



8.0 Inventory of Mitigation Measures



8.0 INVENTORY OF MITIGATION MEASURES

AESTHETICS/LIGHT AND GLARE

Scenic Views and Vistas

No mitigation measures are required.

Short-Term Visual Character/Quality

AES-1 Concurrent with the Grading Permit Application, a Construction Management Plan shall be submitted for review and approval by the Director of Economic and Community Development. The Construction Management Plan shall, at a minimum, indicate the equipment and vehicle staging areas, stockpiling of materials, fencing (i.e., temporary fencing with opaque material), and haul routes. The designation of construction haul routes would route traffic to minimize visual impacts to sensitive uses in the City. The Construction Management Plan shall require the equipment and vehicle staging areas be located as far as practicable from sensitive receptors to reduce visual impacts to nearby sensitive receptors. The requirement for a Construction Management Plan shall be included in project specifications, subject to verification by the Director of Economic and Community Development prior to final plan approval.

Long-Term Visual Character/Quality

No mitigation measures are required.

Light and Glare

AES-2 Construction equipment staging areas shall use appropriate screening (i.e., temporary fencing with opaque material) to buffer views of construction equipment and material, when feasible. Staging locations shall be indicated on Final Development Plans and Grading Plans.

AES-3 All construction-related lighting shall include shielding in order to direct lighting down and away from nearby residential uses and consist of the minimal wattage necessary to provide safety at the construction site. A construction safety lighting plan shall be submitted to the City for review concurrent with Grading Permit application.

AES-4 The proposed Lighting Plan shall be submitted to the City Planning Department for review and approval prior to approval of Final Development Plans and Grading Plans. The Lighting Plan shall ensure compliance with applicable City codes and provisions pertaining to light and glare, including Azusa Development Code Chapter 88.31.030, Outdoor Lighting, which limits lighting intensity, height, spillover, and requires shielding to reduce glare.



Cumulative Impacts

Refer to Mitigation Measures AES-1 through AES-4.

TRAFFIC/CIRCULATION

Construction Traffic

TRA-1 Prior to issuance of any grading and/or demolition permits, whichever occurs first, a Construction Management Plan shall be submitted for review and approval by the City Engineer. The requirement for a Construction Management Plan shall be incorporated into the project specifications and subject to verification by the City Engineer prior to final plan approval. The Construction Management Plan shall, at a minimum, address the following:

- Traffic control for any street closure, detour, or other disruption to traffic circulation.
- Identify the routes that construction vehicles will utilize for the delivery of construction materials (i.e., lumber, tiles, piping, windows, etc.), to access the site, traffic controls and detours, and proposed construction phasing plan for the project.
- Require the Applicant to keep all haul routes clean and free of debris, including but not limited to gravel and dirt as a result of its operations. The Applicant shall clean adjacent streets, as directed by the City Engineer (or representative of the City Engineer), of any material which may have been spilled, tracked, or blown onto adjacent streets or areas.
- Hauling or transport of oversize loads shall be allowed between the hours of 9:00 AM and 3:00 PM only, Monday through Friday, unless approved otherwise by the City Engineer. No hauling or transport will be allowed during nighttime hours, weekends, or Federal holidays.
- Use of local streets shall be prohibited.
- Haul trucks entering or exiting public streets shall at all times yield to public traffic.
- If hauling operations cause any damage to existing pavement, streets, curbs, and/or gutters along the haul route, the Applicant shall be fully responsible for repairs. The repairs shall be completed to the satisfaction of the City Engineer.
- All construction-related parking and staging of vehicles shall be kept out of the adjacent public roadways and shall occur on-site.
- This Plan shall meet standards established in the current California Manual on Uniform Traffic Control Device (MUTCD) as well as City of Azusa requirements.



Operational Traffic

TRA-2 Prior to issuance of a certificate of occupancy, the Applicant shall pay their fair share contribution towards upgrading the following significantly impacted signalized intersections with an Intelligent Transportation System (ITS) to improve circulation and intersection operations:

- I-605/Mount Olive Avenue and Huntington Drive (Duarte); and
- Irwindale Avenue and Foothill Boulevard (Irwindale).

The improvements shall be subject to review and approval by the cities of Irwindale and Duarte, as well as Caltrans.

TRA-3 Prior to issuance of a certificate of occupancy, the Applicant shall pay their fair share contribution towards the restriping of the southbound Irwindale Avenue/I-210 eastbound on- and off-ramps intersection to provide dual left-turn lanes and two through lanes. The fair share payment and associated improvements shall be subject to review and approval by the City of Irwindale City Engineer and coordinated with Caltrans.

