



# California Regional Water Quality Control Board Los Angeles Region



Linda S. Adams  
Acting Secretary for  
Environmental Protection

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Edmund G. Brown Jr.  
Governor

Massoud Ghiam  
City of Carson  
701 East Carson Street  
Carson, CA 90749

## WATER QUALITY CERTIFICATION FOR PROPOSED I-405 AT WILMINGTON AVE. INTERCHANGE IMPROVEMENT PROJECT, U.S. ARMY CORPS OF ENGINEERS NON-NOTIFYING NATIONWIDE PERMIT NO. 14, DOMINGUEZ CHANNEL, CITY OF CARSON, LOS ANGELES COUNTY (File No. 09-138)

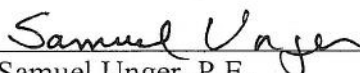
Dear Mr. Massoud Ghiam:

Board staff has reviewed your request on behalf of the City of Carson (Applicant) for a Clean Water Act Section 401 Water Quality Certification for the above-referenced project. Your application was deemed complete on January 25, 2011.

I hereby issue an order certifying that any discharge from the referenced project will comply with the applicable provisions of sections 301 (Effluent Limitations), 302 (Water Quality Related Effluent Limitations), 303 (Water Quality Standards and Implementation Plans), 306 (National Standards of Performance), and 307 (Toxic and Pretreatment Effluent Standards) of the Clean Water Act, and with other applicable requirements of State law. This discharge is also regulated under State Water Resources Control Board Order No. 2003 - 0017 - DWQ, "General Waste Discharge Requirements for Dredge and Fill Discharges that have received State Water Quality Certification" which requires compliance with all conditions of this Water Quality Certification.

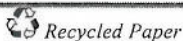
The Applicant shall be liable civilly for any violations of this Certification in accordance with the California Water Code. This Certification does not eliminate the Applicant's responsibility to comply with any other applicable laws, requirements and/or permits.

Should you have questions concerning this Certification action, please contact Dana Cole, Section 401 Program, at (213) 576-5733.

  
\_\_\_\_\_  
Samuel Unger, P.E.  
Executive Officer

3-9-11  
Date

*California Environmental Protection Agency*



*Our mission is to preserve and enhance the quality of California's water resources for the benefit of present and future generations.*

## DISTRIBUTION LIST

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**ATTACHMENT A**

**Project Information  
File No. 09-138**

1. Applicant: Massoud Ghiam  
City of Carson  
701 East Carson Street  
Carson, CA 90749  
  
Phone: (310) 952-1700 (ext 1812)
2. Applicant's Agent: Lisa Louie  
Chambers Group, Inc.  
17671 Cowen Ave, Suite 100  
Irvine, CA 92614  
  
Phone: (949) 261-5414 (ext 7289)
3. Project Name: I-405 Wilmington Ave Interchange Improvement Project
4. Project Location: City of Carson, Los Angeles County

<u>Latitude</u> (decimal degrees)	<u>Longitude</u> (decimal degrees)
33.8278	118.2411
33.8228	118.2432
33.8241	118.2450
33.8244	118.2394
33.8278	118.2407
33.8230	118.2435
33.8243	118.2449
33.8241	118.2393

5. Type of Project: Freeway ramp widening
6. Project Purpose: The proposed project (Project) will improve the movement of people and goods through the project area and will also assist the goals of the Southern California Association of Governments' 2008 Regional Transportation Plan.



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#### 7. Project Description:

The Project will widen Wilmington Avenue, 223rd Street, and the I-405 ramps to enhance their capacity and alleviate traffic congestion. The proposed widening of structures requires support piles that will be constructed similar to the existing bridges in the Dominguez Channel. The project will also include stormwater treatment BMPs for the new impervious area.

The project components specifically related to the Dominguez Channel include:

- Dominguez Channel/I-405 Bridge: Providing a new compact, diamond type, northbound on-ramp in the northwest quadrant of the interchange. The northbound I-405 bridge over Dominguez Channel (Bridge No. 53-1166) will be widened to accommodate the new ramp.
- Wilmington Avenue/223rd Street Bridge: Widening Wilmington Avenue, including the bridge over the Dominguez Channel, to provide an additional through lane on the approach to the 223rd Street intersection.

The total project area is approximately 10.5 acres and will take place along approximately 3275 feet of the Interstate 405 Freeway, 1933 feet of Wilmington Ave., and 889 feet of 223<sup>rd</sup> Street.

