

October 3, 2007

Mr. Scott Johnson
City of Sacramento
Development Services Department
2101 Arena Boulevard, Suite 200
Sacramento, CA, 95834

**SUBJECT: DEIR and Appendices, Sacramento Downtown Railyards #P05-097
SMAQMD # SAC200500788E**

Dear Mr. Johnson:

Thank you for providing the project listed above to the Sacramento Metropolitan Air Quality Management District (District). The District is supportive of this high density, mixed-use project which will provide a vital linkage between downtown Sacramento and the River District and Alkali Flats. There are many issues, however, with the air quality section of the CEQA document which must be addressed. Those issues include the off-site construction fee methodology, the draft Air Quality Mitigation Plan, the Toxic Air Contaminant analysis and interpretation, and the treatment of Global Warming. In addition, there is the issue of the possibility of a change or several changes in the District Thresholds of Significance which would, assuredly, affect the construction mitigation program as it goes forward. Staff comments follow.

Analysis of construction emissions

The Railyards DEIR presents an analysis of the project's estimated construction-related air quality impacts and determines that those emissions will be "significant."¹ The methodology for the analysis was a manual calculation as opposed to the use of URBEMIS. The analyst used emission factors from a generic construction fleet mix, scaled the construction fleet up according to the size of the project and accounted for the usage of the fleet over time. The analysis divided the project into four phases over approximately twenty-two years. The generic construction fleet mix came from District recommendations for users of URBEMIS 8.7. The result of this analysis is distilled onto one page in Appendix D (attached). The results are further summarized in Table 6.1-5.² This approach is very generic and is reflective of the fact that probably little is known at this time about specific construction phasing and equipment.

The analysis could be vastly improved if specific construction equipment was known, however, according to the air quality analyst³, specific equipment was not known at the time of the analysis. It is obvious that as the project is actually built, the fleet mix of "dozers, graders, water trucks and 'other'" equipment will actually be a variety of equipment whose emission factors will deviate from what is presented in the analysis. In addition, the analyst used the same emission factors for like equipment throughout the 20 year duration project. However, it is probable that construction equipment will

¹ Railyards, DEIR, pg 6.1-21

² Railyards, DEIR, pg 6.1-22

³ Phone conversation, Geoff Hornek, EIP, September 2007

become less emissive over time but this improvement is not reflected in the analysis. Finally, according to the analyst, the analysis included the removal of the rail lines. However, the District believes the removal and replacement of the UP rail lines is not included in this analysis at all. The District's CEQA guidance related to typical construction equipment for most projects never envisioned that those projects would require the movement of rail lines. The District had specifically asked for an analysis of this activity in its response to the NOP. The equipment needed to remove rails and to compact the earth prior to the installation of new rails will assuredly be diesel equipment, some of it specific to that task.

As generic as the analysis is, it clearly does show that the project will exceed the District's current construction-related threshold of 85 lbs/day by a considerable margin for over 20 years. For example, NOX emissions for the first phase of the first two years of construction will result in average daily emissions of 484 lbs/day NOx. Construction related emissions, then, are determined to be a significant impact.

Construction-related off-site mitigation

In order to mitigate this significant impact, Mitigation Measure 6.1-2 requires the use of the District's "standard on-site construction mitigation." This measure requires the use of cleaner construction equipment. In addition, the document requires the payment of an off-site construction mitigation fee which will, in effect, mitigate the NOx emissions down to the District's threshold. That corresponding mitigation measure states:

6.1-2 e) The project applicant shall pay into the SMAQMD's construction mitigation fund to offset construction-generated emissions of NOx that exceed SMAQMD's daily emission threshold of 85 lbs/day. The project applicant shall coordinate with the SMAQMD for payment of fees into the Heavy-Duty Low-Emission Vehicle Program designed to reduce construction related emissions within the region. Fees shall be paid based upon the applicable current SMAQMD Fee. The applicant shall keep track of actual equipment use and their NOx emissions so that mitigation fees can be adjusted accordingly for payment to the SMAQMD. ⁴

The District recognizes that the Railyards project is a complex one which will be built out over an estimated 20 years. The construction emission calculations for the determination of significance were done in a very generic way. The off-site mitigation fee for this project, based on the estimated emissions listed in table 6.1-5⁵ would be very large. According to the District draft worksheet⁶, if one assumes 264 work days for every year listed in the table, the fee would be \$15,070,956. The District's normal protocol is to have the applicant pay that fee prior to the issuance of the first grading permit. The mitigation measure above is not consistent with the District protocol in that it does not state the fee in the measure nor specify when the fee is to be paid, but it references an after-the-fact adjustment of the fee based on actual equipment usage.

Given the fact it is not possible to know what equipment and schedule will be used for this project during its long build-out, the District proposes a Railyards-specific mitigation

⁴ Railyards, DEIR, pg 6.1-23

⁵ Railyards, DEIR, pg 6.1-22

⁶ Draft District fee calculation worksheet for entire project, 2010-2029, attached

fee payment methodology which departs from normal District protocol. This methodology would involve payment of a fee on an annual basis and an annual adjustment of that fee based on actual equipment. This methodology is explained below:

Proposal: a phased payment approach with annual reconciliation and the provision of a construction activity monitor.

1) Annual fee payment

Prior to the issuance of the first grading permit, the applicant will provide the District the estimated construction equipment and schedule to be used in the first year of construction for any part of the Railyards project. Applicant will also provide a calculation of the estimated NOx emissions for that year's construction activity. The applicant will pay the District the off-site mitigation fee for any unmitigated emissions above the District's then current threshold (currently 85 lbs/day NOx) for that year prior to the issuance of the grading permit. Grading will not start without the payment of the fee. The off-site mitigation fee will be based on the then current cost to reduce a ton of NOx (currently \$14,300/ton). In addition, the applicant will provide the then current administrative fee (currently 5% of mitigation fee) for the year.

