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1	OSHA R. MESERVE (SBN 204240)	
2	PATRICK M. SOLURI (SBN 210036) SOLURI MESERVE, A LAW CORPORATION 510 8th Street Sacramento, California 95814 Telephone: (916) 455-7300 Facsimile: (916) 244-7300 Email: osha@semlawyers.com patrick@semlawyers.com Specially Appearing for Protestant Environmental Council of Sacramento for Purposes of Presenting Part 2 Testimony	
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11	BEFORE THE	
12	CALIFORNIA STATE WATER RESOURCES CONTROL BOARD	
13	HEARING IN THE MATTER OF	TESTIMONY OF JUDITH LAMARE, Ph.D.
14	RESOURCES AND UNITED STATES	
15	BUREAU OF RECLAMATION REQUEST FOR A CHANGE IN POINT OF	ENVIRONMENTAL COUNCIL OF SACRAMENTO
16	DIVERSION FOR CALIFORNIA WATER FIX	
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	restimony of Judith Lamare, Ph.D.	

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I.

PROFESSIONAL BACKGROUND AND APPROACH TO ANALYSIS

Fifty years ago, I entered the Ph.D. program at the UCLA Department of Political Science, with a focus on public policy, public administration, state and local government with emphasis on quantitative methods, public policy evaluation, and government performance metrics. This was a Department committed to addressing the public interest in solving urban problems (racial equality, poverty, pollution). My dissertation (Ph.D., 1973) focused on transportation policy for Southern California, the key source of uncontrolled air pollution in that basin. At that time, air pollution was blamed on an imbalanced transportation system. After teaching at the university level for several years, I worked as a policy consultant for the California Senate, assigned to state transportation policy issues, principally for transit proponents in the Senate. From 1983 to 2005, I served the American Lung Association/Breathe Sacramento and in this capacity, I managed the Cleaner Air Partnership, a regional air pollution reduction coalition, comprised of business, government and environmental groups. Our mission was to get new and improved nitrogen oxide ("NOx") reduction programs. We advocated for heavy duty diesel emission reduction advances beyond federal regulations. For example, the Carl Moyer Program originated within the Cleaner Air Partnership. Additional information regarding my professional background is available in in my statement of qualifications. (ECOS-12.)

19 In order to prepare this testimony regarding my air quality-related concerns about the 20 Delta Tunnels project (a.k.a. "California WaterFix"), I reviewed the air quality analysis in the 21 Final Environmental Impact Report/Statement ("FEIR/S"), comments on the FEIR/S (and prior 22 drafts) by members of the public and air quality experts, several air districts, and responses to 23 comments for the preferred Alternative 4A. I also spoke with U.S. Environmental Protection 24 Agency and California Air Resources Board experts familiar with the project and confirmed that 25 neither agency performed a thorough analysis of the air quality impacts and mitigation for the Delta Tunnels project, and neither had a role in approving the plan. I also examined online the 26 27 record of performance and audits of the relevant air districts in the programs relied upon for the proposed emission reductions for the Delta Tunnels project in the FEIR/S.¹ (See, e.g., ECOS 18, SJVAPCD 2016 [Appendix E: Incentives] and ECOS-17, SJVAPCD 2017, pp. 6-7 [Table 1,
 total criteria pollutant emissions reduced].)

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II.

AIR QUALITY IMPACTS FROM PETITIONED PROJECT WOULD BE CONTRARY TO THE PUBLIC INTEREST

6 The project would be built in air districts that do not meet air quality standards and are 7 struggling to implement plans to do so. The project makes a commitment to use the best available technology in construction to reduce emissions as feasible. (See SWRCB-111, 8 MMRP, pp. 3-33 to 3-35 [Environmental Commitment ("EC") 3.15, BMPs to reduce criteria 9 10 pollutants and GHG emissions].) But there is an additional significant burden of excess 11 pollutants emitted during construction that must be fully offset. There are two elements of the 12 air quality strategy: use the cleanest available construction equipment and practices (SWRCB-111, MMRP, pp. 3-33 to 3-35) and mitigate remaining "excess" pollution through offsets. 13 (SWRCB-111, MMRP, p. 2-102.) The mitigation program is structured so that construction in 14 15 each air district has a separate mitigation program. (See SWRCB-111, MMRP, p. 2-102 [Mitigation Measures ("MM") AQ-1, AQ-2 and AQ-3, mitigating and offsetting criteria pollutant 16 17 emissions to net zero].)

