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RE: Harvard Westlake RDEIR ENV-2013-0150-EIR SCH NO. 2013041033; Air Quality Analysis and Comments

At the request of the group Save Coldwater Canyon, Autumn Wind Associates has reviewed the above-referenced RDEIR and provides these comments regarding its treatment of air emissions, significance determinations, and proposed mitigations.

I. Introduction

Our review of the RDEIR reflects that the Harvard Westlake project will contribute substantial quantities of criteria and health risk-related emissions and relies on poorly written, unenforceable mitigation as the basis for claims of reduced NOx emissions that will, as a practical matter, not materialize. Lack of detailed project-specific air quality-related information in the RDEIR, its Air Quality Appendix (Appendix C), or via online access at the Lead Agency's website, identifying and explaining the Lead Agency's choices regarding equipment-related modeling inputs and their changes made to CalEEMod model defaults, greatly inhibited ours and the public's ability to validate and verify the emission reductions claimed in the Air Quality element.[1] Notwithstanding the lack of detailed information and explanation on how emissions were calculated from use of equipment, haul trucks, worker vehicle trips, etc., it appears that CalEEMod modeling used under-representative numbers of truck trips and vehicle trip lengths; if this is the case, the project's emission estimate in the RDEIR are underestimated. In turn, underestimation would jeopardize the accuracy of the RDEIR's air quality impact significance determinations, actual emission impacts, the RDEIR's reasons for not performing a health risk assessment, and the efficacy of proposed mitigation measures (and especially MM-AQ-9 and MM-AQ-10). Health risk modeling is conspicuously absent from the RDEIR; this is unacceptable considering the extent of construction equipment numbers and activity that will emit toxic air contaminants across the multi-year construction period to nearby students and residents, and because background levels of

[1] Our requested equipment-specific information affecting the RDEIR's estimates of emissions and used to calculate NOx reductions for MM-AQ-10 arrived after COB March 16, too late to permit a full re-review and re-analysis of the project prior to the March 21 deadline.

toxics in ambient air and to result from diesels routinely operating on or near school grounds will contribute additively and cumulatively with project emissions to student and resident health risks.

Individual points of concerns are noted below; overall, we have serious concerns about the RDEIR's analysis and proposed mitigation for the project's air quality impacts. If our concerns noted below prove to be on point, the RDEIR must be revised and then reissued for public review and comment.

II. Project Expansion and Timing Discrepancy

Starting at RDEIR Project Description element pg. 2-1 and elsewhere, the Harvard-Westlake project has grown and changed significantly in comparison to the project proposed and studied in the preceding DEIR. The construction components have been expanded and re-phased, with the project duration extended. New and/or changed components include addition of a debris basin; security office and an "ancillary 2,582 square foot enclosed structure for offices, restrooms and equipment storage use"; road and roadway access changes; addition to the site of 8 parcels and the Paper Hacienda; and new and/or relocated soil nails. No information in the RDEIR is found to show that those changes have resulted in changes to emissions estimates, although they may have been reflected as unexplained, unreferenced changes to defaults in the CalEEMod modeling prepared by the Lead Agency. At Air Quality element pg. 3.2-26 project duration is changed from 25 to 30 months, and three original phases are changed to eight. Newly added phases increase unmitigated construction emissions considerably over those estimated in the DEIR, with NOx estimated to exceed SCAQMD's regional CEQA threshold of significance. Mitigation proposed to reduce NOx emissions, claimed in the RDEIR to bring emissions below regional significance thresholds, will actually do little for air quality since the primary mitigation measure (MM-AQ-10) is fatally flawed. (See comment IX, below.)

At various locations in the RDEIR project duration is identified as 30 months, an increase of five months over that shown in the DEIR. However, CalEEMod modeling output sheets provided in the RDEIR's Appendix C shows construction across 4 years (2016 – 2019), with construction phases likely extending to 42 months. This is a significant unexplained discrepancy between information found in the RDEIR and Air Quality Appendix C. Project timing and duration are important to emissions estimation, but because assumptions regarding inputs used in the CalEEMod model have not been provided by the Lead Agency, discrepant timing/duration information between the RDEIR's elements and CalEEMod output sheets in Appendix C cannot be logically resolved by the RDEIR's reader.