2) Guaranteed monitoring

In addition, the applicant will provide monitoring funds sufficient for the District to pay an inspector for 10 hours of inspection time per week for the life of the project on an annual basis. This will allow for the inspection of the project's construction activity for the year. The inspector will be employed by District and the hourly rate will be commensurate with District inspectors.

3) On-site mitigation monthly reports

During construction for the life of the project, the proponent will submit monthly construction reports to the District per the requirements of the on-site mitigation fee program. Those reports will comply with the requirements of that mitigation, including a listing of all construction equipment and hours used.

4) Annual reconciliation/ adjustment

The date of the issuance of the first grading permit will be considered the "anniversary date of construction." During the first quarter after each "anniversary date of construction," the District will reconcile the off-site mitigation fee paid the prior year with the cost of mitigation for emissions actually produced during the year. If the applicant is due a partial refund, that amount will reduce the following year's off-site mitigation fee. If the applicant owes more money, that amount will increase the following year's off-site mitigation fee.

For example, using the figures provided in the DEIR, the project's construction-related activities have been estimated to result in 484 lbs/day NOx for the entire first year (2010)⁷. Assuming a year has 264 work days, the construction related off-site mitigation fee for the first year would be \$753,152 plus a \$37,658 administrative fee.⁸

⁷ Railyards, DEIR, Appendix D1

⁸ Draft District fee calculation worksheet for Phase 1A, 2010, attached

If, in the course of the first year, the applicant used less equipment and produced less emissions than was estimated in the construction of the project, then that fact would be reflected in both the monthly reports turned in by the applicant and by the findings of the inspectors. That difference would be captured monetarily during the reconciliation process which would take place during the first quarter of year two and it would be applied to the third year's fee. The reason for the timing is that by the "anniversary date of construction," the applicant would have estimated emissions for the second year and paid the fee for the second year. The reconciliation process for year one would take place after the payment of the second year's fee and during the first quarter of year two. In this example, if the District found that the applicant overpaid the first year by \$100,000, then the 3rd year's estimated fee would be reduced by \$100,000. If on the other hand, it was found more equipment was used and more emissions produced, the third year's fee would be increased accordingly.

5) Repeat process

This process of the applicant estimating the next year's emissions, paying the appropriate fee prior to the first grading permit or the anniversary date of the first grading permit and then having the District reconcile the fee would be repeated yearly until project build out.

6) End of construction

After all the project's construction is completed, the District would reconcile the previous two years' worth of emissions estimates and actual emissions and either issue a refund of some amount (assuming emission estimate was higher than actual) or request an additional fee amount (assuming emission estimate was less than actual).

The process described above may appear to imply that the "applicant" is a single entity who will be shepherding the construction process for the full duration of the project. In reality, parts of this project may be sold off and a variety of applicants may be seeking entitlements. The District intends for the language suggested below to include all successors and assigns of the "applicant."

In order to capture this project-specific mitigation fee protocol, Mitigation Measure 6.1-2e should be rewritten as follows:

6.1-2 e) The project applicant (and successors and assigns) shall pay annually into the SMAQMD's construction mitigation fund to offset construction-generated unmitigated emissions of NOx that exceed SMAQMD's then current daily emission threshold (currently 85 lbs/day) until project build out. The project applicant shall estimate construction activities and corresponding emissions on an annual basis. Fees will be paid to the SMAQMD for use by the Heavy-Duty Low-Emission Vehicle Program designed to reduce construction-related emissions within the region. Fees shall be paid prior to the first grading permit and prior to each year's anniversary date of that first grading permit. The fees will be based upon the then applicable current SMAQMD fee (currently \$14,300/ton NOx reduced) as well as the then current administrative fee (currently 5% of mitigation fee). The applicant shall provide funds to the District for monitoring of actual equipment use and their NOx emissions so that mitigation fees can be adjusted annually by the SMAQMD. Refer to the description in District letter on the DEIR of October 3, 2007 for details.

Operation-related mitigation

The Railyards DEIR presents an analysis of the project's estimated operation-related air quality impacts and determines that those emissions will also be "significant."⁹ The computer generated analysis, contained in Appendix D2 uses URBEMIS 2002, v. 8.7 and its default trip generation values. The analysis does not utilize a project-specific traffic study which could most likely give a better estimate of future trips in the area. It is acceptable, however, to use the default values if specific information is not known.

The mitigation called out for this project is an Air Quality Mitigation Plan (AQMP) designed to reduce the operational air quality emissions by at least 15%. Mitigation Measure 6.1-3 states:

- 6.1-3 *The project applicant shall implement the emission reduction strategies contained in the Railyards AQMP (see Appendix E). The AQMP shall be endorsed by the SMAQMD prior to the first building permit. Documentation confirming implementation of the AQMP shall be provided to the SMAQMD and the City of Sacramento prior to issuance of occupancy permits.*

In order to ensure the implementation of this measure, we suggest that the endorsed AQMP be not only a mitigation measure but also be called out as a condition of approval. In that way if the Mitigation Monitoring Report ever is separated from the project documents, there will be another mechanism for ensuring its implementation throughout the project's long build-out. In addition, the second sentence of the mitigation measure above implies that there will be several occupancy permits throughout the life of the build-out. We suggest that Railyards project occupancy permits have a checkbox put on them to assure provision compliance. We suggest the mitigation measure be rewritten in this manner:

- 6.1-4 *The project applicant shall implement the emission reduction strategies contained in the FINAL Railyards AQMP (see Appendix x? in the FEIR). The AQMP will also be condition of approval of the project. The AQMP shall be endorsed by the SMAQMD prior to the first building permit. Documentation confirming implementation of the AQMP shall be provided to the SMAQMD and the City of Sacramento prior to issuance of each occupancy permit throughout the build-out of the project. A check box will be added to project occupancy permit forms and will require City personnel to assess the submitted documentation to determine whether the AQMP is being complied with.*

