

# Initial Environmental Study

**1. Project Title:** City of Arcadia

Goldring Well and PFAS Treatment Plant

**2. Lead Agency Name and Address:**

City of Arcadia  
240 West Huntington Dr.  
Arcadia, CA 91066

**3. Contact Person and Phone Number:**

Tiffany Lee, Senior Civil Engineer  
(626) 254-2721

**4. Project Location:** Within the City of Arcadia, Intersection of Kardashian Avenue and Goldring Road

**5. Project Sponsor's Name and Address:**

City of Arcadia  
240 West Huntington Dr.  
Arcadia, CA 91066

City of Sierra Madre  
232 West Sierra Madre Blvd.  
Sierra Madre, CA 91024

**6. General Plan Designation:**

The Project site is located within the City of Arcadia and the site is designated as Government Use in the City of Arcadia General Plan.

**7. Zoning:** The Project site is zoned as a Public Facility (PF) within the City of Arcadia. The area is zoned as Industrial (M-1) on the west side of Kardashian and on the north side of Goldring Road.

**8. Description of the Project:** (Describe the whole action involved, including but not limited to later phases of the Project, and any secondary, support, or off-site features necessary for its implementation. Attach additional sheets if necessary).

The proposed project consists of the construction and operation of a groundwater production well, the construction and operation of a Granular Activated Carbon (GAC) or Ion Exchange (IX) treatment system with pre-filters consisting of 2 pairs of vessels for the removal of Per and Polyfluoroalkyl substances (PFAS) from the extracted groundwater, the construction and operation of a new 30,000 gallons backwash tank with a new 4-inch diameter sewer pipeline, and the construction and operation of a new 30-inch diameter Reinforced Concrete Pipe (RCP) storm drain pipeline approximately 1,400 feet in

length connecting from the cul-de-sac at Kardashian Avenue and Goldring Road, going westerly on Randolph Street and connecting to the existing 57-inch RCP on Peck Road (Project). The City of Arcadia's (City) Goldring Well will be located approximately 200 feet south of the intersection of Kardashian Avenue and Goldring Road, within the existing City's Public Works Yard. The proposed Project is located in an open, paved and graded property with a total size of approximately 5 acres owned by the City. The project construction site for the well, pipeline, and PFAS treatment plant is constrained to a designated area covering roughly 5,000 square feet, equivalent to 0.15 acres in total.

The Project will be located in the Main San Gabriel Basin (Main Basin) and the groundwater supply will be shared between the City of Arcadia and the City of Sierra Madre and will serve to enhance the Cities' existing water supply infrastructure and provide system redundancy.

The Project would include well drilling, well development, well testing, pipeline construction, treatment plant construction and startup testing, and site upgrades. Site upgrades would include the construction of a small well enclosure to house the well pump and discharge piping, and installation of disinfection equipment and electrical equipment in an adjacent existing building. In addition, a new underground pipeline would be installed to connect the new well to an existing water distribution pipeline and a new underground pipeline will be installed to connect to an existing storm drain.

## **9. Surrounding Land Uses and Setting (briefly describe the project's surroundings):**

The proposed Project is located in the City of Arcadia. The surrounding neighborhood includes industrial and light manufacturing properties. Surrounding areas of the proposed Project are shown in photos below.



Industrial property along Kardashian Avenue



Industrial property adjacent to Project area

**10. Other agencies whose approval is required (e.g., permits, financing approval, or participation agreement):**

- State Water Resources Control Board Division of Drinking Water
- Main San Gabriel Basin Watermaster
- County Sanitation Districts of Los Angeles County
- City of Arcadia
- City of Sierra Madre
- Regional Water Quality Control Board
- Los Angeles County Flood Control District
- Los Angeles County Department of Public Health

**ENVIRONMENTAL FACTORS POTENTIALLY AFFECTED:**

The environmental factors checked below could be potentially affected by this project, involving at least one impact that is a "Potentially Significant Impact" as indicated by the checklist on the following pages.

- |   |  |
|---|--|
| <input type="checkbox"/> Aesthetics                         | <input type="checkbox"/> Agriculture and Forestry  |
| <input type="checkbox"/> Air Quality                        | <input type="checkbox"/> Biological Resources      |
| <input type="checkbox"/> Cultural Resources                 | <input type="checkbox"/> Energy                    |
| <input type="checkbox"/> Geology/Soils                      | <input type="checkbox"/> Greenhouse Gas Emissions  |
| <input type="checkbox"/> Hazards and Hazardous Materials    | <input type="checkbox"/> Hydrology/Water Quality   |
| <input type="checkbox"/> Land Use/Planning                  | <input type="checkbox"/> Mineral Resources         |
| <input type="checkbox"/> Noise                              | <input type="checkbox"/> Population/Housing        |
| <input type="checkbox"/> Public Services                    | <input type="checkbox"/> Recreation                |
| <input type="checkbox"/> Transportation                     | <input type="checkbox"/> Tribal Cultural Resources |
| <input type="checkbox"/> Utilities/Service Systems          | <input type="checkbox"/> Wildfire                  |
| <input type="checkbox"/> Mandatory Findings of Significance |  |

**DETERMINATION: (To be completed by the Lead Agency)**

On the basis of this initial evaluation:

- ☐ I find that the proposed project COULD NOT have a significant effect on the environment, and a NEGATIVE DECLARATION will be prepared.
- ☒ I find that although the proposed project could have a significant effect on the environment, there will not be a significant effect in this case because revisions in the project have been made by or agreed to by the project proponent. A MITIGATED NEGATIVE DECLARATION will be prepared.

- ☐ I find that the proposed project MAY have a significant effect on the environment, and an ENVIRONMENTAL IMPACT REPORT is required.
- ☐ I find that the proposed project MAY have a "potentially significant impact" or "potentially significant unless mitigated" impact on the environment, but at least one effect 1) has been adequately analyzed in an earlier document pursuant to applicable legal standards, and 2) has been addressed by mitigation measures based on the earlier analysis as described on attached sheets. An ENVIRONMENTAL IMPACT REPORT is required, but it must analyze only the effects that remain to be addressed.
- ☐ I find that although the proposed project could have a significant effect on the environment, because all potentially significant effects (a) have been analyzed adequately in an earlier EIR or NEGATIVE DECLARATION pursuant to applicable standards, and (b) have been avoided or mitigated pursuant to that earlier EIR or NEGATIVE DECLARATION, including revisions or mitigation measures that are imposed upon the proposed project, nothing further is required.

Tiffany Lee  
Signature

02/10/2025  
Date

Tiffany Lee  
Print Name



	Significant Impact	Less Than Significant or Less than Significant with Mitigation Incorporation	No Impact	Analyzed in the Prior EIR	Substantially Mitigated by Uniformly Applicable Development Policies
I. AESTHETICS -- Except as provided in Public Resources Code Section 21099, would the project:					
a) Have a substantial adverse effect on a scenic vista?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b) Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c) In non-urbanized areas, substantially degrade the existing visual character or quality of public views of the site and its surroundings? (Public views are those that are experienced from a publicly accessible vantage point). If the project is in an urbanized area, would the project conflict with applicable zoning and other regulations governing scenic quality?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
d) Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
II. AGRICULTURE AND FOREST RESOURCES: In determining whether impacts to agricultural resources are significant environmental effects, lead agencies may refer to the California Agricultural Land Evaluation and Site Assessment Model (1997) prepared by the California Dept. of Conservation as an optional model to use in assessing impacts on agriculture and farmland. In determining whether impacts to forest resources, including timberland, are significant environmental effects, lead agencies may refer to information compiled by the California Department of Forestry and Fire Protection regarding the state's inventory of forest land, including Forest and Range Assessment Project and the Forest Legacy Assessment Project; and forest carbon measurement methodology provided in Forest Protocols adopted by the California Air Resources Board. Would the project:					
a) Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

b) Conflict with existing zoning for agricultural use, or a Williamson Act contract?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c) Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code section 12220(g)), timberland (as defined by Public Resources Code section 4526), or timberland zoned Timberland Production (as defined by Government Code section 51104(g))?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
d) Result in the loss of forest land or conversion of forest land to non-forest use?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
e) Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use or conversion of forest land to non-forest use?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<p>III. AIR QUALITY -- Where available, the significance criteria established by the applicable air quality management district or air pollution control district may be relied upon to make the following determinations. Would the project:</p>					
a) Conflict with or obstruct implementation of the applicable air quality plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b) Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard ?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c) Expose sensitive receptors to substantial pollutant concentrations?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
d) Result in other emissions (such as those leading to odors) adversely affecting a substantial number of people?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<p>IV. BIOLOGICAL RESOURCES -- Would the project:</p>					
a) Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b) Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the California Department of Fish and Game or US Fish and Wildlife Service?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

c) Have a substantial adverse effect on state or federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?

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d) Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?

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e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?

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f) Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?

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#### V. CULTURAL RESOURCES -- Would the project:

a) Cause a substantial adverse change in the significance of a historical resource pursuant to in '15064.5?

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b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to '15064.5?

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c) Disturb any human remains, including those interred outside of formal cemeteries?

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#### VI. ENERGY -- Would the project:

a) Result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation?

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b) Conflict with or obstruct a state or local plan for renewable energy or energy efficiency?

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#### VII. GEOLOGY AND SOILS -- Would the project:

a) Directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving:

i) Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State

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Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42.

ii) Strong seismic ground shaking?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
iii) Seismic-related ground failure, including liquefaction?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
iv) Landslides?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b) Result in substantial soil erosion or the loss of topsoil?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c) Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
d) Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial direct or indirect risks to life or property?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
e) Have soils incapable of adequately supporting the use of septic tanks or alternative waste water disposal systems where sewers are not available for the disposal of waste water?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
f) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

#### VIII. GREENHOUSE GAS EMISSIONS

Would the project:

a) Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b) Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

#### IX. HAZARDS AND HAZARDOUS MATERIALS

Would the project:

a) Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b) Create a significant hazard to the public or the					

environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
d) Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard or excessive noise for people residing or working in the project area?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
f) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
g) Expose people or structures, either directly or indirectly to a significant risk of loss, injury or death involving wildland fires?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

**X. HYDROLOGY AND WATER QUALITY --**  
Would the project:

a) Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b) Substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would:	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
(i) result in substantial erosion or siltation on- or off-site;	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
(ii) substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or offsite;	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
(iii) create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff; or	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

(iv) impede or redirect flood flows?

<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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d) In flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundation?

<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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e) Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?

<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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XI. LAND USE AND PLANNING - Would the project:

a) Physically divide an established community?

<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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b) Cause a significant environmental impact due to a conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect?

<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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XII. MINERAL RESOURCES -- Would the project:

a) Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?

<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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b) Result in the loss of availability of a locally-important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan?

<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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XIII. NOISE -- Would the project result in:

a) Generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?

<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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b) Generation of excessive groundborne vibration or groundborne noise levels?

<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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c) For a project located within the vicinity of a private airstrip or an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?

<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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XIV. POPULATION AND HOUSING -- Would the project:

a) Induce substantial unplanned population



growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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b) Displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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#### XV. PUBLIC SERVICES

a) Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services:

Fire protection?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Police protection?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Schools?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Parks?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Other public facilities?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

#### XVI. RECREATION --

a) Would the project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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b) Does the project include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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#### XVII. TRANSPORTATION -- Would the project:

a) Conflict with a program plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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b) Would the project conflict or be inconsistent with CEQA Guidelines section 15064.3, subdivision (b)?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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c) Substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?

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d) Result in inadequate emergency access?

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#### XVIII. TRIBAL CULTURAL RESOURCES -- Would the project:

a) Would the project cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is:

i) Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code section 5020.1(k), or

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ii) A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 5024.1. In applying the criteria set forth in subdivision (c) of Public Resource Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe.

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#### XIX. UTILITIES AND SERVICE SYSTEMS -- Would the project:

a) Require or result in the relocation or construction of new or expanded water, wastewater treatment or storm water drainage, electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects?

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b) Have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry and multiple dry years?

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c) Result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?

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d) Generate solid waste in excess of State or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals?

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e) Comply with federal, state, and local management and reduction statutes and regulations related to solid waste?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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XX. WILDFIRE -- If located in or near state responsibility areas or lands classified as very high fire hazard severity zones, would the project:

a) Substantially impair an adopted emergency response plan or emergency evacuation plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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b) Due to slope, prevailing winds, and other factors, exacerbate wildfire risks, and thereby expose project occupants to, pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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c) Require the installation or maintenance of associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines or other utilities) that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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d) Expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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XXI. MANDATORY FINDINGS OF SIGNIFICANCE --

a) Does the project have the potential to substantially degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, substantially reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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b) Does the project have impacts that are individually limited, but cumulatively considerable? ("Cumulatively Considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects)?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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c) Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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## Discussion of Environmental Evaluation

This section provides an explanation of all answers noted on the Environmental Checklist.

### I. AESTHETICS

Would the Project:

a) Have a substantial adverse effect on a scenic vista?

**No impact.** The proposed Project will consist of construction of an extraction well housed inside an enclosure and a groundwater treatment plant . The proposed Project is located within the City's existing Public Works Yards with block walls around the perimeter and the treatment plant will be partially screened from view by existing trees, therefore, the proposed Project will not have any impact on a scenic vista.

b) Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?

**No impact.** The proposed Project will not damage any scenic resources.

c) In non-urbanized area, substantially degrade the existing visual character or quality of public views of the site and its surroundings? (Public views are those that are experienced from publicly accessible vantage point.) If the project is in an urbanized area, would the project conflict with applicable zoning and other regulations governing scenic quality?

**No Impact.** The proposed Project will not substantially degrade the existing visual character or quality of the site and its surroundings. The proposed Project is consistent with existing zoning at that location and will not post any conflict to regulations governing scenic quality.

d) Create a new source of substantial light or glare that would adversely affect day or nighttime views in the area?

**No impact.** The proposed Project will not have any lighting that will have any impact on day or nighttime views in the area.

### II. AGRICULTURAL RESOURCES

Would the Project:

a) Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?

**No impact.** The Project is located in a general light industrial zone. There is no farmland located within the vicinity of the Project and no conversion of farmland will occur.

b) Conflict with existing zoning for agricultural use, or a Williamson act contract?

**No impact.** The Project area is not zoned for agriculture.

c) Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code section 12220(g)), timberland (as defined by Public Resources Code section 4526), or timberland zoned Timberland Production (as defined by Government Code section 51104(g))?

**No impact.** The Project will not conflict with any existing zoning or cause rezoning of forest land.

d) Result in the loss of forest land or conversion of forest land to non-forest use?

**No impact.** No forest land is located within the vicinity of the Project and no conversion of forest land will occur.

e) Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use or conversion of forest land to non-forest use?

**No impact.** The proposed Project will not result in conversion of Farmland, to non-agricultural use or conversion of forest land to non-forest use.

