Attachment G 40 CFR Part 121.7 Compliance

I. Additional Information for Compliance with 40 CFR Part 121.7

The information set forth in the State Water Resources Control Board (State Water Board) Order for the Middle-mile Broadband Network (MMBN) initiative (Water Quality Order 2023-0068-DWQ) is sufficient to comply with Title 40 Code of Federal Regulations (CFR) section 121.7. This Attachment G provides additional information regarding the conditions set forth in Water Quality Order 2023-0068-DWQ to comply with 40 CFR section 121.7(d).

Notwithstanding any determinations by the U.S. Army Corps of Engineers or other federal agency made pursuant to 40 C.F.R. section 121.9, the Permittee must comply with the entirety of the Notice of Applicability (NOA) enrolling the Project in Water Quality Order 2023-0068-DWQ, which sets forth waste discharge requirements pursuant to the Porter-Cologne Water Quality Act.

This following information is generally applicable to the conditions below. Waste discharge requirements shall implement any relevant water quality control plans that have been adopted and shall take into consideration the beneficial uses to be protected, the water quality objectives reasonably required for that purpose, other waste discharges, [and] the need to prevent nuisance, and the provisions of Section 13261." (Wat. Code, § 13263(a).) In addition, California Code of Regulations, title 23,¹ Chapter 28 sets forth regulations pertaining to water quality certifications that must be implemented. Section 3859 requires the implementation of applicable water quality standards and other appropriate requirements. (See also, Cal. Code Regs., § 3861 [stating that a general certification for discharges for a class or classes of activities only if those activities will not individually or cumulatively result in significant adverse impacts or violations of water quality objectives].) These conditions are also generally required to comply with the state's Anti-Degradation Policy (State Board Resolution No. 68-16), which requires that for any "activity which produces or may produce a waste or increased volume or concentration of waste and which discharges or proposes to discharge to existing high quality waters will be required to meet waste discharge requirements which will result in the best practicable treatment or control of the discharge necessary to assure that (a) a pollution or nuisance will not occur and (b) the highest water quality consistent with maximum benefit to the people of the state will be maintained." All Regional Board Water Quality Control Plans (Basin Plans) incorporate the state's Anti-Degradation Policy by reference. The state Anti-Degradation Policy incorporates the federal Antidegradation Policy (40 CFR § 131.12 (a)(1)), which requires "[e]xisting instream water uses and the level of water quality necessary to protect the existing uses shall be maintained and protected." According to the U.S. Environmental Protection Agency (EPA), dischargers of dredged or fill material comply with the federal Antidegradation Policy by complying with U.S. EPA's section 404(b)(1)

¹ Unless as otherwise noted, all citations are to title 23 of California Code of Regulations.

Guidelines. The State Water Board adopted a modified version of U.S. EPA's section 404(b)(1) Guidelines in the Dredge or Fill Procedures (State Supplemental Guidelines) in its "State Wetland Definition and Procedures for Discharges of Dredged or Fill Material to Waters of the State." These conditions are generally required to comply with the review and approval requirements set forth in the Dredge or Fill Procedures, Section B.1.

II. Order Conditions for the Middle-mile Broadband Network Initiative

The organization and statements below correspond with the conditions set forth in section X of Water Quality Order 2023-0068-DWQ. Order sections I through IX, and XI through XVI are not "conditions" as used in 40 CFR section 121.7.

X. Conditions

A. Request for Authorization

This condition is necessary because the Water Boards are authorized to issue a certification as required under the Federal Water Pollution Control Act (Wat. Code, § 13160) and this condition is consistent with regulations regarding water quality certifications (Cal. Code of Regs., §§ 3855, 3861, subd. (c)).

B. Reporting and Notification Requirements

These reporting and notification conditions are necessary to confirm that the general protection measures required under the Order are sufficient to protect beneficial uses and water quality objectives. The reports related to accidental discharges also ensure that corrective actions, if any, that are necessary to minimize the impact or clean up such discharges can be taken as soon as possible. These monitoring and reporting conditions are authorized because the State Water Board and Regional Water Quality Control Boards (collectively Water Boards) have the authority to investigate the quality of any waters of the state within their jurisdiction under Water Code sections 13383 and 13267. The burden of preparing these reports, including costs, are reasonable to the need and benefits of obtaining the reports. The anticipated costs are minimal as the reporting obligations typically require only visual monitoring and notification reporting.