Draft Air Quality Mitigation Plan in DEIR

The Draft Air Quality Mitigation Plan (AQMP) in the Railyards DEIR¹⁰ is a twenty-one page document which utilizes the District's new "Recommended Guidance for Land Use Emission Reductions" which was released in 2007. In addition, it has its own Appendix A entitled "Pedestrian Friendly Street Standards." It appropriately scales the project and

⁹ Railyards, DEIR, pg 6.1-24

¹⁰ Railyards, DEIR, Appendix E

its points according to trip generation rates and in some cases, according to acreage. It claims “points” for nineteen measures, each “point” representing a one percent reduction in NOx or ROG. In total, the document claims the project will reduce operational emissions by 25.51 points (percent). The DEIR, however, states:

“If all of the above emission reduction measures were implemented, a 35.65 percent reduction could occur.”¹¹

We suggest this statement be corrected to reflect the amount of points claimed by the draft AQMP circulated in the DEIR.

The draft AQMP is able to claim 25.51 points largely because of the Blueprint-friendly design characteristics of the project. The Railyards project’s high density, gridded streets, mixed-use, pedestrian friendly nature are rewarded by the AQMP evaluation process. In most cases, the draft AQMP adequately justifies the awarding of points for the measure claimed. There are, however, some measures which need additional clarification or justification. They are discussed below. We have conferred with the project’s representatives and been assured that there will be a revision to the AQMP based upon the following District comments. The revision is planned to be included in the FEIR. With these assurances in mind, the District can provisionally endorse the AQMP. A final District letter of endorsement will be issued once the revised AQMP is received and reviewed.

Specific Recommendations for the AQMP

Introductory text

- The following statement only applies to projects which are analyzed in a Mitigated negative Declaration: “If mitigation measures do not reduce emissions by 15%, then the applicant may have to pay a mitigation fee.”¹² Since Railyards is being analyzed in the context of a DEIR, we suggest the sentence be removed to avoid confusion.
- Table 1 would be more complete if it contained values for the parking related to categories entitled RMU and Total.

Measure 1- Bike parking

Provide an exhibit and/or text to show where in the project bike parking will be provided. The AQMP claims bike parking will be placed throughout 100% of the project. Where in the residential areas will it be? Where in the commercial areas will bike parking be? Where in the office areas will it be? Please cite some document (Central City Urban Design Plan or Railyards Design Guidelines or something else) which will ensure that these bike parking facilities will be implemented and in what manner.

Measure 4- Proximity to path/bike lanes

Please provide an exhibit which shows the ½ mile distance of the entire project from various referenced bike paths and lanes.

Measure 6- Minimization of barriers

Please provide an exhibit (perhaps on Figure 5) which illustrates the barrier created by the rail lines and the tunnel which will be created to overcome that barrier.

¹¹ Railyards, DEIR, pg 6.1-26

¹² Railyards, AQMP, pg. 1

Measure 7- Bus shelters for existing transit service

Please give more information about the number and placement of bus shelters throughout the project.

Measure 10a- Employee and /or customer parking

This measure is a particularly powerful measure, very capable of changing individuals' transportation modes. It's important to explain how this measure will be implemented through subsequent purchases or leases of facilities.

Measure 15 – Office/Mixed Use Density

The measure is missing its description and exhibits.

Measure 21- Affordable housing component

There appears to be a typo in the recording of points in Table 4 of the AQMP. Is the measure worth .1 point or .4?

Measure 24- Fireplace

This, again, is a typo. The fireplace measure is measure # 25.

Measure 29- Exceed Title 24

This measure is a very powerful one, however the language of the AQMP about the measure is not strong enough. The statement "The Railyard target is to exceed Title 24 requirements by 20%" should be replaced by "The Railyard project will exceed Title 24 requirements by 20% in all aspects of its building program." If the commitment cannot be made, then credit for the measure should be removed from the AQMP. However, this is a laudable goal and it should be moved to a "Goal" section of the AQMP or FEIR.

Measure 31- Non-roof surfaces

Justification for this measure is too weak at this point. The measure states "A goal of the proposed Railyards project is to meet the non-roofing surfaces requirement through a combination of shade coverage,..." A "goal" is not the same as commitment. Either strengthen the justification or move the goal, which is a laudable one, to a "Goal" section of the AQMP or FEIR.

In addition, in Regional Transit's comment letter of 9/10/07, author Don Smith cited issues with the Draft Air Quality Mitigation Plan. The letter points out several inconsistencies between the AQMP and the DEIR as well as several measures which need elaboration. In general, we concur with those comments and the measures should be corrected or enhanced as noted. With regard to measure 10-a, "customer and employee parking," we maintain that the provision of a program to assure customers and employees must pay for parking at a rate over and above the cost of an RT pass is a strong incentive for people to avoid parking lots and, hopefully, driving. We believe the program (only if it can be assured to occur in the future) should be awarded the points requested.

Toxic Air Contaminant analysis

Because the project is located close to the freeway (Interstate-5) and to train locomotives on a major rail line, the District, in response to the Notice of Preparation of the DEIR, recommended the DEIR deal with the health impacts of Toxic Air

Contaminants (TACs) from the mobile sources. Section 6.1-5 deals with the issue and finds that the impact of Toxic Air Contaminants to the project is less than significant.¹³ In the DEIR's accompanying discussion and analysis, the analyst partially employed the District's guidance contained in its "Recommended Protocol for Evaluating the Location of Sensitive Land Uses Adjacent to major Roadways, 2007" as well as a separate health risk assessment (HRA) of the construction activities on the site. The acute and chronic health risks of concern have to do with exposure to toxic air contaminants associated with diesel particulates also known as diesel particulate matter (DPM) in the document. In the document, the analyst considered the health risks associated with the freeways, the rail operations and the Sacramento Inter-modal transportation Facility (SITF). Specific comments about the discussion and analysis follow.