### **III. AIR QUALITY**

To comply with the Proposed Rule (PR) 1407.1, the latest California Emissions Estimator Model (CalEEMod version 2020.4.0) was used to evaluate the potential impacts on air quality generated from the proposed Project. The focus of the air quality impact assessment was on the air emissions generated from construction activities. Operational emissions would be minimal and were not considered as part of the model analysis. The proposed Project activities and schedules are provided in Table 1 and results of the CalEEMod calculated exhaust emissions are summarized in Table 2. The CalEEMod generated annual air emissions reports and the associated assumptions are included in Attachment A. Details of the air quality impact assessment are discussed below.

Would the Project:

a) Conflict With or Obstruct Implementation of the Applicable Air Quality Plan?

**No impact.** The Project is located within the South Coast Air Basin, which is under the jurisdiction of the South Coast Air Quality Management District (SCAQMD). The Southern California Association of Governments (SCAG) is responsible for preparing the regional transportation strategy and control measures portion of an Air Quality Management Plan (AQMP), which addresses federal and state Clean Air Act requirements. SCAQMD is responsible for administering the AQMP, which essentially details goals, policies, and programs for improving air quality and establishes thresholds for daily operational emissions. Environmental review of individual projects within the region must demonstrate the daily construction and operational emissions thresholds as established by SCAQMD will not be exceeded, nor will the number or severity of existing air quality violations be increased.

The construction and operation of the Project will not exceed the AQMP's daily emissions thresholds (as discussed in items b below) and will therefore not conflict with or obstruct implementation of the AQMP. There are no Los Angeles County Metropolitan Transportation Authority (MTA) Congestion Management Plan (CMP) arterial corridors or intersections within or along the Project site.

Project operations will result in negligible additional vehicle miles traveled (VMT) associated with employee trips. Since the Project will be located inside the City's Public Works facility, employees will walk to the site to check the system operations without the need for a vehicle. The mobile source project related air pollutant emissions associated with this Project will be negligible. Consequently, the Project will not conflict with or obstruct implementation of AQMP.

The South Coast Air Basin has established federal de minimis levels and attainment status for pollutants. Ozone is classified as extreme with a threshold of 10 tons per year, PM<sub>2.5</sub> is classified as moderate with a threshold of 100 tons per year, and PM<sub>10</sub> is classified as serious with a threshold of 70 tons per year. Ozone is created when NO<sub>x</sub> and ROG reacts with sunlight and heat, so NO<sub>x</sub> and ROG are considered precursors to Ozone. The construction and operation of the proposed Project will not exceed any of the attainment thresholds based on emission estimates shown on Tables 2, will conform with State Implementation Plan and therefore, there will be no significant impact.

b) Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is nonattainment under an applicable federal or state ambient air quality standard?



**Less than Significant Impact.** The SCAQMD provides guidance for evaluating air quality impacts of projects. Activities for the construction of the pumping well, pipeline, and treatment plant were modeled based on a similar Project schedule and equipment used. Table 1 identifies the Project schedule and Project activity examined. The CalEEMod calculates the construction related exhaust emissions from the construction of an extraction well and are quantified in pounds per day (lb/day). These exhaust emissions include Reactive Organic Gases [ROGs; also known as Volatile Organic Compounds (VOCs)], Nitrogen Oxide (NOX), Carbon Monoxide (CO), Sulfur Dioxide (SO<sub>2</sub>), Particulate Matter with a diameter of 10 microns or less (PM<sub>10</sub>), and Particulate Matter with a diameter of microns of 2.5 microns or less (PM<sub>2.5</sub>). The significance of air quality impacts is based on the thresholds of significance established by the SCAQMD during any of the well construction phases.

Table 2 below identifies significance thresholds for potential air quality impacts as indicated by the SCAQMD. The air quality and global climate change impacts associated with the proposed Project would not result in a significant impact on air quality as all of the analyzed air pollutant emissions are significantly less than the SCAQMD threshold significances. Air emissions generated from the operations of the new well would be much less than the air emissions generated during the well construction phases; that is, the air quality and global climate change impacts associated with the operations of the proposed Well would also be less than the SCAQMD threshold significances.

Operation of the well and treatment plant will include periodic visits to the site to collect groundwater samplings and water level measurements, and to conduct inspection of the operation of the facility and occasional maintenance. Since the Project will be located inside the City's Public Works facility, employees will walk to the site to check the system operations without the need for a vehicle. Air emissions generated from the operations of the new well would be much less than the air emissions generated during the well construction phases; that is, the air quality and global climate change impacts associated with the operations of the proposed Well would also be less than the SCAQMD threshold significances.

c) Expose sensitive receptors to substantial pollutant concentrations?

**Less than Significant Impact.** If a project has the potential to result in emissions of any toxic air contaminants (TACs) or hazardous air pollutants (HAPs) which result in a cancer risk of greater than one in one million or a health hazard index of one or more, the project would be deemed to have a potentially significant impact. Sensitive receptors are defined as schools (preschool – 12<sup>th</sup> grade), hospitals, residential care facilities, day care centers, or other facilities that may house individuals with health conditions who would be adversely impacted by changes in air quality. Any project which has the potential to directly impact a sensitive receptor located within one mile and results in a health risk greater than the risk significance thresholds would be deemed to have a potentially significant

impact. The following sensitive receptors were identified to be located within one mile of the Project site: Santa Fe Lodge, Cherrylee Elementary School, Rio Hondo Preparatory School, Rio Hondo Middle School and Arroyo High School.

The State of California considers diesel exhaust particulate matter to be carcinogenic compounds. Diesel exhaust particulate matter will be emitted during construction due to the operation of construction equipment at the site. Since diesel exhaust particulate matter is considered to be carcinogenic, long-term exposure to diesel exhaust emissions have the potential to result in adverse health impacts.

As described in item (b) above, daily construction emissions will be below significant thresholds. Mitigation measures such as misting water spray would be implemented to reduce dust and particulate matter during construction. Impacts to sensitive receptors from construction related air emissions will be less than significant.

d) Create objectionable odors affecting a substantial number of people?

**No Impact.** The proposed Project operation will not create any objectionable odors. Any odors generated by the construction equipment (vehicle emission) will be temporary and controlled in accordance with SCAQMD Rule 402 (Nuisance Emissions). No impact is anticipated.

#### **IV. BIOLOGICAL RESOURCES**

Would the Project:

a) Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?

**No Impact.** A previous Environmental Assessment was performed for the City's Water Supply Wells Project. The previous project also evaluated compliance with the Endangered Species Act. As indicated in the Environmental Assessment, the City of Arcadia is urbanized and plant life is limited to non-native, introduced and ornamental species that area used for landscaping. The project site is located within a property that is currently developed for industrial use. The animal species common to the site and the surrounding area are typical of those found in an urbanized setting. No areas of the City function as a wildlife movement corridor. No locally designated species are located within the City. In addition, no significant mature trees (Heritage Trees) will be impacted by the proposed project. The project site is not located within an area governed by a habitat conservation or community conservation plan. There will be no impact.

b) Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?

**No impact.** A previous Environmental Assessment was performed for the City of Arcadia's Water Supply Wells Project. The previous project also evaluated compliance with the Endangered Species Act. As indicated in the Environmental Assessment, the City of Arcadia is urbanized and plant life is limited to non-native, introduced and ornamental species that area used for landscaping. The project site is located within a property that is currently developed for industrial use. No locally designated species are located within the City. In addition, no significant mature trees (Heritage Trees) will be impacted by the proposed project. The project site is not located within an area governed by a habitat conservation or community conservation plan. There will be no impact.

c) Have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?

**No impact.** There are no federally protected wetlands within the project vicinity.

d) Interfere substantially with the movement of any native resident or migratory fish or wildlife species with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?

**No Impact.** A previous Environmental Assessment was performed for the City of Arcadia's Water Supply Wells Project. The previous project also evaluated compliance with the Endangered Species Act. As indicated in the Environmental Assessment, the City of Arcadia is urbanized and plant life is limited to non-native, introduced and ornamental species that area used for landscaping. The project site is located within a property that is currently developed for industrial use. The animal species common to the site and the surrounding area are typical of those found in an urbanized setting. No areas of the City function as a wildlife movement corridor. The project site is not located within an area governed by a habitat conservation or community conservation plan. There will be no impact.

e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?

**No impact.** The proposed project will not have any conflict with any local policies or ordinances protecting biological resources.

f) Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approval local, regional, or state habitat conservation plan?

**No impact.** The proposed project will not have any conflict with the provisions of any adopted Habitat Conservation Plan.

## **V. CULTURAL RESOURCES**

Would the Project:

a) Cause a substantial adverse change in the significance of a historical resource as defined in §15064.5?

**No Impact.** A previous Environmental Assessment was performed for the City of Arcadia's Water Supply Wells Project, which is located in the general vicinity of the proposed Project. As indicated in the Environmental Assessment, a review of the National Register Information System identified that no cultural resource impacts are anticipated to occur. The Project will not cause a substantial adverse change in the significance of a historical resource as defined in §15064.5.

b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to §15064.5?

**No Impact.** A previous Environmental Assessment was performed for the City of Arcadia's Water Supply Wells Project. As indicated in the Environmental Assessment, a review of the National Register Information System identified that no cultural resource impacts are anticipated to occur. The proposed Project will not affect this property or any other historically significant site. As a result, the Project will not cause a substantial adverse change in the significance of an archaeological resource as defined in §15064.5.

c) Disturb any human remains, including those interred outside of formal cemeteries?

**No Impact.** The Project site is not historically or culturally significant to any group or individual. There are no cemeteries located in the immediate area that will be affected by the proposed Project. The only cemetery in the area is the Live Oak Cemetery (located on E Duarte Rd). As a result, the proposed Project will not disturb any human remains, including those interred outside of formal cemeteries.

## **VI. ENERGY**

Would the Project:

- a) Result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation?

**Less Than Significant Impact.** The Project would not require any new construction that could involve wasteful, inefficient, or unnecessary consumption of energy resources. Construction equipment which requires electricity would be gas or diesel powered. Additional energy would be needed to pump groundwater. However, the Project will include highly efficient well pumps, as such the consumption of energy resources for the Project would be less than significant.

- b) Conflict with or obstruct a state or local plan for renewable energy or energy efficiency?

**No Impact.** The Project site would not interfere with any state or local plans for renewable energy or energy efficiency.

## **VII. GEOLOGY AND SOILS**

Would the Project:

- a) Directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving:

- i) Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42.

**No impact.** The Project area is not located within an Alquist-Priolo Earthquake Fault Zone.

- ii) Strong seismic ground shaking?

**Less than Significant Impact.** All construction activities, including grading work, will be performed in accordance with approved construction standards and practices. There will be no significant impact.

- iii) Seismic-related ground failure, including liquefaction?

**No impact.** A geotechnical investigation was performed as part of the preliminary design to determine the stability of the soil conditions in the Project area. The geotechnical investigation did not identify any seismic-related ground failure issue including liquefaction in the Project area.

iv) Landslides?

**No impact.** The proposed Project is not located within a potential landslide area as the terrain in the area is relatively flat.

b) Result in substantial soil erosion or the loss of topsoil?

**No impact.** A geotechnical investigation was performed as part of the preliminary design to determine the stability of the soil conditions in the Project area. The proposed Project will not result in soil erosion or loss of topsoil.

c) Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the Project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse?

**No impact.** A geotechnical investigation was performed as part of the preliminary design to determine the stability of the soil conditions. The proposed Project will not be located on soil that is unstable, or that will become unstable as a result of the Project.

d) Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial direct or indirect risks to life or property?

**No impact.** A geotechnical investigation was performed as part of the preliminary design to determine the stability of the soil conditions. The Project will create no risk to life or property.

e) Have soils incapable of adequately supporting the use of septic tanks or alternative waste water disposal systems where sewers are not available for the disposal of waste water?

**No impact.** The proposed Project will not require the use of septic tanks or alternative waste water disposal system; therefore, there will be no impacts.

f) Directly or indirectly destroy a unique paleontological resource or site or unique geological feature?

**No Impact.** There are no known paleontological features or unique geologic features known to exist on the Project site. If any paleontological resources are encountered during construction, a qualified paleontologist would be contacted to assess the significance of the paleontological resource.



## **VIII. GREENHOUSE GAS EMISSIONS**

Would the Project:

- a) Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?

**Less than Significant Impact.** Greenhouse gas (GHG) emissions will result from the use of construction equipment, construction worker vehicles, and truck haul trips during construction of the proposed Project and potentially from the occasional operation of an emergency generator. A computer model (CalEEMod version 2020.4.0) published by the SCAQMD has been used for the potential greenhouse gas emissions associated with the construction of an extraction well.

The GHG emissions include biologically generated carbon dioxide (Bio-CO<sub>2</sub>), Non-Biologically generated carbon dioxide (NBio-CO<sub>2</sub>), Methane (CH<sub>4</sub>), and Nitrous Oxide (N<sub>2</sub>O). The total carbon dioxide (Total CO<sub>2</sub>) is the sum of Bio-CO<sub>2</sub> and NBio-CO<sub>2</sub>. In addition, GHG emissions are typically reported in carbon dioxide equivalents (CO<sub>2</sub>e) and are quantified in metric tons per year (MT/yr). Currently, the SCAQMD has not quantified the significance threshold for the GHG emissions; however, the SCAQMD Governing Board adopted the staff proposal on December 5, 2008 for an interim GHG significance threshold for projects where the SCAQMD is lead agency. The annual interim GHG significance for CO<sub>2</sub>e is 3,000 MT/yr based on the relative GHG emissions contribution between residential/commercial sectors and stationary source (industrial) sectors. Since the proposed Project is located within the jurisdiction of the SCAQMD, the interim GHG significance threshold of 3,000 MT/yr for CO<sub>2</sub>e is adopted in this analysis as the significance threshold. The operation of the proposed Project will not directly or indirectly contribute significantly to GHG over existing conditions.

- b) Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?

**No impact.** The proposed Project will include the emission of a small amount of greenhouse gas primarily from diesel fuel utilized by the construction machinery. However, this is consistent with normal construction activities and will post no conflict with any applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases.

## **IX. HAZARDS AND HAZARDOUS MATERIALS**

Would the Project:

- a) Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?

**Less than Significant Impact.** Experienced professional contractors at the proposed Project site will perform physical site inspections, which may include visual inspections, collection of soil samples, and soil testing, to verify the safety of the proposed Project site before construction will be allowed to commence. If during construction of the Project, soil contamination is suspected, construction in the area will stop, and appropriate health and safety procedures will be implemented consistent with California Occupational Safety and Health Administration (CalOSHA) health and safety requirements. If the contractor believes that hazardous materials, as defined in Section 25117 of the Health and Safety Code, is present in the construction area, the contractor will take the steps necessary to contain the contaminant, evacuate the area in its current condition, and notify Department of Toxic Substances Control (DTSC) in writing. DTSC will promptly investigate the conditions, and if it is determined that contaminated soils exist, the extent of the contamination will be determined by the means of a Phase I Environmental Assessment (EA). If the Phase I EA concludes that the site is contaminated, a Phase II EA may be conducted, which will include the development of a sampling plan to determine the extent of the contamination and to help identify the remedial measures suitable for safe completion of the Project. If the extent of the contamination is small, excavation and transport of the soil to an appropriate Class I, Class II, or Class III disposal site in accordance to the provision of existing law, may be performed. If the extend of the contamination is large, all proper steps and procedures will be taken in accordance to the remedial measures identified in the Phase II EA. The Environmental Protection Agency and DTSC will provide regulatory oversight of any investigation and remediation of the Project site. Any construction waste generated by the proposed Project will be properly disposed of at an appropriate facility.

b) Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?