C. Water Quality Monitoring

The water quality monitoring conditions are consistent with the Dredge or Fill Procedures, section IV.A.2.c, water quality monitoring plans are required for any inwater work, including temporary dewatering or diversions. These conditions are required to assure that 1) the discharge shall not adversely affect the beneficial uses of the receiving water or cause a condition of nuisance; 2) the discharge shall comply with all applicable water quality objectives; and 3) treatment and control of the discharge shall be implemented to assure that pollution and nuisance will not occur, and the highest water quality is maintained. A water quality monitoring plan is necessary to conform to water quality standards for oil and grease, dissolved oxygen, pH, turbidity, and temperature. The Basin Plans contain provisions related to all these constituents. These conditions are authorized under Water Code sections 13383 and 13267. The burden of preparing these reports, including costs, are reasonable to the need and benefits of obtaining the reports. The anticipated costs are minimal as the sampling requirements are typically either visual or only require a grab sample every four (4) hours.

D. Standard Conditions

The standard conditions are necessary to assure that this Project will comply with water quality requirements. Water quality requirements include state regulatory requirements for point source discharges into waters of the United States. California Code of Regulations, title 23, Chapter 28 sets forth regulations pertaining to water quality certification for point source discharges to waters of the United States. These conditions were included to comply with section 3860, which sets forth conditions that must be included in all water quality certifications. In addition, the State Water Board has separate authority under the California Water Code to investigate and take enforcement action, if necessary, to prevent any unauthorized or threatened unauthorized diversions of water.

E. General Compliance

1. "Permitted actions must not cause a violation of any applicable water quality standards..."

Conditions related to compliance with water quality objectives and designated beneficial uses are required pursuant to the state's Anti-Degradation Policy (State Board Resolution No. 68- 16), which requires that for any "activity which produces or may produce a waste or increased volume or concentration of waste and which discharges or proposes to discharge to existing high quality waters will be required to meet waste discharge requirements which will result in the best practicable treatment or control of the discharge necessary to assure that (a) a pollution or nuisance will not occur and (b) the highest water quality consistent with maximum benefit to the people of the state will be maintained." All of the Water Quality Control Plans incorporate the state's Anti-Degradation Policy by reference. The state Anti-Degradation Policy incorporates the federal Antidegradation Policy (40 CFR Part 131.12 (a)(1)), which requires "[e]xisting instream water uses and the level of water quality necessary to protect the existing uses shall be maintained and protected." According to U.S. EPA, dischargers of dredged or fill material comply with the federal Antidegradation Policy by complying with U.S. EPA's section 404(b)(1) Guidelines. The State Water Boards adopted a modified version of U.S. EPA's section 404(b)(1) Guidelines in the Dredge or Fill Procedures (State Supplemental Guidelines).

This condition is also required pursuant to California Code of Regulations section 3861(d), which requires that discharges comply with any water quality objectives adopted or approved under sections 13170 or 13245 of the Water Code.

2. "Each individual project must conform to the engineering plans, specifications, and technical reports..."

This condition protects water quality by ensuring that the authorized activity is implemented as proposed and approved. (Wat. Code, § 13264.) Deviations from the approved plans and practices could result in adverse impacts to water quality.

F. Administrative

1. "Signatory requirements for all document submittals..."

Conditions related to signatory requirements are required pursuant to Water Code section 13267, which requires any person discharging waste that could affect the quality of waters to provide to the Water Boards, under penalty of perjury, any technical or monitoring program reports as required by the Water Boards. The signatory requirements are consistent with 40 C.F.R. section 122.22.

2. "Site Access..."

Conditions related to site access requirements are authorized pursuant to the Water Boards' authority to investigate the quality of any waters of the state within its region under Water Code section 13267. Water Code section 13267(c) provides that "the regional board may inspect the facilities of any person to ascertain whether the purposes of this division are being met and waste discharge requirements are being complied with."