TRA-4 Prior to final plan approval, the Applicant shall demonstrate the incorporation of a signalized intersection, and the installation of a short northbound left-turn pocket at the Todd Avenue/Tenth Street intersection on project plans. The plans shall be reviewed and approved by the City Engineer, and to the satisfaction of the Union Pacific Railroad prior to final plan approval. Proof of compliance with this mitigation measure will be required in order to receive a certificate of occupancy for the proposed project.

TRA-5 Prior to issuance of a certificate of occupancy, the Applicant shall pay their fair share contribution towards the restriping of the northbound I-210 ramp approach to provide a left-turn lane and a shared left/through/right-turn lane at the I-210 westbound/Alameda and First Street intersection. The fair share payment and associated improvements shall be subject to review and approval by the City of Azusa City Engineer and coordinated with Caltrans.

Congestion Management Program

No mitigation measures are required.

Hazardous Traffic Conditions

No mitigation measures are required.

Cumulative Impacts

Refer to Mitigation Measures TRA-1 through TRA-5.



AIR QUALITY

Short-Term (Construction) Air Emissions

AQ-1 Prior to issuance of any Grading Permit, the City Engineer and/or the Chief Building Official shall confirm that the Grading Plan, Building Plans, and specifications stipulate that, in compliance with SCAQMD Rule 403, excessive fugitive dust emissions shall be controlled by regular watering or other dust prevention measures, as specified in the SCAQMD's Rules and Regulations. In addition, SCAQMD Rule 402 requires implementation of dust suppression techniques to prevent fugitive dust from creating a nuisance off-site. Implementation of the following measures would reduce short-term fugitive dust impacts on nearby sensitive receptors:

- All active portions of the construction site shall be watered every three hours during daily construction activities and when dust is observed migrating from the project site to prevent excessive amounts of dust.
- Pave or apply water every three hours during daily construction activities or apply non-toxic soil stabilizers on all unpaved access roads, parking areas, and staging areas. More frequent watering shall occur if dust is observed migrating from the site during site disturbance.
- Any on-site stockpiles of debris or on-site haul roads, dirt, or other dusty material shall be enclosed, covered, or watered twice daily, or non-toxic soil binders shall be applied.
- All grading and excavation operations shall be suspended when wind speeds exceed 25 miles per hour.
- Disturbed areas shall be replaced with ground cover or paved immediately after construction is completed in the affected area.
- Track-out devices such as gravel bed track-out aprons (3 inches deep, 25 feet long, 12 feet wide per lane and edged by rock berm or row of stakes) shall be installed to reduce mud/dirt trackout from unpaved truck exit routes. Alternatively a wheel washer shall be used at truck exit routes.
- On-site vehicle speed shall be limited to 15 miles per hour.
- All material transported off-site shall be either sufficiently watered or securely covered to prevent excessive amounts of dust prior to departing the job site.
- Reroute construction trucks away from congested streets or sensitive receptor areas.

AQ-2 The following measures shall be implemented during construction to substantially reduce NO_x related emissions. They shall be included in the Grading Plan, Building Plans, and/or contract specifications. Contract specification language shall be reviewed by the City Engineer and/or Chief Building Official prior to issuance of a grading permit.



- Off-road diesel equipment operators shall be required to shut down their engines rather than idle for more than five minutes, and shall ensure that all off-road equipment is compliant with the CARB in-use off-road diesel vehicle regulation and SCAQMD Rule 2449.
- Require the use of 2010 and newer diesel haul trucks (e.g., material delivery trucks and soil import/export) and if the lead agency determines that 2010 model year or newer diesel trucks cannot be obtained the lead agency shall use trucks that meet EPA 2007 model year NO_x emissions requirements.
- The following note shall be included on all grading plans: During project construction, all internal combustion engines/construction, equipment operating on the project site shall meet EPA-Certified Tier 3 emissions standards, or higher according to the following:
 - Project Start to December 31, 2014: All off-road diesel-powered construction equipment greater than 50 horsepower shall meet Tier 3 off-road emissions standards. In addition, all construction equipment shall be outfitted with Best Available Control Technology (BACT) devices certified by CARB. Any emissions control device used by the contractor shall achieve emissions reductions that are no less than what could be achieved by a Level 3 diesel emissions control strategy for a similarly sized engine as defined by CARB regulations.
 - Post-January 1, 2015: All off-road diesel-powered construction equipment greater than 50 horsepower shall meet the Tier 4 emission standards, where available. In addition, all construction equipment shall be outfitted with BACT devices certified by CARB. Any emissions control device used by the contractor shall achieve emissions reductions that are no less than what could be achieved by a Level 3 diesel emissions control strategy for a similarly sized engine as defined by CARB regulations.
 - A copy of each unit's certified tier specification, BACT documentation, and CARB or SCAQMD operating permit shall be provided at the time of mobilization of each applicable unit of equipment.
- The contractor or Applicant, depending on who supplies the equipment, shall maintain construction equipment engines by keeping them tuned and regularly serviced to minimize exhaust emissions.
- Use low sulfur fuel for stationary construction equipment. This is required by SCAQMD Rules 431.1 and 431.2.
- Utilize existing power sources (i.e., power poles) when available. This measure would minimize the use of higher polluting gas or diesel generators.
- Configure construction parking to minimize traffic interference.