**No Impact.** The Project would not involve any hazardous waste, so there would be no risk to the public or the environment involving the Project.

c) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?

**No Impact.** The Project would not involve any hazardous emissions or handling of hazardous materials, substances, or waste. In addition, there are no schools within one-quarter mile of the Project site. Therefore, it would not pose a risk to existing or proposed school.

d) Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?

**No impact.** The proposed Project area is not included on a list of hazardous materials sites.

e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard or excessive noise for people residing or working in the project area?

**Less than Significant Impact.** The San Gabriel Valley Airport is about 1.8 miles southwest of the proposed Project. Ambient noise levels may increase temporarily in the Project vicinity. Appropriate sound reduction measures will be provided to ensure the noise level from the extraction wells does not exceed allowable levels. Because the noise levels are temporary and consistent with normal operation activity, there is no significant impact.

f) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?

**No impact.** The proposed Project will result in more secure water supply for the City to meet existing and future normal and emergency water operation system needs. The proposed Project will be performed in accordance with city approved traffic control plans and will not impair the implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan.

g) Expose people or structures, either directly or indirectly to a significant risk of loss, injury or death involving wildland fires?

**No impact.** The proposed Project area is not located near any wildlands and there will be no impact associated with wildland fires.

## **X. HYDROLOGY AND WATER QUALITY**

Would the Project:

a) Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality?

**Less than Significant Impact.** A routine part of the construction of water extraction wells requires temporary discharge to waste of extracted groundwater. It is estimated that each well will discharge to waste for approximately 90 hours, for a total discharge volume of approximately 130 acre-feet during construction. It

is anticipated that the extracted water will meet the Regional Water Quality Control Board's applicable standards for discharge to surface waters. Discharge will be in compliance with terms to be agreed upon by RWQCB and EPA.

b) Substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin?

**No impact.** The proposed Project will operate in compliance with the Main Basin Judgement. The judgment establishes a safe annual yield from the aquifer and oversees utilization of water rights within the basin and as a result, there will be no impact associated with depletion of groundwater supplies or recharge.

c) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the additional of impervious surfaces, in a manner which would:

i. result in substantial erosion or siltation on- or off-site

**No impact.** The proposed Project will not alter the existing drainage pattern of the site or area in a manner which would result in substantial erosion or siltation on- or off-site.

ii. Substantially increase the rate or amount of surface water runoff in manner which would result in flooding on- or offsite;

**No impact.** The proposed Project will not substantially increase the rate or amount of surface water runoff in a manner which would result in substantial erosion or siltation on- or off-site.

iii. Create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff; or

**No impact.** The proposed Project will not create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff.

iv. Impede or redirect flood flows?

**No impact.** The proposed Project will not alter the existing drainage pattern of the site in a manner which would impede or redirect flood flows.

d) In flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundation?

**No impact.** The proposed Project is not located in flood hazard, tsunami, or seiche zones.

e) Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?

**No impact.** The proposed Project will not be in conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan.

## **XI. LAND USE AND PLANNING**

Would the Project:

a) Physically divide an established community?

**No impact.** Construction of the proposed Project will not physically divide an established community as the proposed Project will be located within the existing City's Public Works site.

b) Cause a significant environmental impact due to a conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect?

**No Impact.** The proposed Project will be constructed in a developed site that currently houses other public service facilities and will not conflict with any applicable land use plan, policy or regulation of an agency with jurisdiction over the Project.

## **XII. MINERAL RESOURCES**

Would the Project:

a) Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?

**No impact.** The proposed Project will not result in the loss of availability of a known mineral source.

b) Result in the loss of availability of a locally-important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan?

**No impact.** The proposed Project will not affect any locally important mineral resource recovery site.

### **XIII. NOISE**

Would the Project Result in:

a) Generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?

**Less than Significant Impact.** Operation of the proposed extraction wells may increase current noise levels. An enclosure will cover the well to reduce noise impacts.

b) Generation of excessive groundborne vibration or groundborne noise levels?

**Less than Significant Impact.** An increase in groundborne vibration or noise levels may occur during the construction of the proposed Project. However, the increased levels will be temporary and typical of construction activities. Construction will be limited to the allowable hours per City ordinance. Operation of the proposed Project will not result in an increase in groundborne vibration or noise levels. There will be no significant impact.

c) For a project located within the vicinity of a private airstrip or an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?

**Less than Significant Impact.** The San Gabriel Valley Airport is about 1.8 miles southwest of the proposed Project. Ambient noise levels may increase temporarily in the Project vicinity. Appropriate sound reduction measures will be provided to ensure the noise level from the extraction wells does not exceed allowable levels. Because the noise levels are temporary and consistent with normal operation activity, there is no significant impact.

### **XIV. POPULATION AND HOUSING**

Would the Project:

a) Induce substantial unplanned population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?

**No impact.** The proposed Project will not have any population growth inducing impact.



b) Displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere?

**No Impact.** The proposed Project will not displace any existing housing.

## **XV. PUBLIC SERVICES**

Would the Project:

a) Result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services:

Fire Protection  
Police Protection  
Schools  
Parks  
Other Public Facilities

**No impact.** The proposed Project will not result in the need for new or physically altered governmental facilities including fire protection, police protection, schools, parks, or other public facilities.

## **XVI. RECREATION**

Would the Project:

a) Increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?

**No impact.** The proposed Project will not increase the use of existing neighborhood and regional parks or other recreational facilities.

b) Does the project include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?

**No impact.** The proposed Project does not include the construction or expansion of any recreational facilities.

## **XVII. TRANSPORTATION**

Would the Project:

a) Conflict with a program, plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities?

**Less than Significant.** The Project would affect traffic patterns in the Project area as a result of construction. Construction may require temporary lane closure tapers. In accordance with the City, a proper on-site traffic circulation and control will be designed into the development with implementation of City regulations, impacts would be less than significant.

b) Conflict or be inconsistent with CEQA Guidelines Section 15064.3, subdivision (b)?

**No impact.** The proposed Project will not result in any conflict or be inconsistent with CEQA Guidelines.

c) Substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?

**No impact.** There will be no changes to current roadway design that will cause substantially increased hazards. The proposed Project will not substantially increase hazards due to a design feature or incompatible uses.

d) Result in inadequate emergency access?

**No impact.** The proposed Project will not result in inadequate emergency access.

## **XVIII. TRIBAL CULTURAL RESOURCES**

a) Would the project cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is:

- i) Listed or eligible for listing in the California Register of Historical Resources, or in the local register of historical resources as defined in Public Resources Code Section 5020.1(k), or

**Less Than Significant Impact.** The proposed Project will not result in any changes or adverse impacts to tribal cultural resources. The proposed Project area is located within urban/developed land. In addition, the City has completed consultation with the local tribe, Gabrieleño Band of Mission Indians – Kizh Nation,

and will be retaining an approved Native American Monitor prior to commencement of any ground-disturbing activities to ensure proper handling of any potential tribal cultural resources discovery. The following proposed Tribal Cultural Resources (TCR) mitigation measures will be incorporated as part of the Project.

TCR-1: Retain a Native American Monitor Prior to Commencement of Ground-Disturbing Activities

- A. The project applicant/lead agency shall retain a Native American Monitor from or approved by the Gabrieleño Band of Mission Indians – Kizh Nation. The monitor shall be retained prior to the commencement of any “ground-disturbing activity” for the subject project at all project locations (i.e., both on-site and any off-site locations that are included in the project description/definition and/or required in connection with the project, such as public improvement work). “Ground-disturbing activity” shall include, but is not limited to, demolition, pavement removal, potholing, auguring, grubbing, tree removal, boring, grading, excavation, drilling, and trenching. Monitoring of well drilling shall be limited to 50 feet below surface level if the monitor determines the soils are still sensitive to potential Tribal Cultural Resources.
- B. A copy of the executed monitoring agreement shall be submitted to the lead agency prior to the earlier of the commencement of any ground-disturbing activity, or the issuance of any permit necessary to commence a ground-disturbing activity.
- C. The monitor will complete daily monitoring logs that will provide descriptions of the relevant ground-disturbing activities, the type of construction activities performed, locations of ground-disturbing activities, soil types, cultural-related materials, and any other facts, conditions, materials, or discoveries of significance to the Tribe. Monitor logs will identify and describe any discovered TCRs, including but not limited to, Native American cultural and historical artifacts, remains, places of significance, etc., (collectively, tribal cultural resources, or “TCR”), as well as any discovered Native American (ancestral) human remains and burial goods. Copies of monitor logs will be provided to the project applicant/lead agency upon written request to the Tribe.
- D. On-site tribal monitoring shall conclude upon the latter of the following (1) written confirmation to the Kizh from a designated point of contact for the project applicant/lead agency that all ground-disturbing activities and phases that may involve ground-disturbing activities on the project site or in connection with the project are complete; or (2) a determination and written notification by the Kizh to the project applicant/lead agency that no future, planned construction activity and/or development/construction phase at the project site possesses the potential to impact Kizh TCRs.

TCR-2: Unanticipated Discovery of Tribal Cultural Resource Objects (Non-Funerary/Non-Ceremonial)

- A. Upon discovery of any TCRs, all construction activities in the immediate vicinity of the discovery shall cease (i.e., not less than the surrounding 50 feet) and shall not resume for up to 48 hours until the discovered TCR has been fully assessed by the Kizh monitor and/or Kizh archaeologist. The Kizh will recover and retain all discovered TCRs in the form and/or manner the Tribe deems appropriate, in the Tribe's sole discretion, and for any purpose the Tribe deems appropriate, including for educational, cultural and/or historic purposes.

TCR-3: Unanticipated Discovery of Human Remains and Associated Funerary or Ceremonial Objects

- A. Native American human remains are defined in PRC 5097.98 (d)(1) as an inhumation or cremation, and in any state of decomposition or skeletal completeness. Funerary objects, called associated grave goods in Public Resources Code Section 5097.98, are also to be treated according to this statute.
- B. If Native American human remains and/or grave goods are discovered or recognized on the project site, then Public Resource Code 5097.9 as well as Health and Safety Code Section 7050.5 shall be followed.
- C. Human remains and grave/burial goods shall be treated alike per California Public Resources Code section 5097.98(d)(1) and (2).
- D. Preservation in place (i.e., avoidance) is the preferred manner of treatment for discovered human remains and/or burial goods.
- E. Any discovery of human remains/burial goods shall be kept confidential to prevent further disturbance.
  - ii) A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 5024.1. In applying the criteria set forth in subdivision (c) of Public Resource Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe.

**Less Than Significant Impact.** The City has completed consultation with the local tribe, Gabrieleno Band of Mission Indians – Kizh Nation, and will be retaining an approved Native American Monitor prior to commencement of any ground-disturbing activities to ensure proper handling of any potential tribal cultural resources discovery. See proposed TCR mitigation measures above.

## **XIX. UTILITIES AND SERVICE SYSTEMS**

Would the Project:

a) Require or result in the relocation or construction of new or expanded water, wastewater treatment or storm water drainage, electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects?

**No impact.** The proposed Project includes construction of a new well that would produce raw water to be treated and used as drinking water and will not cause significant environmental effects.

b) Have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry and multiple dry years from existing entitlements and resources, or are new or expanded entitlements needed?

**No impact.** The proposed Project will not require new potable water supplies.

c) Result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?

**No impact.** The proposed Project will not increase the existing demand to any wastewater treatment provider.

d) Generate solid waste in excess of State or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals??

**No impact.** Construction of the proposed Project will only generate a minor amount of solid waste and will not have any impact to the serving landfill.

e) Comply with federal, state, and local management and reduction statutes and regulations related to solid waste?

**No impact.** The proposed Project will comply with federal, state, and local statutes and regulations related to solid waste.

## **XX. WILDFIRE**

Would the project:

a) Substantially impair an adopted emergency response plan or emergency evacuation plan?

**No impact.** The proposed Project will not substantially impair an adopted emergency response plan or emergency evacuation plan.

- b) Due to slope, prevailing winds, and other factors, exacerbate wildfire risks, and thereby expose project occupants to, pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire?

**No impact.** The proposed Project will not exacerbate wildfire risks.

- c) Require the installation or maintenance of associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines or other utilities) that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment?

**No impact.** The proposed Project will not require the installation or maintenance of associated infrastructure that may exacerbate fire risks or that may result in temporary or ongoing impacts to the environment.

- d) Expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes?

**No impact.** The proposed Project will not expose people or structures to significant risks.

## **XXI. MANDATORY FINDINGS OF SIGNIFICANCE**

- a) Does the project have the potential to substantially degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, substantially reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory?

**No impact.** The proposed Project does not have the potential to degrade the quality of the environment.

- b) Does the project have impacts that are individually limited, but cumulatively considerable? ("Cumulatively Considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects)?