"Because the project is receiving federal funds and approvals from the U.S. Department of the Interior Bureau of Reclamation ("Reclamation"), U.S. Fish and Wildlife Service ("USFWS"), and National Marine Fisheries Service ("NMFS") (Federal lead agencies), all direct and indirect emissions generated by the project are subject to the general conformity rule." (SWRCB-102, FEIR/S, p. 22E-1.) The Federal Clean Air Act provides safeguards to ensure that federal permits and funds are not permitted for projects whose emissions would fail to conform to adopted air quality attainment plans. The construction emissions of the Delta Tunnels are significantly above the conformity standard even after all available control measures are employed on the project. The FEIR/S acknowledges that these emissions must

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¹ California Air Resources Board, "Incentive Program Oversight," Incentive Program Reviews (available at <u>https://www.arb.c.gov/msprog/moyer/audits/audits.htm).</u>

be reduced to zero by offsetting reductions in the same year, and that emission reductions
 must meet the standards of a "conformity determination" under federal law. (SWRCB-102,
 FEIR/S, p. 22E-13 [emission reduction measures] and pp. 22E-36 to 22E-39 [compliance with
 conformity requirements].)

The analysis of Delta Tunnels emissions subject to the general conformity rule is performed by dividing the project into segments and assigning emissions to each of the air basins based on the construction emissions of segments constructed in each air basin. Splitting the project into three pieces and separately analyzing these is consistent with air quality planning practice in California, but in this case produces perverse results.

Α.

Construction Emissions and Reduction Impacts Not Fully Disclosed

1. Construction Emissions Split into Three Districts for Analysis without Regard for Pollution Transport Patterns

Construction emissions over 11 years would include 1,741 tons of pollutants, primarily NOx, that exceed the annual thresholds for conformity with air quality plans that demonstrate attainment in a future year in a given district.

In the San Joaquin Valley Air Basin ("SJVAB"), the project would exceed thresholds for reactive organic gas ("ROG") in 2020-2025, NOx in 2018-2028, and particulate matter ("PM10") in 2019-2025. In total, the emissions include 677 tons of NOx and 78 tons of ROG.

- In the Sacramento Federal Nonattainment Area, the project would exceed the threshold for NOx in 2019-2027, for a total of 709 tons of NOx.
- Last, in the San Francisco Bay Area Air Basin, the project would exceed the threshold for NOx by 2024-2025, for a total of 277 tons of NOx. (See SWRCB-102, FEIR/S, p. 22-316 to 22-317 [Table 22-110, criteria pollutant emissions from construction].) The project would be built within a narrow 36-mile-long area including the boundaries of three air basins that do not meet state and federal air quality standards. (See ECOS-16, FEIR/S, Figures 22E-1 to 22E-4 [air districts map of project area].) The project segments in each air district are described at FEIR/S, p. 22E-32. Difficulty occurs when the emissions from the project are assigned to

different air districts with different criteria for evaluating their significance while the emissions impact will largely be dispersed to the SJVAB, due to the location of the project in and directly upwind of the SJVAB. (ECOS-14, Cal. EPA 2001.)

"Because the attainment status of the four area air basins differ with respect to ozone, CO, PM10, fine particle ("PM2.5") and Sulfur dioxide ("SO₂") different *de minimis* thresholds must be applied to emissions generated within each air basin." (SWRCB-102, FEIR/S, p. 22-48 [Table 22-8, air district thresholds of significance].) However, the emissions in the hinterlands of two air districts (Sacramento and the Bay Area) are likely to be transported into the northern San Joaquin Valley Air Basin under typical meteorological conditions. Yet the emission reduction mitigation measures are allowed to occur anywhere within the air basin where generated, that is, as far removed from the project area as Kern, Marin and Placer Counties. This is helpful for increasing odds that emission reduction programs will be feasible and achievable. But this is unfair to San Joaquin Valley residents and is inconsistent with the intent and spirit of the Clean Air Act and its Conformity Determination requirement.