3. "The Permittee shall be responsible for work..."

This condition requires site personnel and agencies to be familiar with the content of the Certification and availability of the document at the project site. This condition is required to assure that any authorized discharge will comply with the terms and conditions of the Certification, which requires compliance with all of the water quality objectives and beneficial uses adopted or approved under sections 13170 or 13245 of the Water Code.

4. "Lake and Streambed Alteration Agreement: If issued, the Permittee shall submit a signed copy..."

This Condition is required pursuant to California Code of Regulations section 3856(e), which requires that copies be provided to the Water Boards of "any final and signed federal, state, and local licenses, permits, and agreements (or copies of the draft

documents, if not finalized) that will be required for any construction, operation, maintenance, or other actions associated with the activity. If no final or draft document is available, a list of all remaining agency regulatory approvals being sought shall be included."

G. Construction Conditions

1. "All materials and supplies necessary..."

On-site availability of materials and supplies assures best management practices can be reasonably implemented and that the discharge complies with water quality objectives. This condition and other conditions related to best management practices are consistent with the Water Board's authority to establish, "[w]ater quality conditions that could reasonably be achieved through the coordinated control of all factors which affect water quality in the area" pursuant to Water Code section 13241(c). The activities authorized under this Certification have the potential to result in a discharge that exceeds water quality objectives and work in waters of the state must not cause an exceedance of water quality objectives. As required by Water Code section 13369, all Water Quality Control Plans incentivize the use of best management practices to prevent prohibited discharges into waters of the state.

2. "Construction material, debris, rubbish, spoils..."

Water Code section 13264 prohibits any discharge that is not specifically authorized in this Certification. This condition is necessary to prevent violation of state discharge prohibitions that protect water quality objectives. Water Quality Control Plans prohibit the discharge of construction materials and byproducts from being discharged into waters of the state. For example, "The discharge of soil, silt, bark, slash, sawdust, or other organic and earthen material from any logging, construction, or associated activity of whatever nature into any stream or watercourse in the basin in quantities deleterious to fish, wildlife, or other beneficial uses is prohibited" (Water Quality Control Plan for the North Coast Region, section 4.2.1).

This condition prohibiting discharge of materials detrimental to water quality or hazardous to aquatic life is also consistent with the Dredge or Fill Procedures, Appendix A, Subpart H, which requires actions to minimize and avoid adverse effects, including actions concerning the location, the material. and controlling the material after the discharge (§ 230.70 et seq.).

3. "Environmentally sensitive areas and environmentally..."

This condition is necessary to assure that the project discharge will comply with state discharge prohibitions that protect beneficial uses and water quality objectives. A description and delineation of impact sites is necessary to assure that the discharge from the proposed project will comply with water quality objectives established for

surface waters (California Code of Regulations, title 23, section 3856(h); Dredge or Fill Procedures section IV.A.1(c); Water Quality Control Plan for the San Francisco Bay Region, section 4.23.2).

In addition, Water Quality Control Plans prohibit the discharge of construction materials and byproducts from being discharged into waters of the state, including areas that may be environmentally sensitive, such as vernal pools or eel grass beds. For example, "The discharge of soil, silt, bark, slash, sawdust, or other organic and earthen material from any logging, construction, or associated activity of whatever nature into any stream or watercourse in the basin in quantities deleterious to fish, wildlife, or other beneficial uses is prohibited" (Water Quality Control Plan for the North Coast Region, section 4.2.1). Identification and visible demarcation of areas of avoidance must be obvious to all on-site personnel, to ensure that impacts only occur within the permitted boundaries of project disturbance and to prevent unauthorized discharges to other waters of the state, including environmentally sensitive areas. Furthermore, waters that are not quantified and mapped as either a temporary or permanent impact site in a water quality certification must be fully avoided throughout the duration of the construction activity. This condition is necessary to ensure protection of aquatic resources where no discharge is authorized to occur. Furthermore, excavated material that is improperly exposed can produce or contribute to runoff that results in an unintentional discharge to waters of the state, which is prohibited (Water Quality Control Plan for the North Coast Region, section 4.2.1).