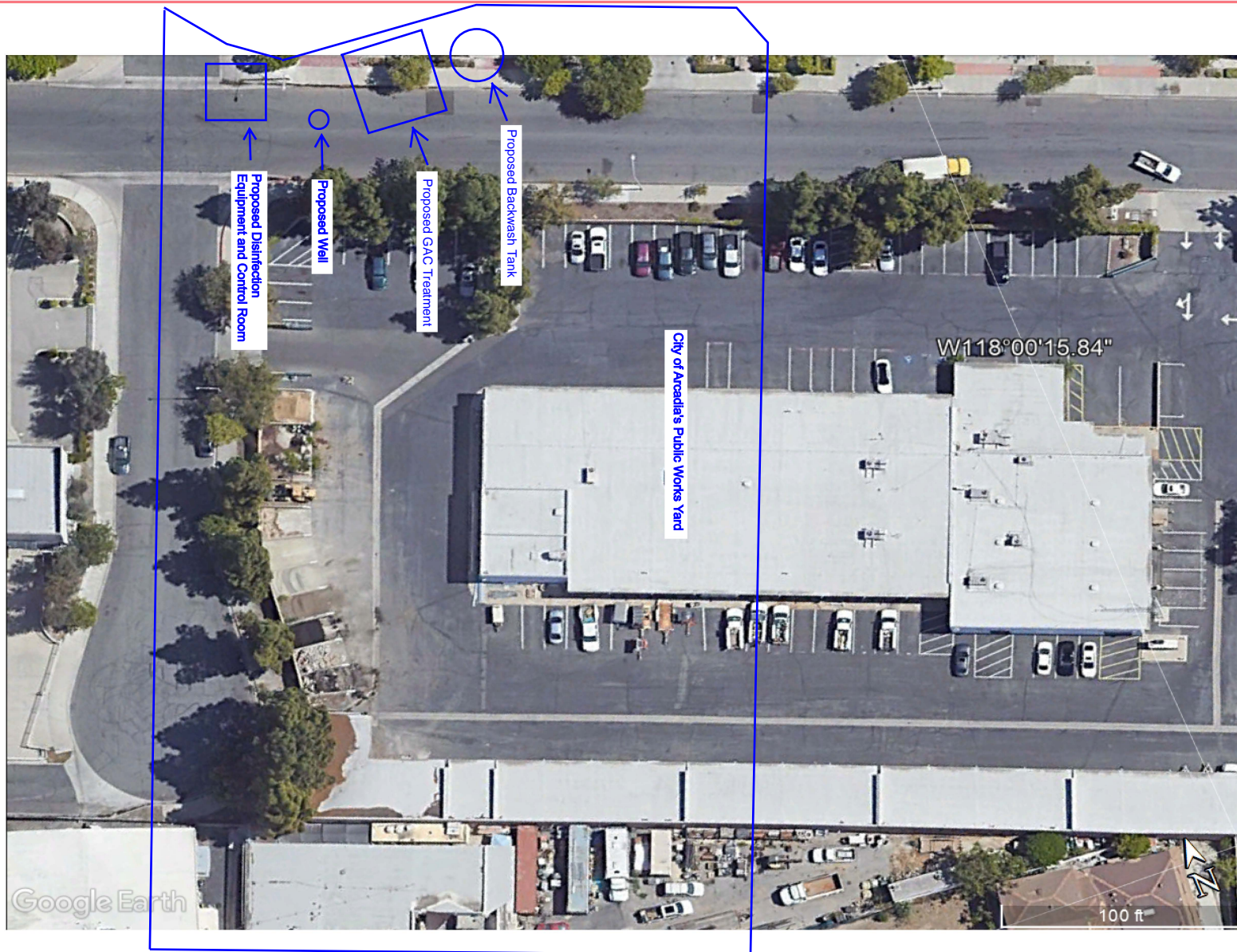
**No impact.** The proposed Project will be constructed in an area with other public service facilities. The Project will not have impacts that are individually limited, but cumulatively considerable.

c) Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?

**No impact.** The proposed Project does not have any environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly.

J:\2795\01\CEQA\Final Draft\Final Initial Environmental Study (February 2025).docx



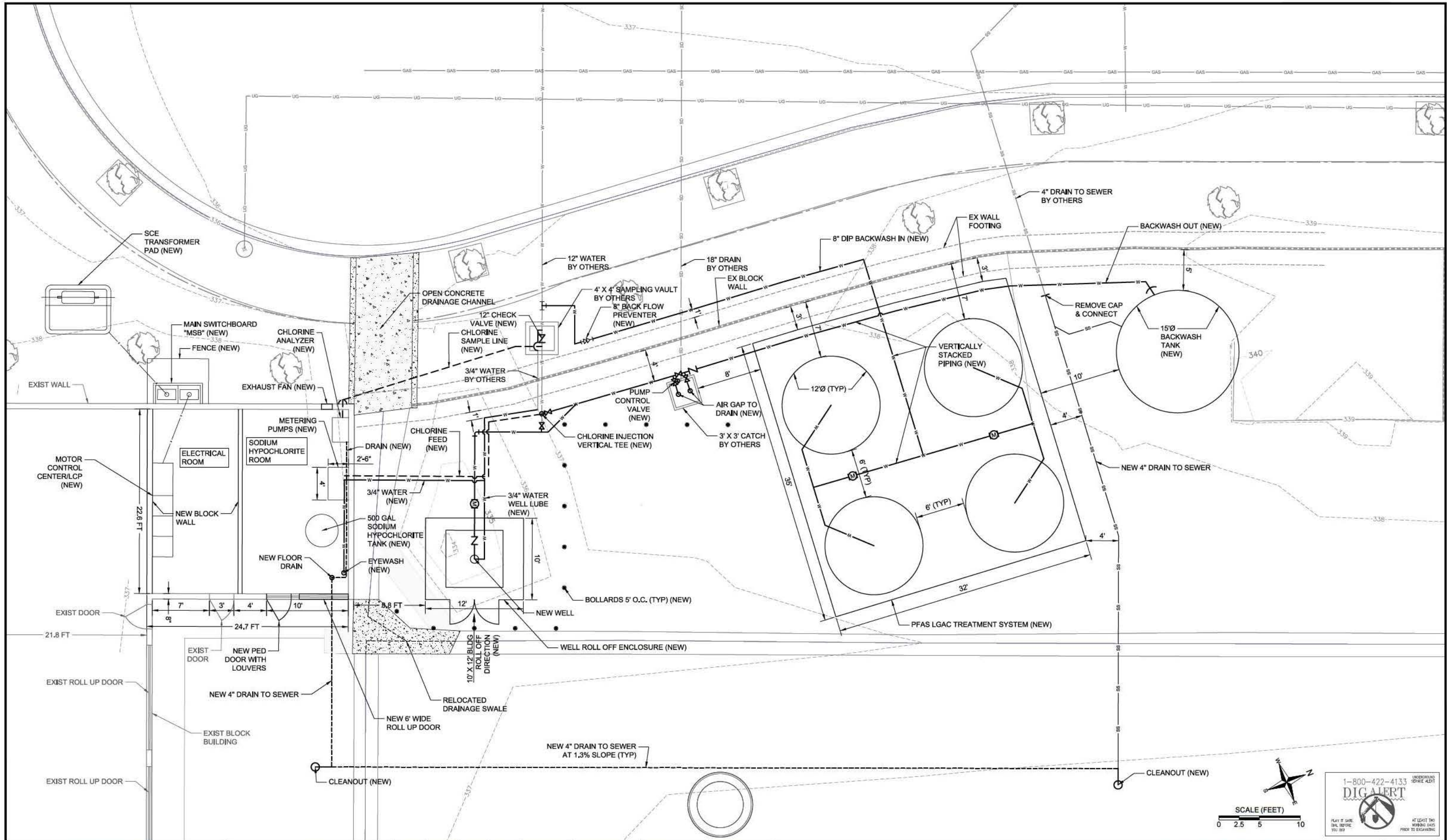



861 VILLAGE OAKS DRIVE, SUITE 100  
COVINA, CALIFORNIA 91724  
TEL: (626) 967-6202  
FAX: (626) 331-7065


2171 E Francisco Blvd., Suite K  
San Rafael California 94901  
2651 W Guadalupe Rd., Suite A209  
Mesa Arizona 85202

## GOLDRING WELL SITE MAP





  
SCALE (FEET)  
0 2.5 5 10



 861 VILLAGE OAKS DRIVE, SUITE 100  
COVINA, CALIFORNIA 91724  
TEL: (626) 967-6202  
FAX: (626) 331-7065  
2171 E FRANCISCO BLVD., SUITE K  
SAN RAFAEL CALIFORNIA 94901

REVISION	DATE	DRAWN BY	CHKD BY	APPROVED	DATE: 01/12/2024	JOB NO.: X000000X	DRAWN BY: G.T.	DESIGNED BY: J.C.
A PRELIMINARY DESIGN REPORT	1.12.24	G.T.	J.C.		SCALE: AS NOTED	PROJ. NO.:	CHECKED BY: J.H.	PROJ. ENGR.:
					APPROVED BY:		7/3/26	6/30/2025
					QTY ENGINEER		ROE	EXPIRATION DATE

**CITY OF ARCADIA**  
PUBLIC WORKS SERVICES DEPARTMENT

ARCADIA GOLDRING WELL  
PFAS LGAC TREATMENT SYSTEM  
PROJECT NO.:  
SITE PLAN

SHEET    OF     
DRAWING NO.  
**C-1**



**Table 1**  
**Arcadia Well and Pipeline Construction and PFAS Treatment Plant Construction Schedule**

Phase	Phase Type	Activity	Phase Type	Date Start	Date End	Working Days
1	Well and Pipeline Construction Site Preparation	Site Clean Up	Site Preparation	9/16/2024	9/20/2024	5
2	Pipeline Construction	Pipeline Construction	Construction	9/23/2024	11/15/2024	40
3	Well Construction	Well Construction	Construction	10/21/2024	2/7/2025	80
4	Well Test	Equipment Test	On-Site Test	2/10/2025	2/21/2025	10
5	Well Head Equipment Mobilization	Site Clean Up	Site Preparation	2/24/2025	2/28/2025	5
6	Well Head Construction	Well Construction	Construction	3/3/2025	6/11/2025	73*
7	Treatment Plant Site Preparation	Site Clean Up	Site Preparation	1/22/2025	1/26/2025	5
8	Treatment Plant Construction	Treatment Plant Construction	Construction	1/27/2025	5/16/2025	80
9	Treatment Plant Startup and Testing	Equipment Test	On-Site Test	5/19/2025	5/23/2025	5

Note:

\* Duration of Well Head Construction schedule is 73 days in total; however, due to an intermittent working schedule, the actual working time is 40 days. Air emission calculation relies on the 73-day timeframe for conservative reasons.

Project Start and End dates shown in the Construction Schedule is subject to change and would not have any impact to the air emissions and GHG emissions calculation results as long as the construction duration remains the same.

Table 2  
The CalEEMod Model Calculated Air Emissions of All analyzed Air Pollutants and CHG Emissions

Phase		ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
unit		lb/day	lb/day	lb/day	lb/day	lb/day	lb/day	lb/day	lb/day	lb/day	lb/day	MT/yr	MT/yr	MT/yr	MT/yr	MT/yr	MT/yr
Site Preparation	Onsite	1.094	11.578	10.960	0.021	0.023	0.484	0.507	0.003	0.445	0.447	0.000	4.643	4.643	0.002	0.000	4.681
	Offsite	0.022	0.052	0.250	0.001	0.157	0.001	0.158	0.040	0.001	0.041	0.000	0.193	0.193	0.000	0.000	0.196
	Total	1.116	11.630	11.209	0.022	0.181	0.484	0.665	0.043	0.446	0.488	0.000	4.836	4.836	0.002	0.000	4.877
Construction	Onsite	1.102	10.964	14.056	0.023	0.000	0.483	0.483	0.000	0.444	0.444	0.000	73.216	73.216	0.024	0.000	73.808
	Offsite	0.015	0.084	0.168	0.001	0.106	0.001	0.106	0.027	0.001	0.028	0.000	2.479	2.479	0.000	0.000	2.545
	Total	1.117	11.048	14.224	0.024	0.106	0.483	0.589	0.027	0.445	0.472	0.000	75.695	75.695	0.024	0.000	76.353
Pump Test	Onsite	0.835	8.734	5.395	0.014	4.528	0.348	4.877	2.484	0.321	2.804	0.000	6.190	6.190	0.002	0.000	6.240
	Offsite	0.022	0.014	0.250	0.001	0.089	0.000	0.090	0.024	0.000	0.024	0.000	0.000	0.000	0.000	0.000	0.000
	Total	0.857	8.748	5.645	0.015	4.618	0.349	4.967	2.508	0.321	2.829	0.000	6.190	6.190	0.002	0.000	6.240
Treatment Plant Test	Onsite	0.862	8.939	8.622	0.018	0.023	0.353	0.376	0.003	0.324	0.327	0.000	3.959	3.959	0.001	0.000	3.992
	Offsite	0.007	0.042	0.077	0.000	0.029	0.000	0.029	0.008	0.000	0.008	0.000	0.085	0.085	0.000	0.000	0.087
	Total	0.869	8.981	8.699	0.018	0.052	0.353	0.405	0.010	0.325	0.335	0.000	4.044	4.044	0.001	0.000	4.079
Operational	Total	0.083	0.086	0.893	0.002	0.233	0.001	0.235	0.062	0.001	0.063	0.000	30.920	30.920	0.002	0.001	31.353
Construction Maximum Daily Emission		1.12	11.63	14.22	0.02	4.62	0.48	4.97	2.51	0.45	2.83	0.00	75.70	75.70	0.02	0.00	76.35
SCAQMD Construction Threshold <sup>1</sup>		75	100	550	150	150	150	150	55	55	55						
Exceed Threshold		No	No	No	No	No	No	No	No	No	No						
SCAQMD Operation Threshold <sup>1</sup>		55	50	550	150	150	150	150	55	55	55						
Exceed Threshold		No	No	No	No	No	No	No	No	No	No						
SCAQMD Operation Threshold <sup>2</sup>																	3,000
Exceed Threshold		No	No	No	No	No	No	No	No	No	No						No

Note:

Source of Threshold - SCAQMD Air Quality Significance Thresholds - April 2019  
Source of CO<sub>2e</sub> Threshold - Draft Guidance Document – Interim CEQA Greenhouse Gas (GHG) Significance Threshold (SCAQMD, October 2008)  
lb/day - pound per dau  
MT/yr - metric tons per year

# ATTACHMENT A

## City of Arcadia Air Emissions Report

## Arcadia Well Construction and PFAS Treatment - Los Angeles-South Coast County, Annual

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied****Arcadia Well Construction and PFAS Treatment****Los Angeles-South Coast County, Annual****1.0 Project Characteristics****1.1 Land Usage**

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
General Light Industry	5.00	1000sqft	0.11	5,000.00	0

**1.2 Other Project Characteristics**

Urbanization	Urban	Wind Speed (m/s)	2.2	Precipitation Freq (Days)	33
Climate Zone	9			Operational Year	2026
Utility Company					
CO2 Intensity (lb/MWhr)	0	CH4 Intensity (lb/MWhr)	0	N2O Intensity (lb/MWhr)	0

**1.3 User Entered Comments & Non-Default Data**

Project Characteristics - PFAS Treatment Plant and Goldring Well Construction.

Land Use - Construction site in a private owned property (approximately 5 acreages), actual construction area is less than 5000 square feet (less than 0.11 acreages).

Construction Phase - Required equipment and project schedule are based on the attached Well, Pipeline, and Treatment Plant construction and Schedule  
Note: Schedule for well head construction is 73-day; however, the actual working time is 40 days due to an intermittent working schedule. Calculation is based on the 73-day schedule for conservative reasons.