III. Emission-Related Details and Explanatory Information Has Not Been Provided in the RDEIR

Neither the RDEIR's Air Quality element nor its Appendix C provide narrative, descriptive, or graphical information identifying and explaining inputs chose for modeling the project's emissions, including those

related to equipment types, horsepower, trip numbers, etc. Model inputs have a direct, consequential effect on emissions quantities estimated for the project, and for their relevance, in turn, to significance thresholds and for estimating mitigation effectiveness. Without providing to the public the CalEEMod input files used by the Lead Agency's modeler, we are unable to effectively determine all the input values associated with each construction phase. In addition, changes made to CalEEMod modeling defaults must be explained in the EIR. Our review reflects that numerous changes to defaults were made without explanation or justification, and because no detailed information is provided it is not possible to understand the details of each changed input. Changes to equipment types, horsepower, hours, and other parameters operating as defaults in the CalEEMod model have been made, and without explanatory information and detail, it is not possible to confirm the accuracy or validity of modeled emission estimates. To correct this significant defect, the EIR must be revised to include comprehensive changes that include the addition of, and online accessibility to, the CalEEMod input table(s) used by the Lead Agency's modeler, along with detailed identification and explanation for changes to model defaults.

IV. Haul Trips Appear Underestimated and May Not Be Consistent with CalEEMod Guidance

The CalEEMod output sheet excerpted below (pg. 90 of 532) reflects 17,640 haul trips, but no information is provided in the RDEIR's Air Quality element to explain how this value was determined.

tblOffRoadEquipment	UsageHours	7.00	8.00
tblOffRoadEquipment	UsageHours	6.00	8.00
tblOffRoadEquipment	UsageHours	6.00	8.00
tblOffRoadEquipment	UsageHours	7.00	8.00
tblOffRoadEquipment	UsageHours	7.00	8.00
tblOffRoadEquipment	UsageHours	7.00	8.00
tblOffRoadEquipment	UsageHours	7.00	8.00
tblOffRoadEquipment	UsageHours	7.00	8.00
tblProjectCharacteristics	OperationalYear	2014	2019
tblTripsAndVMT	HaulingTripNumber	17,500.00	17,640.00
tblTripsAndVMT	VendorTripNumber	70.00	3.00
tblTripsAndVMT	VendorTripNumber	70.00	5.00

At RDEIR pg. 3.2-27, haul truck and delivery truck trips/day are noted as 160. Total excavation of 140,000 cubic yards was identified for modeling purposes, and at RDEIR pg. 2-20 each haul truck is limited to no more than 14 yards of soil. Empirically, 10,000 one-way trips (140,000 cubic yards / 14 cubic yards/haul truck) from the project site to the landfill site should occur during the first substantial

phase of the project--yet this trip estimate varies substantially from the unexplained 17,640 trips identified in the screen shot, above, and we are unable to tell how many yards were estimated per truck trip or whether the 17,640 value in the excerpt above represents all hauling trips or some combination of hauling-plus-other trips, or as one- or two-way roundtrips.

CalEEMod Users Guide provides that "Hauling trips are based on the assumption that a truck can handle 20 tons (or 16 cubic yards) of material per load. Assuming one load of material, CalEEMod considers a haul truck importing material will have a return trip with an empty truck (2 trips). Similarly, the haul truck to take material away will have an arrival trip in an empty truck (2 trips). Thus, each trip to import and export material is considered as two separate round trips (4 trips) unless the "phase" box is clicked. Then, a haul truck trip to import material will be the same haul truck to export material (2 trips). We are unable to determine if the "phase" box was checked during the model runs for the RDEIR since the RDEIR fails to provide any explanatory information on how its modeling inputs were chosen. Regardless, our empirically-based estimate of 10,000 one-way haul trips would then either amount to 20,000 roundtrips or, based on CalEEMod's default approach, 40,000 roundtrips, and these numbers vary appreciably from the unsupported, unexplained 17,640 haul trip value cited in Appendix C. Without having provided the CalEEMod input file with explanatory information on the selection of its inputs, the Lead Agency has hampered the public's ability to verify the RDEIR's emissions estimates, significance findings, and claimed effectiveness of proposed mitigations. An empirical approach to calculating the project's haul trips also calls into serious question the accuracy of the 17,640 trip value used in the RDEIR's CalEEMod modeling for emissions estimation.