In the determination of significance of cancer risks generated from TACs, the DEIR refers to a threshold in the SMAQMD guidance of 446 increased cancer cases per million. For example, the document states:

*"cancer risks from the freeway DPM [Diesel Particulate Matter] are considered less than the threshold in the SMAQMD guidance (446 per million.)"*¹⁴

In addition, it states,

*"the cancer risks from the locomotive DPM are considered lower than the threshold in the SMAQMD guidance (446 per million.)"*¹⁵

The use of the word "threshold" in the DEIR is unfortunate and confusing. The District's look-up table with its shaded and unshaded cells in no way is promulgating a "threshold of significance." In fact, the Forward to the District Protocol specifically states:

*"this document does **not** provide an acceptable cancer risk level or a regulatory threshold; therefore it does not establish which projects are acceptable and which are not. Local land use jurisdictions retain all authority and decide after considering all relevant factors whether the project is appropriate."*¹⁶

The District has no Threshold of Significance for TACs from mobile sources. The state of California has not promulgated a Threshold of Significance for TACs from mobile sources. Statements in the DEIR that conclude this project is "not significant" for TACs are not based in fact if the measure of significance is based on some inference from the District's guidance. They are misleading.

Relative to the risks to residential development close to railway lines, the analyst uses a methodology to convert DPM emission rates for freight trains to equivalent peak hour vehicle traffic. Using the District protocol look-up tables again, the analyst concludes that *"no matter where residences are placed, the cancer risks from the locomotive DPM are considered lower than the threshold in the SMAQMD guidance (446 [increased cancer cases] per million).*¹⁷ The word "threshold" again, is confusing. The term "evaluation criteria" which the Screening HRA uses would, instead, be less confusing.

¹³ Railyards, DEIR, pgs 6.1-26 and 6.1-30

¹⁴ Railyards, DEIR, pg 6.1-29

¹⁵ Railyards, DEIR, pg 6.1-30

¹⁶ Recommended Protocol for Evaluating the Location of Sensitive Land Uses Adjacent to Major Roadways, v. 1, Jan 2007, SMAQMD, pg. 2

¹⁷ Railyards, DEIR, pg 6.1-30

The discussion of the risks of exposure to TACs from the vehicle activity at the SITF also concludes “this impact is less than significant.” This paragraph cites CARB efforts to lower Diesel Particulate Matter (DPM) emissions from diesel transit fleet vehicles as a reason for the determination that the risk is less than significant. In the absence of a threshold, however, **the District believes a discussion of significance or non significance is not based in fact.**

▪ **Appendix O, Health Risk Assessment**

Appendix O of the DEIR contains a “Health Risk Assessment” of the project. Using the District’s Protocol, Environ consultants assessed diesel particulate matter from the freeway and from the railway. Relative to the discussion on impacts from Interstate-5, they estimated traffic counts for 2030 and used the District’s look-up Table 2 for a project that is East and West of a North-South roadway (i.e. I-5). They concluded that:

“if the nearest new residence is placed no closer than 200 feet, the cancer risks from the freeway DPM are considered less than the evaluation criteria selected by SMAQMD (446 per million) and a site specific HRA is not recommended.”¹⁸

The District assumes that the consultant looked at Table 2 of the District’s guidance and saw that for a project that is East of a North-South roadway, the Incremental Cancer Risk Per Million is estimated to be 378 increased cancer cases and that for a project that is West of a North-south roadway, the Incremental Cancer Risk per million is 198 increased cancer cases. Both of the cells of the Table in which the values are stored are not shaded, indicating that the District’s guidance is that a project health risk assessment is not needed. Hence, the consultant did not perform a project-specific HRA of TACs from operational mobile sources generated by the freeway.

While the consultant’s conclusion that the screening methodology indicated there is no need to do a project-specific HRA, the District is concerned that the analysts did not follow District guidance for presenting the results of the screening assessment. Specifically, Figure 3 of the District’s Protocol states that the proponent’s responsibilities are to:

1. The project proponent should provide the following information for the screening effort to the agency requesting the analysis:
 - General project information.... Map showing relative location of affecting roadway....
 - Roadway compass orientation, project compass orientation
 - Distance from the edge of the nearest travel lane to the nearest receptor.
 - Peak hour traffic traffic volume...
2. The local agency or its consultant should screen the project and report the project inputs provided by the proponent as well as the following results:
 - Cancer risk value (cases/million) at the nearest receptor
 - The screening matrix used in the process showing risk varying by distance to roadway.¹⁹

The Screening HRA of Freeway DPM Emissions failed to state how close the nearest residences will be to I-5, both on the west side and east side of the freeway. It also failed

¹⁸ Railyards, DEIR, Appendix O, pg. 2-2.

¹⁹ Recommended Protocol for Evaluating the Location of Sensitive Land Uses Adjacent to Major Roadways, v. 1, Jan 2007, SMAQMD, pg 10.

to state the risk number value in the screening table in order that decision makers understand the risk to individuals who will be living close to the freeway. It did not include a map to show distances of residences to the freeway and it did not include the "screening matrix" used to come up with the result. The screening HRA should be redone and presented in the FEIR to follow the District's Protocol completely.

Another point of concern about the HRA is its silence about residences any closer than 200 feet from the Interstate. Unfortunately, the DEIR makes a statement which implies that residences on the west side of Interstate 5 will be 50 feet from the Interstate. It states:

"...if the nearest new residence is placed no closer than 50 feet west of I-5 and 200 feet east of I-5, the cancer risks from the freeway DPM are considered less than the threshold in the SMAQMD guidance (446 per million.)"²⁰

The Screening HRA, however, never discusses an assessment using residences only 50 feet to the west of a north-south roadway. The District has looked at the screening table in the Protocol document and determined that for a freeway with 20,000 vehicles, residences to the west of a freeway within 50 feet would be exposed to an incremental cancer risk of 459 increases cases of cancer in a 1,000,000 population. This result does indicate a level of risk for which the District's Protocol would recommend a site-specific HRA.