Off-road Equipment - Required equipment and project schedule are based on the attached Well Construction Equipment and Schedule

Trips and VMT - Required equipment and project schedule are based on the attached Well, Pipeline, and Treatment Plant construction and Schedule  
Construion in a small designated open area, no demolition and minimal grading

On-road Fugitive Dust - Required equipment and project schedule are based on the attached Well, Pipeline, and Treatment Plant construction and Schedule  
Default is used

Demolition - Required equipment and project schedule are based on the attached Well Construction Equipment and Schedule  
No demolition

Grading - Required equipment and project schedule are based on the attached Well, Pipeline, and Treatment Plant construction and Schedule  
empty truck arrival, loaded truk departure

## Arcadia Well Construction and PFAS Treatment - Los Angeles-South Coast County, Annual

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

Architectural Coating - Required equipment and project schedule are based on the attached Well, Pipeline, and Treatment Plant construction and Schedule no architectural coatings

Vehicle Trips - Required equipment and project schedule are based on the attached Well, Pipeline, and Treatment Plant construction and Schedule Default is used

Vehicle Emission Factors - Required equipment and project schedule are based on the attached Well, Pipeline, and Treatment Plant construction and Schedule Default is used

Vehicle Emission Factors - Required equipment and project schedule are based on the attached Well Construction Equipment and Schedule Default is used

Vehicle Emission Factors - Required equipment and project schedule are based on the attached Well Construction Equipment and Schedule Default is used

Road Dust - Required equipment and project schedule are based on the attached Well, Pipeline, and Treatment Plant construction and Schedule Default is used

Woodstoves - The Project does not use Wooden stoves and hearths

Consumer Products - Default is used

Area Coating - Default is used

Landscape Equipment - Default is used

Energy Use - Default is used

Water And Wastewater - Default is used

Solid Waste - Default is used

Construction Off-road Equipment Mitigation - List treatment construction and well construction

Table Name	Column Name	Default Value	New Value
tblConstructionPhase	NumDays	100.00	40.00
tblConstructionPhase	NumDays	100.00	80.00
tblConstructionPhase	NumDays	100.00	73.00
tblConstructionPhase	NumDays	100.00	80.00
tblConstructionPhase	NumDays	1.00	5.00
tblConstructionPhase	NumDays	1.00	10.00
tblConstructionPhase	NumDays	1.00	5.00
tblConstructionPhase	NumDays	1.00	5.00
tblConstructionPhase	NumDays	1.00	5.00
tblConstructionPhase	PhaseEndDate	2/7/2025	11/15/2024

## Arcadia Well Construction and PFAS Treatment - Los Angeles-South Coast County, Annual

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

tblConstructionPhase	PhaseEndDate	6/27/2025	2/7/2025
tblConstructionPhase	PhaseEndDate	11/14/2025	6/11/2025
tblConstructionPhase	PhaseEndDate	4/3/2026	5/16/2025
tblConstructionPhase	PhaseEndDate	9/16/2024	9/20/2024
tblConstructionPhase	PhaseEndDate	9/17/2024	2/21/2025
tblConstructionPhase	PhaseEndDate	9/18/2024	3/1/2024
tblConstructionPhase	PhaseEndDate	9/19/2024	9/25/2024
tblConstructionPhase	PhaseEndDate	9/20/2024	5/23/2025
tblConstructionPhase	PhaseStartDate	9/21/2024	9/23/2024
tblConstructionPhase	PhaseStartDate	2/8/2025	10/21/2024
tblConstructionPhase	PhaseStartDate	6/28/2025	3/3/2025
tblConstructionPhase	PhaseStartDate	11/15/2025	1/27/2025
tblConstructionPhase	PhaseStartDate	9/17/2024	2/10/2025
tblConstructionPhase	PhaseStartDate	9/18/2024	2/24/2024
tblConstructionPhase	PhaseStartDate	9/20/2024	5/19/2025
tblGrading	AcresOfGrading	2.50	0.11
tblGrading	AcresOfGrading	7.50	0.11
tblGrading	AcresOfGrading	2.50	0.11
tblGrading	AcresOfGrading	2.50	0.11
tblGrading	AcresOfGrading	2.50	0.11
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	2.00
tblOffRoadEquipment	UsageHours	8.00	6.00
tblOffRoadEquipment	UsageHours	8.00	7.00
tblTripsAndVMT	VendorTripNumber	1.00	0.00
tblTripsAndVMT	VendorTripNumber	0.00	1.00
tblTripsAndVMT	VendorTripNumber	0.00	1.00

Arcadia Well Construction and PFAS Treatment - Los Angeles-South Coast County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

tbITripsAndVMT	VendorTripNumber	0.00	1.00
tbITripsAndVMT	WorkerTripNumber	2.00	5.00
tbITripsAndVMT	WorkerTripNumber	18.00	2.00
tbITripsAndVMT	WorkerTripNumber	18.00	5.00
tbITripsAndVMT	WorkerTripNumber	15.00	2.00
tbITripsAndVMT	WorkerTripNumber	15.00	2.00

2.0 Emissions Summary

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## Arcadia Well Construction and PFAS Treatment - Los Angeles-South Coast County, Annual

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied****2.1 Overall Construction****Unmitigated Construction**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2024	0.0385	0.3989	0.3788	7.4000e-004	2.6000e-003	0.0171	0.0197	6.6000e-004	0.0158	0.0164	0.0000	65.1365	65.1365	0.0204	1.2000e-004	65.6829
2025	0.0773	0.7680	0.9518	1.6200e-003	0.0285	0.0333	0.0618	0.0140	0.0306	0.0446	0.0000	142.2509	142.2509	0.0446	3.9000e-004	143.4816
<b>Maximum</b>	<b>0.0773</b>	<b>0.7680</b>	<b>0.9518</b>	<b>1.6200e-003</b>	<b>0.0285</b>	<b>0.0333</b>	<b>0.0618</b>	<b>0.0140</b>	<b>0.0306</b>	<b>0.0446</b>	<b>0.0000</b>	<b>142.2509</b>	<b>142.2509</b>	<b>0.0446</b>	<b>3.9000e-004</b>	<b>143.4816</b>

**Mitigated Construction**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2024	0.0385	0.3989	0.3788	7.4000e-004	2.6000e-003	0.0171	0.0197	6.6000e-004	0.0158	0.0164	0.0000	65.1365	65.1365	0.0204	1.2000e-004	65.6829
2025	0.0773	0.7680	0.9518	1.6200e-003	0.0285	0.0333	0.0618	0.0140	0.0306	0.0446	0.0000	142.2507	142.2507	0.0446	3.9000e-004	143.4815
<b>Maximum</b>	<b>0.0773</b>	<b>0.7680</b>	<b>0.9518</b>	<b>1.6200e-003</b>	<b>0.0285</b>	<b>0.0333</b>	<b>0.0618</b>	<b>0.0140</b>	<b>0.0306</b>	<b>0.0446</b>	<b>0.0000</b>	<b>142.2507</b>	<b>142.2507</b>	<b>0.0446</b>	<b>3.9000e-004</b>	<b>143.4815</b>

## Arcadia Well Construction and PFAS Treatment - Los Angeles-South Coast County, Annual

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Quarter	Start Date	End Date	Maximum Unmitigated ROG + NOX (tons/quarter)	Maximum Mitigated ROG + NOX (tons/quarter)
1	9-16-2024	12-15-2024	0.4729	0.4729
2	12-16-2024	3-15-2025	0.3224	0.3224
3	3-16-2025	6-15-2025	0.5346	0.5346
		Highest	0.5346	0.5346

**2.2 Overall Operational****Unmitigated Operational**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	0.0204	0.0000	6.0000e-005	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	1.2000e-004	1.2000e-004	0.0000	0.0000	1.3000e-004
Energy	4.8000e-004	4.4000e-003	3.7000e-003	3.0000e-005		3.3000e-004	3.3000e-004		3.3000e-004	3.3000e-004	0.0000	4.7921	4.7921	9.0000e-005	9.0000e-005	4.8206
Mobile	0.0133	0.0156	0.1452	3.3000e-004	0.0378	2.4000e-004	0.0380	0.0101	2.2000e-004	0.0103	0.0000	30.9196	30.9196	2.0200e-003	1.2800e-003	31.3527
Waste						0.0000	0.0000		0.0000	0.0000	1.2585	0.0000	1.2585	0.0744	0.0000	3.1180
Water						0.0000	0.0000		0.0000	0.0000	0.3668	0.0000	0.3668	0.0377	8.9000e-004	1.5738
<b>Total</b>	<b>0.0342</b>	<b>0.0200</b>	<b>0.1490</b>	<b>3.6000e-004</b>	<b>0.0378</b>	<b>5.7000e-004</b>	<b>0.0384</b>	<b>0.0101</b>	<b>5.5000e-004</b>	<b>0.0106</b>	<b>1.6254</b>	<b>35.7117</b>	<b>37.3371</b>	<b>0.1142</b>	<b>2.2600e-003</b>	<b>40.8652</b>

## Arcadia Well Construction and PFAS Treatment - Los Angeles-South Coast County, Annual

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied****2.2 Overall Operational****Mitigated Operational**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	0.0204	0.0000	6.0000e-005	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	1.2000e-004	1.2000e-004	0.0000	0.0000	1.3000e-004
Energy	4.8000e-004	4.4000e-003	3.7000e-003	3.0000e-005		3.3000e-004	3.3000e-004		3.3000e-004	3.3000e-004	0.0000	4.7921	4.7921	9.0000e-005	9.0000e-005	4.8206
Mobile	0.0133	0.0156	0.1452	3.3000e-004	0.0378	2.4000e-004	0.0380	0.0101	2.2000e-004	0.0103	0.0000	30.9196	30.9196	2.0200e-003	1.2800e-003	31.3527
Waste						0.0000	0.0000		0.0000	0.0000	1.2585	0.0000	1.2585	0.0744	0.0000	3.1180
Water						0.0000	0.0000		0.0000	0.0000	0.3668	0.0000	0.3668	0.0377	8.9000e-004	1.5738
<b>Total</b>	<b>0.0342</b>	<b>0.0200</b>	<b>0.1490</b>	<b>3.6000e-004</b>	<b>0.0378</b>	<b>5.7000e-004</b>	<b>0.0384</b>	<b>0.0101</b>	<b>5.5000e-004</b>	<b>0.0106</b>	<b>1.6254</b>	<b>35.7117</b>	<b>37.3371</b>	<b>0.1142</b>	<b>2.2600e-003</b>	<b>40.8652</b>

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
<b>Percent Reduction</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>

**3.0 Construction Detail****Construction Phase**

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Well and Pipeline Construction Mobilization	Site Preparation	9/16/2024	9/20/2024	5	5	Site preparation and mobilization
2	Pump Test	Site Preparation	2/10/2025	2/21/2025	5	10	Well Pump Test
3	Well Head Equipment Mobilization	Site Preparation	2/24/2024	3/1/2024	5	5	Mobilization

## Arcadia Well Construction and PFAS Treatment - Los Angeles-South Coast County, Annual

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

4	PFAS Treatment Plant Mobilization	Site Preparation	9/19/2024	9/25/2024	5	5	Site Preparation and Mobilization
5	Treatment Plant Startup and Testing	Site Preparation	5/19/2025	5/23/2025	5	5	Well Equipment Procurement
6	Pipeline Construction	Building Construction	9/23/2024	11/15/2024	5	40	Pipeline Construction
7	Well Construction	Building Construction	10/21/2024	2/7/2025	5	80	Site Clean Up and Preparation
8	Well Head Construction	Building Construction	3/3/2025	6/11/2025	5	73	Well Head Construction
9	PFAS Treatment Plant Construction	Building Construction	1/27/2025	5/16/2025	5	80	Well Equiping Support

**Acres of Grading (Site Preparation Phase): 0.11****Acres of Grading (Grading Phase): 0****Acres of Paving: 0****Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area: 0 (Architectural Coating – sqft)****OffRoad Equipment**

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Well and Pipeline Construction Mobilization	Graders	1	8.00	187	0.41
Well and Pipeline Construction Mobilization	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Pipeline Construction	Cranes	1	4.00	231	0.29
Pipeline Construction	Forklifts	2	6.00	89	0.20
Pipeline Construction	Graders	1	8.00	187	0.41
Pipeline Construction	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Well Construction	Cranes	1	4.00	231	0.29
Well Construction	Forklifts	2	6.00	89	0.20
Well Construction	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Pump Test	Graders	1	6.00	187	0.41
Pump Test	Rubber Tired Dozers	1	6.00	247	0.40
Pump Test	Tractors/Loaders/Backhoes	1	7.00	97	0.37
Well Head Equipment Mobilization	Cranes	1	4.00	231	0.29

## Arcadia Well Construction and PFAS Treatment - Los Angeles-South Coast County, Annual

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

Well Head Equipment Mobilization	Forklifts	2	6.00	89	0.20
Well Head Equipment Mobilization	Graders	1	8.00	187	0.41
Well Head Equipment Mobilization	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Well Head Equipment Mobilization	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Well Head Construction	Cranes	1	4.00	231	0.29
Well Head Construction	Cranes	1	4.00	231	0.29
Well Head Construction	Forklifts	2	6.00	89	0.20
Well Head Construction	Forklifts	2	6.00	89	0.20
Well Head Construction	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Well Head Construction	Tractors/Loaders/Backhoes	2	8.00	97	0.37
PFAS Treatment Plant Mobilization	Cranes	1	4.00	231	0.29
PFAS Treatment Plant Mobilization	Forklifts	2	6.00	89	0.20
PFAS Treatment Plant Mobilization	Graders	1	8.00	187	0.41
PFAS Treatment Plant Mobilization	Tractors/Loaders/Backhoes	2	8.00	97	0.37
PFAS Treatment Plant Construction	Cranes	1	4.00	231	0.29
PFAS Treatment Plant Construction	Forklifts	2	6.00	89	0.20
PFAS Treatment Plant Construction	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Treatment Plant Startup and Testing	Cranes	1	4.00	231	0.29
Treatment Plant Startup and Testing	Forklifts	2	6.00	89	0.20
Treatment Plant Startup and Testing	Graders	1	8.00	187	0.41
Treatment Plant Startup and Testing	Tractors/Loaders/Backhoes	2	8.00	97	0.37

**Trips and VMT**

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Well and Pipeline Construction Mobilization	2	5.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Pipeline Construction	5	5.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Well Construction	5	2.00	1.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

## Arcadia Well Construction and PFAS Treatment - Los Angeles-South Coast County, Annual

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

Pump Test	3	8.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Well Head Equipment Mobilization	7	2.00	1.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Well Head Equipment Mobilization	7	5.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Well Head Construction	10	2.00	1.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Well Head Construction	10	2.00	1.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
PFAS Treatment Plant Mobilization	6	2.00	1.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
PFAS Treatment Plant Construction	5	2.00	1.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Treatment Plant Startup and Testing	6	2.00	1.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