4. "Access Routes ..."

This condition is necessary to prevent violation of state discharge prohibitions that protect water quality objectives. By altering an aquatic resource's surface topography and reducing hydrologic connectivity and capacity, the use of mechanized equipment can cause a direct loss of aquatic resource area and degrade beneficial uses of waters of the state, including designations that protect listed species habitat. These impacts would result in violations of water quality objectives that have been set in Water Quality Control Plans. For example, the Water Quality Control Plan for the Santa Ana Regional Board, section 4.6, requires that, "Inland surface water communities and populations, including vertebrate, invertebrate, and plant species, shall not be degraded as a result of the discharge of waste." Additionally, fuels and lubricants associated with the use of mechanized equipment have the potential to result in toxic discharges to waters of the state. The North Coast Regional Water Board's toxicity water quality objective prohibits waters from containing toxic substances in concentrations that are toxic to, or that, "produce detrimental physiological responses in human, plant, animal, or aquatic life" (Water Quality Control Plan for the North Coast Region, section 3.3.16).

The conditions related to roads are necessary to assure that the activities are minimally impacting and comply with water quality objectives. Activities related to road construction or maintenance commonly require grading, construction, excavation, and

vegetation removal, and may result in erosion and increased sediment loads, turbidity, etc., that adversely affect water quality. These conditions are required to assure that the discharges from such activities do not exceed water quality objectives established in Water Quality Control Plans, including water quality objectives for oil and grease, pH, sediment, settleable materials, temperature, and turbidity. Specifically, activities associated with road maintenance have the potential to exceed water quality objectives for oil and grease, pH, sediment, settleable materials, temperature, and turbidity. Water Quality Control Plan for the Central Valley Region sections 3.1.10, 3.1.11, 3.1.15, 3.1.16, 3.1.19, 3.1.21.). Section IV.B.1 of the Dredge or Fill Procedures requires that project impacts will not contribute to a net loss of the overall abundance, diversity, and condition of aquatic resources; cause or contribute to a degradation of waters; or violate water quality standards. These conditions are also necessary to assure that activities related to road construction or maintenance do not create physical barriers to fish passage and spawning activities or degradation associated with hydromodification.

- 5. "Bridges, culverts, dip crossings, or other structures must be..."
- 6. "Temporary materials placed in any water of the state must be..."
- 7. "A method of containment must be used below any..."
- 8. "Vegetation trimming and/or removal shall be limited..."

Conditions 5, 6, 7 and 8 limit activities such as construction or maintenance of access roads, staging areas, water crossings, and temporary structures to assure that the activities are minimally impacting and comply with water quality objectives. These types of activities commonly require grading, construction, excavation, and vegetation removal, and may result in erosion and increased sediment loads, turbidity, etc., that adversely affect water quality. These conditions are required to assure that the discharges from such activities do not exceed water quality objectives established in Water Quality Control Plans, including water quality objectives for oil and grease, pH, sediment, settleable materials, temperature, and turbidity. For example, the sediment water quality objective requires that, "the suspended sediment load and suspended sediment discharge rate to surface waters shall not be altered in such a manner as to cause nuisance or adversely affect beneficial uses" (Water Quality Control Plan for the North Coast Region, section 3.3.11). Additionally, improperly designed and/or installed roads and bridges may also create physical barriers to fish passage and impair the beneficial use of fish spawning (Water Quality Control Plan for the San Francisco Basin, section 7.8.4.1).

9. "Unless authorized for restoration, material excavated to prepare a site..."

Condition 9 is required pursuant to the Water Quality Control Plans, and the water quality objectives therein prohibiting excavated material erosion or disposal into waters of the state. For example, the North Coast Water Quality Control Plan prohibits waters from containing settleable material in concentrations that result in the deposition of material that causes nuisance or adversely affects beneficial uses (Section 3.3.12), and prohibits waters from containing suspended material in concentrations that cause nuisance or adversely affect beneficial uses (Section 3.3.13).

10. "Topsoil..."