The District believes it's imperative to identify exactly how close the nearest residences and other sensitive receptors will be from the freeway, both to the east and the west, and to perform a Screening HRA or project-specific Health Risk Assessment which discloses actual risk values. If the Health Risk Assessment is not modified to reflect residences which could be closer than 200 feet from the freeway, the following condition of approval needs to be added to the project:

Recommended condition of approval

The project will not locate any sensitive uses (i.e. residential, schools, hospitals, senior housing) any closer than 200 feet from either side of Interstate 5.

▪ **Typographical errors**

We believe there is a misstatement in the clause which leads off the first sentence of the discussion: "As previously mentioned, the proposed project would generate a less-than-significant impact related to cancer risks generated from vehicle emissions...."²¹ The typo has to do with the fact that nowhere in the document previous to this discussion is there a statement that the impact from TACs would be less-than-significant.

There's a word missing in the statement: "As the proposed Specific Plan allows for residential development railway lines (particularly parcels 17, 35, 44, 47, 48, 49, 51 and 52) on which Union Pacific currently operates freight trains, a cancer risk analysis for railway DPM emissions was preformed and included in the HRA."²²

²⁰ Railyards DEIR, pg 6.1-29

²¹ Railyards, DEIR, pg 6.1-26

²² Railyards, DEIR, pg 6.1-29

Perhaps the author intended to include the word “near” between “development” and “railway?”

Global Warming

The DEIR contains a ~3.5 page section on Global Climate Change as an “issue not addressed.” The section states “*lacking the necessary facts and analysis to support a conclusion as to the ‘significance’ of global warming, and the lack of any adopted methodology or thresholds of significance the City is unable to determine the effectiveness of potential mitigation measures.*”²³ When discussing potential mitigation for Green House Gases (GHG), the document provides a list of items and states “some or all of the following energy conservation measures that would reduce greenhouse gas emission would be included...” Thus, the project’s impact on GHG is not analyzed nor is there a commitment to specific mitigation measures.

Since the release of the document, however, representatives from the State of California Attorney General’s Office contacted the proponent and the City to express the opinion that the section was inadequate. Several meetings between the City, proponent and the District have ensued and the proponent is currently working on a revision to the DEIR discussion which will, among other things, establish a baseline per capita Green House Gas (GHG emissions), calculate future GHG emissions from the Railyards project, describe approaches to mitigation and draw qualitative conclusion about significance on a project and cumulative basis.

This work is currently in progress and we salute the cooperation of the proponent in this emerging issue. We would expect to see the result of this work in the FEIR.

Potential change in District’s Thresholds of Significance

The District’s Thresholds of Significance for ozone precursor emissions were adopted by the District Board of Directors in April 2002. They were developed under the 1994 1-hour State Implementation Plan. It is against these thresholds that air quality analysts judge whether their land use projects are significant or not. The current threshold for construction emissions is 85 lbs/day of NOx (oxides of nitrogen) and there is no threshold of significance for construction related ROG. The current threshold for operational emissions is 65 lbs/day of NOx (oxides of nitrogen) and 65 lbs/day for ROG. The Railyards project is unusual in that it will take a very long time to build out. It is extremely likely that during the 20 year construction build-out of this project that the District will lower those thresholds once and perhaps more than once. The reason for this has to do with the District’s upcoming new 8-hr State Implementation Plan now in development as well as the fact it is likely USEPA will change the SIP ozone standard.

Given these foreseeable changes in the regulatory framework regarding air quality, the District believes the Railyards project, as it goes forward, will need to mitigate its construction emissions according to whatever new threshold of significance is in place at the time. For example, if ten years from now, the construction threshold for significance is 50 lbs/day NOx, then the Railyards applicant will need to mitigate the construction-related emissions down to the new threshold through use of on-site mitigation and the off-site mitigation fee program.

²³ Railyards, DEIR, pg 6.1-17

All projects are subject to SMAQMD rules and regulations in effect at the time of construction. Please see the attached document describing SMAQMD Rules which may apply to this project.

If you have questions, please contact me at 874-4885 or jborkenhagen@airquality.org

Sincerely,



Jeane Borkenhagen
Associate Air Quality Planner Analyst

cc: Larry Robinson SMAQMD
 Suheil Totah Thomas Enterprises
 Tim Rimpo Jones and Stokes
 Ned Ferrario City of Sacramento
 Don Smith Regional Transit

Enc: DEIR Appendix D1, construction-related emission calculation 2010-2029
 District worksheet on off-site construction mitigation fee for entire project
 2010-2029
 District worksheet on off-site construction mitigation fee for 2010
 Regional Transit comment letter on DEIR, dated Sept. 10, 2007
 SMAQMD Rules & Regulations

Railroads DEIR Display page from construction-related emission calculation, Appendix D1