**3.1 Mitigation Measures Construction****3.2 Well and Pipeline Construction Mobilization - 2024****Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					6.0000e-005	0.0000	6.0000e-005	1.0000e-005	0.0000	1.0000e-005	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	1.2500e-003	0.0140	9.7300e-003	2.0000e-005		5.0000e-004	5.0000e-004		4.6000e-004	4.6000e-004	0.0000	2.1370	2.1370	6.9000e-004	0.0000	2.1543
<b>Total</b>	<b>1.2500e-003</b>	<b>0.0140</b>	<b>9.7300e-003</b>	<b>2.0000e-005</b>	<b>6.0000e-005</b>	<b>5.0000e-004</b>	<b>5.6000e-004</b>	<b>1.0000e-005</b>	<b>4.6000e-004</b>	<b>4.7000e-004</b>	<b>0.0000</b>	<b>2.1370</b>	<b>2.1370</b>	<b>6.9000e-004</b>	<b>0.0000</b>	<b>2.1543</b>

## Arcadia Well Construction and PFAS Treatment - Los Angeles-South Coast County, Annual

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied****3.2 Well and Pipeline Construction Mobilization - 2024****Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	4.0000e-005	3.0000e-005	4.0000e-004	0.0000	1.4000e-004	0.0000	1.4000e-004	4.0000e-005	0.0000	4.0000e-005	0.0000	0.1060	0.1060	0.0000	0.0000	0.1068
<b>Total</b>	<b>4.0000e-005</b>	<b>3.0000e-005</b>	<b>4.0000e-004</b>	<b>0.0000</b>	<b>1.4000e-004</b>	<b>0.0000</b>	<b>1.4000e-004</b>	<b>4.0000e-005</b>	<b>0.0000</b>	<b>4.0000e-005</b>	<b>0.0000</b>	<b>0.1060</b>	<b>0.1060</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.1068</b>

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					6.0000e-005	0.0000	6.0000e-005	1.0000e-005	0.0000	1.0000e-005	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	1.2500e-003	0.0140	9.7300e-003	2.0000e-005		5.0000e-004	5.0000e-004		4.6000e-004	4.6000e-004	0.0000	2.1370	2.1370	6.9000e-004	0.0000	2.1543
<b>Total</b>	<b>1.2500e-003</b>	<b>0.0140</b>	<b>9.7300e-003</b>	<b>2.0000e-005</b>	<b>6.0000e-005</b>	<b>5.0000e-004</b>	<b>5.6000e-004</b>	<b>1.0000e-005</b>	<b>4.6000e-004</b>	<b>4.7000e-004</b>	<b>0.0000</b>	<b>2.1370</b>	<b>2.1370</b>	<b>6.9000e-004</b>	<b>0.0000</b>	<b>2.1543</b>

## Arcadia Well Construction and PFAS Treatment - Los Angeles-South Coast County, Annual

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied****3.2 Well and Pipeline Construction Mobilization - 2024****Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	4.0000e-005	3.0000e-005	4.0000e-004	0.0000	1.4000e-004	0.0000	1.4000e-004	4.0000e-005	0.0000	4.0000e-005	0.0000	0.1060	0.1060	0.0000	0.0000	0.1068
<b>Total</b>	<b>4.0000e-005</b>	<b>3.0000e-005</b>	<b>4.0000e-004</b>	<b>0.0000</b>	<b>1.4000e-004</b>	<b>0.0000</b>	<b>1.4000e-004</b>	<b>4.0000e-005</b>	<b>0.0000</b>	<b>4.0000e-005</b>	<b>0.0000</b>	<b>0.1060</b>	<b>0.1060</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.1068</b>

**3.3 Pump Test - 2025****Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0226	0.0000	0.0226	0.0124	0.0000	0.0124	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	4.1700e-003	0.0437	0.0270	7.0000e-005		1.7400e-003	1.7400e-003		1.6000e-003	1.6000e-003	0.0000	6.1902	6.1902	2.0000e-003	0.0000	6.2402
<b>Total</b>	<b>4.1700e-003</b>	<b>0.0437</b>	<b>0.0270</b>	<b>7.0000e-005</b>	<b>0.0226</b>	<b>1.7400e-003</b>	<b>0.0244</b>	<b>0.0124</b>	<b>1.6000e-003</b>	<b>0.0140</b>	<b>0.0000</b>	<b>6.1902</b>	<b>6.1902</b>	<b>2.0000e-003</b>	<b>0.0000</b>	<b>6.2402</b>



## Arcadia Well Construction and PFAS Treatment - Los Angeles-South Coast County, Annual

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied****3.3 Pump Test - 2025****Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.1000e-004	8.0000e-005	1.1800e-003	0.0000	4.4000e-004	0.0000	4.4000e-004	1.2000e-004	0.0000	1.2000e-004	0.0000	0.3275	0.3275	1.0000e-005	1.0000e-005	0.3301
<b>Total</b>	<b>1.1000e-004</b>	<b>8.0000e-005</b>	<b>1.1800e-003</b>	<b>0.0000</b>	<b>4.4000e-004</b>	<b>0.0000</b>	<b>4.4000e-004</b>	<b>1.2000e-004</b>	<b>0.0000</b>	<b>1.2000e-004</b>	<b>0.0000</b>	<b>0.3275</b>	<b>0.3275</b>	<b>1.0000e-005</b>	<b>1.0000e-005</b>	<b>0.3301</b>

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0226	0.0000	0.0226	0.0124	0.0000	0.0124	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	4.1700e-003	0.0437	0.0270	7.0000e-005		1.7400e-003	1.7400e-003		1.6000e-003	1.6000e-003	0.0000	6.1902	6.1902	2.0000e-003	0.0000	6.2402
<b>Total</b>	<b>4.1700e-003</b>	<b>0.0437</b>	<b>0.0270</b>	<b>7.0000e-005</b>	<b>0.0226</b>	<b>1.7400e-003</b>	<b>0.0244</b>	<b>0.0124</b>	<b>1.6000e-003</b>	<b>0.0140</b>	<b>0.0000</b>	<b>6.1902</b>	<b>6.1902</b>	<b>2.0000e-003</b>	<b>0.0000</b>	<b>6.2402</b>

## Arcadia Well Construction and PFAS Treatment - Los Angeles-South Coast County, Annual

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied****3.3 Pump Test - 2025****Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.1000e-004	8.0000e-005	1.1800e-003	0.0000	4.4000e-004	0.0000	4.4000e-004	1.2000e-004	0.0000	1.2000e-004	0.0000	0.3275	0.3275	1.0000e-005	1.0000e-005	0.3301
<b>Total</b>	<b>1.1000e-004</b>	<b>8.0000e-005</b>	<b>1.1800e-003</b>	<b>0.0000</b>	<b>4.4000e-004</b>	<b>0.0000</b>	<b>4.4000e-004</b>	<b>1.2000e-004</b>	<b>0.0000</b>	<b>1.2000e-004</b>	<b>0.0000</b>	<b>0.3275</b>	<b>0.3275</b>	<b>1.0000e-005</b>	<b>1.0000e-005</b>	<b>0.3301</b>

**3.4 Well Head Equipment Mobilization - 2024****Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					6.0000e-005	0.0000	6.0000e-005	1.0000e-005	0.0000	1.0000e-005	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	2.7300e-003	0.0289	0.0274	5.0000e-005		1.2100e-003	1.2100e-003		1.1100e-003	1.1100e-003	0.0000	4.6431	4.6431	1.5000e-003	0.0000	4.6806
<b>Total</b>	<b>2.7300e-003</b>	<b>0.0289</b>	<b>0.0274</b>	<b>5.0000e-005</b>	<b>6.0000e-005</b>	<b>1.2100e-003</b>	<b>1.2700e-003</b>	<b>1.0000e-005</b>	<b>1.1100e-003</b>	<b>1.1200e-003</b>	<b>0.0000</b>	<b>4.6431</b>	<b>4.6431</b>	<b>1.5000e-003</b>	<b>0.0000</b>	<b>4.6806</b>

## Arcadia Well Construction and PFAS Treatment - Los Angeles-South Coast County, Annual

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied****3.4 Well Head Equipment Mobilization - 2024****Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	1.0000e-004	4.0000e-005	0.0000	3.0000e-005	0.0000	3.0000e-005	1.0000e-005	0.0000	1.0000e-005	0.0000	0.0448	0.0448	0.0000	1.0000e-005	0.0467
Worker	5.0000e-005	4.0000e-005	5.5000e-004	0.0000	3.6000e-004	0.0000	3.6000e-004	9.0000e-005	0.0000	9.0000e-005	0.0000	0.1483	0.1483	0.0000	0.0000	0.1495
<b>Total</b>	<b>5.0000e-005</b>	<b>1.4000e-004</b>	<b>5.9000e-004</b>	<b>0.0000</b>	<b>3.9000e-004</b>	<b>0.0000</b>	<b>3.9000e-004</b>	<b>1.0000e-004</b>	<b>0.0000</b>	<b>1.0000e-004</b>	<b>0.0000</b>	<b>0.1931</b>	<b>0.1931</b>	<b>0.0000</b>	<b>1.0000e-005</b>	<b>0.1963</b>

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					6.0000e-005	0.0000	6.0000e-005	1.0000e-005	0.0000	1.0000e-005	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	2.7300e-003	0.0289	0.0274	5.0000e-005		1.2100e-003	1.2100e-003		1.1100e-003	1.1100e-003	0.0000	4.6431	4.6431	1.5000e-003	0.0000	4.6806
<b>Total</b>	<b>2.7300e-003</b>	<b>0.0289</b>	<b>0.0274</b>	<b>5.0000e-005</b>	<b>6.0000e-005</b>	<b>1.2100e-003</b>	<b>1.2700e-003</b>	<b>1.0000e-005</b>	<b>1.1100e-003</b>	<b>1.1200e-003</b>	<b>0.0000</b>	<b>4.6431</b>	<b>4.6431</b>	<b>1.5000e-003</b>	<b>0.0000</b>	<b>4.6806</b>

## Arcadia Well Construction and PFAS Treatment - Los Angeles-South Coast County, Annual

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied****3.4 Well Head Equipment Mobilization - 2024****Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	1.0000e-004	4.0000e-005	0.0000	3.0000e-005	0.0000	3.0000e-005	1.0000e-005	0.0000	1.0000e-005	0.0000	0.0448	0.0448	0.0000	1.0000e-005	0.0467
Worker	5.0000e-005	4.0000e-005	5.5000e-004	0.0000	3.6000e-004	0.0000	3.6000e-004	9.0000e-005	0.0000	9.0000e-005	0.0000	0.1483	0.1483	0.0000	0.0000	0.1495
<b>Total</b>	<b>5.0000e-005</b>	<b>1.4000e-004</b>	<b>5.9000e-004</b>	<b>0.0000</b>	<b>3.9000e-004</b>	<b>0.0000</b>	<b>3.9000e-004</b>	<b>1.0000e-004</b>	<b>0.0000</b>	<b>1.0000e-004</b>	<b>0.0000</b>	<b>0.1931</b>	<b>0.1931</b>	<b>0.0000</b>	<b>1.0000e-005</b>	<b>0.1963</b>

**3.5 PFAS Treatment Plant Mobilization - 2024****Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					6.0000e-005	0.0000	6.0000e-005	1.0000e-005	0.0000	1.0000e-005	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	2.3700e-003	0.0253	0.0218	5.0000e-005		1.0400e-003	1.0400e-003		9.6000e-004	9.6000e-004	0.0000	3.9587	3.9587	1.2800e-003	0.0000	3.9907
<b>Total</b>	<b>2.3700e-003</b>	<b>0.0253</b>	<b>0.0218</b>	<b>5.0000e-005</b>	<b>6.0000e-005</b>	<b>1.0400e-003</b>	<b>1.1000e-003</b>	<b>1.0000e-005</b>	<b>9.6000e-004</b>	<b>9.7000e-004</b>	<b>0.0000</b>	<b>3.9587</b>	<b>3.9587</b>	<b>1.2800e-003</b>	<b>0.0000</b>	<b>3.9907</b>

## Arcadia Well Construction and PFAS Treatment - Los Angeles-South Coast County, Annual

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied****3.5 PFAS Treatment Plant Mobilization - 2024****Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	1.0000e-004	4.0000e-005	0.0000	2.0000e-005	0.0000	2.0000e-005	0.0000	0.0000	1.0000e-005	0.0000	0.0448	0.0448	0.0000	1.0000e-005	0.0467
Worker	1.0000e-005	1.0000e-005	1.6000e-004	0.0000	5.0000e-005	0.0000	6.0000e-005	1.0000e-005	0.0000	1.0000e-005	0.0000	0.0424	0.0424	0.0000	0.0000	0.0427
<b>Total</b>	<b>1.0000e-005</b>	<b>1.1000e-004</b>	<b>2.0000e-004</b>	<b>0.0000</b>	<b>7.0000e-005</b>	<b>0.0000</b>	<b>8.0000e-005</b>	<b>1.0000e-005</b>	<b>0.0000</b>	<b>2.0000e-005</b>	<b>0.0000</b>	<b>0.0872</b>	<b>0.0872</b>	<b>0.0000</b>	<b>1.0000e-005</b>	<b>0.0895</b>

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					6.0000e-005	0.0000	6.0000e-005	1.0000e-005	0.0000	1.0000e-005	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	2.3700e-003	0.0253	0.0218	5.0000e-005		1.0400e-003	1.0400e-003		9.6000e-004	9.6000e-004	0.0000	3.9587	3.9587	1.2800e-003	0.0000	3.9907
<b>Total</b>	<b>2.3700e-003</b>	<b>0.0253</b>	<b>0.0218</b>	<b>5.0000e-005</b>	<b>6.0000e-005</b>	<b>1.0400e-003</b>	<b>1.1000e-003</b>	<b>1.0000e-005</b>	<b>9.6000e-004</b>	<b>9.7000e-004</b>	<b>0.0000</b>	<b>3.9587</b>	<b>3.9587</b>	<b>1.2800e-003</b>	<b>0.0000</b>	<b>3.9907</b>

## Arcadia Well Construction and PFAS Treatment - Los Angeles-South Coast County, Annual

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied****3.5 PFAS Treatment Plant Mobilization - 2024****Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	1.0000e-004	4.0000e-005	0.0000	2.0000e-005	0.0000	2.0000e-005	0.0000	0.0000	1.0000e-005	0.0000	0.0448	0.0448	0.0000	1.0000e-005	0.0467
Worker	1.0000e-005	1.0000e-005	1.6000e-004	0.0000	5.0000e-005	0.0000	6.0000e-005	1.0000e-005	0.0000	1.0000e-005	0.0000	0.0424	0.0424	0.0000	0.0000	0.0427
<b>Total</b>	<b>1.0000e-005</b>	<b>1.1000e-004</b>	<b>2.0000e-004</b>	<b>0.0000</b>	<b>7.0000e-005</b>	<b>0.0000</b>	<b>8.0000e-005</b>	<b>1.0000e-005</b>	<b>0.0000</b>	<b>2.0000e-005</b>	<b>0.0000</b>	<b>0.0872</b>	<b>0.0872</b>	<b>0.0000</b>	<b>1.0000e-005</b>	<b>0.0895</b>