For example, the largest single construction emission source is at the Clifton Court Forebay in eastern Contra Costa County, 17 miles southwest of Stockton and directly west of Lathrop and Manteca, and just northwest of Tracy. (See DWR-616 [map of project activity at Clifton Court Forebay]; SWRCB-102, FEIR/S, p. 22-293 [Impact AQ-3, generation of excess criteria pollutants in BAAQMD].) As a practical matter these emissions are going to transport eastward and southward, adding to ozone formation in the summer, fall, and winter particulate violations. (See SWRCB-102, FEIR/S, pp. 22-4 to 22-5; ECOS-14, Cal. EPA 2001 [weather pattern effects on pollutant transport].) The emissions would have no meaningful impact within the Bay Area Air Quality Management nonattainment area because of this south-east transport. Yet the mitigation would occur somewhere in the Bay Area because the pollutants originated in that basin. This approach to the project's emissions reductions is not in the public interest.

1 The reason given by project proponents for ignoring transport issues is: 2 With respect to pollutant transport among air districts; all mass emissions thresholds adopted by the Plan Area air districts account for expected criteria air 3 pollutant contributions from downwind air basins. Accordingly, use of the Plan Area air district thresholds to evaluate construction and operational impacts 4 associated with the project is appropriate and supported by substantial evidence 5 (see California Air Resources Board 2011b in the Administrative Record for the Draft EIR/EIS and also the local air district threshold justification reports for 6 additional information). Project-level ozone transport or dispersion modeling is not required. 7 8 (SWRCB-102, FEIR/S, Comments and Responses to Comments, Letter 2622, p. 97.) The 9 project, however, is far beyond the scale of construction found in the districts and located in an 10 area particularly subject to transport. The statement also confuses upwind and downwind. 2. **Construction Emissions Split into Three Districts for Analysis** 11 **Results in Underestimating Emission Impacts and Mitigation Needed** 12 for Indirect Emissions 13 A second, related issue occurs because the significance levels of emissions are 14 evaluated by air basin. Table 22-9 "Federal de minimis Thresholds by Air Basin (tons per 15 year)" shows that the standard for determining whether excess emissions must be mitigated to conform to federal law varies significantly by Air District for NOx and VOC/ROG. (SWRCB-16 17 102, FEIR/S, p. 22-49.) In the SJVAB, the threshold is 10 tons per year for each pollutant. In 18 Sacramento Federal Nonattainment Area, it is 25 tons/year and in the San Francisco Bay Area Air Basin, it is 100 tons per year (ten times the SJVAB threshold). If the SJVAB standard were 19 20 applied to all the project NOx and VOC/ROG emissions, an additional 558 tons per year of 21 NOx and an additional 144 tons of ROG would have to be offset by the project. That is an 22 increase of 40 percent over the excess emissions acknowledged as required to be mitigated 23 by the project proponents. Similarly, the threshold for PM10 is not met in any year in any air 24 basin, but if the project PM10 emissions are aggregated, and Bay Area PM10 emissions were 25 not eliminated from the accounting (due to that district not having a PM10 threshold), then there would be years when the threshold for PM10 is exceeded, and PM10 emissions would 26 27 have to be mitigated. 28

It should be noted that the secondary particulate matter impacts from NOx generated in
the construction of project elements in the far eastern part of the Bay Area Air Quality
Management District (Reach 7, Clifton Court Forebay) and southern Sacramento County will
likely be experienced in the San Joaquin Valley Air Basin due to prevailing meteorological
conditions. Yet, SJVAB is the only basin in a federally-designated PM2.5 nonattainment area
and PM10 maintenance area subject to the requirement that secondary PM2.5 and PM10
effects be considered in the general conformity determination for those years in which NOx
emissions exceed 100 tons. (SWRCB-102, FEIR/S, p. 22E-36 [Compliance with Conformity
Requirements] and pp. 22-316 to 22-317 [Table 22-110, Criteria Pollutant Emissions, and
footnote a].)