#### Dominguez Channel/I-405 Bridge

Pile extensions and concrete liners will be placed in the channel. Pile extensions are cast-in-steel-shell (CSS) type piles, which are hollow steel piles filled with concrete. A total of sixteen, 24-inch diameter, 5/8-inch thick-walled piles will be driven into existing clay bottom and soil, underneath the channel invert. Eight piles will be placed into the channel bottom and eight piles will be placed into the channel slopes. The total area of piles to be placed within the Dominguez Channel is 50 square feet. The existing clay soil surrounding each new pile will be excavated and backfilled by concrete to prevent scour similar to the existing bridge.

The total volume for the concrete liner for this bridge will be approximately 193 cubic yards. The total area for the concrete liner is estimated to be 1,415 square feet. The existing clay invert would

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be removed by a machine excavator to the limits and elevations as designed. The channel excavation, as well as the pile installations, will be conducted when half of the channel is dewatered to allow construction of falsework and channel invert improvements underneath the proposed widening structure.

The proposed method to dewater the channel is to dewater one half the width of the channel near the bridge piers at a time. The length of channel dewatering would extend beyond the proposed footprint of the new concrete lining, approximately 20 feet upstream and 20 feet downstream, and will be approximately 50 feet to 60 feet in total length. The barrier may be created using the Portadam®. Portadam is a temporary, portable cofferdam consisting of a free-standing support system and impervious fabric membrane. Once the Portadam is in place, dewatering will occur where the water will be pumped out of the protected area. An alternative to the Portadam® is the use of sheetpiles (made of vinyl or metal). The diversion barrier will be leveled to a height of the high tide plus two to three feet of freeboard.

#### Wilmington Avenue/223<sup>rd</sup> Street Bridge

The construction activities will use pile extensions placed in the channel. A total of sixteen, 24-inch diameter, 5/8-inch thick-walled CSS piles will be driven into existing soil bottom underneath the channel invert. Eight piles will be placed into the channel bottom and eight piles will be placed into the channel slopes.

The total area of piles to be placed within the Dominguez Channel is 50 square feet. The existing clay is 5.5 feet thick along the whole channel bottom. The proposed construction method for this bridge does not require dewatering; however, if channel conditions require dewatering, the dewatering methods using the Portadam® may be used.

While the Project will place piles in the Dominguez Channel, the hydrologic analysis performed as part of the *Hydrology, Floodplain, Water Quality, and Stormwater Runoff Impact Analysis* (Parsons 2007) has determined that it would not substantially impede or redirect the flow, or exceed the capacity of the channel or result in the exposure of people or structures to a significant risk of loss,

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injury, or death involving flooding.

Construction of a proposed retaining wall along the I-405 southbound off ramp will require excavation of the soil to the depth of approximately six feet below ground surface. Groundwater may be encountered and dewatering may be required which will require separate permitting from the Regional Board. Pile installation will not require groundwater dewatering because the Cast in Steel Shell pile is proposed to be used and the piles would penetrate through groundwater.

During construction, pile driving rigs (approximately 16 feet by 20 feet) with oversize rubber tires will be used within the channel that will assist efforts from the bank and bridge in placing pile and concrete lining. Equipment will be located within the channel for a total linear distance of 50 feet from the north side of the existing structure moving north along the channel. The Portadam® facility may extend a total of 60 linear feet. Equipment working within the channel on the channel bottom may be expected to be present up to six months.

A two-year construction period is anticipated.

8. Federal Agency/Permit: U.S. Army Corps of Engineers  
Non Notifying NWP No. 14
9. Other Required Regulatory Approvals: California Department of Fish and Game  
Streambed Alteration Agreement
10. California Environmental Quality Act Compliance: On November 24, 2008 the California Department of Transportation (Caltrans), based on the Initial Study, approved the Mitigated Negative Declaration (State Clearinghouse # 2008041006).
11. Receiving Water: Dominguez Channel (Hydrologic Unit No. 405.12)
12. Designated Beneficial Uses: MUN\*, REC-1, REC-2, WARM, WILD, RARE  
\*Conditional beneficial use



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13. Impacted Waters of the United States: Non-wetland waters (unvegetated streambed): 0.275 temporary acres (60 linear feet) and 0.067 permanent acres (32 linear feet)
14. Dredge Volume: None
15. Related Projects Implemented/to be Implemented by the Applicant: The applicant has not identified additional projects which impact the Dominguez Channel directly.
16. Avoidance/Minimization Activities: The Applicant has proposed to implement several Best Management Practices, including, but not limited to, the following:
- Limit demolition and construction located over the channel to the dry season (April to October).
  - Employ non-shattering methods for demolition activities
  - Place platforms under or adjacent to the bridge structures to collect debris.
  - Secure all materials on bridge structures to prevent discharges being carried into the channel by the wind.
  - Use attachments on equipment, such as backhoes, to catch debris from small demolition operations.
  - Stockpile accumulated debris and waste generated from demolition away from the channel.
  - Use drip pans during equipment operation, maintenance, cleaning, fueling, and storage for spill prevention.
  - Place drip pans under all vehicles and equipment placed on the bridge structures when expected to be idle for more than 1 hour.
  - Keep equipment used in the channel free of leaks.