The top 6 to 12 inches of topsoil tend to be richer in organic matter than other soil horizons below this depth. Therefore, it is essential to stockpile the topsoil layer separately from the rest of the soil in order to ensure survivorship of riparian vegetation populations upon completion of the project.

Backfilling of native topsoil is necessary to assure that the discharge from the proposed project will comply with water quality objectives established for surface waters. "Operations and activities should be planned and conducted in a manner that will not disturb extensive areas of soil or that will disrupt local drainage. Areas where soil is disturbed should be promptly reseeded or stabilized to prevent erosion." (Water Quality Control Plan for the Tulare Lake Basin, section 4.1.7.) Backfilling of native topsoil also assures that the pre-project hydrologic regime is not altered or adversely impacted by introduction of new backfill materials. "The stream flow regimen should be stabilized and maintained, and soil control measures should be applied in a timely manner." (Water Quality Control Plan for the Tulare Lake Basin, section 4.1.7.) "Limit disturbance of natural drainage features and vegetation." (Water Quality Control Plan for the North Coast, Appendix D, page 4-104, Urban and Suburban Runoff Management Measures.)

11. "Any structure, including but not limited to, culverts, pipes, piers and coffer dams...

Conditions related to placement of structures within waters are required to assure that they do not create physical barriers to fish passage and spawning activities. "Any barrier to migration or free movement of migratory fish is harmful. Natural tidal movement in estuaries and unimpeded river flows are necessary to sustain migratory fish and their offspring. A water quality barrier, whether thermal, physical, or chemical, can destroy the integrity of the migration route and lead to the rapid decline of dependent fisheries" (Water Quality Control Plan for the San Francisco Region, section 2.1.10). Furthermore, barriers to migration or free movement may result in an impairment of state water quality objectives, including but not limited to Rare, Threatened, or Endangered Species (RARE), Spawning, Reproduction, and/or Early Development (SPWN), Cold Fresh Water Habitat (COLD), or Warm Fresh Water Habitat (WARM), which occur in all regions of the state.

The Water Quality Control Plan for the North Coast Region sets a numeric target of "zero human-caused barriers" for migration barriers on Class I watercourses (Section 4.2.8). Barriers would also impair beneficial uses designated in the Water Quality Control Plans including "migration of aquatic organisms," "spawning, reproduction, and/or early development," "fish migration," and "fish spawning" (Water Quality Control Plan for the North Coast Region, section 2.2; Water Quality Control Plan for the San Francisco Region, sections 2.1.10 and 2.1.18).

"Hydromodification is a general term that encompasses effects of projects on the natural hydrologic, geochemical and physical functions of streams and wetlands that maintain or enhance water quality." (Water Quality Control Plan for the San Francisco Region, section 4.26.7.) Conditions related to placement of structures within waters of the state are required to assure that they do not result in adverse impacts related to hydromodification. Failure to comply with these conditions may trigger bank failure, channel incision, or headcutting along the channel thalweg, creating excess sediment and barriers to fish passage. These impacts can impair beneficial uses including fish migration, fish spawning, wildlife habitat, cold freshwater habitat, preservation of rare and endangered species, and warm freshwater habitat (Water Quality Control Plan for the San Francisco Region, section 2.1).

12. "Dust Abatement..."

This dust abatement condition is required to assure that the discharge from the proposed project will comply with water quality objectives established for surface waters. Chemicals used in dust abatement activities can result in a discharge of chemical additives and treated waters to surface waters of the state. Therefore, dust abatement activities shall be conducted so that sediment or dust abatement chemicals are not discharged into waters of the state. The Water Quality Control Plan for the San Francisco Region, section 3.3.8, requires that all waters should be free of toxic substances in concentrations that are lethal to or that produce significant alterations in population or community ecology or receiving water biota. In addition, the health and life history characteristics of aquatic organisms in waters affected by controllable water quality factors, such as toxicity. This condition will ensure that the discharge will not adversely affect beneficial uses of the receiving water or cause a condition of nuisance. (Water Quality Control Plan for the North Coast Region, section 4.1.8; Water Code section 13267; Dredge or Fill Procedures section IV. A.2(c)).