**3.6 Treatment Plant Startup and Testing - 2025****Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					6.0000e-005	0.0000	6.0000e-005	1.0000e-005	0.0000	1.0000e-005	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	2.1600e-003	0.0224	0.0216	5.0000e-005		8.8000e-004	8.8000e-004		8.1000e-004	8.1000e-004	0.0000	3.9594	3.9594	1.2800e-003	0.0000	3.9915
<b>Total</b>	<b>2.1600e-003</b>	<b>0.0224</b>	<b>0.0216</b>	<b>5.0000e-005</b>	<b>6.0000e-005</b>	<b>8.8000e-004</b>	<b>9.4000e-004</b>	<b>1.0000e-005</b>	<b>8.1000e-004</b>	<b>8.2000e-004</b>	<b>0.0000</b>	<b>3.9594</b>	<b>3.9594</b>	<b>1.2800e-003</b>	<b>0.0000</b>	<b>3.9915</b>

## Arcadia Well Construction and PFAS Treatment - Los Angeles-South Coast County, Annual

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied****3.6 Treatment Plant Startup and Testing - 2025****Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	1.0000e-004	4.0000e-005	0.0000	2.0000e-005	0.0000	2.0000e-005	0.0000	0.0000	1.0000e-005	0.0000	0.0440	0.0440	0.0000	1.0000e-005	0.0459
Worker	1.0000e-005	1.0000e-005	1.5000e-004	0.0000	5.0000e-005	0.0000	6.0000e-005	1.0000e-005	0.0000	1.0000e-005	0.0000	0.0409	0.0409	0.0000	0.0000	0.0413
<b>Total</b>	<b>1.0000e-005</b>	<b>1.1000e-004</b>	<b>1.9000e-004</b>	<b>0.0000</b>	<b>7.0000e-005</b>	<b>0.0000</b>	<b>8.0000e-005</b>	<b>1.0000e-005</b>	<b>0.0000</b>	<b>2.0000e-005</b>	<b>0.0000</b>	<b>0.0849</b>	<b>0.0849</b>	<b>0.0000</b>	<b>1.0000e-005</b>	<b>0.0872</b>

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					6.0000e-005	0.0000	6.0000e-005	1.0000e-005	0.0000	1.0000e-005	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	2.1600e-003	0.0224	0.0216	5.0000e-005		8.8000e-004	8.8000e-004		8.1000e-004	8.1000e-004	0.0000	3.9594	3.9594	1.2800e-003	0.0000	3.9914
<b>Total</b>	<b>2.1600e-003</b>	<b>0.0224</b>	<b>0.0216</b>	<b>5.0000e-005</b>	<b>6.0000e-005</b>	<b>8.8000e-004</b>	<b>9.4000e-004</b>	<b>1.0000e-005</b>	<b>8.1000e-004</b>	<b>8.2000e-004</b>	<b>0.0000</b>	<b>3.9594</b>	<b>3.9594</b>	<b>1.2800e-003</b>	<b>0.0000</b>	<b>3.9914</b>

## Arcadia Well Construction and PFAS Treatment - Los Angeles-South Coast County, Annual

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied****3.6 Treatment Plant Startup and Testing - 2025****Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	1.0000e-004	4.0000e-005	0.0000	2.0000e-005	0.0000	2.0000e-005	0.0000	0.0000	1.0000e-005	0.0000	0.0440	0.0440	0.0000	1.0000e-005	0.0459
Worker	1.0000e-005	1.0000e-005	1.5000e-004	0.0000	5.0000e-005	0.0000	6.0000e-005	1.0000e-005	0.0000	1.0000e-005	0.0000	0.0409	0.0409	0.0000	0.0000	0.0413
<b>Total</b>	<b>1.0000e-005</b>	<b>1.1000e-004</b>	<b>1.9000e-004</b>	<b>0.0000</b>	<b>7.0000e-005</b>	<b>0.0000</b>	<b>8.0000e-005</b>	<b>1.0000e-005</b>	<b>0.0000</b>	<b>2.0000e-005</b>	<b>0.0000</b>	<b>0.0849</b>	<b>0.0849</b>	<b>0.0000</b>	<b>1.0000e-005</b>	<b>0.0872</b>

**3.7 Pipeline Construction - 2024****Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0161	0.1736	0.1298	3.0000e-004		7.0100e-003	7.0100e-003		6.4500e-003	6.4500e-003	0.0000	26.1945	26.1945	8.4700e-003	0.0000	26.4063
<b>Total</b>	<b>0.0161</b>	<b>0.1736</b>	<b>0.1298</b>	<b>3.0000e-004</b>		<b>7.0100e-003</b>	<b>7.0100e-003</b>		<b>6.4500e-003</b>	<b>6.4500e-003</b>	<b>0.0000</b>	<b>26.1945</b>	<b>26.1945</b>	<b>8.4700e-003</b>	<b>0.0000</b>	<b>26.4063</b>



## Arcadia Well Construction and PFAS Treatment - Los Angeles-South Coast County, Annual

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied****3.7 Pipeline Construction - 2024****Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	3.0000e-004	2.2000e-004	3.1700e-003	1.0000e-005	1.1000e-003	1.0000e-005	1.1000e-003	2.9000e-004	1.0000e-005	3.0000e-004	0.0000	0.8476	0.8476	2.0000e-005	2.0000e-005	0.8544
<b>Total</b>	<b>3.0000e-004</b>	<b>2.2000e-004</b>	<b>3.1700e-003</b>	<b>1.0000e-005</b>	<b>1.1000e-003</b>	<b>1.0000e-005</b>	<b>1.1000e-003</b>	<b>2.9000e-004</b>	<b>1.0000e-005</b>	<b>3.0000e-004</b>	<b>0.0000</b>	<b>0.8476</b>	<b>0.8476</b>	<b>2.0000e-005</b>	<b>2.0000e-005</b>	<b>0.8544</b>

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0161	0.1736	0.1298	3.0000e-004		7.0100e-003	7.0100e-003		6.4500e-003	6.4500e-003	0.0000	26.1945	26.1945	8.4700e-003	0.0000	26.4063
<b>Total</b>	<b>0.0161</b>	<b>0.1736</b>	<b>0.1298</b>	<b>3.0000e-004</b>		<b>7.0100e-003</b>	<b>7.0100e-003</b>		<b>6.4500e-003</b>	<b>6.4500e-003</b>	<b>0.0000</b>	<b>26.1945</b>	<b>26.1945</b>	<b>8.4700e-003</b>	<b>0.0000</b>	<b>26.4063</b>

## Arcadia Well Construction and PFAS Treatment - Los Angeles-South Coast County, Annual

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied****3.7 Pipeline Construction - 2024****Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	3.0000e-004	2.2000e-004	3.1700e-003	1.0000e-005	1.1000e-003	1.0000e-005	1.1000e-003	2.9000e-004	1.0000e-005	3.0000e-004	0.0000	0.8476	0.8476	2.0000e-005	2.0000e-005	0.8544
<b>Total</b>	<b>3.0000e-004</b>	<b>2.2000e-004</b>	<b>3.1700e-003</b>	<b>1.0000e-005</b>	<b>1.1000e-003</b>	<b>1.0000e-005</b>	<b>1.1000e-003</b>	<b>2.9000e-004</b>	<b>1.0000e-005</b>	<b>3.0000e-004</b>	<b>0.0000</b>	<b>0.8476</b>	<b>0.8476</b>	<b>2.0000e-005</b>	<b>2.0000e-005</b>	<b>0.8544</b>

**3.8 Well Construction - 2024****Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0155	0.1553	0.1838	3.0000e-004		7.3400e-003	7.3400e-003		6.7500e-003	6.7500e-003	0.0000	26.0630	26.0630	8.4300e-003	0.0000	26.2738
<b>Total</b>	<b>0.0155</b>	<b>0.1553</b>	<b>0.1838</b>	<b>3.0000e-004</b>		<b>7.3400e-003</b>	<b>7.3400e-003</b>		<b>6.7500e-003</b>	<b>6.7500e-003</b>	<b>0.0000</b>	<b>26.0630</b>	<b>26.0630</b>	<b>8.4300e-003</b>	<b>0.0000</b>	<b>26.2738</b>

## Arcadia Well Construction and PFAS Treatment - Los Angeles-South Coast County, Annual

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied****3.8 Well Construction - 2024****Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	3.0000e-005	1.0500e-003	3.8000e-004	0.0000	1.6000e-004	1.0000e-005	1.7000e-004	5.0000e-005	0.0000	5.0000e-005	0.0000	0.4657	0.4657	2.0000e-005	7.0000e-005	0.4860
Worker	1.5000e-004	1.2000e-004	1.6500e-003	0.0000	5.7000e-004	0.0000	5.7000e-004	1.5000e-004	0.0000	1.5000e-004	0.0000	0.4407	0.4407	1.0000e-005	1.0000e-005	0.4443
<b>Total</b>	<b>1.8000e-004</b>	<b>1.1700e-003</b>	<b>2.0300e-003</b>	<b>0.0000</b>	<b>7.3000e-004</b>	<b>1.0000e-005</b>	<b>7.4000e-004</b>	<b>2.0000e-004</b>	<b>0.0000</b>	<b>2.0000e-004</b>	<b>0.0000</b>	<b>0.9064</b>	<b>0.9064</b>	<b>3.0000e-005</b>	<b>8.0000e-005</b>	<b>0.9303</b>

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0155	0.1553	0.1838	3.0000e-004		7.3400e-003	7.3400e-003		6.7500e-003	6.7500e-003	0.0000	26.0630	26.0630	8.4300e-003	0.0000	26.2737
<b>Total</b>	<b>0.0155</b>	<b>0.1553</b>	<b>0.1838</b>	<b>3.0000e-004</b>		<b>7.3400e-003</b>	<b>7.3400e-003</b>		<b>6.7500e-003</b>	<b>6.7500e-003</b>	<b>0.0000</b>	<b>26.0630</b>	<b>26.0630</b>	<b>8.4300e-003</b>	<b>0.0000</b>	<b>26.2737</b>

## Arcadia Well Construction and PFAS Treatment - Los Angeles-South Coast County, Annual

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied****3.8 Well Construction - 2024****Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	3.0000e-005	1.0500e-003	3.8000e-004	0.0000	1.6000e-004	1.0000e-005	1.7000e-004	5.0000e-005	0.0000	5.0000e-005	0.0000	0.4657	0.4657	2.0000e-005	7.0000e-005	0.4860
Worker	1.5000e-004	1.2000e-004	1.6500e-003	0.0000	5.7000e-004	0.0000	5.7000e-004	1.5000e-004	0.0000	1.5000e-004	0.0000	0.4407	0.4407	1.0000e-005	1.0000e-005	0.4443
<b>Total</b>	<b>1.8000e-004</b>	<b>1.1700e-003</b>	<b>2.0300e-003</b>	<b>0.0000</b>	<b>7.3000e-004</b>	<b>1.0000e-005</b>	<b>7.4000e-004</b>	<b>2.0000e-004</b>	<b>0.0000</b>	<b>2.0000e-004</b>	<b>0.0000</b>	<b>0.9064</b>	<b>0.9064</b>	<b>3.0000e-005</b>	<b>8.0000e-005</b>	<b>0.9303</b>

**3.8 Well Construction - 2025****Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	7.7100e-003	0.0768	0.0984	1.6000e-004		3.3800e-003	3.3800e-003		3.1100e-003	3.1100e-003	0.0000	14.0414	14.0414	4.5400e-003	0.0000	14.1549
<b>Total</b>	<b>7.7100e-003</b>	<b>0.0768</b>	<b>0.0984</b>	<b>1.6000e-004</b>		<b>3.3800e-003</b>	<b>3.3800e-003</b>		<b>3.1100e-003</b>	<b>3.1100e-003</b>	<b>0.0000</b>	<b>14.0414</b>	<b>14.0414</b>	<b>4.5400e-003</b>	<b>0.0000</b>	<b>14.1549</b>

## Arcadia Well Construction and PFAS Treatment - Los Angeles-South Coast County, Annual

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied****3.8 Well Construction - 2025****Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	1.0000e-005	5.6000e-004	2.0000e-004	0.0000	9.0000e-005	0.0000	9.0000e-005	3.0000e-005	0.0000	3.0000e-005	0.0000	0.2462	0.2462	1.0000e-005	4.0000e-005	0.2570
Worker	8.0000e-005	6.0000e-005	8.3000e-004	0.0000	3.1000e-004	0.0000	3.1000e-004	8.0000e-005	0.0000	8.0000e-005	0.0000	0.2293	0.2293	1.0000e-005	1.0000e-005	0.2310
<b>Total</b>	<b>9.0000e-005</b>	<b>6.2000e-004</b>	<b>1.0300e-003</b>	<b>0.0000</b>	<b>4.0000e-004</b>	<b>0.0000</b>	<b>4.0000e-004</b>	<b>1.1000e-004</b>	<b>0.0000</b>	<b>1.1000e-004</b>	<b>0.0000</b>	<b>0.4755</b>	<b>0.4755</b>	<b>2.0000e-005</b>	<b>5.0000e-005</b>	<b>0.4881</b>

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	7.7100e-003	0.0768	0.0984	1.6000e-004		3.3800e-003	3.3800e-003		3.1100e-003	3.1100e-003	0.0000	14.0414	14.0414	4.5400e-003	0.0000	14.1549
<b>Total</b>	<b>7.7100e-003</b>	<b>0.0768</b>	<b>0.0984</b>	<b>1.6000e-004</b>		<b>3.3800e-003</b>	<b>3.3800e-003</b>		<b>3.1100e-003</b>	<b>3.1100e-003</b>	<b>0.0000</b>	<b>14.0414</b>	<b>14.0414</b>	<b>4.5400e-003</b>	<b>0.0000</b>	<b>14.1549</b>

## Arcadia Well Construction and PFAS Treatment - Los Angeles-South Coast County, Annual

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied****3.8 Well Construction - 2025****Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	1.0000e-005	5.6000e-004	2.0000e-004	0.0000	9.0000e-005	0.0000	9.0000e-005	3.0000e-005	0.0000	3.0000e-005	0.0000	0.2462	0.2462	1.0000e-005	4.0000e-005	0.2570
Worker	8.0000e-005	6.0000e-005	8.3000e-004	0.0000	3.1000e-004	0.0000	3.1000e-004	8.0000e-005	0.0000	8.0000e-005	0.0000	0.2293	0.2293	1.0000e-005	1.0000e-005	0.2310
<b>Total</b>	<b>9.0000e-005</b>	<b>6.2000e-004</b>	<b>1.0300e-003</b>	<b>0.0000</b>	<b>4.0000e-004</b>	<b>0.0000</b>	<b>4.0000e-004</b>	<b>1.1000e-004</b>	<b>0.0000</b>	<b>1.1000e-004</b>	<b>0.0000</b>	<b>0.4755</b>	<b>0.4755</b>	<b>2.0000e-005</b>	<b>5.0000e-005</b>	<b>0.4881</b>