Railroads - NOx Emissions/Fee Calculations

Phase/ Equipment Type	Area (Acres)	Scaling Factor Grade	Scaling Factor Build	NOx Emission Factor (lbs/day)	NOx Emissions (lbs.)																									
					January		February		March		April		May		June		July		August		September		October		November		December			
					Month	Day	Month	Day	Month	Day	Month	Day	Month	Day	Month	Day	Month	Day	Month	Day	Month	Day	Month	Day	Month	Day	Month	Day	Month	Day
Phase 1A (2010 - 2011)																														
Grading/Site Prep																														
Dozer	28.3	2.8		22.61	1408	64	704	64																						
Grader	28.3	2.8		10.22	636	28	318	28																						
Water Truck	28.3	2.8		20.89	1301	59	650	59																						
Building Construction																														
Other	27.6	13.8	12.84					1949	177	3898	177	3898	177	3898	177	3898	177	3898	177	3898	177	3898	177	3898	177	3898	177			
Other	27.6	13.8	12.84					1949	177	3898	177	3898	177	3898	177	3898	177	3898	177	3898	177	3898	177	3898	177	3898	177			
Other	27.6	13.8	12.84					1949	177	3898	177	3898	177	3898	177	3898	177	3898	177	3898	177	3898	177	3898	177	3898	177			
NOx Emissions (lbs.)					3345	152	1672	152	5847	532	11695	532	11695	532	11695	532	11695	532	11695	532	11695	532	11695	532	11695	532	11695	532		
NOx Emissions after SQAQMD Mandatory 20% Reduction*					2676	122	1338	122	4678	425	9356	425	9356	425	9356	425	9356	425	9356	425	9356	425	9356	425	9356	425	9356	425	9356	425
Residual NOx Emissions over SQAQMD 85 lbs/day Threshold									37	340	340		340		340		340		340		340		340		340		340		340	
NOx Emissions (Average Daily)					464																									

Notes:
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Phase/ Equipment Type	Area (Acres)	Scaling Factor Grade	Scaling Factor Build	NOx Emission Factor (lbs/day)	NOx Emissions (lbs.)																									
					January		February		March		April		May		June		July		August		September		October		November		December			
					Month	Day	Month	Day	Month	Day	Month	Day	Month	Day	Month	Day	Month	Day	Month	Day	Month	Day	Month	Day	Month	Day	Month	Day	Month	Day
Phase 1B (2012 - 2013)																														
Grading/Site Prep																														
Dozer	50.0	5.0		22.61	2485	113	1242	113																						
Grader	50.0	5.0		10.22	1123	51	562	51																						
Water Truck	50.0	5.0		20.89	2296	104	1148	104																						
Building Construction																														
Other	32.4	16.2	12.84					2287	208	4573	208	4573	208	4573	208	4573	208	4573	208	4573	208	4573	208	4573	208	4573	208	4573	208	
Other	32.4	16.2	12.84					2287	208	4573	208	4573	208	4573	208	4573	208	4573	208	4573	208	4573	208	4573	208	4573	208	4573	208	
Other	32.4	16.2	12.84					2287	208	4573	208	4573	208	4573	208	4573	208	4573	208	4573	208	4573	208	4573	208	4573	208	4573	208	
NOx Emissions (lbs.)					5003	268	2952	268	6660	624	13720	624	13720	624	13720	624	13720	624	13720	624	13720	624	13720	624	13720	624	13720	624		
NOx Emissions after SQAQMD Mandatory 20% Reduction*					4723	215	2361	215	5486	499	10976	499	10976	499	10976	499	10976	499	10976	499	10976	499	10976	499	10976	499	10976	499		
Residual NOx Emissions over SQAQMD 85 lbs/day Threshold									130	414	414		414		414		414		414		414		414		414		414		414	
NOx Emissions (Average Daily)					579																									

Notes:
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Phase/ Equipment Type	Area (Acres)	Scaling Factor Grade	Scaling Factor Build	NOx Emission Factor (lbs/day)	NOx Emissions (lbs.)																								
					January		February		March		April		May		June		July		August		September		October		November		December		
					Month	Day	Month	Day	Month	Day	Month	Day	Month	Day	Month	Day	Month	Day	Month	Day	Month	Day	Month	Day	Month	Day	Month	Day	Month
Phase 2 (2014 - 2018)																													
Grading/Site Prep																													
Dozer	21.4	2.1		22.61	1065	48	533	48																					
Grader	21.4	2.1		10.22	482	22	241	22																					
Water Truck	21.4	2.1		20.89	984	45	482	45																					
Building Construction																													
Other	20.4	10.2	12.84					1439	131	2877	131	2877	131	2877	131	2877	131	2877	131	2877	131	2877	131	2877	131	2877	131	2877	131
Other	20.4	10.2	12.84					1439	131	2877	131	2877	131	2877	131	2877	131	2877	131	2877	131	2877	131	2877	131	2877	131	2877	131
Other	20.4	10.2	12.84					1439	131	2877	131	2877	131	2877	131	2877	131	2877	131	2877	131	2877	131	2877	131	2877	131	2877	131
NOx Emissions (lbs.)					2532	115	1266	115	4316	392	8631	392	8631	392	8631	392	8631	392	8631	392	8631	392	8631	392	8631	392	8631	392	
NOx Emissions after SQAQMD Mandatory 20% Reduction*					2025	92	1013	92	3452	314	6905	314	6905	314	6905	314	6905	314	6905	314	6905	314	6905	314	6905	314	6905	314	
Residual NOx Emissions over SQAQMD 85 lbs/day Threshold									7	229	229		229		229		229		229		229		229		229		229		
NOx Emissions (Average Daily)					358																								

Notes:
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Phase/ Equipment Type	Area (Acres)	Scaling Factor Grade	Scaling Factor Build	NOx Emission Factor (lbs/day)	NOx Emissions (lbs.)																								
					January		February		March		April		May		June		July		August		September		October		November		December		
					Month	Day	Month	Day	Month	Day	Month	Day	Month	Day	Month	Day	Month	Day	Month	Day	Month	Day	Month	Day	Month	Day	Month	Day	Month
Phase 3 (2019 - 2023)																													
Grading/Site Prep																													
Dozer	53.6	5.4		22.61	2668	121	1334	121																					
Grader	53.6	5.4		10.22	1206	55	603	55																					
Water Truck	53.6	5.4		20.89	2465	112	1232	112																					
Building Construction																													
Other	34.7	17.4	12.84					2453	223	4907	223	4907	223	4907	223	4907	223	4907	223	4907	223	4907	223	4907	223	4907	223	4907	223
Other	34.7	17.4	12.84					2453	223	4907	223	4907	223	4907	223	4907	223	4907	223	4907	223	4907	223	4907	223	4907	223	4907	223
Other	34.7	17.4	12.84					2453	223	4907	223	4907	223	4907	223	4907	223	4907	223	4907	223	4907	223	4907	223	4907	223	4907	223
NOx Emissions (lbs.)					6338	288	3169	288	7350	669	14720	669	14720	669	14720	669	14720	669	14720	669	14720	669	14720	669	14720	669	14720	669	
NOx Emissions after SQAQMD Mandatory 20% Reduction*					5071	230	2535	230	5888	535	11776	535	11776	535	11776	535	11776	535	11776	535	11776	535	11776	535	11776	535	11776	535	
Residual NOx Emissions over SQAQMD 85 lbs/day Threshold									145	450	450		450		450		450		450		450		450		450		450		
NOx Emissions (Average Daily)					621																								