13. "Use of Mechanized Equipment..."

This condition is necessary to prevent violation of state discharge prohibitions that protect water quality objectives. Water Quality Control Plans prohibit the discharge of mechanized equipment and byproducts from being discharged into waters of the state. Water Code section 13264 prohibits any discharge that is not specifically authorized in this Certification.

14. "Piers or Piles..."

This condition is necessary to prevent violation of state discharge prohibitions that protect water quality objectives. By altering an aquatic resource's surface topography and reducing hydrologic connectivity and capacity, the use of mechanized equipment can cause a direct loss of aquatic resource area and degrade beneficial uses of waters of the state, including designations that protect listed species habitat. These impacts would result in violations of water quality objectives that have been set in Water Quality Control Plans. For example, the Water Quality Control Plan for the Santa Ana Regional Board, section 4.6, requires that, "Inland surface water communities and populations, including vertebrate, invertebrate, and plant species, shall not be degraded as a result of the discharge of waste." Additionally, fuels and lubricants associated with the use of mechanized equipment have the potential to result in toxic discharges to waters of the state. The North Coast Regional Water Board's toxicity water quality objective prohibits waters from containing toxic substances in concentrations that are toxic to, or that, "produce detrimental physiological responses in human, plant, animal, or aquatic life" (Water Quality Control Plan for the North Coast Region, section 3.3.16).

15. "Culvert Construction or Maintenance..."

Conditions related to structures within waters, including placement of instream piers or piles, and culvert replacement and maintenance activities, are required to assure that they do not create physical barriers to fish passage and spawning activities. "Any barrier to migration or free movement of migratory fish is harmful. Natural tidal movement in estuaries and unimpeded river flows are necessary to sustain migratory fish and their offspring. A water quality barrier, whether thermal, physical, or chemical, can destroy the integrity of the migration route and lead to the rapid decline of dependent fisheries" (Water Quality Control Plan for the San Francisco Region, section 2.1.10).

The Water Quality Control Plan for the North Coast Region sets a numeric target of "zero human-caused barriers" for migration barriers on Class I watercourses (Section 4.2.8). Barriers would also impair beneficial uses designated in the Water Quality Control Plans including "migration of aquatic organisms," "spawning, reproduction, and/or early development," "fish migration," and "fish spawning" (Water Quality Control Plan for the North Coast Region, section 2.2; Water Quality Control Plan for the San Francisco Region, sections 2.1.10 and 2.1.18).

"Hydromodification is a general term that encompasses effects of projects on the natural hydrologic, geochemical and physical functions of streams and wetlands that maintain or enhance water quality." (Water Quality Control Plan for the San Francisco Region, section 4.26.7.) Conditions related to culverts and other instream structures are required to assure that they do not result in adverse impacts related to hydromodification. Failure to comply with these conditions may trigger bank failure, channel incision, or headcutting along the channel thalweg, creating excess sediment and barriers to fish passage. These impacts can impair beneficial uses including fish migration, fish spawning, wildlife habitat, cold freshwater habitat, preservation of rare and endangered species, and warm freshwater habitat (Water Quality Control Plan for the San Francisco Region, sections 2.1).

16. "Toxic and Hazardous Materials..."

These conditions are required pursuant to the Water Quality Control Plans, and the Policy for Implementation of Toxics Standards for Inland Surface Waters, Enclosed Bays, and Estuaries of California (SIP), which prohibit the discharge of substances in concentrations toxic to human, plant, animal, or aquatic life. For example, the North Coast Water Quality Control Plan prohibits waters from containing toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in human, plant, animal, or aquatic life. The concentrations of toxic substances in the water column, sediments or biota shall not adversely affect beneficial uses (Water Quality Control Plan for the North Coast Region, section 3.3.16). All waters should be free of toxic substances in concentrations that are lethal to or that produce significant alterations in population or community ecology or receiving water biota. In addition, the health and life history characteristics of aquatic organisms in waters affected by controllable water quality factors, such as toxicity (Water Quality Control Plan for the San Francisco Bay Region, section 3.3.8).