- Minimize obstruction of through-traffic lanes and provide temporary traffic controls such as a flag person during all phases of construction when needed to maintain smooth traffic flow. Construction shall be planned so that lane closures on existing streets are kept to a minimum.
- Schedule construction operations affecting traffic for off-peak hours to the best extent when possible.
- Develop a traffic plan to minimize traffic flow interference from construction activities (the plan may include advance public notice of routing, use of public transportation and satellite parking areas with a shuttle service.)
- Construction-related equipment, including heavy-duty equipment, motor vehicles, and portable equipment, shall be turned off when not in use for more than five minutes.

Long-Term (Operational) Air Emissions

AQ-3 The proposed project shall include, but not be limited to, the following list of project design features. These features shall be incorporated into the project design to ensure consistency with adopted statewide plans and programs. The project applicant shall demonstrate the incorporation of the following project design features prior to the issuance of building or occupancy permits as applicable. Lease/purchase documents shall identify that tenants are required to implement the following:

- At project start, all heavy duty trucks entering the property must meet or exceed 2010 engine emission standards specified in California Code of Regulations Title 13, Article 4.5, Chapter 1, Section 2025 (prior to issuance of occupancy permit).
- If the above clean truck requirements are infeasible, a phase-in schedule shall be set forth that shall feasibly achieve emission reductions as soon as possible, and faster than existing regulations (i.e., California Code of Regulations Title 13, Article 4.5, Chapter 1, Section 2025). Should an alternative schedule be found necessary, the SCAQMD staff shall be consulted prior to approving the schedule (prior to issuance of occupancy permit).
- Require at least a portion of the construction equipment fleet to utilize alternative fueled technologies (prior to issuance of occupancy permit).
- At a minimum, require tenants upon occupancy that do not already operate 2007 and newer trucks to apply in good faith for funding to replace/retrofit their trucks, such as Carl Moyer, VIP, Prop 1B, or other similar funds. Should funds be awarded, the tenant should also be required to accept and use them (prior to issuance of occupancy permit).
- Provide food options, fueling, truck repair and or convenience store on-site to minimize the need for trucks to traverse through residential neighborhoods (prior to issuance of building permit).



- Require all on-site vehicles (hostlers, forklifts, etc.) to utilize zero or near-zero emission technology (prior to issuance of occupancy permit).
- Implement a trip reduction program, for which all employees shall be eligible to participate (prior to issuance of occupancy permit).
- Provide a ride sharing program, for which all employees shall be eligible to participate (prior to issuance of occupancy permit).
- Provide transit subsidies, for which all employees shall be eligible to receive (prior to issuance of occupancy permit).

Localized Hot-Spot Emissions

Refer to Mitigation Measures AQ-1 through AQ-3.

Odors

No mitigation measures are required.

Air Plan Consistency

Refer to Mitigation Measures AQ-1 through AQ-3.

Cumulative Impacts

Refer to Mitigation Measures AQ-1 through AQ-3.

GREENHOUSE GAS EMISSIONS

Project Related Sources of Greenhouse Gas Emissions

Refer to Mitigation Measures AQ-1 through AQ-3.

GHG Plan Consistency

Refer to Mitigation Measures AQ-1 through AQ-3.

Cumulative Impacts

Refer to Mitigation Measures AQ-1 through AQ-3.



NOISE

Short-Term Construction Noise Impacts

N-1 Prior to Grading Permit issuance or the start of demolition activities, the Applicant shall demonstrate, to the satisfaction of the City of Azusa Community Development Department, that the project complies with the following:

- Construction contracts specify that all construction equipment, fixed or mobile, shall be equipped with properly operating and maintained mufflers and other State required noise attenuation devices.
- During construction, stationary construction equipment shall be placed such that emitted noise is directed away from sensitive noise receivers.
- Construction activities shall not occur between the hours of 6:00 p.m. and 7:00 a.m., including Saturdays, or at any time on Sunday or a Federal holiday, per the City's Noise Ordinance.