V. Truck Trip Numbers Appear to Be Underestimated and Concrete Truck Trips May Not Have Been Included with Haul Trips

At Appendix C pg. 28 of 532 the following table is provided:

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Site Preparation	2	5.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Grading	9	30.00	0.00	17,640.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Soil Nailing	6	30.00	3.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Shotcrete	4	30.00	5.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Foundation/Structure	9	30.00	50.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

The column labeled "Hauling Trip Length", above, appears to indicate that all hauling trips were calculated only for the grading phase, but what hauling tasks are factored into the 17,640 trips? The reader is left to guess, since there is no explanatory information found in the RDEIR or Appendix C. However, the default capacity used in CalEEMod for haul trucks is 16 cubic yards, and if we divide

140,000 cubic yards by that value we arrive at 8 cubic yards'/truck capacity. Doubling that capacity would result in 8820 truckloads—which then doubled to create a round trip (one trip to, one trip return) gets us back to the 17,640 hauling trip number shown in the screenshot above. If this approach is what was used in the modeling, it understates the total number of trips since the 16 cubic yard/truck haul default in CalEEMod should not have been used. Rather, the 14 cubic yard/truck haul value specified at various locations in the RDEIR should have been used to calculate numbers of truck hauls. Additionally, the RDEIR states that there will be 16 trips/day during the grading phase, apparently applying to concrete trucks, although we are not able to determine if those trips were included for calculating "Trips and VMT" showing in the table above. If they were not, where were they calculated? If they were inadvertently omitted by the Lead Agency's modeler, emissions estimates for the project have been under-calculated.

VI. Haul Distances Appear Underrepresented in Project Modeling

At Project Description pg. 2-20, the hauling distance for disposal of the project's ~140,000 cubic yards of excavated soil is noted as 35 miles, yet as noted in the screen shot above the default distance is listed as 20 miles. Lacking explanatory information in the RDEIR on input choices made by the Lead Agency, we are unable to explain the discrepancy. Did modeling for Appendix C count haul trips as one roundtrip per 14-cubic yard increment, or, as CalEEMod notes in its guidance on the issue, as 2 complete roundtrips? Using the empirically derived roundtrip estimate of either 20,000 or 40,000 roundtrips for the project's soil disposal, the 30-mile increased roundtrip trip length would result in an additional 600,000 – 1,200,000 miles traveled. From the table above, a 40-mile haul roundtrip would actually result in 70 miles' travel, an increase of 43%. So, too, would related heavy-duty truck emissions. If the RDEIR has undercut haul trip emissions by using the CalEEMod trip distance default, project emission estimates contained in Tables 3.2-6 and 3.2-7 are underestimated. Please provide clarifications and specific details used for modeling haul truck emissions to resolve haul truck and trip-related discrepant information contained within the RDEIR's various elements and appendices.

VII. PM10/2.5 Concentration Modeling for Project-Specific Operational and Cumulative Impacts Is Poorly Explained and Ignores Relevant Cumulative Sources

RDEIR Tables 3.2-8 and 3.2-9 provide modeled pollutant concentrations at four sensitive receptor locations for emissions generated at the parking structure and where diesel school buses will pick up and deliver students. No information is provided in the RDEIR to show how those were selected or whether they were on the basis of "maximally exposed individual" (MEI) locations. Please provide clarification on why those locations were selected and whether they represent the most at-risk MEIs.

Additionally, at pg. 3.2-29, PM10 and PM2.5 concentrations were modeled for the school pool area and "the single-family residence located directly northwest". Similarly, no information is provided that explains why those locations were selected for PM concentration modeling. Moreover, the RDEIR should have provided multiple pollutant concentrations at those locations, similar to what was undertaken in the tables referenced above. While the tables reflect operational emissions, the project's 2016 – 2019 construction period (either 30 months or, according to CalEEMod output sheets, substantially longer) will generate sustained criteria pollutant and TAC emissions for residents located north and west of the project area and, per Table 2-1, as close as 77' to the construction limit line. We are requesting that pollutant concentrations be estimated and provided for those locations.