Toxic compounds impair the beneficial uses of cold freshwater habitat, estuarine habitat, marine habitat, preservation of rare and endangered species, fish migration, fish spawning, warm fresh water habitat, and wildlife habitat (Water Quality Control Plan for the San Francisco Bay Region, sections 2.1.3; 2.1.5; 2.1.9; 2.1.14; 2.1.10; 2.1.18; 2.1.19; & 2.1.20).

Conditions related to concrete/cement are required pursuant to the Water Quality Control Plans, which prohibit discharges to waters that adversely raise or lower pH levels. For example, the North Coast Water Quality Control Plan prohibits discharges from lowering pH levels below 6.5 or raising them above 8.5, or raising/lowering the pH to a level that causes a nuisance or impairs beneficial uses. Concrete/cement is an alkaline component that has the potential to raise the pH of water resources to levels 3. The SIP implements criteria for priority toxic pollutants contained in the California Toxics Rule promulgated by the U.S. Environmental Protection Agency (U.S. EPA) that would

negatively affect beneficial uses (Water Quality Control Plan for the North Coast Region, section 3.3.16).

Conditions related to toxic and hazardous materials are necessary to assure that discharges comply with any water quality objectives adopted or approved under sections 13170 or 13245 of the Water Code.

Many waters in California are high in mercury either naturally or due to historic mining activities. This mercury, when discharged to waters of the state can become bioavailable and impair beneficial uses including Subsistence Fishing (SUB) and Tribal Subsistence Fishing (T-SUB). Effective sediment control is required under the Tribal and Subsistence Fishing Beneficial Uses and Mercury Provisions (Cal. Code of Reg., section 3010).

17. "Work in Delineated Waters of the State..."

Conditions related to work in delineated waters are required pursuant to the California Code of Regulations, section 3861 (d) (2) which prohibits discharges that violate any water quality objectives adopted or approved under sections 13170 or 13245 of the Water Code. Work in waters must not cause exceedances of water quality objectives; accordingly, these conditions require implementation of best practicable treatments and controls to prevent pollution and nuisance, and to maintain water quality. Consistent with the Dredge or Fill Procedures, section IV.A.2.c, water quality monitoring plans are required for any in-water work. These conditions are required to assure that 1) the discharge shall not adversely affect the beneficial uses of the receiving water or cause a condition of nuisance; 2) the discharge shall comply with all applicable water quality objectives; and 3) treatment and control of the discharge shall be implemented to assure that pollution and nuisance will not occur and the highest water quality is maintained (Water Quality Control Plan for the North Coast Region, section 4.1.8; Water Code section 13267).

Conditions related to dewatering and diversions or impoundments of water are required pursuant to the California Code of Regulations, section 3861(d)(2) which prohibits discharges that violate any water quality objectives adopted or approved under sections 13170 or 13245 of the Water Code. Work in waters and temporary diversions must not cause exceedances of water quality objectives; accordingly, these conditions require implementation of best practicable treatments and controls to prevent pollution and nuisance, and to maintain water quality.

These conditions are also required pursuant to the state's Anti-Degradation Policy (State Board Resolution No. 68-16), which requires that for any "activity which produces or may produce a waste or increased volume or concentration of waste and which discharges or proposes to discharge to existing high quality waters will be required to meet waste discharge requirements which will result in the best practicable treatment or

control of the discharge necessary to assure that (a) a pollution or nuisance will not occur and (b) the highest water quality consistent with maximum benefit to the people of the state will be maintained." All of the Water Quality Control Plans incorporate the state's Anti-Degradation Policy by reference.

If surface waters or ponded waters are not appropriately diverted from areas undergoing grading, construction, excavation, and/or vegetation removal, the waters will be susceptible to erosion and increased sediment loads, contamination and pollution from construction equipment, temperature fluctuations, etc. Diverting waters away from these areas will ensure that the discharge will not exceed water quality objectives, adversely affect beneficial uses of the receiving waters, or cause a condition of nuisance. Dewatered areas must also be stabilized prior to a rainfall event to assure that the discharge from the proposed project will comply with water quality objectives established for surface waters. For example, the Water Quality Control Plan for the Central Coast Region, section 3.3.2, prohibits alteration of the suspended sediment load and suspended sediment discharge rate of surface waters in such as manner as to cause nuisance or adversely affect beneficial uses. Similarly, the Water Quality Control Plan for the Plan for the San Francisco Bay Region, section 4.19, requires stabilization prior to a rainfall event as necessary to prevent sediment contributions to water bodies.