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- Direct water from concrete curing and finishing operations away from inlets and watercourses to collection areas for dewatering.
- Re-vegetate disturbed slopes following Caltrans work.
- Slopes and benches will be rounded to reduce concentrated flows, and preserve existing vegetation as much as possible to minimize erosion.
- Rip-rap and culverts with flared end sections will be created where possible to reduce concentrated flows and limit erosion.

In addition, stormwater treatment BMPs for the removal of total lead, dissolved lead, total zinc, dissolved zinc, and sediments from stormwater runoff will be part of the project. The Applicant estimates that 100% Water Quality Volume/Water Quality Flow (WQV/WQF) generated by the entire project will be treated.

Within the project limits, the existing paved surface area is 3.16 acres. The proposed project is expected to add an additional 2.04 acres (0.83 hectare) of paved surface area. The proposed Treatment BMPs, which are 3 Biofiltration Swales and 1 Media Filter are estimated to treat runoff from 14.5 acres of impervious surface. The proposed devices will also treat flows from 9.3 acres of impervious surface outside the project limits. Therefore in addition to the 100% WQV/WQF (resulting from on site runoff), it is estimated that additional off site runoff, equating to 179% of the WQV/WQF for the entire project, will be treated.

17. Proposed  
Compensatory  
Mitigation:

None

18. Required  
Compensatory  
Mitigation:

Due to the small acreage of permanent impact and because the project includes new stormwater treatment BMPs in an area which currently has no stormwater BMPs, the Regional Board will not require any compensatory mitigation. See *Attachment B, Conditions of Certifications, Additional Conditions* for modifications and additions to the above proposed compensatory mitigation.



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### Conditions of Certification

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#### STANDARD CONDITIONS

Pursuant to §3860 of Title 23 of the California Code of Regulations (23 CCR), the following three standard conditions shall apply to this project:

1. This Certification action is subject to modification or revocation upon administrative or judicial review, including review and amendment pursuant to §13330 of the California Water Code and Article 6 (commencing with 23 CCR §3867).
2. This Certification action is not intended and shall not be construed to apply to any activity involving a hydroelectric facility and requiring a Federal Energy Regulatory Commission (FERC) license or an amendment to a FERC license unless the pertinent Certification application was filed pursuant to 23 CCR Subsection 3855(b) and the application specifically identified that a FERC license or amendment to a FERC license for a hydroelectric facility was being sought.
3. Certification is conditioned upon total payment of any fee required pursuant to 23 CCR Chapter 28 and owed by the Applicant.

#### ADDITIONAL CONDITIONS

Pursuant to 23 CCR §3859(a), the Applicant shall comply with the following additional conditions:

1. The Applicant shall submit to this Regional Board copies of any other final permits and agreements required for this project, including, but not limited to, the U.S. Army Corps of Engineers' (ACOE) Section 404 Permit and the California Department of Fish and Game's (CDFG) Streambed Alteration Agreement. **These documents shall be submitted prior to any discharge to waters of the State.**
2. The Applicant shall adhere to the most stringent conditions indicated with either this certification, the CDFG's Streambed Alteration Agreement, or the ACOE Section 404 Permit.
3. The Applicant shall comply with all water quality objectives, prohibitions, and policies set forth in the *Water Quality Control Plan, Los Angeles Region (1994)*, as amended.
4. The Avoidance/Minimization activities proposed by the Applicant as described in Attachment A, No. 16, are incorporated as additional conditions herein.
5. The Applicant and all contractors employed by the Applicant shall have copies of this Certification, the approved and all other regulatory approvals for this project on site at all times and shall be familiar with all conditions set forth.