Notes:
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Phase/ Equipment Type	Area (Acres)	Scaling Factor Grade	Scaling Factor Build	NOx Emission Factor (lbs/day)	NOx Emissions (lbs.)																							
					January		February		March		April		May		June		July		August		September		October		November		December	
					Month	Day	Month	Day	Month	Day	Month	Day	Month	Day	Month	Day	Month	Day	Month	Day	Month	Day	Month	Day	Month	Day	Month	Day
Phase 4 (2024 - 2029)																												
Grading/Site Prep																												
Dozer	27.1	2.7		22.61	1348	6																						

Construction Emissions Mitigation Fee Calculation

PART 1: PROJECT INFORMATION

Project Name:	Railyards (draft fee calculation- whole project) 2016-2029		
Control/Application #:			
Single Family Dwelling Units:		Note: Enter information only in blue bordered cells	
Multi Family Dwelling Units:		Total Residential Acreage:	
Non-residential Square Feet:		Total Non-residential Acreage:	

PART 2: EMISSIONS INFORMATION

Year	Activity Phase	NOx (lbs/day) unmitigated	NOx (lbs/day) mitigated*	NOx over threshold (lbs/day)	duration (days)	Total significant NOx (lbs)
			0.00			
			0.00	0	0	0.00
2010			484.00	399.00	264	105336.00
2011			484.00	399.00	264	105336.00
2012			579.00	494.00	264	130416.00
2013			579.00	494.00	264	130416.00
2014			358.00	273.00	264	72072.00
2015			358.00	273.00	264	72072.00
2016			358.00	273.00	264	72072.00
2017*			358.00	273.00	264	72072.00
2019			621.00	536.00	264	141504.00
2020			621.00	536.00	264	141504.00
2021			621.00	536.00	264	141504.00
2022			621.00	536.00	264	141504.00
2023			621.00	536.00	264	141504.00
2024			426.00	341.00	264	90024.00
2025			426.00	341.00	264	90024.00
2026			426.00	341.00	264	90024.00
2027			426.00	341.00	264	90024.00
2028			426.00	341.00	264	90024.00
2029			426.00	341.00	264	90024.00
Asphalt			0.00	0	0	0.00
<i>Total project Nox over threshold (lbs)</i>			2007456.00			
<i>Total project Nox over threshold (tons)</i>			1003.73			

PART 3: MITIGATION FEE RESULTS

MITIGATION FEE (\$14,300/TON)**	\$14,353,310
ADMINISTRATIVE FEE (5.0%)	\$717,666
TOTAL FEE	\$15,070,976

>>> Fee is to be paid to the SMAQMD, either in total or on a by acre basis, prior to any ground disturbance.
 * emission figure for 2018 missing in Table 1

Mitigation Fee (\$/acre) #DIV/0!

* Assumes a construction mitigation plan which achieves a 20% reduction in NOx from on-site, off-road equipment.
 ** Or the \$/ton of NOx cost-effectiveness value in effect at the time the fee is collected.

Construction Emissions Mitigation Fee Calculation

PART 1: PROJECT INFORMATION

Project Name:	Railyards (draft fee worksheet, 1 year only) 2010		
Control/Application #:			
Single Family Dwelling Units:		<i>Note: Enter information only in blue bordered cells</i>	
Multi Family Dwelling Units:		Total Residential Acreage:	
Non-residential Square Feet:		Total Non-residential Acreage:	

PART 2: EMISSIONS INFORMATION

Year	Activity Phase	NOx (lbs/day) unmitigated	NOx (lbs/day) mitigated*	NOx over threshold (lbs/day)	duration (days)	Total significant NOx (lbs)
		0.00				
		0.00		0	0	0.00
	2010 Phase 1A	484.00		399.00	264	105336.00
	2011				0	264
	2012				0	264
	2013				0	264
	2014				0	264
	2015				0	264
	2016				0	264
	2017				0	264
	2019				0	264
	2020				0	264
	2021				0	264
	2022				0	264
	2023				0	264
	2024				0	264
	2025				0	264
	2026				0	264
	2027				0	264
	2028				0	264
	2029				0	264
	Asphalt		0.00		0	0.00
	<i>Total project Nox over threshold (lbs)</i>			105336.00		
	<i>Total project Nox over threshold (tons)</i>			52.67		

PART 3: MITIGATION FEE RESULTS

MITIGATION FEE (\$14,300/TON)**	\$753,152
ADMINISTRATIVE FEE (5.0%)	\$37,658
TOTAL FEE	\$790,810

>>> Fee is to be paid to the SMAQMD, either in total or on a by acre basis, prior to any ground disturbance.

Mitigation Fee (\$/acre)	#DIV/0!
---------------------------------	----------------

* Assumes a construction mitigation plan which achieves a 20% reduction in NOx from on-site, off-road equipment.