It is arguable that these unmitigated emissions are *indirect emissions* from the project in the San Joaquin Valley Air Basin. "The General Conformity evaluation must consider both direct and indirect sources of emissions for all nonattainment and/or maintenance pollutants, which include regulated precursor emissions." (SWRCB-102, FEIR/S, p. 22-49.) However, the Conformity Analysis specifically did not consider the impacts of unmitigated emissions in one air district as indirect emissions in the adjacent air basin. Hence, there will not be mitigation for those impacts.

B. Risks of Proposed Emissions Offset Programs

There are substantial risks that the intended protection of the public interest in the emissions reductions program for the Delta Tunnels Project, will not occur.

1.

Feasibility of Environmental Commitments

As commented on by air quality experts, some of the engines relied upon for lower emissions may not be available as planned. (SWRCB-102, FEIR/S, Comments and Responses to Comments, p. 107, Letter 2622.) Specifically, the availability of the Tier 4 tunneling locomotive engine, used to transport muck, is speculative. The EPA certified Tier 4 tunneling locomotive engine, which would lower emissions from tunneling activities, is asserted to be available by proponents because of "consultation with tunneling locomotive engine manufacturers." (SWRCB-102, FEIR/S, Comments and Responses to Comments, p. 107,

1 Letter 2622.) There is no estimate of the additional pollution offsets required should this 2 engine prove to be unavailable to power construction activities for some or all of the 3 construction period.

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2. **Deferred Mitigation Programs**

Air quality experts and the San Joaquin Valley Unified Air Pollution Control District ("SJVAPCD") commented that the proposed mitigation program agreements should have been finalized before project approval. (SWRCB-102, FEIR/S, Comments and Responses to Comments, pp. 63-64, Letter 2506, and p. 107, Letter 2622.) While the FEIR/S defines the emission reduction performance required to be credible (SWRCB-110, Adopted Findings of Fact and Overriding Considerations, pp. 210-227 [stating all reductions must be quantifiable, verifiable, enforceable and satisfy the basic criterion of additionality]), it is air districts that must judge whether these conditions have been met. The deferral of fully defining the mitigation program means it is speculative. For example, the mitigation program relies upon voluntary participation of owners of engines to replace or retrofit diesel engines in buses, trucks and locomotives.

16 For comparison, consider the case of the California High-Speed Train Project's Merced to Fresno section. There, the agreement between the implementing agency, the California 18 High Speed Rail Authority, and the air district was required as a condition of approval. The 19 reason given was:

In implementing a VERA, the SJVAPCD verifies the actual emission reductions 20 that have been achieved as a result of completed grant contracts, monitors the 21 emission reduction projects, and ensures the enforceability of achieved reductions. The initial agreement is generally based on the projected maximum 22 emissions that exceed thresholds as calculated by a District-approved Air Quality Impact Assessment and/or the project's EIR/EIS; the agreement then requires 23 the proponent to deposit funds sufficient to offset those maximum emissions exceedances. However, because the goal is to mitigate actual emissions, the 24 District has designed adequate flexibility into these agreements such that the 25 final mitigation is based on actual emissions related to the project, based on actual equipment used, hours of operation, etc. that the proponent tracks and 26 reports to SJVAPCD during construction. After the project is mitigated, the District certifies to the lead agency that the mitigation is completed. Thus, a 27 VERA provides the lead agency with an enforceable mitigation measure that will result in emissions exceedances being fully offset. If FRA selects one of the 28 action alternatives in the ROD, it would include the VERA mitigation measure

AQ-MM#4 as an enforceable commitment undertaken by the Authority and required for project implementation. According to the SJVAPCD, since 2005 the SJVAPCD has entered into seventeen VERAs with project proponents and achieved 1,393 tons of NOx and PM10 reductions per year. It is the SJVAPCD's experience that implementation of a VERA is a feasible mitigation measure which effectively achieves actual emission reductions, mitigating the project to a net-zero air quality impact.