Further, construction-generated PM10/2.5 concentrations are cumulatively significant, locally. The *construction* PM10/PM25 concentration increments are a significant fraction of the State/federal AAQS at the nearest sensitive receptors, unlike modeled *operational* ambient concentrations which are a small fraction of the AAQS. South Coast is a PM10/PM2.5 nonattainment area with a long and ongoing record of serious challenges to re-attainment of federal and state health-based particulate standards. While the RDEIR at pg. 3.2-34 dismisses project's potential to cause cumulatively significant TAC exposures, there could easily be a point when project construction PM10/2.5 concentrations combine with background PM10/PM25 concentrations to exceed ambient air quality standards. The RDEIR notes that SCAQMD requires that other cumulative PM10/2.5 sources within 500 meters of the site be identified (the RDEIR refers to footnote "17", yet no reference is given at bottom of page), but ignores that the RDEIR's aerial view of the project provides ample evidence of numerous sources of PM10/PM2.5 (i.e., local roadways) within that radius.

VIII. RDEIR Fails to Provide Adequate Review of Project-Specific and Cumulative Health Risks

Tables 3.2-8 and 3.2-9 were constructed using outputs for the project's operational criteria pollutants taken from the Lead Agency's use of the AERMOD model; AERMOD may also serve to estimate chronic and acute health risks from potential exposures of nearby sensitive receptors to toxic air contaminants (TAC) that will be emitted by the project and primarily as diesel particulate matter (DPM). Construction-related DPM, a CARB-declared toxic, will be emitted at the project site throughout its 30 – 42-month duration, and will combine with both project-specific operational DPM and that contributed by diesel vehicles operating at adjacent roadways.

At pg. 3.2-30 the Lead Agency has rejected use of AERMOD to characterize increased health risks, largely under the assumption that short-term exposures to TACs need not be evaluated. This position is routinely contradicted in practice; many EIRs in the South Coast air basin and elsewhere in the state have undergone AERMOD modeling to characterize their short-term, construction-related health risks. OEEHA guidance for evaluating air toxic hotspots recognizes that air districts can and do require health

risk modeling for short-term TAC-emitting projects, including those that may involve as little as 2 months' duration.[2] PM2.5 emission concentrations at various locations on or around the project site, to result from project construction equipment, is not a replacement for the health risk assessment that should have been conducted for the RDEIR to ensure that cancer and non-cancer risks do not exceed SCAQMD significance thresholds for maximally exposed individuals. School children will be captive on-campus for many hours per day, day after day, month after month, with increased health risks as a result of the project's heavy reliance on extensive diesel-powered construction equipment and in combination with existing background TAC concentrations. In February 2015, OEHHA (State Office of Environmental Health Hazard Assessment) released updated Risk Assessment Guidelines that outline risk calculations for specific age groupings, including a more protective breathing rate for children.

OEHHA's guidelines were adopted by SCAQMD in June, 2015, well ahead of issuance of the Harvard-Westlake RDEIR, with age and breathing rate protections now three times more protective than existed previously. Soon after, revised SCAQMD HRA guidance was issued that anticipated an increase in the significance of TAC emissions as a result of the more protective values in OEHHA's recommendations; the net effect of OEHHA recommended changes was that short-term projects—including construction projects such as this one--could readily cause excessive health risks. In supporting documentation, SCAQMD staff have advised that a six-month construction project of a size smaller than that described in the Harvard-Westlake RDEIR could cause health risks that would exceed their established TAC thresholds of significance.[3]

The RDEIR has failed to consider health risks to school children and nearby residents that will result from construction-related toxics emitted through the 2016 – 2019 period, and it has similarly failed to evaluate cumulative TAC emissions that include operational emissions from increased vehicle operation at the new parking structure, with school bus parking/access changes, and with increased vehicle use at roadways that will be improved as part of the project. In light of the overwhelmingly sensitive-receptor population—children--served by the school, with residents as close as 72' from the construction zone, and against the backdrop of more protective OEHHA and SCAQMD TAC and health-risk guidance changes made prior to issuance of the RDEIR, the Lead Agency should have put a priority on protecting public health by including a Health Risk Assessment in the RDEIR. Without a bona fide HRA, the Lead Agency cannot justifiably conclude that the project's project-specific and cumulative TAC impacts are less than significant.

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[2] OEHHA; "Air Toxics Hotspots Program Guidance Manual"; February 2015; pg. 8-18.