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6. Fueling, lubrication, maintenance, operation, and storage of vehicles and equipment shall not result in a discharge or a threatened discharge to waters of the State. At no time shall the Applicant use any vehicle or equipment which leaks any substance that may impact water quality. Staging and storage areas for vehicles and equipment shall be located outside of waters of the State.
7. All excavation, construction, or maintenance activities shall follow best management practices to minimize impacts to water quality and beneficial uses. Dust control activities shall be conducted in such a manner that will not produce downstream runoff.
8. No construction material, spoils, debris, or any other substances associated with this project that may adversely impact water quality standards, shall be located in a manner which may result in a discharge or a threatened discharge to waters of the State. Designated spoil and waste areas shall be visually marked prior to any excavation and/or construction activity, and storage of the materials shall be confined to these areas.
9. All waste and/or dredged material removed shall be relocated to a legal point of disposal if applicable. A legal point of disposal is defined as one for which Waste Discharge Requirements have been established by a California Regional Water Quality Control Board, and is in full compliance therewith. Please contact the Land Disposal Unit, at the Regional Board for further information.
10. The Applicant shall implement all necessary control measures to prevent the degradation of water quality from the proposed project in order to maintain compliance with the Basin Plan. The discharge shall meet all effluent limitations and toxic and effluent standards established to comply with the applicable water quality standards and other appropriate requirements, including the provisions of Sections 301, 302, 303, 306, and 307 of the Clean Water Act. This Certification does not authorize the discharge by the applicant for any other activity than specifically described in the 404 Permit.
11. The discharge shall not: a) degrade surface water communities and populations including vertebrate, invertebrate, and plant species; b) promote the breeding of mosquitoes, gnats, black flies, midges, or other pests; c) alter the color, create visual contrast with the natural appearance, nor cause aesthetically undesirable discoloration of the receiving waters; d) cause formation of sludge deposits; or e) adversely affect any designated beneficial uses.
12. The Applicant shall allow the Regional Board and its authorized representative entry to the premises, including all mitigation sites, to inspect and undertake any activity to determine compliance with this Certification, or as otherwise authorized by the California Water Code.
13. The Applicant shall not conduct any construction activities within waters of the State during a rainfall event. The Applicant shall maintain a **five-day (5-day) clear weather forecast**



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before conducting any operations within waters of the State. If any Project activities are to be held within five (5) days of a predicted rainfall event, the Applicant shall stage materials necessary to prevent water degradation on site, and shall ensure that all stabilization procedures are completed prior to the rainfall event.

14. If rain is predicted after operations have begun, grading activities must cease immediately and the site must be stabilized to prevent impacts to water quality, and minimize erosion and runoff from the site.
15. No activities shall involve wet excavations (i.e., no excavations shall occur below the seasonal high water table). A minimum **5-foot** buffer zone shall be maintained above the existing groundwater level. If construction or groundwater dewatering is proposed or anticipated, the Applicant shall file a **Report of Waste Discharge** to this Regional Board and obtain any necessary NPDES permits/Waste Discharge Requirements prior to discharging waste. Sufficient time should be allowed to obtain any such permits (generally 180 days). If groundwater is encountered without the benefit of appropriate permits, the Applicant shall cease all activities in the areas where groundwater is present, file a Report of Waste Discharge to this Regional Board, and obtain any necessary permits prior to discharging waste.
16. All project or construction activities not included in this Certification which may require a permit must be reported to the Regional Board for appropriate permitting. Bank stabilization and grading, as well as any other ground disturbances, are subject to restoration and revegetation requirements, and may require additional Certification action.
17. All surface waters, including ponded waters, shall be diverted away from areas undergoing grading, construction, excavation, vegetation removal, and/or any other activity which may result in a discharge to the receiving water. If surface water diversions are anticipated, the Applicant shall develop and submit a **Surface Water Diversion Plan** (plan) to this Regional Board. The plan shall include the proposed method and duration of diversion activities, structure configuration, construction materials, equipment, erosion and sediment controls, and a map or drawing indicating the locations of diversion and discharge points. Contingency measures shall be a part of this plan to address various flow discharge rates. The plan shall be submitted prior to any surface water diversions. If surface flows are present, then upstream and downstream monitoring for the following shall be implemented:
  - pH
  - temperature
  - dissolved oxygen
  - turbidity
  - total suspended solids (TSS)

Analyses must be performed using approved US Environmental Protection Agency methods, where applicable. These constituents shall be measured at least once prior to diversion and



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then monitored for on a daily basis during the first week of diversion and/or dewatering activities, and then on a weekly basis, thereafter, until the in-stream work is complete.