(ECOS-15, California High-speed Rail Authority ("CHRA") 2012, App. 3.3-B.) Conversely,

without such an agreement prior to project approval, the mitigation measure is speculative.

3. Speculative Emission Offset Programs

The emissions offset program relies on speculative emission reduction programs to claim that emissions can be reduced to net zero. (SWRCB-110, Adopted Findings of Fact and Overriding Considerations, pp. 210-227.) Little analysis or data is presented on the current performance of these programs. Further, there is nothing in the record to demonstrate the incentive programs potential to feasibly meet these emission reductions, despite the constraints on the location of emission reductions.

For two decades, Air Districts have been implementing incentive programs to reduce heavy duty diesel NOx and PM emissions. (SWRCB-102, FEIR/S, 22-29 to 22-34 [description of Criteria Pollutant management by air districts in project area].) The programs work because federal engine standards and state fleet rules set a regulatory framework in which it is advantageous for heavy duty engine owners to participate in incentive programs before regulations force engine turnover. Millions of dollars have been expended to *accelerate* turnover of older engines. For example, SJVAPCD reports that in 2017 its incentive programs reduced NOx by 6,479 tons, particulate by 255 tons and ROG by 787 tons. (ECOS-17, SJVAPCD 2017.)

But there is a limit on what can be achieved with these programs because of normal vehicle turnover rates and California's Air Resources Board regulatory deadlines. (See ECOS-21, 13 CCR § 2025 [Regulation to Reduce Emissions of Diesel Particulate Matter, Oxides of Nitrogen and Other Criteria Pollutants, from In-Use Heavy-Duty Diesel-Fueled Vehicles].)

For example, by January 2, 2023 nearly all trucks and buses in fleet operation and
trucks entering ports or railyards will need to have 2010 model year engines or the equivalent.

Thus, there may be inadequate motivation for vehicle owners to provide further mitigation
 through participation in incentive programs to replace or retrofit engines to a higher standard
 even if such engines became available.

4. Risk That the Contingency Program for Emission Reductions cannot Be Achieved, Harming the Public Interest in Air Quality and Conformity with Air Quality Plans

The emission reduction program relies on a speculative contingency mitigation measure to be developed, implemented, and monitored by the DWR, an agency with no air quality mitigation expertise, to manage risk that the primary speculative mitigation program will not succeed. (SWRCB-110, Adopted Findings of Fact and Overriding Considerations, pp. 210-227.) Particularly disturbing is the assumption that if the air districts are unable to meet the reduction goals, DWR would be able to do so. The contingency plan contains the same measures included in the primary reduction plan.

The integrity of the Delta Tunnels air pollution mitigation program rests on the expert
credentials and participation by the individual air districts. The FEIR/S and General Conformity
Determination cite the air districts' participation as the source of credibility for the mitigation
approach. Yet the FEIR/S does not require an enforceable criteria pollutant emission
reduction program agreement be in place with each air district before construction begins, and
allows DWR to substitute its own emission reduction program (after "consultation" with air
districts) independent of air district implementation and oversight, if it deems necessary.
Both U.S. Environmental Protection Agency ("EPA") and the Sacramento Metropolitan
Air Quality Management District ("SMAQMD") submitted comments cautioning that offsets may
become scarce or prohibitively expensive in certain years. On August 26, 2014, U.S. EPA
Region IX Administrator noted in a letter to Will Stelle, Regional Administrator, West Coast

Region National Marine Fisheries Service:

The availability of sufficient offsets to demonstrate conformity for the BDCP may be limited. EPA is aware that other construction projects scheduled to take place in the BDCP project area during the BDCP's proposed construction time frame also include the purchase of offsets to demonstrate conformity. For example, two segments of the California High Speed Rail project scheduled to be constructed in the San Joaquin Valley Air District are currently pursuing a significant amount of offsets for several criteria pollutants.

(ECOS-20, U.S. EPA 2014, p. 21.)