[3] Based on SCAQMD Staff presentation, Potential Impacts of New OEHHA Risk Guidelines on SCAQMD Programs, Agenda Item 8b, http://www.aqmd.gov/docs/default-source/Agendas/Governing-Board/2014/may-specsess-8b.pdf, p. 9. Presentation provides that 6 months' construction impacts from a typical 1-acre office project could cause significant risk where 1 lb/day of DPM for 6 months would increase cancer risk beyond the 10 per million threshold of significance.

IX. Construction Mitigation Measures Are Fatally Flawed

Construction mitigations proposed for reducing the project's construction equipment emissions are identified at RDEIR pg. 3.2-36. MM-AQ-9 in its latest version requires:

> "The construction contractor shall coordinate with the Project Site administrator for Harvard-Westlake School and the administrator for Sunnyside Preschool to schedule construction activity that utilizes heavy equipment and generates fugitive dust to when student exposure would be minimized."

As written the mitigation measure cannot be depended upon to produce real, measurable reductions in school children's exposures to the project's construction-related PM10, PM2.5, or toxic DPM emissions since it lacks enforceability and offers no metrics by which to measure its effectiveness, particularly important for young breathers immediately adjacent to the construction zone. The only hard requirement imposed by the measure's language on the contractor is that they "shall coordinate" with school personnel, which means nothing more than that they will communicate. Mere requirement for coordination does nothing, in itself, to minimize or reduce student exposures to construction activity emissions.

Furthermore, no definition is offered for what constitutes "heavy equipment" or at what level or point "fugitive dust" or "heavy equipment" would invoke the "coordination" requirement. As a practical matter, all phases of the project will utilize diesel construction equipment heavy enough to perform the excavation, earthmoving, cement pumping, offsite soils hauling, and the dozens of other tasks identified for the project, and diesel equipment types and tasks have already been scheduled for each day of each phase of the project (see equipment phases and schedules in Appendix C). No less importantly, nearly every piece of construction-related equipment identified in Appendix C will routinely create diesel emissions and fugitive dust, with emissions occurring across every working hour and day of the project, and they will occur from the first phase through the last phase of the project identified for years 2016 – 2019. Is the public asked to believe that the School will voluntarily keep construction equipment idle when schoolchildren are walking or riding to or from school, or on playgrounds or playing field areas? What possible times of the weekday will occur when preschool children, high school athletes, and neighboring residents are guaranteed to be indoors? Requiring nothing more than coordination does not protect children, athletes, or residents from construction emissions.

The Lead Agency's reliance on this mitigation ignores the practical reality that with millions invested in construction equipment and labor, along with construction contracts requiring specified completion dates, construction equipment will not be idled by this mitigation. Moreover, school children will attend school on five of the six days per week during which construction is allowed---this inherent conflict simply overwhelms meaningful application of the measure. We note, as well, that the mitigation gives

school administrators no criteria by which they may demand that construction activities be halted or reduced. In total, the measure can do little more than act as window-dressing designed to mollify concerned citizens and parents. The Lead Agency must revise the measure to include objective metrics that will ensure that it provides real, substantial emission reductions for students and teachers, and which lays out under exactly what conditions school administrators can expect construction equipment to cease operation upon their request.

MM-AQ-10, found at pg. 3.2-36 requires:

> "The construction contractor shall ensure that diesel-powered construction equipment greater than 50 horsepower meets the USEPA Tier 3 emission standards, where available."

This measure is written to do little more than give the appearance of substantive emission benefits, using what the lay person will assume is a requirement that lower-emitting Tier 3 diesel equipment or better will be required to operate on site. The measure does not require that, nor will it provide it—instead, it is cleverly written to permit the contractor through the use of the subjective "where available" language to opt out of requiring any or all Tier 3 equipment and without challenge. This equates to asking the fox to guard the henhouse, and it neatly ignores the reality that requiring actual Tier 3 engines (or better) for every piece of diesel equipment to operate on the site across its 30 – 42-month project duration will increase costs, delay work schedules, and require constant surveillance of onsite contractors and sub-contractors to ensure 100% compliance with the mitigation.