Results of the analyses shall be submitted to this Regional Board by the 15th day of each subsequent sampling month. A map or drawing indicating the locations of sampling points shall be included with each submittal. Diversion activities shall not result in the degradation of beneficial uses or exceedance of water quality objectives of the receiving waters. Downstream TSS shall be maintained at ambient levels. Where natural turbidity is between 0 and 50 Nephelometric Turbidity Units (NTU), increases shall not exceed 20%. Where natural turbidity is greater than 50 NTU, increases shall not exceed 10%. Any such violations may result in corrective and/or enforcement actions, including increased monitoring and sample collection.

18. The Applicant shall restore the proposed **0.275 acres** of TEMPORARY IMPACTS to waters of the United States and all other areas of temporary disturbance which could result in a discharge or a threatened discharge to waters of the State. Restoration shall include grading of disturbed areas to pre-project contours. Restored areas shall be monitored and maintained as necessary for five years. The Applicant shall implement all necessary Best Management Practices to control erosion and runoff from areas associated with this project.
19. The Applicant shall submit to this Regional Board **Annual Mitigation Monitoring Reports** (Annual Reports) by **January 1<sup>st</sup>** of each year for a minimum period of **five (5) years** following this issuance of 401 Certification or until mitigation completion has been achieved and documented. The Annual Reports shall describe in detail all of the project or construction activities performed during the previous year and all restoration and mitigation efforts. At a minimum the Annual Reports shall include the following documentation and answered appropriately whether or not mitigation has been performed:
  - (a) Color photo documentation of the pre- and post-project site conditions;
  - (b) Geographical Positioning System (GPS) coordinates in decimal-degrees format outlining the boundary of the project areas;
  - (c) The overall status of project including a detailed schedule of work;
  - (d) Copies of all permits revised as required in Additional Condition 1;
  - (e) Water quality monitoring results for each reach (as required) compiled in an easy to interpret format;
  - (f) A certified Statement of “no net loss” of wetlands associated with this project;
  - (g) Discussion of any monitoring activities and exotic plant control efforts; and





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includes the Standard Urban Storm Water Mitigation Plan (SUSMP) and all related implementing local ordinances and regulations for the control of stormwater pollution from new development and redevelopment.

25. The project shall comply with all requirements of the National Pollutant Discharge Elimination System (NPDES) **General Permit** for Storm Water Discharges Associated with Construction Activity, Order No. 2009-009-DWQ. All stormwater treatment systems shall be located outside of any water of the State and shall not be used as a wetland or riparian mitigation credit.
26. Coverage under this Certification may be transferred to the extent the underlying federal permit may legally be transferred and further provided that the Applicant notifies the Executive Officer at least 30 days before the proposed transfer date, and the notice includes a written agreement between the existing and new Applicants containing a specific date of coverage, responsibility for compliance with this Certification, and liability between them.
27. The Applicant or their agents shall report any noncompliance. Any such information shall be provided verbally to the Executive Officer within 24 hours from the time the Applicant becomes aware of the circumstances. A written submission shall also be provided within five days of the time the Applicant becomes aware of the circumstances. The written submission shall contain a description of the noncompliance and its cause; the period of noncompliance, including exact dates and times, and if the noncompliance has not been corrected; the anticipated time it is expected to continue and steps taken or planned to reduce, eliminate and prevent recurrence of the noncompliance. The Executive Officer, or an authorized representative, may waive the written report on a case-by-case basis if the oral report has been received within 24 hours.
28. *Enforcement:*
  - (a) In the event of any violation or threatened violation of the conditions of this Certification, the violation or threatened violation shall be subject to any remedies, penalties, process or sanctions as provided for under State law. For purposes of section 401(d) of the Clean Water Act, the applicability of any State law authorizing remedies, penalties, process or sanctions for the violation or threatened violation constitutes a limitation necessary to assure compliance with the water quality standards and other pertinent requirements incorporated into this Certification.
  - (b) In response to a suspected violation of any condition of this Certification, the State Water Resources Control Board (SWRCB) or Regional Water Quality Control Board (RWQCB) may require the holder of any permit or license subject to this Certification to furnish, under penalty of perjury, any technical or monitoring reports the SWRCB deems appropriate, provided that the burden, including costs, of the reports shall be a



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reasonable relationship to the need for the reports and the benefits to be obtained from the reports.

- (c) In response to any violation of the conditions of this Certification, the SWRCB or RWQCB may add to or modify the conditions of this Certification as appropriate to ensure compliance.
29. This Certification shall expire **five (5) years** from date of this Certification. The Applicant shall submit a complete application prior to termination of this Certification if renewal is requested.