**3.9 Well Head Construction - 2025****Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0402	0.4002	0.5131	8.3000e-004		0.0176	0.0176		0.0162	0.0162	0.0000	73.2159	73.2159	0.0237	0.0000	73.8079
<b>Total</b>	<b>0.0402</b>	<b>0.4002</b>	<b>0.5131</b>	<b>8.3000e-004</b>		<b>0.0176</b>	<b>0.0176</b>		<b>0.0162</b>	<b>0.0162</b>	<b>0.0000</b>	<b>73.2159</b>	<b>73.2159</b>	<b>0.0237</b>	<b>0.0000</b>	<b>73.8079</b>

## Arcadia Well Construction and PFAS Treatment - Los Angeles-South Coast County, Annual

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied****3.9 Well Head Construction - 2025****Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	8.0000e-005	2.9300e-003	1.0600e-003	1.0000e-005	7.9000e-004	1.0000e-005	8.0000e-004	2.1000e-004	1.0000e-005	2.3000e-004	0.0000	1.2839	1.2839	4.0000e-005	1.9000e-004	1.3401
Worker	4.0000e-004	2.9000e-004	4.3000e-003	1.0000e-005	2.9900e-003	1.0000e-005	3.0000e-003	7.7000e-004	1.0000e-005	7.7000e-004	0.0000	1.1954	1.1954	3.0000e-005	3.0000e-005	1.2047
<b>Total</b>	<b>4.8000e-004</b>	<b>3.2200e-003</b>	<b>5.3600e-003</b>	<b>2.0000e-005</b>	<b>3.7800e-003</b>	<b>2.0000e-005</b>	<b>3.8000e-003</b>	<b>9.8000e-004</b>	<b>2.0000e-005</b>	<b>1.0000e-003</b>	<b>0.0000</b>	<b>2.4793</b>	<b>2.4793</b>	<b>7.0000e-005</b>	<b>2.2000e-004</b>	<b>2.5448</b>

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0402	0.4002	0.5131	8.3000e-004		0.0176	0.0176		0.0162	0.0162	0.0000	73.2158	73.2158	0.0237	0.0000	73.8078
<b>Total</b>	<b>0.0402</b>	<b>0.4002</b>	<b>0.5131</b>	<b>8.3000e-004</b>		<b>0.0176</b>	<b>0.0176</b>		<b>0.0162</b>	<b>0.0162</b>	<b>0.0000</b>	<b>73.2158</b>	<b>73.2158</b>	<b>0.0237</b>	<b>0.0000</b>	<b>73.8078</b>

## Arcadia Well Construction and PFAS Treatment - Los Angeles-South Coast County, Annual

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied****3.9 Well Head Construction - 2025****Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	8.0000e-005	2.9300e-003	1.0600e-003	1.0000e-005	7.9000e-004	1.0000e-005	8.0000e-004	2.1000e-004	1.0000e-005	2.3000e-004	0.0000	1.2839	1.2839	4.0000e-005	1.9000e-004	1.3401
Worker	4.0000e-004	2.9000e-004	4.3000e-003	1.0000e-005	2.9900e-003	1.0000e-005	3.0000e-003	7.7000e-004	1.0000e-005	7.7000e-004	0.0000	1.1954	1.1954	3.0000e-005	3.0000e-005	1.2047
<b>Total</b>	<b>4.8000e-004</b>	<b>3.2200e-003</b>	<b>5.3600e-003</b>	<b>2.0000e-005</b>	<b>3.7800e-003</b>	<b>2.0000e-005</b>	<b>3.8000e-003</b>	<b>9.8000e-004</b>	<b>2.0000e-005</b>	<b>1.0000e-003</b>	<b>0.0000</b>	<b>2.4793</b>	<b>2.4793</b>	<b>7.0000e-005</b>	<b>2.2000e-004</b>	<b>2.5448</b>

**3.10 PFAS Treatment Plant Construction - 2025****Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0220	0.2193	0.2811	4.6000e-004		9.6500e-003	9.6500e-003		8.8800e-003	8.8800e-003	0.0000	40.1183	40.1183	0.0130	0.0000	40.4427
<b>Total</b>	<b>0.0220</b>	<b>0.2193</b>	<b>0.2811</b>	<b>4.6000e-004</b>		<b>9.6500e-003</b>	<b>9.6500e-003</b>		<b>8.8800e-003</b>	<b>8.8800e-003</b>	<b>0.0000</b>	<b>40.1183</b>	<b>40.1183</b>	<b>0.0130</b>	<b>0.0000</b>	<b>40.4427</b>



## Arcadia Well Construction and PFAS Treatment - Los Angeles-South Coast County, Annual

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied****3.10 PFAS Treatment Plant Construction - 2025****Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	4.0000e-005	1.6100e-003	5.8000e-004	1.0000e-005	2.5000e-004	1.0000e-005	2.6000e-004	7.0000e-005	1.0000e-005	8.0000e-005	0.0000	0.7035	0.7035	2.0000e-005	1.0000e-004	0.7343
Worker	2.2000e-004	1.6000e-004	2.3600e-003	1.0000e-005	8.8000e-004	0.0000	8.8000e-004	2.3000e-004	0.0000	2.4000e-004	0.0000	0.6550	0.6550	2.0000e-005	2.0000e-005	0.6601
<b>Total</b>	<b>2.6000e-004</b>	<b>1.7700e-003</b>	<b>2.9400e-003</b>	<b>2.0000e-005</b>	<b>1.1300e-003</b>	<b>1.0000e-005</b>	<b>1.1400e-003</b>	<b>3.0000e-004</b>	<b>1.0000e-005</b>	<b>3.2000e-004</b>	<b>0.0000</b>	<b>1.3585</b>	<b>1.3585</b>	<b>4.0000e-005</b>	<b>1.2000e-004</b>	<b>1.3944</b>

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0220	0.2193	0.2811	4.6000e-004		9.6500e-003	9.6500e-003		8.8800e-003	8.8800e-003	0.0000	40.1182	40.1182	0.0130	0.0000	40.4426
<b>Total</b>	<b>0.0220</b>	<b>0.2193</b>	<b>0.2811</b>	<b>4.6000e-004</b>		<b>9.6500e-003</b>	<b>9.6500e-003</b>		<b>8.8800e-003</b>	<b>8.8800e-003</b>	<b>0.0000</b>	<b>40.1182</b>	<b>40.1182</b>	<b>0.0130</b>	<b>0.0000</b>	<b>40.4426</b>

## Arcadia Well Construction and PFAS Treatment - Los Angeles-South Coast County, Annual

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied****3.10 PFAS Treatment Plant Construction - 2025****Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	4.0000e-005	1.6100e-003	5.8000e-004	1.0000e-005	2.5000e-004	1.0000e-005	2.6000e-004	7.0000e-005	1.0000e-005	8.0000e-005	0.0000	0.7035	0.7035	2.0000e-005	1.0000e-004	0.7343
Worker	2.2000e-004	1.6000e-004	2.3600e-003	1.0000e-005	8.8000e-004	0.0000	8.8000e-004	2.3000e-004	0.0000	2.4000e-004	0.0000	0.6550	0.6550	2.0000e-005	2.0000e-005	0.6601
<b>Total</b>	<b>2.6000e-004</b>	<b>1.7700e-003</b>	<b>2.9400e-003</b>	<b>2.0000e-005</b>	<b>1.1300e-003</b>	<b>1.0000e-005</b>	<b>1.1400e-003</b>	<b>3.0000e-004</b>	<b>1.0000e-005</b>	<b>3.2000e-004</b>	<b>0.0000</b>	<b>1.3585</b>	<b>1.3585</b>	<b>4.0000e-005</b>	<b>1.2000e-004</b>	<b>1.3944</b>

## Arcadia Well Construction and PFAS Treatment - Los Angeles-South Coast County, Annual

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied****4.0 Operational Detail - Mobile****4.1 Mitigation Measures Mobile**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	0.0133	0.0156	0.1452	3.3000e-004	0.0378	2.4000e-004	0.0380	0.0101	2.2000e-004	0.0103	0.0000	30.9196	30.9196	2.0200e-003	1.2800e-003	31.3527
Unmitigated	0.0133	0.0156	0.1452	3.3000e-004	0.0378	2.4000e-004	0.0380	0.0101	2.2000e-004	0.0103	0.0000	30.9196	30.9196	2.0200e-003	1.2800e-003	31.3527

**4.2 Trip Summary Information**

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
General Light Industry	24.80	9.95	25.00	100,554	100,554
Total	24.80	9.95	25.00	100,554	100,554

**4.3 Trip Type Information**

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
General Light Industry	16.60	8.40	6.90	59.00	28.00	13.00	92	5	3

**4.4 Fleet Mix**

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
General Light Industry	0.537891	0.065289	0.189998	0.126515	0.023567	0.006518	0.011114	0.008084	0.000933	0.000591	0.025474	0.000708	0.003318

Arcadia Well Construction and PFAS Treatment - Los Angeles-South Coast County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Electricity Mitigated						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
NaturalGas Mitigated	4.8000e-004	4.4000e-003	3.7000e-003	3.0000e-005		3.3000e-004	3.3000e-004		3.3000e-004	3.3000e-004	0.0000	4.7921	4.7921	9.0000e-005	9.0000e-005	4.8206
NaturalGas Unmitigated	4.8000e-004	4.4000e-003	3.7000e-003	3.0000e-005		3.3000e-004	3.3000e-004		3.3000e-004	3.3000e-004	0.0000	4.7921	4.7921	9.0000e-005	9.0000e-005	4.8206

## Arcadia Well Construction and PFAS Treatment - Los Angeles-South Coast County, Annual

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied****5.2 Energy by Land Use - NaturalGas****Unmitigated**

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
General Light Industry	89800	4.8000e-004	4.4000e-003	3.7000e-003	3.0000e-005		3.3000e-004	3.3000e-004		3.3000e-004	3.3000e-004	0.0000	4.7921	4.7921	9.0000e-005	9.0000e-005	4.8206
<b>Total</b>		<b>4.8000e-004</b>	<b>4.4000e-003</b>	<b>3.7000e-003</b>	<b>3.0000e-005</b>		<b>3.3000e-004</b>	<b>3.3000e-004</b>		<b>3.3000e-004</b>	<b>3.3000e-004</b>	<b>0.0000</b>	<b>4.7921</b>	<b>4.7921</b>	<b>9.0000e-005</b>	<b>9.0000e-005</b>	<b>4.8206</b>

**Mitigated**

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
General Light Industry	89800	4.8000e-004	4.4000e-003	3.7000e-003	3.0000e-005		3.3000e-004	3.3000e-004		3.3000e-004	3.3000e-004	0.0000	4.7921	4.7921	9.0000e-005	9.0000e-005	4.8206
<b>Total</b>		<b>4.8000e-004</b>	<b>4.4000e-003</b>	<b>3.7000e-003</b>	<b>3.0000e-005</b>		<b>3.3000e-004</b>	<b>3.3000e-004</b>		<b>3.3000e-004</b>	<b>3.3000e-004</b>	<b>0.0000</b>	<b>4.7921</b>	<b>4.7921</b>	<b>9.0000e-005</b>	<b>9.0000e-005</b>	<b>4.8206</b>

Arcadia Well Construction and PFAS Treatment - Los Angeles-South Coast County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

5.3 Energy by Land Use - Electricity

Unmitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
General Light Industry	54300	0.0000	0.0000	0.0000	0.0000
Total		0.0000	0.0000	0.0000	0.0000

Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
General Light Industry	54300	0.0000	0.0000	0.0000	0.0000
Total		0.0000	0.0000	0.0000	0.0000

6.0 Area Detail

6.1 Mitigation Measures Area

## Arcadia Well Construction and PFAS Treatment - Los Angeles-South Coast County, Annual

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	0.0204	0.0000	6.0000e-005	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	1.2000e-004	1.2000e-004	0.0000	0.0000	1.3000e-004
Unmitigated	0.0204	0.0000	6.0000e-005	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	1.2000e-004	1.2000e-004	0.0000	0.0000	1.3000e-004

**6.2 Area by SubCategory****Unmitigated**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	2.3200e-003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.0181					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	1.0000e-005	0.0000	6.0000e-005	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	1.2000e-004	1.2000e-004	0.0000	0.0000	1.3000e-004
<b>Total</b>	<b>0.0204</b>	<b>0.0000</b>	<b>6.0000e-005</b>	<b>0.0000</b>		<b>0.0000</b>	<b>0.0000</b>		<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>1.2000e-004</b>	<b>1.2000e-004</b>	<b>0.0000</b>	<b>0.0000</b>	<b>1.3000e-004</b>

## Arcadia Well Construction and PFAS Treatment - Los Angeles-South Coast County, Annual

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied****6.2 Area by SubCategory****Mitigated**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	2.3200e-003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.0181					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	1.0000e-005	0.0000	6.0000e-005	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	1.2000e-004	1.2000e-004	0.0000	0.0000	1.3000e-004
<b>Total</b>	<b>0.0204</b>	<b>0.0000</b>	<b>6.0000e-005</b>	<b>0.0000</b>		<b>0.0000</b>	<b>0.0000</b>		<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>1.2000e-004</b>	<b>1.2000e-004</b>	<b>0.0000</b>	<b>0.0000</b>	<b>1.3000e-004</b>

**7.0 Water Detail****7.1 Mitigation Measures Water**



Arcadia Well Construction and PFAS Treatment - Los Angeles-South Coast County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	0.3668	0.0377	8.9000e-004	1.5738
Unmitigated	0.3668	0.0377	8.9000e-004	1.5738

7.2 Water by Land Use

Unmitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
General Light Industry	1.15625 / 0	0.3668	0.0377	8.9000e-004	1.5738
Total		0.3668	0.0377	8.9000e-004	1.5738

Arcadia Well Construction and PFAS Treatment - Los Angeles-South Coast County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

7.2 Water by Land Use

Mitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
General Light Industry	1.15625 / 0	0.3668	0.0377	8.9000e-004	1.5738
Total		0.3668	0.0377	8.9000e-004	1.5738

8.0 Waste Detail

8.1 Mitigation Measures Waste

Category/Year

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	1.2585	0.0744	0.0000	3.1180
Unmitigated	1.2585	0.0744	0.0000	3.1180

Arcadia Well Construction and PFAS Treatment - Los Angeles-South Coast County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

8.2 Waste by Land Use

Unmitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
General Light Industry	6.2	1.2585	0.0744	0.0000	3.1180
Total		1.2585	0.0744	0.0000	3.1180

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
General Light Industry	6.2	1.2585	0.0744	0.0000	3.1180
Total		1.2585	0.0744	0.0000	3.1180

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type
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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

10.0 Stationary Equipment

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Fire Pumps and Emergency Generators

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type
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Boilers

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type
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User Defined Equipment

Equipment Type	Number
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11.0 Vegetation

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