review of drive times to the project site and the locations of other nearby club retail stores, with consideration also given to natural and man-made features, such as topography and freeway access.

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**Conclusion**

With the supplemental environmental analyses now complete, pursuant to CEQA, the City is now recirculating the revised environmental analyses as well as the previously circulated Economic Impact Analysis for public comment. **That public comment period will be 45 days commencing at 8:00 a.m. on July 10, 2019 and ending at 5:00 p.m. on Friday, August 23, 2019.** All public comments should be sent in writing or via email to:

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Subsequent to the public comment period and consideration of and response to any comments as required by CEQA, City staff intends to schedule the JDEDZ project for reconsideration by the Planning Commission and City Council in the Fall of 2019.

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**COMMUNITY DEVELOPMENT – P. O. BOX 520, Pleasanton, CA 94566-0802**

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