Similar to MM-AQ-9, the measure fails to provide the objective criteria by which the term "where available" is defined, rendering it unenforceable. While most forms of Tier 3 construction equipment have been available since the 2006—2008 timeframe, many larger pieces of expensive equipment are long-lived and operate at Tier 2 or lesser Tier rates and they are located and operate regularly throughout the South Coast Air Basin. Many construction fleets in CA comply with CARB's offroad diesel regulation by using a fleet-averaged emission approach, allowing them to continue to use older, more difficult and costly to replace, higher-emitting equipment. Fashioning an enforceable mitigation that recognizes the existence of older, higher-emitting equipment that is virtually certain to end up at the Harvard-Westlake project, similar to what has been done in other CEQA-reviewed-and-mitigated construction projects around the state, should have been undertaken by the Lead Agency.

No standards are required by MM-AQ-10, and unchallengeable discretion is given solely to the "construction contractor" to implement and enforce the measure—or, as will occur without provision for challenge, to simply assert that Tier 3 equipment wasn't/isn't available at any given point in the construction process. Furthermore, the measure fails to specify which contractor the measure applies to, and what entity is responsible for ensuring that all contractors and every piece of equipment on the site, whether under his control or not, is at least Tier 3 rated so that fully 100% of emissions reductions

claimed in the RDEIR for AQ-MM-10 are achieved. Large construction projects such as this one routinely use scores of contractors; this one is virtually certain to use dozens over its four calendar year construction period. Because the measure is unenforceable and offers no mechanism by which it will measure its progress to ensure consistency with the reductions claimed for it in the RDEIR, MM-AQ-10 cannot be expected to deliver the emission reductions claimed in the RDEIR, and it must be revised to ensure real, discrete, verifiable reductions across the project life. Otherwise, the critical emission reductions claimed for it in the RDEIR must be removed.

X. Tower/Ramp Equipment and Emissions Appear to Have Been Omitted

CalEEMod output sheets contained in Appendix C for summer, winter, and annual settings appear to show that the "Tower/Ramp" construction phase, called out in numerous locations in the RDEIR and with a 130-day schedule, will use no construction equipment and generate no emissions. We are at a loss to understand this.

RDEIR Tables 3.2-6 and 3.2-7 reflect unmitigated regional project emissions and localized construction emissions. Table 3.2-7 lists "Tower/Ramp" with <1 lb./day for the four criteria pollutants listed at the top of the Table. Inexplicably, however, Table 3.2-6's regional focus on project emissions of six pollutants appears to have no "Tower/Ramp" phase or any related emissions. Because the Lead Agency has failed to provide the CalEEMod input table used to estimate the project's construction emission quantities and concentrations as part of the RDEIR and its appendices available online to the public, and has similarly failed to provide any narrative or descriptive information explaining their choices of modeling inputs, we are unable to understand why Tower/Ramp emissions would have not been characterized for regionally significant project emissions. And while Table 3.2-7 does list the Tower/Ramp phase, its negligible emission quantities point to a strong possibility that the modeler failed to include its equipment-related model inputs before running the model. If this is the case, emission estimates in the RDEIR's Air Quality element will be underestimated. In turn, an underestimation for Tower/Ramp activities will affect impact significance determinations and emissions reductions calculated for proposed mitigations.

XI. Reasonable, Feasible Construction Equipment Emissions Mitigations Should Have Been Reviewed and Discussed in the Air Quality Element

RDEIR Table 3.2-6 provides detailed, unmitigated emission quantities estimated for the project, with NOx listed as the only pollutant exceeding SCAQMD's daily threshold of significance. Mitigations are provided at pg. 3.2-36, with pg. 3.2-37 reflecting a reduction of NOx emissions to well below the regional threshold of significance by reliance on MM-AQ-10. As noted elsewhere in this comment letter, MM-AQ-10 is devised in such a way that it will result in little if any NOx benefit that would not otherwise

occur. Regardless, the RDEIR should have provided a table showing quantities of emissions reductions anticipated by use of the proposed mitigation measures. Additionally, were MM-AQ-10 to be written in a form that ensured its effectiveness, it would provide meaningful reductions of both NOx and PM2.5, and particulate reductions are particularly important since the air basin reflects serious PM2.5 nonattainment challenges.