Construction-Related Vibration Impacts

No mitigation measures are required.

Long-Term (Mobile) Noise Impacts

No mitigation measures are required.

Long-Term (Stationary) Noise Impacts

No mitigation measures are required.

Cumulative Impacts

Refer to Mitigation Measure N-1.

PUBLIC SERVICES AND UTILITIES

Water Services

No mitigation measures are required.

Wastewater

No mitigation measures are required.



Solid Waste

No mitigation measures are required.

Fire Protection

No mitigation measures are required.

Police Protection

No mitigation measures are required.

Schools

No mitigation measures are required.

Parks and Recreation

No mitigation measures are required.

Cumulative Impacts

No mitigation measures are required.

CULTURAL RESOURCES

Archaeological Resources

CUL-1 If evidence of subsurface archaeological resources is found during construction, excavation and other construction activity in that area shall cease and the construction contractor shall contact the City of Azusa Community Development Department. With direction from the Director of Community Development, an archaeologist certified by the County of Los Angeles shall be retained to evaluate the discovery prior to resuming grading in the immediate vicinity of the find. If warranted, the archaeologist shall collect the resource and prepare a technical report describing the results of the investigation. The test-level report shall evaluate the site including discussion of significance (depth, nature, condition and extent of the resources), final mitigation recommendations (which shall be adopted and implemented by the Applicant), and cost estimates.

Paleontological Resources

CUL-2 If evidence of subsurface paleontological resources is found during construction, excavation and other construction activity in that area shall cease and the construction contractor shall contact the City of Azusa Community Development Department. With direction from the Director of Community Development, a paleontologist certified by the County of Los Angeles shall evaluate the find. If warranted, the paleontologist shall prepare and complete a standard Paleontological Resources Mitigation Program for the



salvage and curation of identified resources. The Paleontological Resources Mitigation Program shall be adopted and implemented by the Applicant.

Cumulative Impacts

Refer to Mitigation Measures CUL-1 and CUL-2.

HYDROLOGY AND WATER QUALITY

Water Quality - Short-Term Impacts

No mitigation measures are required.

Long-Term Operational Impacts

HWQ-1 Prior to the issuance of a Grading Permit, the Applicant shall submit detailed plans to the City showing compliance with all BMPs required in the SUSMP, for the review and approval of the City Engineer and/or the Chief Building Official. The BMPs shall be included within project specifications, subject to City verification prior to final plan approval.

Cumulative Impacts

Refer to Mitigation Measure HWQ-1.

GEOLOGY AND SOILS

Rupture of a Known Earthquake Fault

GEO-1 Prior to Building Permit issuance, the City Engineer and/or City Building Official shall ensure that the Grading and Building Plans demonstrate compliance with the required 50-foot building setback from the Duarte Fault trace, per the recommendations of the *Geotechnical Documentation* prepared for the proposed project.

Strong Seismic Ground Shaking

GEO-2 Prior to Grading or Building Permit issuance, the Grading and Building Plan, construction contracts, and specifications shall demonstrate compliance with the recommendations set forth in the *Geotechnical Documentation* prepared for the project that pertain to seismic ground shaking. These recommendations pertain to seismic design parameters, foundation design recommendations, lateral earth pressures, cement type and corrosion, slab-on-grade design, site development recommendations, and preliminary pavement design. The *Geotechnical Documentation* is included in Appendix 13.9, *Geotechnical Documentation* of this EIR and is incorporated by reference into this mitigation measure.

Liquefaction

No mitigation measures are required.



Loss of Topsoil

Refer to Mitigation Measure HWQ-1.

Unstable Geologic Units

GEO-3 Prior to Grading or Building Permit issuance, the Grading and Building Plan, construction contracts, and specifications shall demonstrate compliance with the recommendations set forth in the *Geotechnical Documentation* prepared for the project that pertain to unstable geologic units. These recommendations pertain to expansion potential, slab-on-grade design, site development recommendations (including grading, fill placement, and compaction), trenching, drainage, utility trench backfill, and preliminary pavement design. The *Geotechnical Documentation* is included in Appendix 13.9, *Geotechnical Documentation* of this EIR and is incorporated by reference into this mitigation measure.

Cumulative Impacts

Refer to Mitigation Measure GEO-1 through GEO-3.



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