** Or the \$/ton of NOx cost-effectiveness value in effect at the time the fee is collected.



Regional Transit

Sacramento Regional
Transit District
A Public Transit Agency
and Equal Opportunity Employer

Mailing Address:
P.O. Box 2110
Sacramento, CA 95812-2110

Administrative Office:
1400 29th Street
Sacramento, CA 95816
(916) 321-2800
(25th St. Light Rail Station/
Bus 26, 38, 50, 67, 68)

Light Rail Office:
2700 Academy Way
Sacramento, CA 95815
(916) 648-8400

Public Transit Since 1973

www.sact.com

September 10, 2007

Scott Johnson
Associate Planner
CITY OF SACRAMENTO
Environmental Planning Services
North Permit Center
2101 Arena Boulevard, Suite 200
Sacramento, CA 95814

NAME OF DEVELOPMENT: Railyards
CONTROL NUMBER: 2006032058
TYPE OF DOCUMENT: Draft Environmental Impact Report and
Technical Appendices

Regional Transit (RT) staff has reviewed the DEIR for the proposed Railyards and provides the following comments:

DEIR

Page 2-72 – We find that mitigation measure 6.12-6 addresses the impact of the project on the public transit system by the Initial Phase of the project. The same mitigation measure is referred to on page 2-118 pertaining to the Full Project.

The wording of the mitigation measure should be revised so that it addresses both the Initial Phase and the Full Project. We recommend that the end of the first sentence of the mitigation measure 6.12-6 should be changed from "transit demand generated by the Initial Phase." to "transit demand generated by the Initial Phase and Full Project." We believe this would clarify the applicant's commitment to coordinate with RT during the both phases of the project.

Page 6.12-5, Existing Transit System – there are 96 bus routes, not 70.

Page 6.12-133 – Full Project and public transit.. This section needs to:

- call out the future light rail station on 7th Street.
- show the Intermodal and 7th Street Stations on appropriate maps for the development (Figure 3-5 is one of these maps).
- maps should also identify the ¼ and ½ mile radii around each station (Figure 3-5 is one of these maps).
- be discussion about placing intensive transit-oriented development adjacent to the stations (especially the 7th Street station). The applicant should be required to coordinate that development with RT.
- mitigation measure 6.12-6 should also be stated in this section.

Technical Appendices – Draft Air Quality Mitigation Plan

A number of details in this document were inconsistent with what is provided in the DEIR. For example:

Page 2, last paragraph – refers to the Specific Plan as 237 acres, the DEIR refers to it as 244 acres (page 3-1). The 237 acre Specific Plan was the 1994 plan.

Page 3, Project Objectives – The project objectives in the Draft Air Quality Plan (pages 3 and 4) are different than what is found in the DEIR (page 3-11).

Page 4 – the housing numbers provided in the Draft Air Quality Plan (page 4, 13, 850) and page 5, Table 1, differ from the DEIR (page 3-13; 12,100).

There are likely more inconsistencies between the two documents. These need to be identified and corrected.

Draft Air Quality Plan – Continued

Figure P-101 (two pages after page 4) – this figure needs to show the 7th Street Light Rail Station.

Page 11 – Light Rail – The text needs to call out the 7th Street Light Rail Station.

Pages 13 and 14 - The text on page 13, and/or Table 4 should call out the developer's contribution, modifications and improvements for transit (page 18 and mitigation measure 6.12-6).

Page 16 – Pedestrian Barriers. This section should discuss removing pedestrian barriers between activity areas and transit.

Page 10a – Customer and employee parking. We disagree that providing parking lots within ¼ of transit is transit-friendly, or that it reduces air pollution. Reduced and constrained parking provides incentive for people to take transit. This credit should not be given.

Page 18 – This should refer to the mitigation measure (6.12-6) which requires the developer to contribute to transit.

Thank you for the opportunity to review this project. If you have further questions regarding these recommendations, please contact me at 556-0506 or dsmith@sacrt.com.

Sincerely,



Don Smith
Senior Planner

c: RoseMary Covington, AGM Planning and Transit Service Development, RT
Fred Arnold, Director of Real Estate, RT
Paul Marx, Interim Planning Director, RT
Jeane Borkenhagen, SMAQMD

SMAQMD Rules & Regulations Statement (revised 1/07)

*The following statement is recommended as standard condition of approval or construction document language for **all** development projects within the Sacramento Metropolitan Air Quality Management District (SMAQMD):*

All projects are subject to SMAQMD rules and regulations in effect at the time of construction. A complete listing of current rules is available at www.airquality.org or by calling 916.874.4800. Specific rules that may relate to construction activities or building design may include, but are not limited to:

Rule 201: General Permit Requirements. Any project that includes the use of equipment capable of releasing emissions to the atmosphere may require permit(s) from SMAQMD prior to equipment operation. The applicant, developer, or operator of a project that includes an emergency generator, boiler, or heater should contact the District early to determine if a permit is required, and to begin the permit application process. Portable construction equipment (e.g. generators, compressors, pile drivers, lighting equipment, etc) with an internal combustion engine over 50 horsepower are required to have a SMAQMD permit or a California Air Resources Board portable equipment registration.

Rule 403: Fugitive Dust. The developer or contractor is required to control dust emissions from earth moving activities or any other construction activity to prevent airborne dust from leaving the project site.

Rule 417: Wood Burning Appliances. Effective October 26, 2007, this rule prohibits the installation of any new, permanently installed, indoor or outdoor, uncontrolled fireplaces in new or existing developments.

Rule 442: Architectural Coatings. The developer or contractor is required to use coatings that comply with the volatile organic compound content limits specified in the rule.

Rule 902: Asbestos. The developer or contractor is required to notify SMAQMD of any regulated renovation or demolition activity. Rule 902 contains specific requirements for surveying, notification, removal, and disposal of asbestos containing material.

Other general types of uses that require a permit include dry cleaners, gasoline stations, spray booths, and operations that generate airborne particulate emissions.