Because MM-AQ-10 as written relies on the subjective judgments and actions of the "construction contractor" for its implementation and is therefore unenforceable, the Lead Agency must revise it. The Lead Agency must also consider more effective construction equipment mitigations regularly imposed on similar land use projects in other CA air basins with nonattainment air quality challenges both as severe and less severe than those facing the South Coast air basin. In the Sacramento and San Joaquin Valley areas, air district CEQA guidance providing for percentage reductions of a construction project's NOx and PM10/2.5 emissions are regularly imposed by Lead Agencies. CEQA personnel in SMAQMD and SJVUAPCD recognized long ago that large construction projects will invariably need and use lower-tier (higher-emitting) diesel equipment as the practical result of a number of factors largely involving price and new equipment availability constraints attached to replacement of very long-lived construction equipment. As an example, replacement of a functioning older, higher-emitting scraper with new will often exceed a million dollars. Rather than relying on a mitigation that attempts to require all Tier 3 or better equipment for use throughout the project's 30 -- 42-month duration, the Lead Agency should impose a fleet-averaged emission reduction approach.

Lead Agencies in the Sacramento region routinely impose mitigation requiring 20% and 45% reductions of NOx and PM10 equipment emissions, taken against the fleet wide average for all construction equipment operating in the basin[4]. Detailed equipment lists are required of the Applicant, with revisions and updates provided for over time, and in the Sacramento region the air district inspects on an approximate monthly basis those larger construction projects to verify that specified equipment and emission reductions are consistent with equipment lists and emission rates provided by the project manager. Such an approach ensures compliance with substantive, quantitative-based mitigation measures, and just as importantly it provides flexibility to the Contractor who may wish to occasionally use older, higher-emitting equipment on the job by counterbalancing with use of some measure of newer (Tier 4I or Tier 4F) diesel-powered equipment. Most importantly, the measure provides flexibility, a record of all equipment used at the project site that provides for rapid compliance assessment, and enforceability by air agency or Lead Agency personnel whose duty it is to ensure that CEQA mitigations are complied with once project construction is initiated.

[4] For more information on SMAQMD CEQA Mitigations and their prescribed use, see: http://www.airquality.org/ceqa/mitigation.shtml

Other CEQA-mitigated projects have required use of an emissions or environmental coordinator onsite. The coordinator logs equipment in on the site; ensures that it complies with inventory records and emissions requirements; provides visual inspections of equipment to ensure that idling time limits are not exceeded and that equipment is well maintained to reduce emissions; and provides an updated compliance log to the Lead Agency (and to the air district if requested) on a weekly or bi-weekly basis. The coordinator would also ensure compliance with SCAQMD Rule 403, for which the RDEIR claims a 61% emission benefit.

We provide here the gist of SMAQMD's standard mitigation language routinely imposed on significantly-sized construction projects undergoing CEQA review; this mitigation should be carefully considered for application to the Harvard-Westlake project:

> "The Applicant shall prepare an Air Quality Mitigation Plan (AQMP) and submit the Plan to the SMAQMD for approval prior to issuance of the Work Authorization Permit by the Planning and Community Development Department ground disturbing activities. The AQMP should provide narrative, descriptions, and exhibits that illustrate and justify the measures chosen to reduce the project's operational emissions of ROG and NOx. At a minimum the AQMP shall include:
>
> > The proponent shall provide a plan, for approval of the lead agency and the SMAQMP, demonstrating that the heavy-duty (>50 horsepower) off-road vehicles to be used in the project, including owned or leased and subcontracted vehicles, will achieve a project wide fleet-average 20 percent NOx reduction and 45 percent particulate reduction1 compared to the most recent CARB fleet average at time of each annual report; and
> >
> > The proponent shall submit to the lead agency and the SMAQMD a comprehensive inventory of all off-road equipment, equal to or greater than 50 horsepower, that will be used an aggregate of 40 or more hours per year during any portion of the project. The inventory shall include the horsepower rating, engine production year, and projected hours of use or fuel throughput for each piece of equipment. The inventory shall be updated and submitted annually throughout the duration of the project. The proponent shall provide SMAQMD with the name and phone number of the project manager and/or on-site foreman.
> >
> > Due to the long-term nature of this project, the requirement for the emission reduction plan referenced herein will sunset on Month/Year due to existing SMAQMD and CARB rules that will affect CARB fleet
> > averages at that time.
> >
> > Controlling visible emissions from off-road diesel-powered equipment. Emissions from all off-road diesel powered equipment used on the project site shall not exceed 40 percent opacity for more than three minutes in any one hour. Any equipment found to exceed 40 percent opacity (or Ringelmann 2.0) shall be repaired immediately, and the lead agency and SMAQMD shall be notified within 48 hours of identification of non-compliance equipment. The SMAQMD and/or other officials may conduct periodic site

inspections to determine compliance. Nothing in this section shall supersede other SMAQMD or state rules or regulations.