Likewise, in a January 28, 2016 letter to Cassandra Enos-Nobriga of the Department of Water Resources, the Air Pollution Control Officer for the SMAQMD noted: "DWR should be aware that toward the middle of the construction time period it will become more difficult to identify off-site emission reduction options for mitigation measure AQ-1a. Consequently, it is likely that mitigation measures will become increasingly expensive. DWR should ensure that adequate funds will be available." (SWRCB-102, FEIR/S, Attachment 22E.)

Concern about the scarcity of offset opportunities was the basis for recommending that the FEIR/S contain a contingency program to ensure that mitigation goals are met. (SWRCB-102, FEIR/S, Comments and Responses to Comments, p.40, Letter 1434 [SMAQMD recommending "that plans be outlined for development of contingency mitigation should any currently proposed mitigation prove infeasible"].) The point of contingency is to come up with additional measures to backstop the measures relied upon. Ironically, the only measures suggested for the contingency program are the very measures which the air districts already implement and have the expertise to carry out. (See, e.g., SWRCB-102, FEIR/S, pp. 22-69 to 22-70.) It is not in the public interest for DWR to rely on the expertise of the air districts to qualify their mitigation program and then to appropriate the role of carrying out that program away from those districts and back to DWR.

5. Unreasonable Assumption That DWR Can Backstop Air Districts

Contingency planning should be creative and done far in advance. There is a maze of regulatory and incentive programs underway at state, federal and local levels that present an obstacle course for DWR to achieve complete offset of its construction emissions. The FEIR/S, simply assumes that if an expected reduction in partnership with an air district goes missing, DWR can produce it on a timely basis. (SWRCB-110, Adopted Findings of Fact and Overriding Considerations, pp. 210-227.) This is not a reasonable assumption. DWR is obligated to find and document feasible emission reductions that it can achieve to supplement any shortfalls by the air districts and have air district agreement that its plan is in fact surplus to their planned emission reductions. These emission reductions measures are the equivalent of

1 a State Implementation Plan ("SIP") measure under the Federal Clean Air Act and must meet 2 the performance criteria of a SIP measure. (ECOS-19, SJVAPCD 1994 [adopting Code of 3 Federal Regulations ("CFR"), title 40, chapter 1, subchapter C, parts 6 and 51]; see also ECOS-20, U.S. EPA 2014, p. 21 ["Demonstrate that all direct and indirect emissions of the federal action, including all required conservation measures, would conform to the applicable SIPs and not cause or contribute to violations of the National Ambient Air Quality Standards].)

There is also the fact that other construction projects will be seeking the same emission reduction sources for offsets. The FEIR/S does not consider the cumulative demands on voluntary emission reduction programs in the air districts. The same measures are required for attainment of air quality standards, normal local demand for offsets for new projects, and for other expected large state/federal projects anticipated. For instance, the High-Speed Rail Merced to Fresno project, which generates 589 tons of pollutants requiring offsets during the same time period. (ECOS-15, CHRA 2012.)

6. **Risk of Losing Conformity Determination**

General Conformity Determinations are valid for five years. (SWRCB-102, FEIR/S, p. 22E-38 [general conformity determination findings and conclusions].) The project runs the risk of not being able to avoid redetermination if it is unable to meet its mitigation obligations. The risk of losing the Conformity Determination and the consequences have not been disclosed by Petitioners. Loss of conformity would lead to a loss of federal permits and any federal funding for the project. It is not in the public interest for a project to be initiated that may default on its federal permits and not be sustainable through completion.

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7. **Cumulative Emission Reduction Burden for DWR**

In addition, state law governs reduction of greenhouse gas emissions. Project construction would generate three million metric tons of greenhouse gas emissions. (SWRCB-110, Adopted Findings of Fact and Overriding Considerations, p. 229.) These emissions also must be offset completely, but the emission reduction programs suffer the same risks as described for the criteria pollution reductions programs. The mitigation program is "to be determined." (SWRCB-110, Adopted Findings of Fact and Overriding Considerations, pp. 102-