Consistent with the Dredge or Fill Procedures, section IV.A.2.c, water quality monitoring plans are required for any in-water work, including temporary dewatering or diversions. These conditions are required to assure that 1) the discharge shall not adversely affect the beneficial uses of the receiving water or cause a condition of nuisance; 2) the discharge shall comply with all applicable water quality objectives; and 3) treatment and control of the discharge shall be implemented to assure that pollution and nuisance will not occur and the highest water quality is maintained (Water Quality Control Plan for the North Coast Region, section 4.1.8; Water Code section 13267).

Conditions related to groundwater permits are required pursuant to the Cal. Code of Regs, title 23, section 3856(e), which requires complete copies of any final and signed federal, state, or local licenses, permits, and agreements (or copies of drafts if not finalized) that will be required for any construction, operation, maintenance, or other actions associated with the activity.

18. "Directional Drilling..."

Conditions related to directional drilling are necessary given the risks posed by an inadvertent return of drilling fluids to waters. Given the likely toxicity of the discharge and the proximity to the impacted water, significant adverse impacts to waters would be expected and remediation would be difficult. All Water Quality Control Plans prohibit the discharge of substances in concentrations toxic to human, plant, animal, or aquatic life. Horizontal directional drilling, and similar drilling operations, may result in the unintentional discharge of drilling fluids to waters of the state. These conditions are

necessary to ensure that 1) the discharge shall not adversely affect the beneficial uses of the receiving water or cause a condition of nuisance; 2) the discharge shall comply with all applicable water quality objectives; and 3) treatment and control of the discharge shall be implemented to assure that pollution and nuisance will not occur and the highest water quality is maintained.

H. Restoration and Mitigation for Temporary Impact

Conditions in this section related to restoration and/or mitigation of temporary impacts are required pursuant to California Code of Regulations, section 3861(d), which requires the inclusion of conditions to avoid and mitigate all project impacts, and to assure that the discharge complies with water quality objectives adopted or approved under Sections 13170 or 13245 of the Water Code. These conditions are also consistent with the Dredge or Fill Procedures, which requires "in all cases where temporary impacts are proposed, a draft restoration plan that outlines design, implementation, assessment, and maintenance for restoring areas of temporary impacts to pre-project conditions." (Dredge or Fill Procedures section IV. A.2(d) & B.4.) Mitigation is also required to ensure compliance with Executive Order W-59-93 that requires no net loss of the structure or function of California's wetland resources.

I. Compensatory Mitigation for Permanent Impacts

Conditions related to mitigation requirements are required by the Dredged or Fill Procedures, section IV.A.2.b. In addition, section IV.B.1.a of the Procedures requires that the Water Boards will approve a project only after it has been determined that a sequence of actions has been taken to first avoid, then to minimize, and lastly compensate for adverse impacts that cannot be practicably avoided or minimized. (See also State Supplemental Guidelines, section 230.10, restrictions on discharge & Cal. Code of Regs., section 3856(h) (requiring submittal of proposed mitigation and description of steps taken to avoid, minimize, or compensate).) Accordingly, compensatory mitigation may be required for projects that would result in permanent impacts. Conditions regarding compensatory mitigation are necessary to ensure compliance with state and federal anti-degradation policies. Compensatory mitigation conditions are consistent with Executive Order W-59-93 commonly referred to as California's "no net loss" policy for wetlands. Compensatory mitigation requirements are also authorized by Water Code, section 13263, which requires the imposition of requirements that implement water quality control plans and takes into consideration the beneficial uses to be protected and the need to prevent nuisance.

The condition related to financial securities is necessary to ensure that the discharger has sufficient funds to fulfil the compensatory mitigation required. (Dredge or Fill Procedures, section IV.B.5.f.)