The Applicant must receive an endorsement letter of the AQMP from the SMAQMD prior to ground disturbing activities.

XII. Alternative Diesel Mitigation Should Have Been Reviewed and Discussed in the Air Quality Element

The Lead Agency has failed to consider requiring use of renewable diesel for all equipment that will operate at the project site. The RDEIR should be revised to include a mitigation measure that requires use of low-emission and/or low-CO2 alternative fuels unless costs are substantially (~100%) greater than routine diesel fuel costs. Use of renewable diesel (which is not to be confused with bio-diesel) should be required for all offroad diesel construction equipment and onroad diesel haul-truck vehicles operating at the project, with proof of its use to be submitted by contractors and sub-contractors to the trained and qualified outside environmental coordinator for record-keeping and compliance purposes noted in the previous paragraph.

One such product that should have been carefully evaluated in the DSEIR is "Diesel HPR" or an equivalent product, made from 98% renewable content (a rate about 4 times greater than regular B-20 biodiesel) and currently marketed at many locations throughout CA. The price for this ultra-low carbon-intensity diesel, with better performance characteristics than traditional petroleum diesel fuel, is competitive with standard onroad and offroad diesel. Scores of municipalities throughout CA have switched or are switching to exclusive use of renewable diesel, based on its superior emission benefits and cost-effectiveness advantages.

Fossil diesel has a cetane rating of 40. The HPR Diesel product, or similar, has a cetane rating of 74. That level of higher cetane results in lower PM and NOx. (The Harvard-Westlake project will, with its poorly written MM-AQ-10, is virtually certain to produce NOx emissions exceeding the regional threshold of significance. Health risks to students and nearby residents from toxic DPM emitted by construction equipment have been ignored by the RDEIR. Renewable diesel fuel, readily available at little if any additional cost over traditional diesel, will provide substantial NOx and PM2.5 benefits for ozone precursor and health risk reductions.) Because the density of the fuel is slightly lower, so is the chemical energy per unit volume (3%). But because the cetane rating is so much higher PM otherwise not emitted is converted into productive energy, with tractive horsepower (per unit volume) slightly higher than fossil diesel (1%).

XIII. Diesel Is a Carcinogen

At RDEIR pg. 3.2-5 the RDEIR has included a statement that is both substantially out of date and misleading: “Based upon human and laboratory studies, there is considerable evidence that diesel exhaust is a likely carcinogen”. The RDEIR should be revised to eliminate cut-and-paste, anachronistic information which, in this case, has been outdated for many years. CARB long ago declared DPM (emitted by diesels that will operate at the Harvard-Westlake project) a toxic air contaminant based on its carcinogenicity, and it has invoked dozens of Air Toxic Control Measures over the years aimed squarely at reducing diesel exhaust emissions since it first initiated its Diesel Risk Reduction Program in 1998.

XIV. Construction Equipment and Haul Trip Discrepancies

From pg. 3.2-27, the RDEIR states “144 haul truck trips per day (i.e., 72 inbound trips and 72 outbound trips) for hauling of the excavated material; plus, up to 8 delivery trucks per day (8 inbound and 8 outbound).” It appears that the “8 delivery trucks per day” is in error, based on the 8 inbound and 8 outbound trips, and that delivery trucks will total 16 trips/day.

Additionally, immediately below the quote noted above, the RDEIR states “3.5 acres of land disturbed per day during grading based on 2 scrapers, 1 dozer, and 1 blade”. A “blade” is not listed in CalEEMod or CARB’s OFFROAD equipment model, but likely refers to a grader. More importantly, the use of 2 scrapers, 1 dozer, and 1 blade as the only equipment to excavate, grade, and move and load 140,000 cubic yards of soils is a gross misstatement and is contradicted by equipment listings found in Appendix C’s CalEEMod output sheets. Rather than listing in the Air Quality element only three types of equipment for the project, the Lead Agency must provide all equipment details by type, make, model, their hours of intended use by phase, and any other factors that underlie emissions calculations or modeling performed for the RDEIR.

Should you have any questions or comments regarding this comment letter, please feel free to contact me at your convenience.

Sincerely,

Greg Gilbert