1 3 and 229-236.) In the FEIR/S, Comments and Responses to Comments (p.110-114, Letter 2 2622) there is discussion of comments submitted by air quality experts regarding the flawed 3 nature of the mitigation program. For example, the pollution reduction burden is high, the timing is critical, but the mitigation program reporting will occur only for the past year. (SWRCB-102, FEIR/S, Comments and Responses to Comments, Letter 2622, p.111, ["the project proponents will conduct annual reporting to verify and document that selected strategies achieve sufficient emissions reductions to offset construction-related emissions to net zero. The annual report will identify construction emissions for the reporting year, projects selected to offset those emissions, actual emission reductions achieved, and funds provided"].) Should mitigation fail to keep pace, it will not be reported until after the fact. This is a serious lapse in accountability. Another example is that consultation will take place with California Air Resources Board ("CARB") and air districts, but their approval will not be required for the mitigation plan. (See SWRCB-102, FEIR/S, Comments and Responses to Comments, Letter 2622, p. 110.)

III. Suggested Water Board Permit Conditions to Help Protect the Public Interest in Clean Air

The Water Board should step in and require permit conditions to fill the public interest gap left by the FEIR/S, Findings of Fact and Mitigation Monitoring Program. The Board should engage CARB in a joint review of the project, direct and indirect emissions impacts, environmental commitments and mitigation to determine how to strengthen and guarantee air guality mitigation to achieve the stated goal.

I suggest the following conditions be imposed on the project by the SWRCB to help diminish the unreasonable impacts on air quality that would be contrary to the public interest:

- Require all construction criteria pollutant emissions generated in the Bay Area Air Quality Management District to be evaluated and mitigated according to San Joaquin Valley Air Basin standards and in the San Joaquin Valley Air Basin.
 - Require all emission reduction measures be approved and implemented by air districts or CARB.

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- Require emission reduction agreements with air districts and CARB to be completed prior to issuance of Water Board permit.
- Require all DWR/air district/CARB agreements to include schedules and contractual provisions to ensure that emission reduction offsets are implemented in the year that the emissions are generated. Failure to have contracts for sufficient emission reduction projects approved for the coming two years should trigger a delay in the schedule of construction until this "stay ahead" provision is confirmed with signed contracts to deliver proven emission reductions.
- Require that the Water Board permit be suspended in the event that environmental commitments or emission reduction offset contracts do not meet the schedule, with the California Air Resources Board as the arbiter of whether emissions reductions are achieved.
- Require DWR to report annually to Cal EPA and the Water Board on all emission reduction offsets required and achieved for the report year and under contract for the coming two years to demonstrate that future year emissions will be on schedule.
- Require public disclosure of agreements with air districts, Air Resources Board and annual reports to the Water Board for air quality and greenhouse gas reduction programs.

In my opinion, this project as planned, is detrimental to the public interest, both in the project area and elsewhere. This project would result in an unfair air pollution burden in the San Joaquin Valley, already impacted by severe air quality problems. These requirements listed above will not prevent the damage to the public interest, but merely limit the severity.

Executed on the 30th day of November, 2017, at Sacramento, California.

went lamare

Judith Lamare

Testimony of Judith Lamare, Ph.D.

1 REFERENCES

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2 || 13 CCR § 2025. [ECOS-21]

- 3 California Environmental Protection Agency, Air Resources Board, Assessment of the Impacts
 - of Transported Pollutants on Ozone Concentrations in California (March 2001).

[ECOS-14]

6 CHRA, Final Environmental Impact Report/Statement: Merced to Fresno, Appendix 3.3-B Draft

Federal Conformity Determination (2012). [ECOS-15]

8 || FEIR/S, Figures 22E-1 to 22E-4. [ECOS-16]

9 SJVAPCD, Annual Demonstration Report, SIP-Creditability of Emission Reductions Generated

through Incentive Programs (2017), pp. 6-7. [ECOS-17]

11 SJVAPCD, Plan for the 2000 8-Hour Ozone Standard (2016), Appendix E: Incentives

[ECOS-18]

13 SJVAPCD, Rule 9110 Federal General Conformity Regulation (1994). [ECOS-19]

14 U.S. EPA, Letter to Will Stelle (2014). [ECOS-20]